



CONTRACT AMENDMENT

Materials Management Procurement
 9875 N 85th Ave , 2nd Fl
 Peoria, AZ 85345
 Telephone (623) 773-7115
 Fax (623) 773-7118

Solicitation No P09-0069A Page 1 of 1
 Description Biddability/Constructability Reviews
 Amendment No Four (4) Date 8/1/13

Buyer Christine Finney

In accordance with Special Terms and Conditions, Contract Extension, the above referenced contract shall expire on 9/30/13 LAST YEAR OF CONTRACT

The New Contract Term 10/01/13 to 09/30/14

Contractor hereby acknowledges receipt and agreement A signed copy shall be filed with the City of Peoria, Materials Management Division

[Signature]

Signature

08/20/13

Date

Fred S Tallarico

Typed Name and Title

Jacobs Engineering Group, Inc

Company Name

101 N 1st Ave , #3100

Address

Phoenix

City

AZ

State

85003

Zip Code

Attested by

[Signature]
 for Rhonda Germinsky,
 City Clerk

[Signature]
 Director Andrew Granger, Engineering Director

[Signature]
 Dept Rep Dan Nissen, Assistant City Engineer

[Signature]
 Approved as to Form Stephen M Kemp City Attorney



CC Number

ACON47309D

Contract Number

Official File

City Seal

The above referenced Contract Amendment is hereby Executed
October 25 2013, at Peoria, Arizona

[Signature]
 Dan Zenko, Materials Manager

ACON47309D



CONTRACT AMENDMENT

**Materials Management
Procurement**

9875 N. 85th Ave., 2nd Fl.
Peoria, AZ 85345

Telephone: (623) 773-7115
Fax: (623) 773-7118

Solicitation No: P09-0069A Page 1 of 1
Description: Biddability/Constructability Reviews
Amendment No: Three (3) Date: 7/23/2012

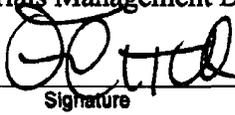
Buyer: Christine Finney

In accordance with Special Terms and Conditions, Contract Extension, the above referenced contract shall expire on 9/30/12.

The New Contract Term:

Contract Term: 10/01/12 to 09/30/13

Contractor hereby acknowledges receipt and agreement. A signed copy shall be filed with the City of Peoria, Materials Management Division.

Fred S. Tallarico
Typed Name and Title

Jacobs Engineering Group, Inc.
Company Name

101 N. 1st Ave., #3100
Address

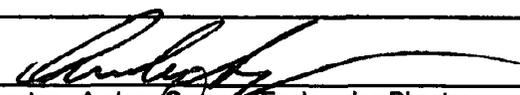
Phoenix
City

AZ
State

85003
Zip Code

Attested by:


City Clerk


Director: Andrew Granger, Engineering Director


Dept Rep: Dan Nissen, Assistant City Engineer



CC Number

ACON47309C

Contract Number:

Official File


Approved as to Form: Stephen M. Kemp, City Attorney

The above referenced Contract Amendment is hereby Executed

August 21, 2012, at Peoria, Arizona.


Dan Zenko, Materials Management Supervisor

City Seal

(Rev 02/11/10)



CONTRACT AMENDMENT

Materials Management
Procurement
9875 N. 85th Ave., 2nd Fl.
Peoria, AZ 85345
Telephone: (623) 773-7115
Fax: (623) 773-7118

Solicitation No: P09-0069A Page 1 of 1
Description: Biddability/Constructability Reviews
Amendment No: Two (2) Date: 5/18/2011

Buyer: Christine Finney

In accordance with Special Terms and Conditions, Contract Extension, the above referenced contract shall expire on 9/30/11.

The New Contract Term:

Contract Term: 10/01/11 to 09/30/12

Contractor hereby acknowledges receipt and agreement. A signed copy shall be filed with the City of Peoria, Materials Management Division.

[Signature] 08/15/11 Fred S. Tallarico Jacobs Engineering Group, Inc.
Signature Date Typed Name and Title Company Name

101 N. 1st Ave., #3100 Phoenix AZ 85003
Address City State Zip Code

Attested by:
Wanda Nelson

Wanda Nelson, City Clerk

[Signature] 5/23/11
Director: Andrew Granger, Engineering Director

[Signature] 5/19/11
Dept Rep: Dan Nisser, Assistant City Engineer



CC Number

ACON47309B

Contract Number:

Official File

[Signature]
Approved as to Form: Stephen M. Kemp, City Attorney

The above referenced Contract Amendment is hereby Executed
September 7, 2011, at Peoria, Arizona.

[Signature]

Materials Manager

City Seal
(Rev 02/11/10)

A CON 47309B



CONTRACT AMENDMENT

**Materials Management
Procurement**
9875 N. 85th Ave., 2nd Fl.
Peoria, AZ 85345
Telephone: (623) 773-7115
Fax: (623) 773-7118

Solicitation No: P09-0069A Page 1 of 1
Description: Biddability/Constructability Reviews
Amendment No: One (1) Date: 6/16/2010

Buyer: Christine Finney

In accordance with Special Terms and Conditions, Contract Extension, the above referenced contract shall expire on 9/30/10.

The New Contract Term:

Contract Term: 10/01/10 to 09/30/11

Contractor hereby acknowledges receipt and agreement. A signed copy shall be filed with the City of Peoria, Materials Management Division.

07/07/10
Date

Fred S. Tallarico
Typed Name and Title

Jacobs Engineering Group, Inc.
Company Name

101 N. 1st Ave., #3100
Address

Phoenix
City

AZ
State

85003
Zip Code

Attested by:

Mary Jo Waddell, City Clerk

Requested by:

Recommended by:

Ellen Van Riper, Assistant City Attorney

Approved as to Form: Stephen M. Kemp, City Attorney

The above referenced Contract Amendment is hereby Executed

July 12, 2010, at Peoria, Arizona.

Herman F. Koebergen, Materials Manager



City Seal

(Rev 02/11/10)

CC Number

ACON47309A

Contract Number:

Official File

A CON 47309A

ORIGINAL



City of Peoria, Arizona
Notice of Request for Proposal
for Professional Services



Request for Proposal No: P09-0069 A Proposal Due Date: June 30, 2009
Services: Bidability/Constructability Reviews Proposal Time: 5:00 P.M. AZ Time
Location: City of Peoria, Materials Management Purchasing Agent: Christine Finney, CPPB
Mailing Address: 8314 West Cinnabar Street, Peoria, AZ 85345
Phone: (623) 773-7115

In accordance with City of Peoria Procurement Code, competitive sealed proposals for the services specified will be received by the City of Peoria Materials Management at the specified location until the date and time cited above. Proposals shall be in the actual possession of the City of Peoria Materials Management on or prior to the exact date and time indicated above. Late proposals will not be considered, except as provided in the City of Peoria Procurement Code. Proposals shall be submitted in a sealed envelope with the Request for Proposal number and the offeror's name and address clearly indicated on the front of the envelope. All proposals shall be completed in ink or typewritten. Offerors are strongly encouraged to carefully read the entire Request for Proposal Package.

OFFER

To the City of Peoria: The undersigned, on behalf of the entity, firm, company, partnership, or other legal entity listed below, offers on its behalf to the City a proposal that contains all terms, conditions, specifications and amendments in the Notice of Request for Proposal issued by the City. Any exception to the terms contained in the Notice of Request for Proposal must be specifically indicated in writing and are subject to the approval of the City prior to acceptance. The signature below certifies your understanding and compliance with Paragraph 1 of the City of Peoria Standard Terms and Conditions (form COP 202) contained in the Request for Proposal package issued by the City.

For clarification of this offer contact:

Name: Fred S. Talkerico

Telephone: 714-503-3756 Fax: 714-503-3982

Jacobs Engineering Group Inc.
Company Name

[Signature]
Authorized Signature for Offer

101 N. 1st Ave # 3100
Address

Cherry Switzer
Printed Name

Phoenix AZ 85003
City State Zip Code

Vice President
Title

ACCEPTANCE OF OFFER AND CONTRACT AWARD (For City of Peoria Use Only)

Your offer is accepted by the City, subject to approval of each written exception that your proposal contained. The contract consists of the following documents: 1.) Request for Proposal issued by the City; 2.) Your offer in Response to the City's Request for Proposal; and 3.) This written acceptance and contract award.

As the awarded professional service provider, you are now legally bound to provide the services listed by the attached award notice, based on the solicitation of proposals, including all terms, conditions, specifications, amendments and your offer as now accepted by the City. The professional service provider shall not commence any billable work or provide any services under this contract until the professional service provider receives an executed Purchase Order or a Notice to Proceed.

Attested by: [Signature]
Mayor Jo Kief, City Clerk

City of Peoria, Arizona. Effective Date: 9/24/09

Approved as to form: Ellen Van Riper, Assistant City Attorney

[Signature]
Stephen M. Kemp, City Attorney

CC: _____
Contract Number: ACON 47309

Contract Awarded Date September 23, 2009

[Signature]
Herman F. Kobergen, Materials Manager
for





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
10/01/09

PRODUCER LIC #0437153 1-212-948-1306
 Marsh Risk & Insurance Services
 Contract.ReviewCSS@marsh.com
 777 S. Figueroa Street
 Los Angeles, CA 90017-5822
 Fax to: 1-212-948-1306

INSURED
 Jacobs Engineering Group Inc.
 1111 South Arroyo Parkway
 P.O. Box 7084
 Pasadena, CA 91109-7084

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: ACE AMER INS CO	22667
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR ADD'L LTR	INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
A	X	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> CONTRACTUAL LIABILITY GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	HDO G24931511	07/01/09	07/01/10	EACH OCCURRENCE	\$ 1,000,000
						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 250,000
						MED EXP (Any one person)	\$ 5,000
						PERSONAL & ADV INJURY	\$ 1,000,000
						GENERAL AGGREGATE	\$ 2,000,000
						PRODUCTS - COMP/OP AGG	\$ 2,000,000
A	X	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	ISA H08578953	07/01/09	07/01/10	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
						BODILY INJURY (Per person)	\$
						BODILY INJURY (Per accident)	\$
						PROPERTY DAMAGE (Per accident)	\$
		GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT	\$
						OTHER THAN AUTO ONLY: EA ACC	\$
						AGG	\$
		EXCESS / UMBRELLA LIABILITY <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION \$				EACH OCCURRENCE	\$
						AGGREGATE	\$
							\$
							\$
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N <input checked="" type="checkbox"/> N	WLR C45698440 (AOS)	07/01/09	07/01/10	<input checked="" type="checkbox"/> WC STATUTORY LIMITS	
A		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	WCU C45698488 (LA, OH, TX)*	07/01/09	07/01/10	E.L. EACH ACCIDENT	\$ 100,000
A		If yes, describe under SPECIAL PROVISIONS below	SCF C45698464 (ME, WI)	07/01/09	07/01/10	E.L. DISEASE - EA EMPLOYEE	\$ 100,000
						E.L. DISEASE - POLICY LIMIT	\$ 500,000
A		OTHER PROFESSIONAL LIABILITY *CLAIMS MADE*	EON G21655065 003	07/01/09	07/01/10	PER CLAIM/PER AGGREGATE	1,000,000
						DEFENSE INCLUDED	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS
 Office Location: Phoenix, AZ; Project Mgr: Gary Fromm; Contract Mgr: Joann Dean; Senior Contract Mgr: Sandra Holmes;
 Sector: Public; *\$2,000,000 SIR FOR STATES OF: LA, OH, TX. Re: 91st Avenue Improvements; Contract No. P10-0022; The City of Peoria, its agents, representatives, officers, directors, officials and employees are added as additional insureds for general liability & auto liability as respects the negligence of the insured in the performance of insured's services to cert holder under contract for captioned work. Coverage is primary and certificate holder's insurance is excess and non-contributory. Waiver of subrogation is hereby granted in favor of cert holder for GL & AL. *THIS IS A SAMPLE CERTIFICATE ONLY*. THE ACTUAL CERTIFICATE FOR THE PROPOSED PROJECT WILL COMPLY WITH THE TERMS AND CONDITIONS

CERTIFICATE HOLDER
 1-209702925
 City of Peoria
 9875 N. 85th Avenue
 Peoria, AZ 85345
 USA

CANCELLATION
 SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.
 AUTHORIZED REPRESENTATIVE
Chas. M. Berman

IMPORTANT

If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

This Certificate of Insurance does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

SUPPLEMENT TO CERTIFICATE OF INSURANCE

DATE
10/01/09

NAME OF INSURED: Jacobs Engineering Group Inc.

NEGOTIATED IN THE FINAL CONTRACT, CONSISTENT WITH POLICY TERMS AND CONDITIONS.



SOLICITATION AMENDMENT

Materials Management Procurement
 8314 West Cinnabar Avenue
 Peoria, Arizona 85345-6560
 Telephone: (623) 773-7115
 Fax: (623) 773-7118

Solicitation No: P09-0069
 Description: Biddability/Constructability Reviews
 Amendment No: One (1)
 Solicitation Due Date: June 30, 2009
 Solicitation Due Time: 5:00 P.M. Arizona Time

Buyer: Christine Finney

A signed copy of this Amendment shall be received by the City of Peoria, Materials Management no later than the Solicitation Due Date and Time.

A. The City responds formally to the following question for clarification purposes and for the benefit of all potential offerors:

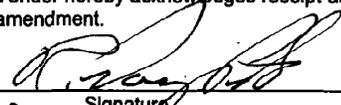
Question: Will the City allow firms (or firm's subconsultants) who are awarded a contract as a result of this solicitation to participate in a bid or solicitation for that same construction project?

Answer: No. The City would consider it a conflict of interest for the firm or any of its subconsultants providing Biddability/Constructability review to also bid on the same project. The firm would not be allowed to bid on the same project regardless of the origin of the project (i.e. transportation, utilities, parks, building projects).

B. Special Terms and Conditions, Page 14, **ADD** the following paragraph as item 39.

39. Multiple Awards: In order to assure that any ensuing contracts will allow the City to fulfill current and future requirements, the City reserves the right to award contracts to multiple companies. The actual utilization of any contract will be at the sole discretion of the City. The fact that the City may make multiple awards should be taken into consideration by each potential contractor.

Vendor hereby acknowledges receipt and agreement with the amendment.

 6/30/09
 Signature Date

Fred S. Tallarico, PE,
 Director of Operations, Arizona
 Typed Name and Title

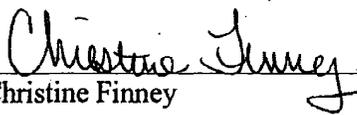
JACOBS ENGINEERING GROUP INC.
 Company Name
 101 N. 1st Avenue #3100
 Address

Phoenix AZ 85003
 City State Zip

The above referenced Solicitation Amendment is hereby Executed

June 23, 2009

at Peoria, Arizona


 Christine Finney
 Buyer



REQUEST FOR PROPOSAL

INSTRUCTIONS TO OFFEROR

Materials Management Procurement

8314 West Cinnabar Street
Peoria, Arizona 85345-6560
Phone: (623) 773-7115
Fax: (623) 773-7118

1. **PREPARATION OF PROPOSAL:**
 - a. All proposals shall be on the forms (if any) provided in this *Request For Proposal* package. It is permissible to copy these forms if required. Telegraphic (facsimile) or mailgram proposals will not be considered.
 - b. The Offer and Contract Award document (COP Form 203) shall be submitted with an original ink signature by a person authorized to sign the offer.
 - c. Erasures, interlineations, or other modifications in the proposal shall be initialed in original ink by the authorized person signing the Offer sheet.
 - d. If price is a consideration and in case of error in the extension of prices in the proposal, the unit price shall govern. No proposal shall be altered, amended, or withdrawn after the specified proposal due date and time.
 - e. Periods of time, stated as a number of days, shall be calendar days.
 - f. It is the responsibility of all Offerors to examine the entire *Request For Proposal* package and seek clarification of any item or requirement that may not be clear and to check all responses for accuracy before submitting a bid. Negligence in preparing a Proposal confers no right of withdrawal after proposal due date and time.
2. **INQUIRIES:** Any question related to the *Request For Proposal* shall be directed to the purchasing agent whose name appears on the front. The Offeror shall not contact or ask questions of the department for which the requirement is being procured. Questions should be submitted in writing when time permits. The purchasing agent may require any and all questions be submitted in writing at the Buyer's sole discretion. Any correspondence related to a *Request For Proposal* should refer to the appropriate *Request For Proposal* number, page, and paragraph number. However, the Offeror shall not place the *Request For Proposal* number on the outside of any envelope containing questions since such an envelope may be identified as a sealed proposal and, if so, will not be opened until after the official *Request For Proposal* due date and time.
3. **PROSPECTIVE OFFERORS CONFERENCE:** A prospective offerors conference may be held. If scheduled, the date and time of this conference will be indicated within this document. The purpose of this conference will be to clarify the contents of this *Request For Proposal* in order to prevent any misunderstanding of the City's position. Any doubt as to the requirements of this *Request For Proposal* or any apparent omission or discrepancy should be presented to the City at this conference. The City will then determine if any action is necessary and may issue a written amendment to the *Request for Proposal*. Oral statements or instructions will not constitute an amendment to this *Request for Proposal*.
4. **LATE PROPOSALS:** Late Proposals will not be considered, except as provided by the *City of Peoria Procurement Code*. A professional service provider submitting a late proposal shall be so notified.
5. **WITHDRAWAL OF PROPOSAL:** At any time prior to the specified proposal due date and time, a professional service provider (or designated representative) may withdraw the proposal. Telegraphic (facsimile) or mailgram proposal withdrawals will not be considered.
6. **AMENDMENT OF PROPOSAL:** Receipt of a Solicitation Amendment (COP Form 207) shall be acknowledged by signing and returning the document prior to the specified proposal due date and time.
7. **PAYMENT:** The City will make every effort to process payment for the purchase of services within thirty (30) calendar days after receipt of services and a correct notice of amount due, unless a good faith dispute exists as to any obligation to pay all or a portion of the account. Any proposal that requires payment in less than thirty (30) calendar days shall not be considered.
8. **DISCOUNTS:** Payment discount periods will be computed from the date of receipt of service or correct invoice, whichever is later, to the date Buyer's payment is mailed. Unless freight and other charges are itemized, any discount provided will be taken on full amount of invoice. Payment discounts of thirty (30) calendar days or more will be deducted from the proposal price in determining the low bid. However, the Buyer shall be entitled to take advantage of any payment discount offered by the Offeror provided payment is made within the discount period.
9. **TAXES:** The City of Peoria is exempt from Federal Excise Tax, including the Federal Transportation Tax. Sales tax, if any, shall be indicated as a separate item.
10. **VENDOR REGISTRATION:** After the award of a contract, the successful Offeror shall have a completed Vendor Registration Form (COP Form 200) on file with the City of Peoria Materials Management Division.
11. **AWARD OF CONTRACT:**
 - a. Notwithstanding any other provision of this *Request For Proposal*, The City expressly reserves the right to:
 - (1) Waive any immaterial defect or informality; or
 - (2) Reject any or all proposals, or portions thereof, or
 - (3) Reissue a *Request For Proposal*.
 - b. A response to a *Request For Proposal* is an offer to contract with the City based upon the terms, conditions and specifications contained in the City's *Request For Proposal* and the written amendments thereto, if any. Proposals do not become contracts unless and until they are accepted by the City Council. A contract is formed when written notice of award(s) is provided to the successful Offeror(s). The contract has its inception in the award document, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the procurement contract are contained in the *Request For Proposal*; unless modified by a Solicitation Amendment (COP Form 207) or a Contract Amendment (COP Form 217).



STANDARD TERMS AND CONDITIONS

Materials Management Procurement

8314 West Cinnabar Street
Peoria, Arizona 85345-6560
Phone: (623) 773-7115
Fax: (623) 773-7118

THE FOLLOWING TERMS AND CONDITIONS ARE AN EXPLICIT PART OF THE SOLICITATION AND ANY RESULTANT CONTRACT.

1. **CERTIFICATION:** By signature in the Offer section of the Offer and Contract Award page (COP Form 203), the Professional Services Provider, (Consultant), certifies:
 - a. The submission of the offer did not involve collusion or other anti-competitive practices.
 - b. The Consultant shall not discriminate against any employee or applicant for employment in violation of Federal Executive Order 11456.
 - c. The Consultant has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip favor, or service to a public servant in connection with the submitted offer. Failure to sign the offer, or signing it with a false statement, shall void the submitted offer or any resulting contracts, and the Consultant may be debarred.
2. **GRATUITIES:** The City may, by written notice to the Consultant, cancel this contract if it is found by the City that gratuities, in the form of entertainment, gifts or otherwise, were offered or given by the Consultant or any agent or representative of the Consultant, to any officer or employee of the City with a view toward securing an order, securing favorable treatment with respect to the awarding, amending, or the making of any determinations with respect to the performing of such order. In the event this contract is cancelled by the City pursuant to this provision, the City shall be entitled, in addition to any other rights and remedies, to recover or withhold from the Consultant the amount of the gratuity. Paying the expense of normal business meals which are generally made available to all eligible city government customers shall not be prohibited by this paragraph.
3. **APPLICABLE LAW:** In the performance of this agreement, contractors shall abide by and conform to any and all laws of the United States, State of Arizona and City of Peoria including but not limited to federal and state executive orders providing for equal employment and procurement opportunities, the Federal Occupational Safety and Health Act and any other federal or state laws applicable to this agreement.

Contractor specifically understands and acknowledges the applicability to it of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986, and the Drug Free Workplace Act of 1989. In addition, if this agreement pertains to construction, Contractor must also comply with A.R.S. § 34-301, as amended (Employment of Aliens on Public Works Prohibited) and A.R.S. § 34-302, as amended (Residence Requirements for Employees).

Under the provisions of A.R.S. § 41-4401, Contractor hereby warrants to the City that Contractor and each of its subcontractors ("Subcontractors") will comply with, and are contractually obligated to comply with, all Federal immigration laws and regulations that relate to their employees and A.R.S. § 23-214(A) (hereinafter, "Contractor Immigration Warranty").

A breach of the Contractor Immigration Warranty shall constitute a material breach of this agreement and shall subject Contractor to penalties up to and including termination of this agreement at the sole discretion of the City. The City may, at its sole discretion, conduct random verification of the employment records of Contractor and any Subcontractors to ensure compliance with the Contractor Immigration Warranty. Contractor agrees to assist the City in regard to any random verifications performed.

Neither Contractor nor any Subcontractor shall be deemed to have materially breached the Contractor Immigration Warranty if Contractor or the Subcontractor establishes that it has complied with the employment verification provisions prescribed by §§ 274A and 274B of the Federal Immigration and Nationality Act and the E-Verify requirements prescribed by A.R.S. § 23-214(A).

The provisions of this Paragraph must be included in any contract Contractor enters into with any Subcontractors who provide services under this agreement or any subcontract. "Services" is defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.



STANDARD TERMS AND CONDITIONS

Materials Management Procurement

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Contractor warrants, for the term of this agreement and for six months thereafter, that it has fully complied with the requirements of the Immigration Reform and Control Act of 1986 and all related or similar legal authorities.

This contract shall be governed by the City and Contractor shall have all remedies afforded each by the Uniform Commercial Code, as adopted in the State of Arizona, except as otherwise provided in this contract or in statutes pertaining specifically to the City. This contract shall be governed by the laws of the State of Arizona and suit pertaining to this contract may be brought only in courts in the State of Arizona.

This contract is subject to the provisions of ARS §38-511; the City may cancel this contract without penalty or further obligations by the City or any of its departments or agencies if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the City or any of its departments or agencies, is at any time while the contract or any extension of the contract is in effect, an employee of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract.

4. **LEGAL REMEDIES:** All claims and controversies shall be subject to resolution according to the terms of the City of Peoria Procurement Code.
5. **CONTRACT:** The contract between the City and the Consultant shall consist of (1) the Solicitation, including instructions, all terms and conditions, specifications, scopes of work, attachments, and any amendments thereto, and (2) the offer submitted by the Consultant in response to the solicitation. In the event of a conflict in language between the Solicitation and the Offer, the provisions and requirements in the Solicitation shall govern. However, the City reserves the right to clarify, in writing, any contractual terms with the concurrence of the Consultant, and such written contract shall govern in case of conflict with the applicable requirements stated in the Solicitation or the Consultant's offer. The Solicitation shall govern in all other matters not affected by the written contract.
6. **CONTRACT AMENDMENTS:** This contract may be modified only by a written Contract Amendment (COP Form 217) signed by persons duly authorized to enter into contracts on behalf of the City and the Consultant.
7. **CONTRACT APPLICABILITY:** The Offeror shall substantially conform to the terms, conditions, specifications and other requirements found within the text of this specific Solicitation. All previous agreements, contracts, or other documents, which have been executed between the Offeror and the City are not applicable to this Solicitation or any resultant contract.
8. **PROVISIONS REQUIRED BY LAW:** Each and every provision of law and any clause required by law to be in the contract will be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the contract will forthwith be physically amended to make such insertion or correction.
9. **SEVERABILITY:** The provisions of this contract are severable to the extent that any provision or application held to be invalid shall not affect any other provision or application of the contract which may remain in effect without the invalid provision or application.
10. **RELATIONSHIP TO PARTIES:** It is clearly understood that each party will act in its individual capacity and not as an agent, employee, partner, joint venturer, or associate of the other. An employee or agent of one party shall not be deemed or construed to be the employee or agent of the other for any purpose whatsoever. The Consultant is advised that taxes or Social Security payments will not be withheld from any City payments issued hereunder and that the Consultant should make arrangements to directly pay such expenses, if any.
11. **INTERPRETATION-PAROL EVIDENCE:** This contract represents the entire agreement of the Parties with respect to its subject matter, and all previous agreements, whether oral or written, entered into prior to this contract are hereby revoked and superseded by this contract. No representations, warranties, inducements or oral agreements have been made by any of the Parties except as expressly set forth herein, or in any other contemporaneous written agreement executed for the purposes of carrying out the provisions of this contract. This contract may not be changed, modified or rescinded except as provided for herein, absent a written agreement signed by both Parties. Any attempt at oral modification of this contract shall be void and of no effect.



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12. **ASSIGNMENT-DELEGATION:** No right or interest in this contract shall be assigned by Consultant without prior written permission of the City and no delegation of any duty of Consultant shall be made without prior written permission of the City.
13. **SUBCONTRACTS:** No subcontract shall be entered into by the Consultant with any other party to furnish any of the material, service or construction specified herein without the advance written approval of the City. The prime Consultant shall itemize all sub-contractors which shall be utilized on the project. Any substitution of sub-contractors by the prime Consultant shall be approved by the City and any cost savings will be reduced from the prime Consultant's bid amount. All subcontracts shall comply with Federal and State laws and regulations which are applicable to the services covered by the subcontract and shall include all the terms and conditions set forth herein which shall apply with equal force to the subcontract and if the Subcontractor were the Consultant referred to herein. The Consultant is responsible for contract performance whether or not Subcontractors are used.
14. **RIGHTS AND REMEDIES:** No provision in this document or in the Consultant's offer shall be construed, expressly or by implication, as waiver by the City of any existing or future right and/or remedy available by law in the event of any claim of default or breach of contract. The failure of the City to insist upon the strict performance of any term or condition of the contract or to exercise or delay the exercise of any right or remedy provided in the contract, or by law, or the City's acceptance of and payment for materials or services, shall not release the Consultant from any responsibilities or obligations imposed by this contract or by law, and shall not be deemed a waiver of any right of the City to insist upon the strict performance of the Contract.
15. **INDEMNIFICATION:** To the fullest extent permitted by law, the Consultant shall defend, indemnify and hold harmless the City, its agents, representatives, officers, directors, officials and employees for costs or damages for which the Consultant is legally responsible or for which the City is vicariously liable on account of the Consultant's willful or negligent acts, error or omissions.

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

16. **OVERCHARGES BY ANTITRUST VIOLATIONS:** The City maintains that, in practice, overcharges resulting from antitrust violations are borne by the purchaser. Therefore, to the extent permitted by law, the Consultant hereby assigns to the City any and all claims for such overcharges as to the goods and services used to fulfill the Contract.
17. **FORCE MAJEURE:** Except for payment for sums due, neither party shall be liable to the other nor deemed in default under this Contract if and to the extent that such party's performance of this Contract is prevented by reason of force majeure. The term "*force majeure*" means an occurrence that is beyond the control of the party affected and occurs without its fault or negligence. Without limiting the foregoing, force majeure includes acts of God; acts of the public enemy; war; acts of terror, hate crimes affecting public order; riots; strikes; mobilization; labor disputes; civil disorders; fire; floods; lockouts, injunctions-intervention-acts, or failures or refusals to act by government authority; events or obstacles resulting from a governmental authority's response to the foregoing; and other similar occurrences beyond the control of the party declaring force majeure which such party is unable to prevent by exercising reasonable diligence. The force majeure shall be deemed to commence when the party declaring force majeure notifies the other party of the existence of the force majeure and shall be deemed to continue as long as the results or effects of the force majeure prevent the party from resuming performance in accordance with this Contract.

Force majeure shall not include the following occurrences:

- a. Last minute failure of office equipment is not force majeure.
- b. Late performance by a subcontractor unless the delay arises out of a force majeure occurrence in accordance with this Force Majeure term and Condition.

Any delay or failure in performance by either party hereto shall not constitute default hereunder or give rise to any claim for damages or loss of anticipated profits if, and to the extent that such delay or failure is caused by force majeure. If either party is delayed at any time in the progress of the work by force majeure, then the delayed party shall notify the other party in writing of such delay within forty-eight (48) hours commencement thereof and shall specify the causes of such delay in such notice. Such



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notice shall be hand delivered or mailed *Certified-Return Receipt* and shall make a specific reference to this article, thereby invoking its provisions. The delayed party shall cause such delay to cease as soon as practicable and shall notify the other party in writing. The time of completion shall be extended by contract modification for a period of time equal to the time that the results or effects of such delay prevent the delayed party from performing in accordance with this contract.

18. **RIGHT TO ASSURANCE:** Whenever one party to this contract in good faith has reason to question the other party's intent to perform he may demand that the other party give a written assurance of this intent to perform. In the event that a demand is made and no written assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation of the Contract.
19. **RIGHT TO AUDIT RECORDS:** The City may, at reasonable times and places, audit the books and records of any Contractor as related to any contract held with the City. This right to audit also empowers the City to inspect the papers of any Contractor or Subcontractor employee who works on this contract to ensure that the Contractor or Subcontractor is complying with the Contractor Immigration Warranty made pursuant to Paragraph 3 above.
20. **RIGHT TO INSPECT:** The City may, at reasonable times, inspect the part of the place of business of a Consultant or Subcontractor which is related to the performance of any contract as awarded or to be awarded.
21. **WARRANTIES:** Consultant warrants that all services delivered under this contract shall conform to the specifications of this contract. Consultant warrants that all services shall be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. Additional warranty requirements may be set forth in the solicitation.
22. **INSPECTION:** All services are subject to final inspection and acceptance by the City. Services failing to conform to the specifications of this Contract will be held at Consultant's risk and may be returned to the Consultant. If so returned, all costs are the responsibility of the Consultant. The City may elect to do any or all:
 - a. Waive the non-conformance.
 - b. Stop the work immediately.
 - c. Bring material into compliance.This shall be accomplished by a written determination for the City.
23. **TITLE AND RISK OF LOSS:** The title and risk of loss of service shall not pass to the City until the City actually receives the service at the point of delivery, unless otherwise provided within this Contract.
24. **NO REPLACEMENT OF DEFECTIVE TENDER:** Every tender of materials shall fully comply with all provisions of the Contract. If a tender is made which does not fully conform, this shall constitute a breach of the Contract as a whole.
25. **DEFAULT IN ONE INSTALLMENT TO CONSTITUTE TOTAL BREACH:** Consultant shall deliver conforming materials in each installment of lot of this Contract and may not substitute nonconforming materials. Delivery of nonconforming materials or a default of any nature, at the option of the City, shall constitute a breach of the Contract as a whole.
26. **LICENSES:** Consultant shall maintain in current status all Federal, State and Local licenses and permits required for the operation of the business conducted by the Consultant as applicable to this Contract.
27. **PATENTS AND COPYRIGHTS:** All services, information, computer program elements, reports and other deliverables, which may be patented or copyrighted and created under this contract are the property of the City and shall not be used or released by the Consultant or any other person except with the prior written permission of the City.
28. **PREPARATION OF SPECIFICATIONS BY PERSONS OTHER THAN CITY PERSONNEL:** All specifications shall seek to promote overall economy for the purposes intended and encourage competition and not be unduly restrictive in satisfying the City's needs. No person preparing specifications shall receive any direct or indirect benefit from the utilization of specifications, other than fees paid for the preparation of specifications.



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29. **COST OF PROPOSAL PREPARATION:** The City shall not reimburse the cost of developing presenting or providing any response to this solicitation. Offers submitted for consideration should be prepared simply and economically, providing adequate information in a straightforward and concise manner.
30. **PUBLIC RECORD:** All offers submitted in response to this solicitation shall become the property of the City and shall become a matter of public record available for review, subsequent to the award notification, in accordance with the City's Procurement Code. However, subsequent to the award of the contract, any information and documents obtained by the City during the course of an audit conducted in accordance with Paragraph 19 above for the purpose of determining compliance by Contractor or a Subcontractor with the Contractor Immigration Warranty mandated by Paragraph 3 above shall remain confidential and shall not be made available for public review or produced in response to a public records request, unless the City is ordered or otherwise directed to do so by a court of competent jurisdiction.
31. **ADVERTISING:** Consultant shall not advertise or publish information concerning this Contract, without prior written consent of the City.
32. **DELIVERY ORDERS:** The City shall issue a Purchase Order for the services covered by this contract. All such documents shall reference the contract number as indicated on the Offer and Contract Award (COP Form 203).
33. **FUNDING:** Any contract entered into by the City of Peoria is subject to funding availability. Fiscal years for the City of Peoria are July 1 to June 30. The City Council approves all budget requests. If a specific funding request is not approved, the contract shall be terminated.
34. **DISCLAIMER:** The City of Peoria, Arizona provides current and complete solicitation information for registered Plan Holders only. Updates, amendments and related information regarding the solicitation contained herein will be delivered only to registered Plan Holders. The City assumes no liability or duty to so update or send any update to persons who are not Plan Holders. Any person who acquires these documents from any source other than the City website or directly from the Materials Management Division, has no assurance that the solicitation is valid. No person may amend this document, nor may any person publish it without this disclaimer.
35. **PAYMENT:** A separate invoice shall be issued for each service performed, and no payment will be issued prior to receipt of services and correct invoice.



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1. **Purpose:** Pursuant to provisions of the City Procurement Code, the City of Peoria, Materials Management Division intends to establish a contract for **Biddability/Constructability Reviews**.
2. **Authority:** This Solicitation as well as any resultant contract is issued under the authority of the City. No alteration of any resultant contract may be made without the express written approval of the City Materials Manager in the form of an official contract amendment. Any attempt to alter any contract without such approval is a violation of the contract and the City Procurement Code. Any such action is subject to the legal and contractual remedies available to the City inclusive of, but not limited to, contract cancellation, suspension and/or debarment of the Consultant.
3. **Offer Acceptance Period:** In order to allow for an adequate evaluation, the City requires an offer in response to this Solicitation to be valid and irrevocable for ninety (90) days after the opening time and date.
4. **Eligible Agencies:** Any contract resulting from this Solicitation shall be for the use of all City of Peoria departments, agencies and boards.
5. **Cooperative Purchasing:** Any contract resulting from this solicitation shall be for the use of the City of Peoria. In addition, specific eligible political subdivisions and nonprofit educational or public health institutions may also participate at their discretion. In order to participate in any resultant contract, a political subdivision or nonprofit educational or public health institution must have been invited to participate in this specific solicitation and the contractor must be in agreement with the cooperative transaction. In addition to cooperative purchasing, any eligible agency may elect to participate (piggyback) on any resultant contract; the specific eligible political subdivision, nonprofit educational or public health institution and the contractor must be in agreement.

Any orders placed to the successful contractor will be placed by the specific agencies participating in this purchase. Payment for purchases made under this agreement will be the sole responsibility of each participating agency. The City shall not be responsible for any disputes arising out of transactions made by others.
6. **Contract Type:** Fixed Price
7. **Term of Contract:** The term of any resultant contract shall commence on the first day of the month following the date of award and shall continue for a period of one (1) year thereafter, unless terminated, cancelled or extended as otherwise provided herein.
8. **Contract Extension:** By mutual written contract amendment, any resultant contract may be extended for supplemental periods of up to a maximum of forty-eight (48) months.
9. **Affirmative Action:** It is the policy of the City of Peoria that suppliers of goods or services to the City adhere to a policy of equal employment opportunity and demonstrate an affirmative effort to recruit, hire, and promote regardless of race, color, religion, gender, national origin, age or disability. The City of Peoria encourages diverse suppliers to respond to solicitations for products and services.
10. **Submittal Requirements:** Proposal Submittal & Content Requirements are outlined in detail on Pages 21 – 22.
11. **Discussions:** In accordance with the City of Peoria Procurement Code, after the initial receipt of proposals, discussions may be conducted with offerors who submit proposals determined to be reasonably susceptible of being selected for award.
12. **Interview Guidelines:** During any requested interview, which would be scheduled in the future, be prepared to discuss your firm's proposal, staff assignments, project approach and other pertinent information. The presentation shall be approximately 30 minutes, allowing 30 minutes for a question and answer session. The Consultant's Project/Team Manager shall lead the presentation team and answer questions on behalf of the Consultant. If work involves a major sub-consultant, the firms Project/Team Manager's presence may also be requested (by the City) at the interview.
13. **Evaluation:** In accordance with the City of Peoria Procurement Code, awards shall be made to the responsible offeror whose proposal is determined in writing to be the most advantageous to the City, based upon the evaluation criteria listed below. The evaluation factors are listed in their relative order of importance.
 - a. Project Understanding and Project Approach;
 - b. Experience;



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- c. Past/Similar Projects;
- d. Conformance to Request for Proposals.

The City reserves the right to consider historic information and facts, whether gained from the Offeror's proposal, questions and answer conferences, references, or other source and the views of the evaluator(s) with prior Contract or service delivery experience with any of the Offerors, while conducting the proposal evaluations.

- 14. **Proposal Opening:** Proposals shall be submitted at the time and place designated in the request for proposals. All information contained in the proposals shall be deemed as exempt from public disclosure based on the City's need to avoid disclosure of contents prejudicial to competing offerors during the process of negotiation. The proposals shall not be open for public inspection until after contract award. **PRICES SHALL NOT BE READ.** After contract award, the successful proposal and the evaluation documentation shall be open for public inspection.
- 15. **Performance Warranty:** This section does not relieve Consultant from its obligation to provide Work and Materials/Design Materials appropriate to the purposes of this Project. Nothing in this Agreement creates any contractual liability between the City of Peoria and any Subcontractor; however, the City of Peoria is an intended third-party beneficiary of all contracts for services, all Subcontracts, purchase orders and other agreements between the Consultant and third parties. The Consultant must incorporate the obligations of this Agreement into its respective Subcontracts, supply agreements and purchase orders.
- 16. **Permits and Approvals:** Consultant agrees and undertakes to obtain necessary permits and approvals, as per the scope of work, from all local, state and federal authorities for the project. In all other cases, the consultant agrees to assist the city to obtain all necessary permits and approvals from all local, state, and federal authorities for the project.
- 17. **Scope of Work Deliverable:** The successful Consultant shall prepare and provide a detailed Scope of Work for the project. The finalized Scope of Work shall include the agreed upon approach, method, format, and timing to complete the project.
- 18. **Inspection:** All work shall be subject to inspection, surveillance, and test by the City at reasonable times during the performance of the contract. The Consultant shall provide and maintain an inspection system which is acceptable to the City.
- 19. **Document Ownership:** Original design notes, and original tracings of the plans, as instruments of service shall remain the property of the Consultant. The Consultant shall provide the City with duplicate reproducibles of original tracings on stable base (mylar) material, and two (2) sets of prints of the final tracings, without cost to the City. Final as-built plans will be on 4 mil, 24 x 36" double matte non-wash off photo mylar with no adhesive or sticky back attached. Original field notes (survey) and copy of design calculations and computer disc of the same shall be provided to the City.
- 20. **Ownership of Documents:** All materials/design materials (hardcopy or electronic), drawings, specifications, reports, and other data developed by the Consultant, its assigned employees or subconsultants pursuant to this Agreement shall become the property of the City of Peoria as prepared, whether delivered to the City of Peoria or not. Unless otherwise provided herein, all such data shall be delivered to the City of Peoria or its designee upon completion of the agreement or at such other times as the City of Peoria or its designee may request.

The City of Peoria shall indemnify and hold harmless the Consultant, its Subcontractors, Subconsultants, and their respective agents and employees from and against all claims, liabilities, demands, actions, costs and expenses (including attorneys' and experts' fees and costs) (collectively, "Claims") arising from any use by the City of Peoria, its successors or assigns of such Materials/Design Materials if reuse, modifications or amendments of any such materials/design materials are made without the prior consent and involvement of the Consultant.

- 21. **Use of Materials/Design Materials:** The City of Peoria shall have unlimited rights to copy and use in connection with the Project all Materials/Design Materials, including the right to use same on the Project at no additional cost to the City of Peoria, regardless of degree of completion, provided that said services performed have been fully paid for as required by the terms of this Agreement exclusive of amounts disputed by City of Peoria in good faith. The Consultant agrees to and does hereby grant to the City of Peoria and any assignee or successor of the City of Peoria as owner of the Project a royalty-free license to any such Materials/Design Materials as to which the Consultant may assert any rights under the patent or copyright laws. The Consultant hereby assigns outright and exclusively to the City of Peoria all copyrights of the Project. The Consultant, as part of its agreements with any Subcontractor or Subconsultant, will secure such license and use rights from each such entity, and shall



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defend, indemnify and hold the City of Peoria and any successors or assigns harmless from any claims from such for claims by such entities for copyright or patent infringement.

- 22. **Investigation of Conditions:** The Consultant warrants and agrees familiarity of the work that is required, is satisfied as to the conditions under which is performed and enters into this contract based upon the Consultants own investigation.
- 23. **Compensation:** Compensation for services shall be based upon fees negotiated, including all approved costs and expenses incurred in connection with the project; including but not limited to, telephone and other communications, reproduction of documents, special consultants (as approved by the City) and computer costs.
- 24. **Acceptance:** Determination of the acceptability of work shall be completed in a responsive and professional manner and in accordance with the specifications, schedules, or plans which are incorporated in the Scope of Work.
- 25. **Payments:** The City shall pay the Consultant monthly, based upon work performed and completion to date, and upon submission of invoices. All invoices shall document and itemize all work completed to date. The invoice statement shall include a record of time expended and work performed in sufficient detail to justify payment.
- 26. **Insurance Requirements:** The Consultant, at Consultant's own expense, shall purchase and maintain the herein stipulated minimum insurance with companies duly licensed, possessing a current A.M. Best, Inc. Rating of A-, or approved unlicensed in the State of Arizona with policies and forms satisfactory to the City.

All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted; failure to do so may, at the sole discretion of the City, constitute a material breach of this Contract.

The Consultant's insurance shall be primary insurance as respects the City, and any insurance or self-insurance maintained by the City shall not contribute to it.

Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect coverage afforded under the insurance policies to protect the City.

The insurance policies, except Workers' Compensation, shall contain a waiver of transfer rights of recovery (subrogation) against the City, its agents, representatives, directors, officers, and employees for any claims arising out of the Consultant's acts, errors, mistakes, omissions, work or service.

The insurance policies may provide coverage which contain deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to the City under such policies. The Consultant shall be solely responsible for the deductible and/or self-insured retention and the City, at its option, may require the Consultant to secure payment of such deductibles or self-insured retentions by a Surety Bond or an irrevocable and unconditional letter of credit.

The City reserves the right to request and to receive, within 10 working days, certified copies of any or all of the herein required insurance policies and/or endorsements. The City shall not be obligated, however, to review same or to advise Consultant of any deficiencies in such policies and endorsements, and such receipt shall not relieve Consultant from, or be deemed a waiver of the City's right to insist on, strict fulfillment of Consultant's obligations under this Contract.

The insurance policies, except Workers' Compensation and Professional Liability, required by this Contract, shall name the City, its agents, representatives, officers, directors, officials and employees as Additional Insureds.

27. **Required Insurance Coverage:**

- a. Commercial General Liability

Consultant shall maintain Commercial General Liability insurance with a limit of not less than \$1,000,000 for each occurrence with a \$2,000,000 Products/Completed Operations Aggregate and a \$2,000,000 General Aggregate Limit. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual coverage including, but not limited to, the liability assumed under the indemnification



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provisions of this Contract which coverage will be at least as broad as Insurance Service Office, Inc. Policy Form CG 00011093 or any replacements thereof. The coverage shall not exclude X, C, U.

Such policy shall contain a severability of interest provision, and shall not contain a sunset provision or commutation clause, nor any provision which would serve to limit third party action over claims.

The Commercial General Liability additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured, Form B, CG 20101093, and shall include coverage for Consultant's operations and products and completed operations.

If required by this Contract the Consultant subletting any part of the work, services or operations awarded to the Consultant shall purchase and maintain, at all times during prosecution of the work, services or operations under this Contract, an Owner's and Consultant Protective Liability insurance policy for bodily injury and property damage, including death, which may arise in the prosecution of the Consultant's work, service or operations under this Contract. Coverage shall be on an occurrence basis with a limit not less than \$1,000,000 per occurrence, and the policy shall be issued by the same insurance company that issues the Consultant's Commercial General Liability insurance.

b. Automobile Liability

Consultant shall maintain Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to the Consultant's any owned, hired, and non-owned vehicles assigned to or used in performance of the Consultant's work. Coverage will be at least as broad as coverage code 1, "any auto", (Insurance Service Office, Inc. Policy Form CA 00011293, or any replacements thereof). Such insurance shall include coverage for loading and off loading hazards.

c. Workers' Compensation

The Consultant shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant's employees engaged in the performance of the work or services; and, Employer's Liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit.

In case any work is subcontracted, the Consultant will require the Subcontractor to provide Workers' Compensation and Employer's Liability to at least the same extent as required of the Consultant.

d. Professional Liability

The Consultant retained by the City to provide the work or service required by this Contract will maintain Professional Liability insurance covering acts, errors, mistakes and omissions arising out of the work or services performed by the Consultant, or any person employed by the Consultant, with a limit of not less than \$1,000,000 each claim.

28. **Certificates of Insurance:** Prior to commencing work or services under this Contract, Consultant shall furnish the City with Certificates of Insurance, or formal endorsements as required by the Contract, issued by Consultant's insurer(s), as evidence that policies providing the required coverages, conditions and limits required by this Contract are in full force and effect.

In the event any insurance policy(ies) required by this contract is(are) written on a "Claims made" basis, coverage shall extend for two years past completion and acceptance of the Consultant's work or services and as evidenced by annual Certificates of Insurance.

If a policy does expire during the life of the Contract, a renewal certificate must be sent to the City fifteen (15) days prior to the expiration date.

All Certificates of Insurance shall be identified with bid serial number and title. A \$25.00 administrative fee will be assessed for all certificates received without the appropriate bid serial number and title.

29. **Cancellation and Expiration Notice:** Insurance required herein shall not expire, be canceled, or materially changed with respect to coverage or rating of carrier. All other changes shall be with thirty (30) days prior written notice to the City.



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30. Independent Contractor:

a. General

- i. The Consultant acknowledges that all services provided under this Agreement are being provided by him as an independent Consultant, not as an employee or agent of the City Manager or the City of Peoria.
- ii. Both parties agree that this Agreement is nonexclusive and that Consultant is not prohibited from entering into other contracts nor prohibited from practicing his profession elsewhere.

b. Liability

- i. The City of Peoria shall not be liable for any acts of Consultant outside the scope of authority granted under this Agreement or as the result of Consultant's acts, errors, misconduct, negligence, omissions and intentional acts.
- ii. To the fullest extent permitted by law, the Consultant shall defend, indemnify and hold harmless the City, its agents, representatives, officers, directors, officials and employees for costs or damages for which the Consultant is legally responsible or for which the City is vicariously liable on account of the Consultant's willful or negligent acts, errors or omissions.

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

c. Other Benefits

The Consultant is an independent Consultant, therefore, the City Manager will not provide the Consultant with health insurance, life insurance, workmen's compensation, sick leave, vacation leave, or any other fringe benefits. Further, Consultant acknowledges that he is exempt from coverage of the Comprehensive Benefit and Retirement Act (COBRA). Any such fringe benefits shall be the sole responsibility of Consultant.

31. Key Personnel: It is essential that the Consultant provide adequate experienced personnel, capable of and devoted to the successful accomplishment of work to be performed under this contract. The Consultant must agree to assign specific individuals to the key positions.

- a. The Consultant agrees that, once assigned to work under this contract, key personnel shall not be removed or replaced without written notice to the City.
- b. If key personnel are not available for work under this contract for a continuous period exceeding 30 calendar days, or are expected to devote substantially less effort to the work than initially anticipated, the Consultant shall immediately notify the City, and shall, subject to the concurrence of the City, replace such personnel with personnel of substantially equal ability and qualifications.

32. Unifier Project Management System: Awarded vendors may be required to utilize the City's Project Management System, Unifier, for the management of business processes and information regarding the awarded contract. Unifier is an on-line application and will be made available to awarded vendors at no additional charge. Vendors will utilize Unifier to submit and process information to the City such as: Field Change Order Requests, RFI's, Submittals, Payment Applications, Meeting Minutes, etc. Training will be offered to the vendors at no additional charge.

33. Confidential Information:

- a. If a person believes that a bid, proposal, offer, specification, or protest contains information that should be withheld, a statement advising the Materials Supervisor of this fact shall accompany the submission and the information shall be identified.
- b. The information identified by the person as confidential shall not be disclosed until the Materials Supervisor makes a written determination.
- c. The Materials Supervisor shall review the statement and information and shall determine in writing whether the information shall be withheld.



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d. If the Materials Supervisor determines to disclose the information, the Materials Supervisor shall inform the bidder in writing of such determination.

34. **Confidentiality of Records:** The Consultant shall establish and maintain procedures and controls that are acceptable to the City for the purpose of assuring that information contained in its records or obtained from the City or from others in carrying out its functions under the contract shall not be used or disclosed by it, its agents, officers, or employees, except as required to efficiently perform duties under the contract. Persons requesting such information should be referred to the City. Consultant also agrees that any information pertaining to individual persons shall not be divulged other than to employees or officers of Consultant as needed for the performance of duties under the contract. These provisions shall not restrict the Design Professional from giving notices required by law or complying with an order to provide information or data when such order is issued by a court, administrative agency or other authority with proper jurisdiction.

35. **Ordering Process:** Upon award of a contract by the City of Peoria, Materials Management Division may procure the specific service awarded by the issuance of a purchase order to the appropriate Consultant. The award of a contract shall be in accordance with the City of Peoria Procurement Code and all transactions and procedures required by the Code for public bidding have been complied with. A purchase order for the awarded service that cites the correct contract number is the only document required for the department to order and the Consultant to deliver the service.

Any attempt to represent any service not specifically awarded as being under contract with the City of Peoria is a violation of the contract and the City of Peoria Procurement Code. Any such action is subject to the legal and contractual remedies available to the City inclusive of, but not limited to, contract cancellation, suspension and/or debarment of the Consultant.

36. **Billing:** All billing notices to the City shall identify the specific item(s) being billed and the purchase order number. Items are to be identified by the name, model number, and/or serial number most applicable. Any purchase/delivery order issued by the requesting agency shall refer to the contract number resulting from this solicitation.

37. **Cancellation:** The City reserves the right to cancel the whole or any part of this contract due to failure by the Consultant to carry out any obligation, term or condition of the contract. The City will issue written notice to the Consultant for acting or failing to act as in any of the following:

- a. The Consultant provides material that does not meet the specifications of the contract;
- b. The Consultant fails to adequately perform the services set forth in the specifications of the contract;
- c. The Consultant fails to complete the work required or to furnish the materials required within the time stipulated in the contract;
- d. The Consultant fails to make progress in the performance of the contract and/or gives the City reason to believe that the Consultant will not or cannot perform to the requirements of the contract.

Upon receipt of the written notice of concern, the Consultant shall have ten (10) days to provide a satisfactory response to the City. Failure on the part of the Consultant to adequately address all issues of concern may result in the City resorting to any single or combination of the following remedies:

- a. Cancel any contract;
- b. Reserve all rights or claims to damage for breach of any covenants of the contract;
- c. Perform any test or analysis on materials for compliance with the specifications of the contract. If the results of any test or analysis find a material non-compliant with the specifications, the actual expense of testing shall be borne by the Consultant;
- d. In case of default, the City reserves the right to purchase materials, or to complete the required work in accordance with the City Procurement Code. The City may recover any actual excess costs from the Consultant by:
 - i. Deduction from an unpaid balance;
 - ii. Or any other remedies as provided by law.



SPECIAL TERMS AND CONDITIONS

Solicitation Number: P09-00679

Materials Management
Procurement
8314 West Cinnabar Street
Peoria, Arizona 85345-6560
Phone: (623) 773-7115
Fax: (623) 773-7118

38. **Project Travel Reimbursable Expenses:** If travel expenses are allowed as part of the contract the reimbursable expenses will be as follows. All expenses will be billed to the City at cost without markup. Copies of bills for expenses are to be submitted with the invoice. Travel time to and from job site is excluded from this contract. There will be no allowances for parking or personal car mileage. No incidentals for travel of any kind are allowed under this contract.

The following is a list of allowable travel expenses under this contract agreement:

a. Transportation:

- i. Air Transportation – coach class fares, minimum 14 days advanced purchase, unless otherwise agreed upon.
- ii. Car Rental – mid size car, gas for rental car (City assumes no liability regarding additional insurance costs).

b. Lodging and Meals:

- i. Meals – three meals per day, at the current federal per diem rate for Maricopa County.
- ii. Lodging – not to exceed the current federal rate for Maricopa County. Vendors are encouraged to stay in hotels located within the City of Peoria when practical. A listing of accommodations within Peoria can be found on the following website: <http://visitpeoriaaz.gov/accommodations.php>



SPECIAL PROVISIONS

Solicitation Number: P09-00679

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SPECIAL PROVISIONS

I. The following Special Provisions shall apply if the individual project assigned to the Contractor is utilizing Federal American Recovery and Reinvestment Act of 2009 (ARRA) funds. The City will notify the Contractor of such a circumstance.

A. **Compliance with Davis-Bacon Act (40 U.S.C. §276a-276a-5) Prevailing Wage Requirements (ARRA Section 1606):**

All laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and the through the Federal Government pursuant to the ARRA shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the United States Secretary of Labor in accordance with subchapter IV of chapter 31 of Title 40, United States Code. In addition, all covered contracts shall include the standard contract clauses regarding prevailing wages and benefits included in the United States Department of Labor regulations found at 29 Code of Federal Regulations ("CFR") § 5.5, which are incorporated by reference in this contract. The contractor shall comply with the requirements of 29 CFR Part 3, which are also incorporated by reference in this Contract.

The contractor or subcontractors shall insert in any subcontracts the clauses contained in 29 CFR § 5.5(a) (1) through (10) and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR § 5.5.

A breach of the contract clauses in 29 CFR § 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR § 5.12.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the United States Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the City, the State of Arizona ("State"), the United States Department of Labor, or their employees or their representatives.

By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR § 5.12(a)(1).

No part of this contract shall be subcontracted to any person or firm ineligible for award of a government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR § 5.12(a)(1).



SPECIAL PROVISIONS

Solicitation Number: P09-00679

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B. Use of American Iron, Steel, and Manufactured Goods – Buy American Requirements (ARRA Section 1605):

The contractor acknowledges to and for the benefit of the City (“Purchaser”) and the State that it understands the goods and services under this contract are being funded with monies made available by the ARRA (or are being made available for a project being funded with monies made available by the ARRA) and such law contains provisions commonly known as “Buy American” that require all of the iron, steel, and manufactured goods used in the project be produced in the United States (“Buy American Requirements”) including iron, steel, and manufactured goods provided by the Contractor pursuant to this contract. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the Buy American Requirements, (b) all of the iron, steel, and manufactured goods used in the project will be and/or have been produced in the United States in a manner that complies with the Buy American Requirements, unless a waiver of the requirements is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the Buy American Requirements, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this contract, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense or cost (including without limitation attorney’s fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this contract necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

C. Whistleblower Protections Under The ARRA:

(a) The Contractor shall post a notice of employees’ rights and remedies for whistleblower protections provided under Section 1553 of the ARRA (Pub. L. 111-5).

(b) The Contractor shall require that this provision be included in all subcontracts.

D. Reporting Requirements under the ARRA:

(a) This Contract requires the Contractor to provide products and/or services that are funded under the ARRA. Section 1512(c) of the ARRA requires each contractor to report on its use of Recovery Act funds under this Contract. These reports will be made available to the public.

(b) Reports from contractors for all work funded, in whole or in part, by the ARRA, and for which an invoice is submitted prior to June 30, 2009, are due no later than July 10, 2009. Thereafter, reports shall be submitted no later than the 10th day after the end of each calendar quarter.

(c) The Contractor shall report the following information, using the online reporting tool available at www.FederalReporting.gov:

(1) The City of Peoria contract and order number, as applicable.

(2) The amount of ARRA funds invoiced by the Contractor for the reporting period.



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- (3) A list of all significant services performed or supplies delivered, including construction, for which the Contractor invoiced in the calendar quarter.
- (4) Program or project title, if any.
- (5) A description of the overall purpose and expected outcomes or results of the Contract, including significant deliverables and, if appropriate, associated units of measure.
- (6) An assessment of the Contractor's progress towards the completion of the overall purpose and expected outcomes or results of the Contract (*i.e.*, not started, less than 50 percent completed, completed 50 percent or more, or fully completed). This covers the Contract (or portion thereof) funded by the ARRA.
- (7) A narrative description of the employment impact of work funded by the ARRA. This narrative should be cumulative for each calendar quarter and only address the impact on the Contractor's workforce. At a minimum, the Contractor shall provide—
- (i) A brief description of the types of jobs created and jobs retained in the United States and outlying areas (see definition in Federal Acquisition Record (FAR) 2.101). This description may rely on job titles, broader labor categories, or the Contractor's existing practice for describing jobs as long as the terms used are widely understood and describe the general nature of the work; and
 - (ii) An estimate of the number of jobs created and jobs retained by the prime contractor, in the United States and outlying areas. A job cannot be reported as both created and retained.
- (8) Names and total compensation of each of the five most highly compensated officers of the Contractor for the calendar year in which the Contract is awarded if—
- (i) In the Contractor's preceding fiscal year, the Contractor received—
 - (A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
 - (B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
 - (ii) The public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986.
- (9) For subcontracts valued at less than \$25,000 or any subcontracts awarded to an individual, or subcontracts awarded to a subcontractor that in the previous tax year had gross income under \$300,000, the Contractor shall only report the aggregate number of such first tier subcontracts awarded in the quarter and their aggregate total dollar amount.
- (10) For any first-tier subcontract funded in whole or in part under the ARRA, that is over \$25,000 and not subject to reporting under paragraph 9, the Contractor shall require the subcontractor to provide the information described in (i), (ix), (x), and (xi) below to the Contractor for the purposes of the quarterly report. The Contractor shall advise the subcontractor that the information will be made available to the public as required by Section 1512 of the ARRA. The Contractor shall provide detailed information on these first-tier subcontracts as follows:
- (i) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.
 - (ii) Name of the subcontractor.
 - (iii) Amount of the subcontract award.
 - (iv) Date of the subcontract award.
 - (v) The applicable North American Industry Classification System (NAICS) code.
 - (vi) Funding agency.
 - (vii) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.



SPECIAL PROVISIONS

Solicitation Number: **P09-00679**

**Materials Management
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- (viii) Subcontract number (the contract number assigned by the prime contractor).
- (ix) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district if applicable.
- (x) Subcontract primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district if applicable.
- (xi) Names and total compensation of each of the subcontractor's five most highly compensated officers, for the calendar year in which the subcontract is awarded if—
 - (A) In the subcontractor's preceding fiscal year, the subcontractor received—
 - (1) 80 percent or more of its annual gross revenues in Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and
 - (2) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and
 - (B) The public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986.

E. Central Contractor Registration Required:

- (a) The Contractor is required to properly register and maintain an updated registration with the Central Contractor Registration (CCR), which is the primary Federal Government repository for contractor information required for the conduct of business with the Federal Government. The requirements for such registration are set forth in the Federal Acquisition Record (FAR), including the establishment of a "Data Universal Numbering System (DUNS) number," the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.
- (b) "Registered in the CCR database" means that—
 - (1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and
 - (2) The Federal Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record "Active". The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.
- (c) The DUNS number will be used by the City to verify that the Contractor is registered in the CCR database.
- (d) If the Contractor does not become registered in the CCR database in the time prescribed by the City, the City will proceed to award the Contract to the next otherwise successful registered responding entity.
- (e) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the City's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this Contract and is not a substitute for a properly executed contractual document.



SCOPE OF WORK

Solicitation Number: P09-0069

Materials Management Procurement

8314 West Cinnabar Street
Peoria, Arizona 85345-6560
Phone: (623) 773-7115
Fax: (623) 773-7118

SCOPE OF WORK

I. PURPOSE:

The City of Peoria will be accepting proposals from qualified individuals or Consultants/Construction Manager firms to provide professional services for Biddability/Constructability reviews of various types of Capital Improvement Program (CIP) projects; including but not limited to: Parks, water, wastewater, street, drainage and traffic control projects. The extent of the biddability/constructability reviews will vary depending upon the types and sizes of projects. The qualified individuals/firms shall provide consulting services on an "as-needed" basis for projects to be determined during the term of the contract. The biddability/constructability review is intended to:

- Minimize ambiguities or omissions in the construction documents
- Improve the effectiveness of a set of plans and specifications by having those with construction expertise review the plans and specification.
- Reduce construction related contract amendments
- Improve contractors productivity
- Develop construction-friendly specifications
- Enhance quality
- Reduce conflicts/disputes
- Decrease construction costs
- Review preliminary cost estimate

Those involved in biddability/constructability reviews should be reviewing issues that affect the ability for contractors to understand the plans and specifications well enough to provide well informed bids, ensure that the project can be constructed economically and without delays and meet the City's requirements during construction.

Reviewers should also be considering if the plans and specifications are allowing the contractor to perform the work in the most efficient manner possible, while delivering a high quality product. Those conducting the reviews should have knowledge of construction practices and the ability make independent cost estimates of the work elements and/or review cost estimates.



SCOPE OF WORK

Solicitation Number: P09-0069

Materials Management Procurement

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II. TASKS:

- Perform biddability/constructability review of the 60% contract documents (construction plans, specifications, construction estimate, bid proposal and relevant information) for the project and submit a biddability/constructability report on discrepancies, inconsistencies, omissions, ambiguities, proposed changes and recommendations. Deliverables include a report of the findings and a meeting with the project manager/design consultant to discuss the findings.
- Perform biddability/constructability review of the 95% contract documents (construction plans, specifications, construction estimate, bid proposal and relevant information) for the project and submit a biddability/constructability report on discrepancies, inconsistencies, omissions, ambiguities, proposed changes and recommendations. Deliverables include a report of the findings and a meeting with the project manager/design consultant to discuss the findings.
- Evaluate the engineer's estimate based upon historical and current unit cost information.
- Train City of Peoria staff to conduct in-house constructability reviews.

III. DELIVERABLES:

Consultants shall be required to provide the following deliverables to the City as part of each project:

- Red lined drawings, specifications and other construction documents (such as calculations, catalog cuts, materials lists, etc. if available or requested by the City)
- A detailed, written matrix report describing the findings, reviewers estimated level of completion; issues and proposed solutions, identified by item, page, and discipline
- A book of printed pictures when reference is made to specific site conditions not covered by the A/E team or in conflict with construction documents
- A summary report identifying the major issues, deficiencies and solutions, percentage of completion of each discipline's drawings and specifications
- A data CD that includes all material created by biddability/Constructability review consultant



SUBMITTAL REQUIREMENTS

Solicitation Number: P09-0069

Materials Management Procurement

8314 West Cinnabar Street
Peoria, Arizona 85345-6560
Phone: (623) 773-7115
Fax: (623) 773-7118

I. PROPOSAL FORMAT: Proposals shall be submitted in one (1) original and five (5) copies on the forms and in the format as contained in the Request for Proposal. The proposals should be submitted in the maximum length of fifteen (15) pages. Additional data support information will not be counted in the 15 page limit. **DO NOT BIND THE ORIGINAL COPY.**

II. PROPOSAL CONTENT: The following items shall be addressed in the proposal submission:

A. Project Understanding and Approach:

- Understanding of the Scope of Work
- Plan and Method of Approach to accomplish the Scope of Work
 - Turnaround time for review and back check of projects
- Anticipated City Involvement (with this contract)

B. Experience:

- Firm's & Staff's Experience
 - Number of project review assignments the individual/ firm can handle at any given time.
 - Number of staff by discipline
 - Qualifications of staff to be assigned to City's projects (short resumes)
 - Availability of proposed staff and how the consultant will be able to manage the required services if multiple projects are assigned to it by the City.
- Location of office performing the services

C. Past/Similar Projects:

- Provide a description (written narrative) of the firm's experience with similar types of work.
- Provide at least three (3) owner references from projects completed or ongoing within the past five (5) years
- Complete questionnaire provided on Page 23, make additional copies as necessary.

D. Additional Data Support (these items are optional and will not be counted in the 15-page limit):

- Cover Letter, Dividers, etc (not required)
- Professional Affiliations
- Detailed Resumes to supplement short resumes from section B

E. Exceptions:

- Any exceptions to any part of this RFP must be clearly noted and identified on page 24.

III. EVALUATION: In accordance with the City of Peoria Procurement Code, awards shall be made to the responsible offeror whose proposal is determined in writing to be the most advantageous to the City, based upon the evaluation criteria listed below. The evaluation factors are listed in their relative order of importance.

- a. Project Understanding and Approach;
- b. Experience;
- c. Past/Similar Projects;
- d. Conformance to Request for Proposal.



SUBMITTAL REQUIREMENTS

Solicitation Number: P09-0069

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The City reserves the right to consider historic information and facts, whether gained from the Offeror's proposal, questions and answer conferences, references, or other source and the views of the evaluator(s) with prior Contract or service delivery experience with any of the Offerors, while conducting the proposal evaluations.

IV. PROPOSAL DUE DATE AND CONTACT INFORMATION:

Proposals are due no later than 5:00 P.M. on DATE June 30, 2009.

Proposals shall be submitted in one (1) original and five (5) copies and shall be delivered to:

City of Peoria
Materials Management
8314 West Cinnabar
Peoria, Arizona 85345

Proposals must be submitted in a sealed envelope or package with the solicitation number and the Offeror's name and address clearly indicated on the envelope or package.

Company Name
Company Address
RFP# P09-0069, Biddability/Constructability Reviews
Attention: Christine Finney, Buyer

All questions regarding this RFP should be directed to Christine Finney, Buyer at (623) 773-7531 or E-mail: Christine.Finney@PeoriaAZ.gov

Contact with City staff, other than the designated contact person indicated in the RFP, regarding this solicitation is strictly prohibited during the proposal process.



QUESTIONNAIRE

Solicitation Number: **P09-0069**

**Materials Management
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Offerors are to indicate below any exceptions they have taken to the Terms, Conditions or Scope of Work: Jacobs Contracts Management Group has reviewed the City's contract. No exceptions taken.



QUESTIONNAIRE

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Has your firm been certified by any jurisdiction in Arizona as a minority or woman owned business enterprise? Yes _____, No x .

If yes, please provide details and documentation of the certification.



QUESTIONNAIRE

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Please list a minimum of three (3) owner references from similar projects whom the City of Peoria Materials Management Division may contact:

1. Company: _____
Contact: _____ Phone: _____
Address: _____
Project: _____

2. Company: _____
Contact: _____ Phone: _____
Address: _____
Project: _____

3. Company: _____
Contact: _____ Phone: _____
Address: _____
Project: _____

August 27, 2009

Ms. Christine Finney, CPPB
Materials Management Procurement
City of Peoria
8314 West Cinnabar Street
Peoria, AZ 85345-6560

**RE: Biddability Constructability Reviews
P09-0069**

Dear Ms. Finney:

We are pleased to provide the following cost proposal for the Biddability/Constructability Reviews. Our detailed cost proposal is shown in the attached pages. Given the task order approach of the work, we are proposing rate schedule based approach be utilized for work performed by Jacobs and Corral/ Dybas Group. For work performed by Debra Drecksel, LLC, we are proposing that rate schedule currently in use for her contract with the Arizona Department of Administration.

Item 4 of your fee letter requests if there will be any fee reductions for multiple assignments. Given our competitive cost structure, we are unable to offer any fee reductions. We will strive to work with the City to perform the requested duties in as efficient manner as possible.

We have no exceptions to the contract as presented in the RFP. We have one clarification that occurred between submittal of the Statement of Qualifications and the present. Jacobs has been refining its contracting structure, and it is our desire to have Jacobs Project Management Co. be the contracting entity, in lieu of Jacobs Engineering Group, Inc as shown in the Statement of Qualifications. This change will have no impact on the City of Peoria.

We look forward to working with the City. Please feel free to contact me at (602) 650-4902 or fred.tallarico@jacobs.com if you have any questions.

Sincerely,



Fred S. Tallarico, PE
Principal

JACOBS™

Peoria Biddability/Constructability Cost Proposal
Peoria Contract P09-0069
DERIVATION OF COST PROPOSAL

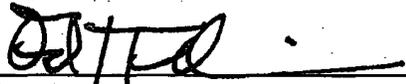
Staff Classification	Proposed Rate
Principal	\$ 200.00
Senior Construction Manager	\$ 171.00
Construction Manager	\$ 128.00
Senior Engineer	\$ 177.00
Clerical	\$ 71.00

Subconsultants

Corral/Dybas Group	See Attached
Debra Drecksel, LLC	See Attached

Direct & Outside Reimbursibles

Outside Reproduction	Actual Cost
Deliveries	Actual Cost
Miscellaneous Supplies	Actual Cost



Signature

Principal

Title

August 27, 2009

Date



August 26, 2009

Mr. Fred Tallarico, P.E.
Jacobs
101 N. 1st. Avenue, Suite 3100,
Phoenix, Arizona, 85003-1902

Subject: **P09-0069 Bidability/Constructability Reviews**
City of Peoria
Fee Structure

Dear Mr. Tallarico:

We have prepared our fee structure for the referenced contract. The following hourly rates are established for the categories identified:

Category	Landscape Architect	Secretarial Clerical
Rate	\$109.06	\$50.02

Other reimbursable expenses are as follows:

Mileage - .505 per mile.

If you should have any questions on the enclosed materials, please contact me at 602-222-9822. We look forward to working with you and the Jacobs staff on this project.

Sincerely,

Edward Corral, RLA
President

Cost Proposal for Debra Drecksel L

Solicitation Number: EPS060041
 Solicitation Name: TRAINING & PARTNERING SERVICES
 Procurement Officer: John Red Horse

Document Name: Solicitation Questionnaire No. 3 – Prices and Pricing

Offeror Name: Offeror Response

Instruction: Offerors shall submit all applicable Products and Services, units of measure and all associated fees and charges into this worksheet. The Product and Service Category is labeled below. There is one worksheet for each of the categories included herein.

See "Drecksel Attachment on Partnering Services" for additional details on Partnering Services.
 See "Drecksel Attachment on Sample Partnering Agendas" for additional details on Partnering Services.
 All Partnering Services will be conducted at the Customer's location.
 Partnerships/Projects with a minimal degree of complexity as described in Contract Attachment 2.1 - 2.2.8.1.1

Description	Price
Two (2) hour workshop Lump Sum Cost	\$2,050
Four (4) hour workshop Lump Sum Cost	\$2,730
Total cost to reproduce and mail one report (in excess of 35 reports)	\$11.84

Partnerships/Projects with a moderate degree of complexity as described in Contract Attachment 2.1 - 2.2.8.1.2

Description	Price
Four (4) hour workshop Lump Sum Cost	\$2,730
Six (6) hour workshop Lump Sum Cost	\$3,510
Total cost to reproduce and mail one report (in excess of 35 reports)	\$11.84

Partnerships/Projects with a high degree of complexity as described in Contract Attachment 2.1 - 2.2.8.1.3

Description	Price
Eight (8) hour workshop Lump Sum Cost	\$4,485
Twelve (12) hour workshop Lump Sum Cost	\$5,950
Sixteen (16) hour workshop Lump Sum Cost	\$6,950
Total cost to reproduce and mail one report (in excess of 35 reports)	\$13.84

Proposed interventions, mediation, problem solving, review and follow-up services and/or other services (Contract Attachment 2.1-2.2.8.5 Partnering

Description	Price
Mediation	\$195 hour
Intervention	\$195 hour
Facilitated Problem Solving	\$195 hour
Specialized Team Building	\$195 hour
Partnering Follow-up Activities	\$195 hour
Report writing and distribution	\$195 hour
planning time per hour in excess of 4 hours	\$195 hour
Preparation hours for a Partnering Workshop cancelled less than 48 hours prior to the start time of the workshop	\$195 hour
Travel time (this means hours required to and from the workshop site) for a Partnering Workshop cancelled less than 48 hours prior to the start time of the workshop.	\$195 hour
Specialized Partnering Consulting Services	\$195 hour
Clerical/Administrative Partnering Services	\$ 55 hour

Partnering Training and Education-Instruction

Description	Price
Class instruction - Agency Developed	
One-half day (4 hour) class	\$2,540
One day (8 hour) class	\$3,585
One and one-half day (12 hour) class	\$5,120
Two day (16 hour) class	\$5,950
Proposed Alternative/Additional Materials: Identify and price separately all participant handouts, including manuals, workbooks, assessments, other. Use additional pages as necessary.	

Contractor Developed Curriculum or Modification

Consulting Services – Curriculum Development or Modification	\$195 hour
Proposed Materials: Identify and price separately all participant handouts, including manuals, workbooks, assessments, other. Use additional pages as necessary	\$15 per manual
Other Related Fees (describe)	



**Materials Management
Procurement**
8314 West Cinnabar Street
Peoria, Arizona 85345-6560
Phone: (623) 773-7115
Fax: (623) 773-7118

August 20, 2009

Jacobs
Attn: Fred S. Tallarico, PE
101 North First Avenue, Suite 3100
Phoenix, Arizona 85003

Re: P09-0069, Biddability/Constructability Reviews

Dear Mr. Tallarico:

The City of Peoria is requesting that Jacobs submit their proposed fee structure in the format indicated below:

- 1.) Fee Structure clearly identified as a percentage of estimated construction, pre-set rates for the categories as outlined in the solicitation scope of work, detailed hourly rates for staff to be assigned to City projects, or per-sheet rates.
- 2.) Any clarifications, exemption/exclusions, and additional information deemed appropriate.
- 3.) Table of reimbursable expenses and applicable markups, if any.
- 4.) Any fee reductions if more than one project is assigned to an individual or firm.

It is requested that the information be submitted by August 27, 2009 by 5:00 PM. The response can be faxed to (623) 773-7118 or e-mailed to christine.finney@peoriaaz.gov but please still send the original.

If you have any questions, please call me at (623) 773-7531.

Sincerely,

A handwritten signature in cursive script that reads "Christine Finney".

Christine Finney, CPPB
Buyer II, Materials Management

Leander, Evan N.

From: Leander, Evan N.
Sent: Tuesday, April 24, 2007 3:34 PM
To: Dan Nissen (dan.nissen@peoriaaz.gov); Chris Kmetty (chris.kmetty@peoriaaz.gov)
Cc: Fred; 'Karl Obergh'; Craig; paul.dickman@parsons.com
Subject: Happy Valley Road (P-0111) - Final Plans Comments
Attachments: Happy Valley Road Comments - Leander.doc

Dan/Chris,

I have taken the liberty of performing a review of the Final Plans for the aforementioned project, and have attached the associated comments. Overall, the plans appear to be in pretty good shape. Obviously, portions will need to be addressed as part of the anticipated 83rd Avenue improvements (i.e. roadway plans for Happy Valley/83rd Avenue, Sunrise Water Company waterline extension on 83rd Avenue, striping and signal work at the Happy Valley/83rd Avenue intersection, etc.). However, there are essentially no Special Provisions at this time, with this recommended to be an early priority, and task for the PM/CM-CMAR team. Please use these as you see fit.

Thanks -

Evan N. Leander, P.E.
Construction Services Manager
Carter::Burgess
Office: 602-650-4011
Fax: 602-253-1202
Cellular: 602-723-5075
Email: evan.leander@c-b.com

Happy Valley Road
 Interim Roadway Improvements
 Lake Pleasant Road to Terramar Boulevard

Carter::Burgess

Disposition Codes:

- A. Will Comply
- B. Consultant to Evaluate
- C. Client to Evaluate
- D. No Further Action

Review Comments

Reviewed By: Evan N. Leander **Organization:** Carter::Burgess

Comment No.	Sheet Number	Code	Review Comment	Response
1	Cover		Should Council information be revised?	
2	Cover		Should Utility Contacts be revised?	
3	11		Ensure locations of Utility Crossings are added to plans	
4	97		New River Bridge Bank Protection plan missing (found between sheets 180 and 181)	
5	235-257		Irrigation Plans missing from plan set	
6	273		Missing plan sheet	
7	278-279		Missing plan sheets	
8	6		Recommend 1/2" surface course for Pavement Sections	
9	6-8		Confirm slope of Meandering Sidewalk in Typical Sections (i.e. away from roadway?)	
10	General		Are Special Provisions available? (I have confirmed with Parsons that 16 sheets of information are available related to electrical and landscape items, but that the Special Provisions are anticipated to be developed during the CMAR process)	
11	12		Recommend Trinity Industries' representative be required to be on site during installation of the ADIEM 30' attenuation device to ensure proper installation, etc.	
12	22		Clarify new roadway/existing roadway tie-in at Existing	

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Review Comments

Reviewed By: Evan N. Leander **Organization:** Carter::Burgess

Comment No.	Sheet Number	Code	Review Comment	Response
			EOP of radius return/taper at south side of the roadway at Station 6+21.05	
13	25		Missing two leader lines from Note 5 on the right side of the page (quantity is correct)	
14	26		The removal and salvage wrought iron fence on right side of the page is not noted in the Removal Notes	
15	27		The removal and salvage wrought iron fence on left side of the page is not noted in the Removal Notes	
16	33		The removal of the existing headwall on left side of the page is not noted in the Removal Notes	
17	33		The sewer manhole adjustment on left side of the page is not noted in the Construction Notes	
18	37		Removal of Dumped Material on right side of page is not in Removal Notes, and limits are not detailed	
19	38		Removal of Dumped Material on left side of page is not in Removal Notes, and limits are not detailed	
20	39		The remove existing sign in the center of the page is not noted in the Removal Notes	
21	51		Not used	
22	51		Note 31 should be 24' x 10' x 2' versus 24' x 10' x 2"	

Happy Valley Road
 Interim Roadway Improvements
 Lake Pleasant Road to Terramar Boulevard

Carter::Burgess

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Review Comments

Reviewed By: Evan N. Leander

Organization: Carter::Burgess

Comment No.	Sheet Number	Code	Review Comment	Response
23	57		System 22 lacks a Dumped Riprap callout	
24	59		Consider up-sizing the 54" outlet pipe on System 34	
25	60		System 41 lacks a Dumped Riprap callout	
26	60		System 42 lacks a Dumped Riprap callout	
27	63		Systems 47, 48, 49, & 50 lack Dumped Riprap callouts	
28	64		Systems 51 & 52 lack Dumped Riprap callouts	
29	65		System 60 lacks a Dumped Riprap callout	
30	67		Add Dumped Riprap to CBC outlet area	
31	100		Consider extending waterline stub further south to avoid impacts to roadway pavement in the future	
32	103		Need more detail on "Provide Cathodic Protection" note (i.e. Special Provisions)	
33	105		Shading of roadways makes it difficult to see waterline, and notes/leaders, etc. especially on the Frontage Road (typical)	
34	105		Consider extending waterline stub further south to avoid impacts to roadway pavement in the future	
35	110		Consider extending waterline stub at Station 59+11 further south to avoid impacts to roadway pavement in	

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Comment No.	Sheet Number	Code	Review Comment	Response
			the future	
36	122		Consider extending waterline stubs (3) further north/south to avoid impacts to roadway pavement in the future	
37	124		Waterline offsets vary without clear details as to geometrics (typical)	
38	128		Consider extending waterline stub further south to avoid impacts to roadway pavement in the future	
39	135		Recommend installing future 8" C-900 PVC waterline from the new 16" waterline to a point south of call-out 25 in order to provide irrigation water to the 2" service	
40	135		Recommend darkening new construction line work for clarity (typical Sheets 135 – 138)	
41	138		Call-out 18 does not reference box and cover (also check call-outs for all valves on Sunrise Extension as well as the waterline plans)	
42	154		Recommend installing semi-permanent barricades at the south turn-out to 77 th Avenue in lieu of the Type III's	
43	157		Missing striping plans for west leg of Frontage Road	
44	157		Missing centerline striping call-out east of Station 14+00	

Happy Valley Road
 Interim Roadway Improvements
 Lake Pleasant Road to Terramar Boulevard

Carter::Burgess

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Comment No.	Sheet Number	Code	Review Comment	Response
45	164		Clarify notes related to "Light Pole by Others" (typical)	
46	179		Need to verify sidewalk meander layout as it will affect light pole locations (i.e. light pole at Station 157+50 as an example)	
47	97		(This sheet is currently between Sheets 180 and 181) Require additional material and construction notes related to the "Reno Mattress" (i.e. chain link fabric, fill material, connection details, etc.)	
48	203		Determine paint color for sound walls, and insert information into Note 8	
49	266-287		Recommend representative from Logan Simpson be tasked with tagging plants to be salvaged	

PROJECT NO: 20815 (CIP 08-051)

**PLANS / SPECIFICATIONS REVIEW
COMMENT AND SIGNATURE SHEET**

July 27, 2009

PROJECT NAME: **GREENWAY ROAD
IMPROVEMENTS (LITCHFIELD
ROAD TO BULLARD AVENUE)**

REVIEW: 100%

Date Distributed:
Return to:
Phone No.:

ITEM	DWG SHT PG	SECTION or DETAIL No.	COMMENTS (If no comments, please note.)	REVIEWED BY	COMMENT RESOLUTION
1		General	No Traffic signs or striping plans were provided or reviewed.	GAL	
2	C1.1	Benchmark	Typically two Benchmarks should be provided.	GAL	
3	C1.2	CoS ENG NOTES	General Note 3 is missing: THE CONTRACTOR OR DESIGN ENGINEER IS REQUIRED TO CONTACT THE DIVISION MANAGER OF THE STREETS DEPARTMENT TO VERIFY THE LOCATION OF ALL EXISTING CITY IRRIGATION LINES AND EQUIPMENT PRIOR TO CONSTRUCTION.	GAL	
4	C1.2	CoS ENG NOTES	Note 6 is missing the following: PER THE REQUIREMETNS OF ARS 33-106.	GAL	
5	C1.2	The MaxWell IV	The detail appears to be an old version (993-M4), it should be replaced with the new version TRI-1104 IV. Minimum changes required are: Manhole Cone – Modified Flat Bottom, Graded Basin by Others, Rock – Clean and Washed, sized between 3/8" and 1 1/2" to best compliment soil conditions. Also recommend minimum manhole cover size is 30".	GAL	
6	C1.4	STA 18+70	Need to relocate the WSO to behind curb line or preferable to right-of-way. 8" water line stub out lengthen by 15 ft.	GAL	
7	C1.6	STA 27+60	Need to relocate the WSO to behind curb line or preferable to right-of-way. 8" water line stub out lengthen by 15 ft.	GAL	
8	C1.8	Basin #3	The way that this basin is graded, there is not enough room to place the future sidewalk without regarding the basin.	GAL	
9	C1.8	STA 35+24	Existing 8" water line is at elevation 1191; Basin #3 has a bottom elevation of 1191. This is a potential conflict.	GAL	
10	C1.8	STA 35+80	New ADA ramp does not appear to tie into the existing sidewalk. Add note to contractor to field fit.	GAL	
11	C1.8	STA 36+60	Note that MAG Standard Detail 240 – Valley Gutter is being modified to a 6' wide valley gutter. The drawing shows a 3' wide valley gutter. Do you want to change this to 6 ft?	GAL	
12	C1.10	STA 45+15	Need to relocate the WSO to behind curb line or preferable to right-of-way. 8" water line stub out lengthen by 15 ft.	GAL	

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**Engineering Department
PLANS / SPECIFICATIONS REVIEW
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PROJECT NO: 20815 (CIP 08-051)

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13	C1.15	STA 62+48	The existing Reclaimed Water valve box is round vs. square, when this valve box is adjusted with the new AC, it should be replaced with a square box per City Standards.	GAL	
14	C5.11	STA 45+15	There is a water line that is greater than 2 ft but less than 6 ft from the pressurized Reclaimed Water line which runs below it. This will require extra protection per MAG Detail 404-1.	GAL	
15	C5.12	STA 53+70	There is a water line that is greater than 2 ft but less than 6 ft from the pressurized Reclaimed Water line which runs below it. This will require extra protection per MAG Detail 404-1.	GAL	
16	C5.2	CoS Reclaimed Water Note	<p>Add the following General Reclaimed Water Notes:</p> <ol style="list-style-type: none"> 13. OPERATIONAL TESTING SHALL BE CONDUCTED BY THE CITY OF SURPRISE UTILITIES DIVISION. 14. ALL POTABLE WATER CONNECTIONS MUST BE PHYSICALLY DISCONNECTED PRIOR TO CONNECTION TO THE RECLAIMED WATER SYSTEM. 15. RECLAIMED WATER LINES SHALL BE DISINFECTED AND TESTED AS DETAILED IN ADEQ ENGINEERING BULLETIN #8 16. RECLAIMED LINES SHALL BE FLUSHED AND TESTED USING POTABLE WATER AND MUST MAINTAIN AN AIR GAP BETWEEN THE POTABLE WATER AND RECLAIMED WATER AT ALL TIMES. 17. CROSS CONNECTION TESTING MAY BE REQUIRED PRIOR TO RECEIVING RECLAIMED WATER. 18. ALL PIPE VALVES, AIR RELIEF VALVES, PRESSURE REDUCING VALVES, PUMPS, CONTROL VALVES, METER BOX LIDS, METER BOX INTERIORS, AND ANY OTHER APPURTANCES OF THE RECLAIMED WATER SYSTEM SHALL BE PAINTED PURPLE (PANTONE NO. 512) OR HAVE PURPLE COLOR INTEGRATED INTO THE MATERIAL. 19. ALL FLANGED SIDE OUTLETS, DRAIN VALVE ASSEMBLIES, BLOW OFF VALVES ASSEMBLIES, SAMPLING TAPS, AND AIR OR VACUUM RELEASE VALVES AND BACKFLOW PREVENTION ASSEMBLIES SHALL HAVE AN ATTACHED SIGN OR TAG READING "RECLAIMED WATER - DO NOT DRINK." 	GAL	

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ITEM	DWG SHT PG	SECTION or DETAIL No.	COMMENTS (If no comments, please note.)	REVIEWED BY	COMMENT RESOLUTION
17	C5.2	CoS Reclaimed Water Note 10	Change to read per General Reclaimed Water Notes: "APPROVED METALLIC MARKING TAPE AND MARKER BALLS SHALL BE INSTALLED PER CITY OF SURPRISE STANDARD DETAIL 6-25."	GAL	
18	C5.2	CoS Reclaimed Water Note 11	Change to read per General Reclaimed Water Notes: "ALL RECLAIMED RESIDENTIAL WATER VALVE COVERS SHALL BE SQUARE AND IDENTIFIED AS "RECLAIMED" PER CITY OF SURPRISE STANDARD DETAIL 6-24."	GAL	
19	C5.2	CoS Reclaimed Water Note 12	Change header to read: "12. RECLAIMED WATER SYSTEM MATERIAL SPECIFICATION NOTES:" Change fourth paragraph to read: "WATER LINE VALVE: MUELLER OR CLOW RESILIENT WEDGE SEATED GATE VALVE IN ACCORDANCE WITH MAG SECTION 630.3 WITH VALVE BOX, COVER AND LOCKING DEBRIS CAP IN ACCORDANCE WITH MAG DETAIL 391-1 TYPE C, 392, AND CITY OF SURPRISE DETAIL 6-24." Add the following: "RECLAIMED SERVICE: TAPS, PIPES AND FITTINGS FOR RECLAIMED WATER SERVICE THROUGH A 2-INCH (2") SIZE SHALL BE IN ACCORDANCE WITH COS 6-20. ALL OTHER ITEMS: IN ACCORDANCE WITH MAG SPECIFICATIONS.	GAL	
20	C5.2	CoS Reclaimed Water Note 2	General Reclaimed Water Notes states: "A minimum cover over reclaimed water line is 48 inches (48)". The plans show 36".	GAL	
21	C5.2	CoS Reclaimed Water Note 3	Change to read: "... under trench shall be a class D.	GAL	

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**Engineering Department
PLANS / SPECIFICATIONS REVIEW
COMMENT AND SIGNATURE SHEET**

PROJECT NO: 20815 (CIP 08-051)

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22	C5.2	CoS Reclaimed Water Note 4	Change to read per General Reclaimed Water Notes: "WHEN A RECLAIMED WATER MAIN IS ADJACENT TO OR CROSSES A POTABLE WATER MAIN, THE RECLAIMED WATER MAIN SHALL BE CONSIDERED A PRESSURE OR FORCE SANITARY SEWER AND COMPLY WITH MAG STANDARD DETAIL 404 FOR SEPARATION AND/OR PROTECTION. WHEN A RECLAIMED WATER MAIN IS ADJACENT TO OR CROSSES A SEWER LINE, THE RECLAIMED WATER MAIN SHALL BE CONSIDER A POTABLE WATER MAIN AND COMPLY WITH MAG STANDARD DETAIL 404 FOR SEPARATION AND/OR PROTECTION."	GAL	
23	C5.2	CoS Reclaimed Water Note 8	Change to read: "... and the City Water Services Depart. Utilities Division 48 hours ... phone at 623-222-3400 6150 and City Water Services Depart. City of Surprise Utilities at 623-222-7999 7100."	GAL	
24	C5.2	CoS Reclaimed Water Note 9	Change to read per General Reclaimed Water Notes: "SHUTDOWN OF EXISTING FACILITIES TO BE SCHEDULED BY CONTRACTOR WITH CITY OF SURPRISE UTILITIES 48-HOURS IN ADVANCE. VALVES ARE TO BE OPERATED ONLY BY A UTILITIES DIVISION CERTIFIED OPERATOR OR UNDER THE DIRECTION OF THE UTILITIES DIVISION CERTIFIED OPERATOR. SHUTDOWN OF EXISTING SYSTEM IS LIMITED. NORMAL PRESSURE AND FLOW MUST BE RETURNED BY THE SCHEDULED TIME."	GAL	
25	C5.3	A	Valve Box and Cover per MAG 391 - Curb Stop with Freeze Drain (Optional) This is either required or not. Which way does the City want to go?	GAL	
26	C5.4	STA 9+95	Must maintain 6 ft clearance between new Reclaimed Water Line and existing 18" sewer line per MAG Detail 404-1.	GAL	
27	C5.5	STA 18+70	Do we need to provide a stub out for the landscape irrigation system to be installed at this location? This would preclude future excavation of the new roadway. Do you allow taps into 16" reclaimed water lines?	GAL	
28	C5.5	STA 18+70	There is a water line that is greater than 2 ft but less than 6 ft from the pressurized Reclaimed Water line which runs below it. This will require extra protection per MAG Detail 404-1.	GAL	
29	C5.7	STA 27+60	There is a water line that is greater than 2 ft but less than 6 ft from the pressurized Reclaimed Water line which runs below it. This will require extra protection per MAG Detail 404-1.	GAL	

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ITEM	DWG SHT PG	SECTION or DETAIL No.	COMMENTS (If no comments, please note.)	REVIEWED BY	COMMENT RESOLUTION
30	C5.9	STA 35+25	There is a water line that is greater than 2 ft but less than 6 ft from the pressurized Reclaimed Water line which runs below it. This will require extra protection per MAG Detail 404-1.	GAL	
31	C6.8	STA 35+14	Should consider extending the 4" sewer line to the edge of the Drainage Easement in stead of the road right-of-way. The sewer line is 14 ft deep and goes through the bottom of the new retention basin. The Drainage Easement is 50 ft wide.	GAL	
32	ID1	Irrigation Legend	Quantities are not listed for all items	GAL	
33	LS1		Need to add "General Reclaimed Water Notes" to Landscape Drawing Set	GAL	
34	LS1	STA 12+90	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
35	LS2	STA 21+30	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
36	LS2	STA 23+70	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
37	LS2	STA 26+80	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
38	LS3	STA 29+60	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
39	LS3	STA 34+10	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
40	LS3	STA 35+00	Add note: "PROVIDE 3" SLEEVE UNDER/THROUGH ALL DRAINAGE STRUCTURES"	GAL	
41	LS3	STA 37+20	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
42	LS4	STA 43+20	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
43	LS4	STA 45+80	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	

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ITEM	DWG SHT PG	SECTION or DETAIL No.	COMMENTS (If no comments, please note.)	REVIEWED BY	COMMENT RESOLUTION
44	LS4	STA 47+60	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
45	LS4	STA 48+75	Add note: "PROVIDE 3" SLEEVE UNDER/THROUGH ALL DRAINAGE STRUCTURES". Note two will be required.	GAL	
46	LS5	STA 50+10	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
47	LS5	STA 52+10	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
48	LS5	STA 52+10	Add to Tree Lateral: FLUSH CAP. TYP.	GAL	
49	LS5	STA 54+80	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
50	LS6	STA 59+20	Add to Tree Lateral: FLUSH CAP. TYP.	GAL	
51	LS6	STA 59+50	Add to Shrub Lateral: FLUSH CAP. TYP.	GAL	
52	LS6	STA 61+50	Add note: "PROVIDE 3" SLEEVE UNDER/THROUGH ALL DRAINAGE STRUCTURES"	GAL	
53	SL3		No STA called out for the end of the ITS Pull Box near STA 11+00	GAL	
54	SL8		No STA called out for the end of the ITS Pull Box near STA 62+00	GAL	
55	SL9	Material List	Material List shows Quantities for 9 Street Lights, but 24 are to be installed.	GAL	
56	Page 4	4.0	Cooperation with Utilities; Contacts listed here are different than the contacts listed on the cover sheets of the drawings. Cox Communications not listed.	GAL	
57	Page 7	15.0	Is there a space size limit? 2 acres, 3 acres ??	GAL	
58	Page 8	Item 2, General	Can a Registered Professional Civil Engineer certify as-built drawings?	GAL	

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City of Surprise
Engineering Department
PLANS / SPECIFICATIONS REVIEW
COMMENT AND SIGNATURE SHEET

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ITEM	DWG SHT PG	SECTION or DETAIL No.	COMMENTS (If no comments, please note.)	REVIEWED BY	COMMENT RESOLUTION
59	Page 10	Item 6, Basis of Payment	Are any partial payments for this item?	GAL	
60	Page 11	Item 8, Measurement and Payment	Are any partial payments for this item?	GAL	
61	Page 13	Item 13, Materials	Since the valley gutter is part of the roadway, it should be made of Class A concrete per MAG Section 725. MAG Standard Detail 240 calls for MAG A.	GAL	
62	Page 13	Item 14	Note that the ramp details will be changing for 2010. The landing will be 5 ft vs. 3 ft.	GAL	
63	Page 26	Section 440.3 F.1	Conflicts with Irrigation Notes 14 on Drawing ID2, which states: 24 volt wire shall be 600v, UF US approved, #14 gauge, single strand, plastic, insulated copper wire. Common wires to be white. Control wires to be red. No black wiring is to be used. Tape and bundle wire every 10' and lay beside mainline in trench. Splice in valve boxes only, using elastomeric silicone connections. Provide 18" slack at each elbow in mainline trench and at each remote control valve. Pull one additional spare control wire to each valve box location for potential future use. Color of extra cable shall be yellow.	GAL	
64	Page 29	Section 440.9 A.1	Conflicts with Page 26 F.1 and Irrigation Notes 14. Note that MAG Specification Section 440.9 calls for a minimum of #12 wire.	GAL	
65	ENG EST		Add item for Irrigation valve control wiring, to include Red, White and Yellow #14 gauge, single strand, plastic, insulated copper wire.	GAL	
66	ENG EST	84	Add the word "Purple" after 1/2" Class 315 PVC Irrigation Pipe	GAL	
67	ENG EST	85	Add the word "Purple" after 3/4" Class 200 PVC Irrigation Pipe	GAL	
68	ENG EST	86	Add the word "Purple" after 1" Class 160 PVC Irrigation Pipe	GAL	
69	ENG EST	87	Add the word "Purple" after 2" Sch 40 PVC Mainline	GAL	
70	ENG EST	88	Flush Cap – Quantity should be 20 vs. 14	GAL	

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Engineering Department
**PLANS / SPECIFICATIONS REVIEW
COMMENT AND SIGNATURE SHEET**

PROJECT NO: 20815 (CIP 08-051)

July 27, 2009

PROJECT NAME: GREENWAY ROAD
IMPROVEMENTS (LITCHFIELD
ROAD TO BULLARD AVENUE)

REVIEW: 100%

Date Distributed:
Return to:
Phone No.:

ITEM	DWG SHT PG	SECTION or DETAIL No.	COMMENTS (If no comments, please note.)	REVIEWED BY	COMMENT RESOLUTION
71	ENG EST	89	Pull Box – Quantity should be 22 vs. 16 (20 for 4" irrigation sleeve and 2 for 3" irrigation sleeve)	GAL	
72	ENG EST	96	4" Sch 40 PVC Irrigation Sleeve Quantity should be 1690 vs. 2400 LF	GAL	
73	ENG EST	96A	Add: 3" Sch 40 PVC Irrigation Sleeve Quantity 1320 LF	GAL	
74					
75					

ACTION CODES:

A = WILL COMPLY

B = CONSULTANT/DESIGNER TO EVALUATE

C = CLIENT TO EVALUATE

D = TEAM RECOMMENDS NO FURTHER ACTION

Executive Summary

Happy Valley Road Interim Roadway Improvements Lake Pleasant Road to Terramar Boulevard City of Peoria

Carter and Burgess has performed the following constructability review on the Happy Valley Road Interim Roadway Improvements between Lake Pleasant Road and Terramar Boulevard. Recommendations and comments are in **bold print**.

Project Description: This project involves the new construction of 3.117 miles of roadway located in the City of Peoria. The new roadway is 42 feet wide accommodating 2-16 foot travel lanes with two attached 5-foot bike lanes on either side of the road.

1. The project intersects and provides accesses to 95th, 93rd, 92nd, 91st 83rd, and 77th Avenues.
2. It builds one new 236 foot long, three span prestressed bridge over New River, one triple barrel box culvert through Rock Springs Wash, and a double barrel box culvert under an approach.
3. The project installs a series of storm water pipes and piping systems to collect and pass storm water.
4. It incorporates the installation of a new 16" waterline for the length of the project.
5. It installs multiple conduits perpendicular to the road for future utility installations on ¼ mile increments throughout the project.
6. The project constructs sound barrier walls, meandering sidewalk, curb and gutter, single curb and concrete barrier.
7. The project anticipates conflicts with APS, COX, QWEST, El Paso Gas, and the existing sewer manholes.
8. The project installs a series of levees up stream in the Rock Springs Wash Basin.
9. Finally, the project anticipates the removal and resetting of many Saguaro Cacti.

Roadway Width:

The project is considered to be an interim roadway improvements project. It constructs half of the final road section. The future half is shown to the south paralleling this project.

This project incorporates two-5 foot attached bike lanes (one for east bound, and one for west bound bikers). The width of the bike lanes incorporates the pan of the gutter. **The curb and gutter pan should not be considered as part of a properly designed attached bike lane.**

Approaches:

95th Avenue: This is an approach built on the left side to address access of 95th Avenue coming in from the north. This is currently a residential approach serving a limited number of homes. This intersection has the potential to become a four-way

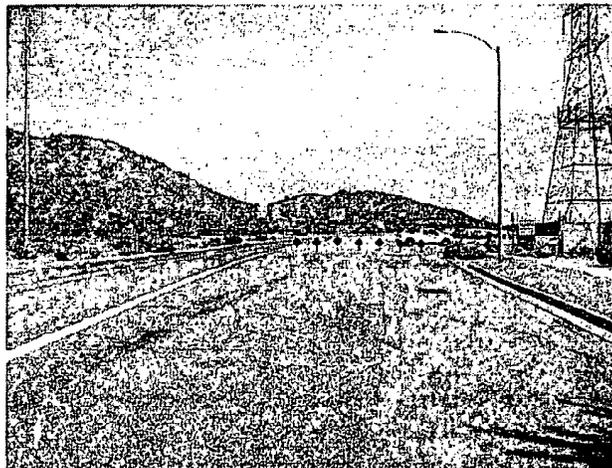
intersection once development occurs to the south. Due to previous subdivision development a few miles to the south, this intersection will not become a major through route.

93rd Avenue: This intersection has existing approaches built on the left and right sides of the road to address the existing subdivision accesses (Station 45+00). Due to previous subdivision development a few miles to the south, this intersection will not become a major through route.

92nd Avenue: This intersection has existing approaches built on the left and right sides of the road to address the existing subdivision accesses (Station 51+50). Due to previous subdivision development a few miles to the south, this intersection will not become a major through route.

91st Avenue: This approach forms a major Tee intersection between the Happy Valley Road and 91st Avenue (Station 59+00). The intersection is set to receive conduit and pull boxes but no signal. **This intersection should be reevaluated for signal installation as part of this project.**

83rd Avenue: This approach forms a major four-way intersection between Happy Valley Road and 83rd Avenue (Station 116+50). The intersection is set to receive conduit and pull boxes and a four way signal system. **It is understood that existing 83rd Avenue is to be extended from where it currently ends south of Happy Valley Road, as a five-lane road, northward through the intersection. This is to be designed as part of the PM/CM scope, and constructed under the CMAR contract. At a minimum this should be done from the south end (approximately 1/4 mile south of the Happy Valley alignment) with the five lanes being extended through the intersection with Happy Valley Road, and then tapering back into the existing two lane road. However, 83rd Avenue could be extended further to the north (approximately one mile) if desired, with the five lane configuration, or bid as a stand alone project.**



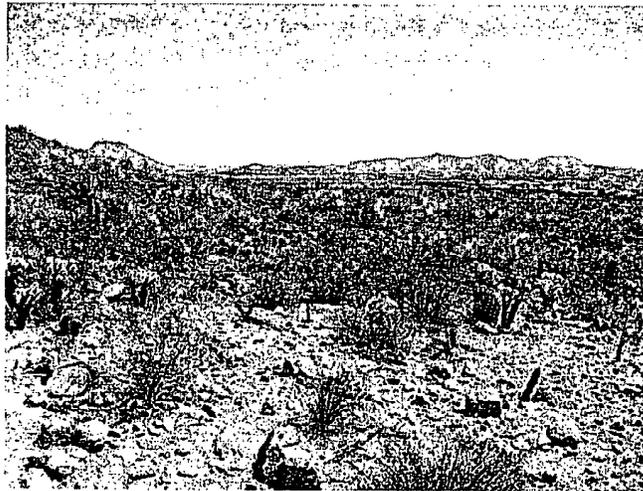
77th Avenue: This is an approach built on the right side to address the future access of 77th Avenue coming in from the south. This intersection does not have the potential to become a major Tee intersection due to previous subdivision development to the south, and a permanent drainage structure to the north.

Utility Trenches:

The project incorporates the installation of a utility trench every ¼ mile. These new trenches will have conduit installed for APS, QWEST and Cox. **Consideration should be given to install these trenches with conduit across each major approach. Costs for these installations may be recouped upon the sale of use to each utility company as they are used. Minimum recommendation would be for all of the above listed Avenues.**

Sidewalk vs Separated Pathway:

The project incorporates an attached six foot wide sidewalk along the north side of the road. There are a few areas where the sidewalk is separated from the back of curb. **Given the nature of the terrain, and the protected land adjacent to the project between Terramar Boulevard and 91st Avenue, (Phase I and Phase III described below), the project lends itself to be value enhanced through the addition of a separated pathway system on the north side of the road. The benefits of the separated path are self evident but in brief would provide a much safer environment for pedestrians, would be an amenity to the neighborhoods through which the new road passes, and would promote a healthy community through encouraging walking and biking. The costs for this pathway could be partially offset through the elimination of the sidewalk adjacent to the road where the pathway was built.**



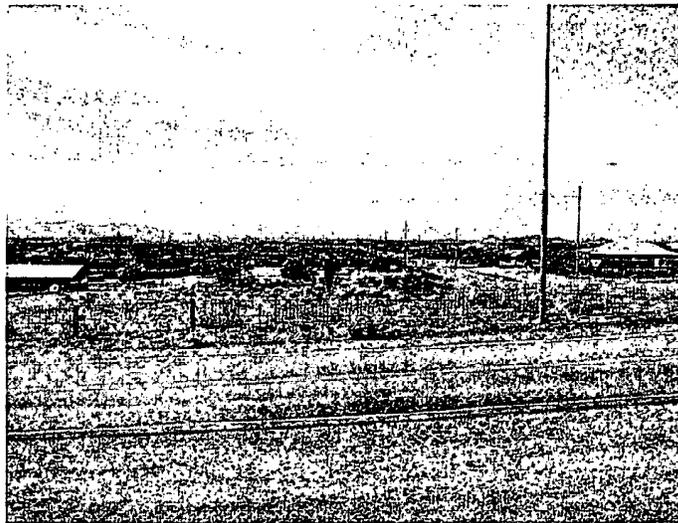
Possible new separated pathway area (very scenic)

Sound Barrier Walls:

The project incorporates sound walls at the following locations:

- 31+85 – 36+90 LT
- 36+59 – 44+46 LT
- 45+15 – 57+58 LT
- 57+07 - 58+47 LT

Additional sound walls may be desired by residents between 91st Avenue and 92nd Avenue on the south side of the road. This area has built up rapidly and is continuing to develop.



91st Avenue Looking West

Storm Water Drainage Pipes:

The project includes numerous locations for the installation of storm water pipes. These are located as follows:

Station	Size
6+80	18" RGRCP
12+25	18" RGRCP
16+50	18" RGRCP
19+80	18" RGRCP
23+00	18" RGRCP
27+50	18" RGRCP
32+25	18" RGRCP
36+50	18" RGRCP
59+35	24" RGRCP

Storm Water Drainage Pipes Cont:

68+00	24" RGRCP
69+00	24" RGRCP
70+25	24" RGRCP
72+60	24" RGRCP
75+25	24" RGRCP
86+50	24" RGRCP
87+25	18" RGRCP
88+25	24" RGRCP
93+25	24" RGRCP
97+25	24" RGRCP
98+75	24" RGRCP
104+50	24" RGRCP
126+90	30" RGRCP
127+50	30" RGRCP
128+20	30" RGRCP
129+00	30" RGRCP
137+00	30" RGRCP
140+00	18" RGRCP
167+20	18" RGRCP
168+50	18" RGRCP

Unless minimum cover over the pipe is a design issue, it is recommended that all pipes under the mainline road be a minimum of 24 inches in diameter to facilitate future maintenance. The potential to have pipes fill in with silt is likely due to the nature of the soils in this area.

Additional storm water pipes should be installed at the following stations:

73+25	24" RGRCP-This pipe should be a mirror of the pipe at 72+60 (only skewed to the right), picking up the water from the uphill gully at station 73+30 and emptying at the same location as the 72+60 pipe.
101+00 (20 Degree Skew LT)	24" RGRCP-Install new pipe to pick up water from outlet of 18" pipe installed on LT side of the road from 99+90 to 100+80 and to pick up water from gully at inlet at 100+70. Outlet to gully at station 101 on the RT.

Storm Water Drainage System:

The project installs the following drainage systems:

Station to Station	Description
36+80 – 52+75	This system crosses under the roadway using 18” diameter pipe. Unless minimum cover is a design issue, suggest revising 18” pipes to 24” pipes for maintenance purposes.
61+80 – 63+50	This system crosses under the roadway using 18” diameter pipe. Unless minimum cover is a design issue, suggest revising 18” pipes to 24” pipes for maintenance purposes.
77+00 – 85+30	This system crosses under the roadway using 18” diameter pipe. Unless minimum cover is a design issue, suggest revising 18” pipes to 24” pipes for maintenance purposes. This area is subject to heavy silting. Upstream protection measures should be taken to eliminate this problem. This system is being installed to protect down stream development. It will concentrate water which historically has used various channels to move off the mountain. Improvements should be made to the down stream channel to ensure this water is properly conveyed. The existing down stream natural wash beginning at station 85+40 may or may not have the capacity to handle event flows of these combined washes.



Photo Shows the Silty Nature of the Soils

Storm Water Drainage System:

95+95 – 97+30 No issues

102+50 -103+50 No issues

106+90 – 115+30. **This storm water system has many apparent issues.**

First and foremost, the system concentrates water from a substantial area into the borrow ditch along 83rd Avenue. The outlet of the system is a 36" flared end. From the outlet, the water from this system has two possible means of conveyance to the Rock Springs Wash. The first is an existing 24" pipe located directly to the east of the outlet of the system in 83rd Ave. This pipe is within a few feet of the outlet. The second is conveyance down the borrow ditch on the left (west) side of 83rd Avenue to the next existing pipe. The means of conveyance of the storm water from the outlet to Rock Springs Wash is not sufficient. If the previous suggestion of reconstruction of 83rd Avenue from the five-lane to the south through the intersection is accepted, the design should provide conveyance for water coming from this system under 83rd Avenue. In addition, improvements should be made to the down stream channel to ensure this water is properly conveyed to the Rock Springs Wash. The existing down stream natural wash may or may not have the capacity to handle event flows of these combined washes. Without improvements, downstream storm water problems are likely.

Second, this storm water system proposes placing three manholes in the surface of the road. This is not necessary as none of the other systems do this.

Third, the plan and profile sheet is missing the location and diameters of the various pipes in this system.

Fourth, this system crosses under the roadway using 18" diameter pipe. Unless minimum cover is a design issue, suggest revising 18" pipes to 24" pipes for maintenance purposes.

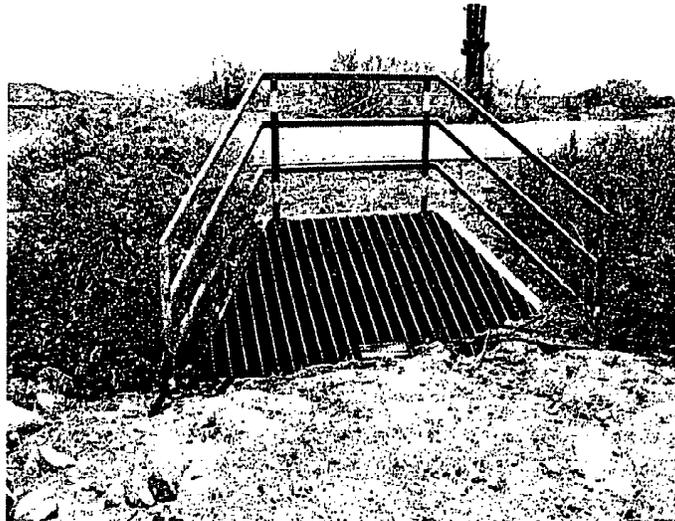
Additional Storm Water Drainage Systems

99+90 to 100+90

18" RGRCP-Install new pipe to pick up water from uphill gully at 99+90 on the left. Install the pipe parallel to road on the right side. Bring to inlet of pipe at 100+90.

Through-out Project

The project should include an allowance of money to perform grading work on the uphill side of the road to capture storm water and drain it into planned drainage structures. It should also include money and substantial measures to capture silt before it enters into the drainage system. Finally, it should provide easy access for maintenance of the silt traps once the project is complete.

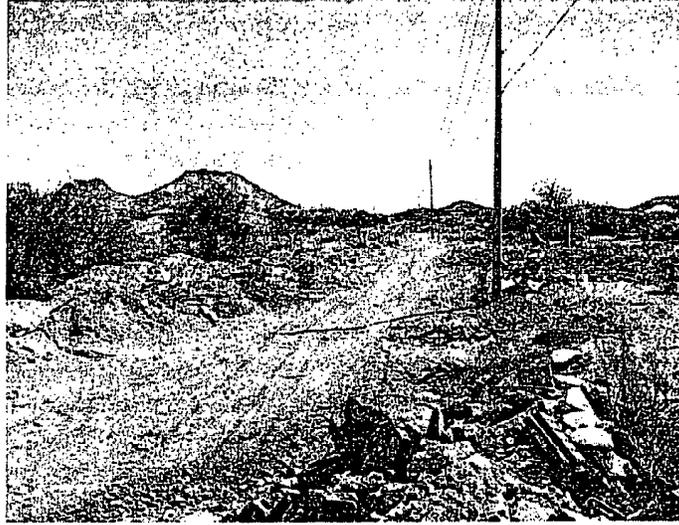


Example of Silting of existing pipes on 83rd Avenue

Additional Recommendations:

Material Removal

The piles of material scheduled to be removed from the project between stations 162+50 and the end of the project is highly contaminated with trash. This material is not suitable for use on the project without proper processing. The plans call for the material to be wasted. The material either needs to receive proper disposal or screening and crushing to be used on this project. The approximate quantity is 15,000yd³



Existing Contaminated material between stations 163+00 – 171+00

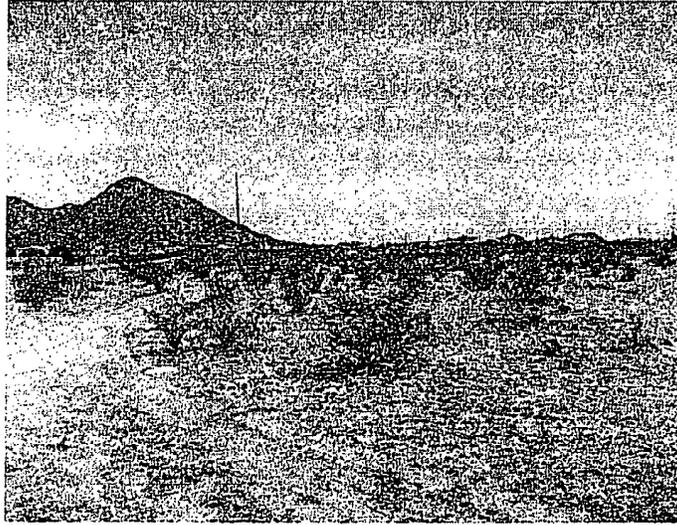
The project lends itself to three phases. The phases are:

- Phase I: Terramar Boulevard through 83rd Avenue Intersection
- Phase II: Lake Pleasant Parkway through 91st Avenue Intersection
- Phase III: 83rd Avenue through 91st Ave.

The sooner a project can be brought to contract, the less the cost will be. Overall construction costs rise on average each year around 5%. However, with that said, given limited City budgets, phasing this project will allow the project to be built while providing a lower yearly fiscal impact to the City. Phase I and Phase II could use material from Phase III for borrow purposes. Another idea would be to allow the water line to be installed as a stand alone project on phase III due to the difficult terrain and soils.



Phase I (Looking from 83rd Ave toward Terramar Blvd)



Phase II (Pleasant Valley Road Looking East toward 91st Ave)



Phase III (91st Ave looking toward 83rd Ave)

Sincerely,
Carter & Burgess, Inc.

Craig D. Jackson P.E.

BIDDABILITY / CONSTRUCTABILITY REVIEWS

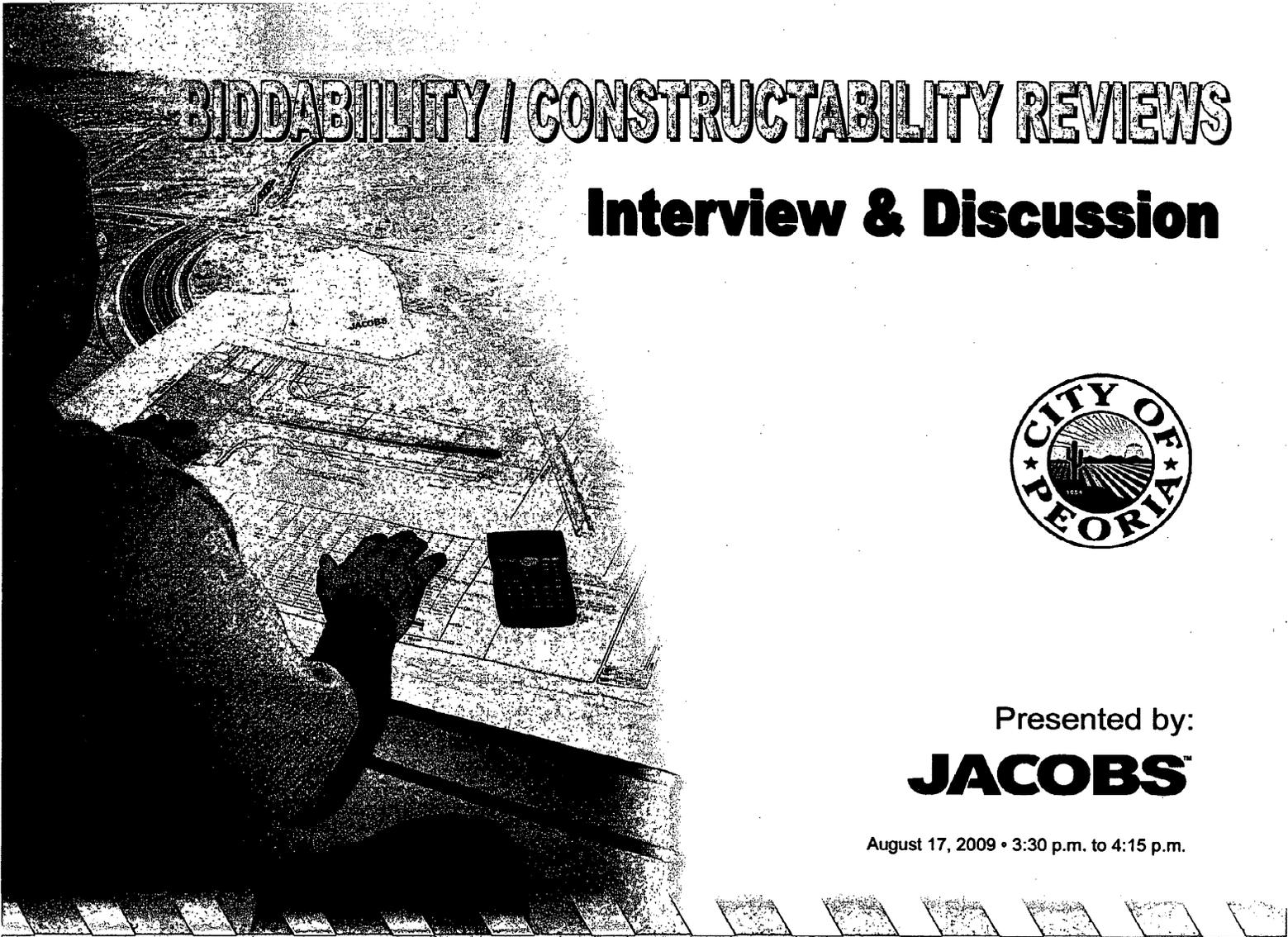
Interview & Discussion



Presented by:

JACOBS™

August 17, 2009 • 3:30 p.m. to 4:15 p.m.





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accurate way of estimating one of kind work elements, or items where little history exists. *Several of our team members have experience performing this type of estimate including Kelly Renyer, who has experience as the estimator for a construction firm.*

As a training tool, we can show City staff where the external resources are and how to use them, provide guidance to the City so you can start to build your own database, and provide templates and insight on how to perform a "bottom up" estimate.

Biddability Reviews

Biddability is the review of the contract documents to identify errors, omissions and conflicts in the plans, specifications and bid item schedule. These reviews identify uncertainty and minimize un-quantified risks to the bidder and the City.

When we perform a biddability review, we want to look at it from both the contractors' and City's point of view. The Contractor's identifies how they will receive payment and will identify the risk for every element of work. The City's point of view wants a contract that can be administered without additional costs due to change orders. We have been working continuously with the City's Inspectors and Project Managers for almost two years. We want to make sure that the bid tabulation is setup in a manner that does not require excessive measurement and payment, or have the City taking on risk that it cannot manage. Some of the items that we are going to review include:

- Verifying that plan notes do not conflict with specifications and Special Provisions.
- Reviewing or developing a schedule that can be used as the basis of contract time, being sure to consider 'no construction' windows.
- Verifying that all bid items shown on the plans are called out in the Special Provisions and included in the bid schedule
- Checking the Standard Specification sections pay items against the bid schedule to ensure that all needed items are included in the bid schedule, or called out as incidental to an included item
- Checking that the unit of measure can be effectively administered by City inspectors, and assigns the risk to the party best able to manage it. Examples are paying for base materials by the area or volume versus weight, and for traffic control as a lump sum and not as device counts.
- Performing an independent takeoff of the quantities, and verify that the summary of quantities is tabulated correctly
- Verifying that all Special Provisions have the necessary measurement and payment clauses
- Verifying that all required permits are included
- Verifying that a list of all utility owners and contact numbers is included for the utilities shown on the plan sheets
- Verifying that the log of test borings is included, if applicable

Item No.	Item Description	Unit	Quantity	Unit Price	Estimated Amount
1-1000	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1001	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1002	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1003	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1004	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1005	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1006	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1007	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1008	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1009	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1010	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1011	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1012	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1013	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1014	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1015	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1016	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1017	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1018	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1019	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		
1-1020	EROSION CONTROL, APPROX 100' X 20'	CU YD	100		

Review Documentation Process
We're reviewed the plans...Now what?

As a member of the Project Team performing constructability/biddability reviews on behalf of the City of Peoria, Jacobs will perform our reviews in tandem with the City's reviews. This streamlines the process, keeps the design on schedule, and gives the Project Team time to discuss any constructability/biddability issues in an open forum prior to the next submittal. This is in keeping with the open communication established through the Jacobs process of "safety by design."

As is typical with a City of Peoria project, a comment resolution form is provided by the designer at the time of submittal. Working closely with the City's reviewers, the Jacobs Lead Reviewers will compile our comments to the plans, specs and estimate from the constructability/biddability perspective, and document these comments on the same comment resolution form with the City's comments. This allows one set of comments to be addressed by the designer and reduces the chance for conflicting comments to be made regarding the plans and specifications. We suggest also being in attendance at



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the comment resolution meetings at each stage of the design so as to field any questions concerning our review comments.

Partnering Meetings

Sometimes known as "Solutioneering"



In helping the City achieve its stated goals, we are providing the ability to facilitate Partnering Sessions. Partnering is a proven way to manage issues during the construction process. Partnering establishes clear roles and responsibilities for all of the parties and a clear escalation ladder through which to settle issues as they arise.

Having issues settled quickly saves costs on two fronts. It minimizes delays to the contractor's operations, and allows for a greater range of solutions. When done successfully Partnering allows all of the project parties to understand what is important to each other. This can be a powerful tool in how the partners operate on a daily basis and their approach to settling issues. We have worked with Debra Drecksel, who provided the Partnering for the Happy Valley Road project, to provide these services as needed on the City's projects.

Post Construction Reviews

The work is done...now what?

Post-construction reviews are beneficial to the construction process. Post-Construction reviews are part of a "lessons learned" process that eliminates repeated mistakes that increase costs and affect project schedules – both risks to the City. They provide feedback about project issues that can be addressed on future projects and are an educational opportunity for all of the parties involved in the construction. Post-construction reviews lead to increased communication to the construction process and can lead to improvements in project plans and specifications.

As part of this contract, we propose that the City consider performing Post Construction reviews on select recently completed projects as the first order of work. This would serve two purposes. The first would be to aid in refining the constructability and biddability checklists, and equally important, as a teaching tool for City staff.

City Staff Training

Advancing our Industry

Constructability and Biddability should be considered throughout the project development process, not just during the reviews. To accomplish this, we will provide the City staff training to raise their awareness of these issues and how to address them. Our approach will have three elements: on-the-job training, formal training, and systems development.

On-the-Job Training – There is no substitute for experience and working with experienced people. We would propose that a City staff person shadow one of our reviewers during a review. This would provide real world examples of what to look for, and why it is important. Shadowing generates a dialog that is beneficial to both the trainee and the trainer. The Jacobs Risk Assessment Checklist would be used during this one-on-one training.

Formal Training – The classroom is very effective at getting large numbers of people trained. It also provides a forum for group discussions which can be very beneficial. This as an effective method to provide the basics of the Constructability and Biddability reviews. Where this method would be very effective is providing training on cost estimating methods. Further, the classroom sessions could be broken into groups to allow for group activity to review common, and uncommon ambiguities in plans and then allow for a group discussion on what was learned.

Systems Development – This aspect of the training is to provide a legacy of systems in place to assure the skills remain within the City's corporate framework. We would accomplish this by:

- Developing a series of Risk Assessment Checklists for the City's use.
- Developing training guides that can be used.
- Identifying services and publications, such as the *Blue Book Equipment Rental Rates and Means Estimating Guides* that the City might want to subscribe.



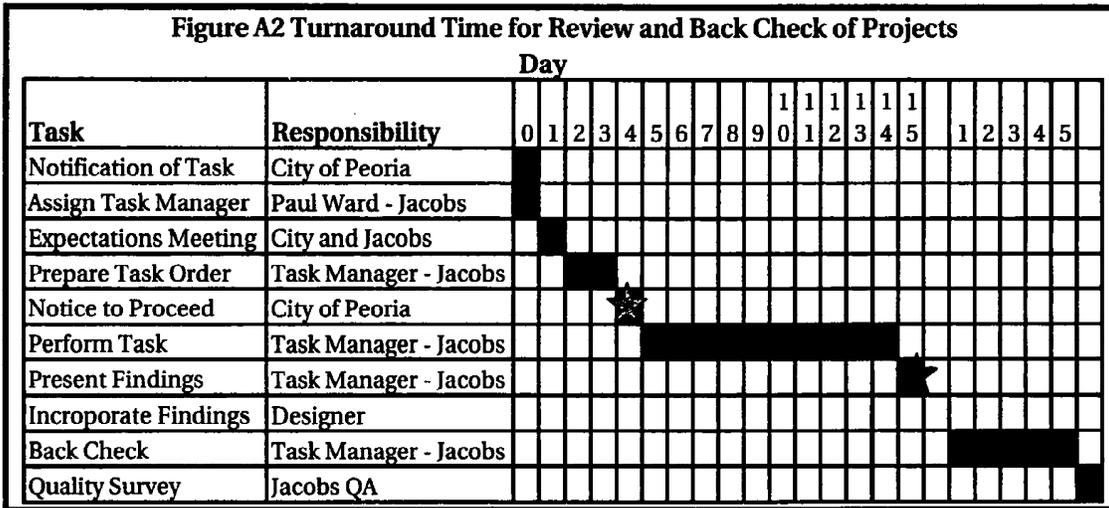
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- Developing a system of capturing cost data on projects that can be used to assist in future estimating efforts. To enhance this effort, we would propose working with Peoria's neighbors to include their data.

A2-1 Turnaround Time for Review and Back Check of Projects

We understand that many of these tasks will be time sensitive. One of the Contract Manager's first tasks will be to work with the Project Principal to identify the right team for the task, and assure they have the immediate availability to perform these reviews. *Our desire is to be able to execute a task order so we may start within five working days of a request being initiated, and have substantially completed the task within 10 working days. We have provided a schedule of how a review may proceed below.*



A3 ANTICIPATED CITY INVOLVEMENT (WITH THIS CONTRACT)

The involvement of City staff falls into two categories: participation and training. While many of our staff understands the City's practices, the City staff is the ultimate resource for operations and maintenance practices. We anticipate their involvement to provide feedback on specific issues that are identified as part of the constructability/biddability process. The constructability process works best when there is collaboration between the reviewer, engineer and owner. The City has specified this contract serve as a vehicle for training City staff. The level of involvement of City staff in this will be at your discretion.

B. EXPERIENCE



B1. FIRM'S & STAFF'S EXPERIENCE

The Jacobs Phoenix Office has 200 staff members, of which 13 are in our Project Management/Construction Management group. We have augmented our team with Corral/Dybas Group for Landscape Architecture Review; and Debra Drecksel, LLC for Partnering Facilitation. This team will bring proven experience in all aspects of assisting with the implementation of the City's Capital Improvement Program. Our organization chart (Figure B1) indicates the tenured staff that we anticipate working on this assignment. Their brief resumes are provided in this section. No strangers to the City's Engineering and Construction Management staff, we have a long and successful history in working with the City in "Building Peoria."

B2. NUMBER OF PROJECT REVIEW ASSIGNMENTS THE INDIVIDUAL/ FIRM CAN HANDLE AT ANY GIVEN TIME.

Our organization chart (Figure B1) was developed anticipating multiple assignments. We have identified three (3) Review Leaders/Constructability Champions, each of whom can manage multiple assignments. We



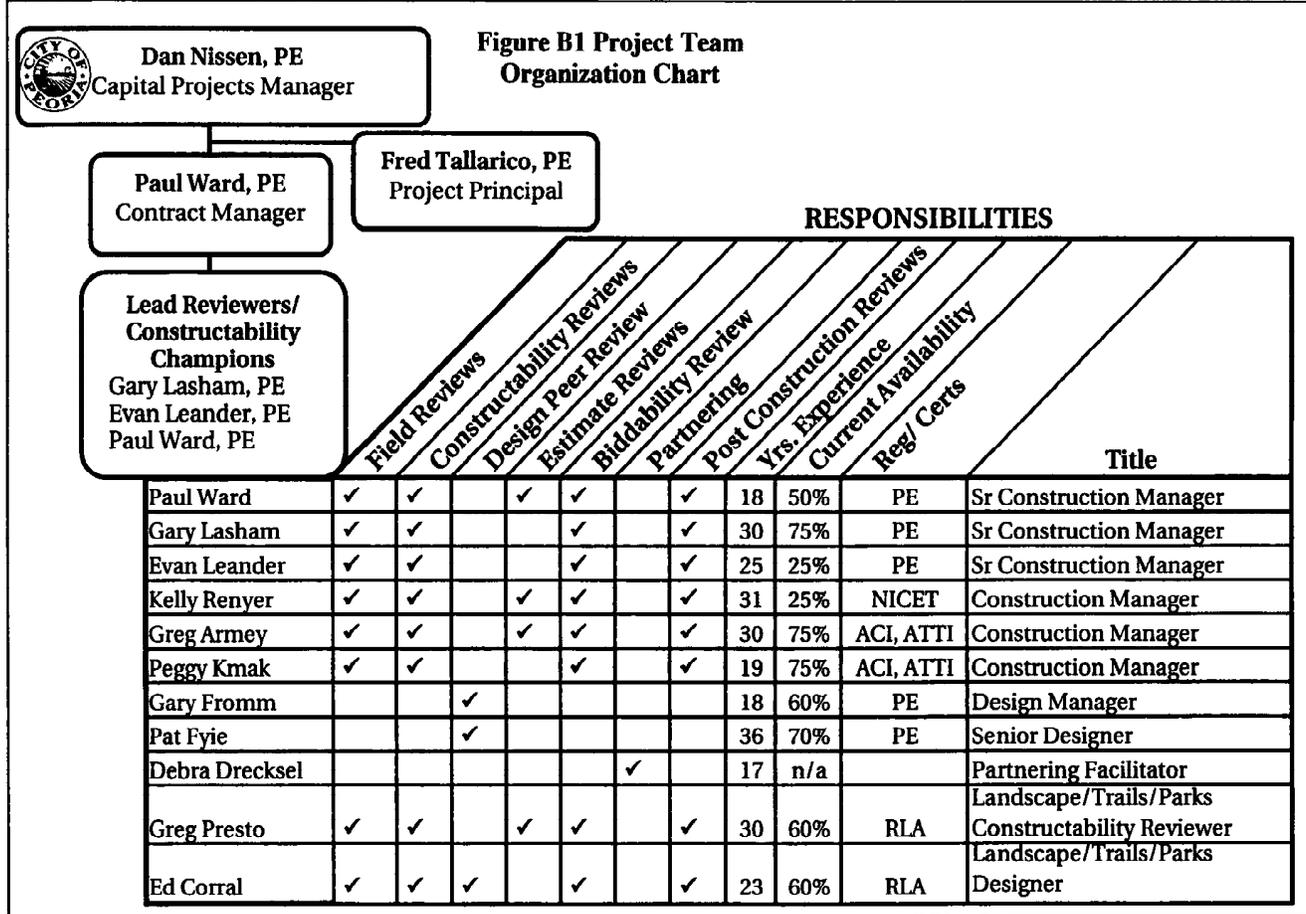
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have identified six personnel locally who will be performing constructability and biddability reviews. Based on our working relationship with the City and you "knowing us", we could manage a minimum of four active assignments at any given time.



B2-1. Number of staff by discipline

The Jacobs Phoenix office provides a range of services which are focused in two primary areas, Infrastructure and Architecture. We anticipate all staff being used on this contract to come from the Infrastructure Division which is comprised of the following technical disciplines, as presented in the table below:

Figure B2 Infrastructure Staff Technical Disciplines			
Director of Operations	1	Cultural Resources	14
Manager of Project Operations	1	Environmental Planning	7
Construction Management	13	Transit	1
Highway / Roadway	27	Aviation	8
Traffic Engineering	7	Survey	8
Transportation Planning	4	ITS	1
Structures	4	Project Controls	3
Site Civil	8	Office Staff	8
Water Resources	5	Sales Coordination	2
Total Infrastructure		122	
Architecture		58	
Other		20	
Total		200	



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B2-2. Qualifications of staff to be assigned to City's projects (short resumes)

Fred Tallarico, PE, Principal

Fred is Jacobs Arizona Operations Manager for the North America Infrastructure group. Fred will commit the necessary resources to ensure the contract is managed in accordance with the City of Peoria's expectations. He will support our Contract Manager by providing him with the necessary personnel and resources to complete the project.

Paul Ward, PE, Contract Manager – Sr. Construction Manager – Lead Reviewer

Paul has experience in Construction Management, Project and Program Management and Project Controls, including detailed review of GMP cost proposals and construction schedules. Paul's construction management background includes experience as a Resident Engineer on projects ranging from \$100,000 to over \$500 million. This includes plan and specification interpretation, change order preparation and negotiation, claims analysis and defense, and inspection for contract and specification compliance for projects involving the construction and rehabilitation of highways and highway structures. Paul has been involved in many formal and ad-hoc constructability/biddability reviews

Evan Leander, PE, Sr. Construction Manager – Lead Reviewer

Evan offers 26 years of extensive experience as a project manager, construction manager, and resident engineer in the construction and design of numerous projects at the state, county and local government levels. His qualifications, expertise, and focused skills include construction management / supervision, contract administration, field inspection/ quality control, design/plan reviews, constructability/value engineering studies, public meetings/presentations, and partnering practices. For 13 years, Evan performed as an ADOT Resident Engineer. In this capacity he provided oversight on numerous major freeway and bridge projects with construction costs exceeding \$250 million dollars. He also supervised and scheduled 25 engineers, inspectors and field technicians. Well rounded in his experience with alternative project delivery methods, Evan serves the client well as the Owner's representative with his organizational skills and diligence in planning and executing the work of a diverse and multi-disciplined team.

Gary Lasham, PE, Sr. Construction Manager – Lead Reviewer

Gary is the former MCDOT Construction Manager of 17 years. Overall, Gary has more than 30 years of experience in civil engineering, public administration, construction management, public works operation, facilities planning, budget preparation, project management, construction administration and fleet safety management. Gary worked extensively on planning future roadway projects with the County, ensuring effective solutions or reconstruction of roadway surfaces. He was also responsible for evaluating, recommending, and approving, designs and change orders for roadway reconstruction. Since joining Jacobs, Gary is managing the construction administration and inspection services for a City of Phoenix developer-driven water and sewer installation near 59th Avenue and Baseline, and the City of Glendale's 67th Avenue Improvements project.

Kelly Renyer, NICET, Construction Manager - Reviewer

Kelly Renyer offers 31 years experience as a construction manager, project manager, estimator, and inspection supervisor for numerous projects statewide. He brings knowledge of all elements of construction including water and waste water distribution. He was Construction Manager for the City of Flagstaff for 17 years in charge of inspection division as well as the materials lab. He was also a project manager and estimator for six years for construction firm in Flagstaff. He was the inspection supervisor in charge of 17 inspectors for the City of Peoria. He's experience on both the owner and contractor's side of the table give him perspective that is very valuable for these reviews.

Greg Arney, ACI, ATTI, Construction Manager - Reviewer

Greg has 30 years experience in construction administration, supervision and inspection. Greg supervised the construction of many projects in the Valley including the Ray Road (Val Vista to Greenfield), and Pecos Road (Lindsay to Recker Road) projects. Additional, he supervised and managed the construction of the Santan Basin Parks (Cosmo & Discovery Parks), which won ACEC



PROPOSAL
Biddability / Constructability Reviews
Request for Proposal No. P09-0069

Materials Management
Procurement
8314 West Cinnabar Street
Peoria, Arizona 85345-6560
Phone: (623) 773-7115
Fax: (623) 773-7118

Excellence Awards. Greg has a thorough understanding of construction issues, and more than 10 years experience overseeing and managing the construction of roadway, bridge and freeway projects in the Phoenix Metropolitan Valley. Greg is experienced in providing constructability reviews of the plans from the design team. Prior to performing construction administration, Greg was a journeyman carpenter and understands construction from the contractor's point of view.

Peggy Kmak, ACI, ATTI, Construction Manager - Reviewer

Peggy serves as a construction supervisor with Jacobs' Construction Management Group. She has 19 years of experience in the construction and engineering industry. Her experience includes construction supervision, administration and observation, acting as an owner's representative for transportation and municipal projects, survey coordination and drafting. Her survey experience included cadastral land surveys and construction surveys. She supervises a construction technician, performs daily project observations and prepares reports, manages the shop drawing review process, and reviews testing results and payment applications. In addition, she processes changes orders and claims, including negotiations, settlements and documentation, and resolves contractor questions, providing drawing clarification and utility coordination.

Gary Fromm, PE, Design Manager - Lead Reviewer

Gary offers 18 years of transportation project management and design experience. He has a range of experience working with various governmental agencies including city, county, state, and federal. His experience in roadway design gives him the confidence to evaluate projects and recommend changes to improve the design, make it easier to construct, and to meet design guidelines and standards. Gary's recent projects for the City of Peoria include Happy Valley Road and the Beardsley Connector projects.

Pat Fyie, PE, Senior Designer - Reviewer

Pat has more than 36 years of experience in the management, planning, design and construction of storm water, water & wastewater, transportation and land development projects. His experience includes 22 years in private practice and 8 years as Public Works Administrator/County Engineer for Hamilton County, Tennessee. Water projects include distribution systems, storage, pumping facilities and system analysis. Storm water experience includes hydrology, storm drain and culvert design, retention/detention basin design, storm water master planning, channelization and bank protection, and NPDES and Corps of Engineers permitting.

Debra Drecksel, Partnering Facilitator, Debra Drecksel, LLC

Debra has worked in various capacities in the construction industry since 1985. In the last 17 years, she has served as a third party neutral as a Partnering Facilitator and mediator. In the past, she also acted as an arbitrator, lawyer, and Judge Pro Tempore. As a Partnering Facilitator, Debra focuses on what is important to the parties, works diligently to help them get their needs met in mutually beneficial ways, and brings a results-oriented approach to her projects. Debra has facilitated City of Peoria projects including the Happy Valley Road project.

Greg Presto, RLA, Landscape Architect Reviewer - Corral Dybas Group

Greg is a Project Landscape Architect/Erosion Control Coordinator for Corral Dybas Group. He is a registered landscape architect in Arizona with over 30 years of design and project management experience. Work during this period includes a wide variety of public works projects such as transportation streetscape design, bridge enhancement aesthetics, and park design and construction management. Previously, Greg worked for the City of Phoenix Parks Department. As a Landscape Architect he provided design of local enhancement projects, parks, streetscapes, and the plan review of many different types of private, local and public sector development projects for these cities. Greg current work with CDG includes providing construction administration services for ADOT as well as providing design services for several transportations projects including the Beardsley Connector in the City of Peoria. Greg is also an experienced/certified Erosion Control Coordinator and is experienced in the development of construction SWPPP's, temporary erosion control plans for construction projects and SWPPP inspections and monitoring.



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Ed Corral, RLA, Construction Manager – Reviewer – Corral Dybas Group

Ed is a veteran landscape architect with over 23 years of public works project experience in both the design and construction phases for Corral Bybas Group. He is a registered landscape architect in Arizona and has worked on and completed a wide variety of public works projects including transportation corridor enhancements, environmental mitigation, streetscape design, MAG system transportation design, structural aesthetics, and construction management. He has provided landscape architectural design of several City of Peoria projects such as Happy Valley Road, and the Beardsley Connector extension projects. Ed has used his design expertise to further his knowledge of construction. He has been instrumental in assisting ADOT on several construction management projects where he was the Resident Landscape Architect providing complete construction management services for ADOT on the SR 101L from the CAP Canal to Scottsdale Road and SR 202L, Elliot Road to Power Road.

B2-3. Availability of proposed staff and how the consultant will be able to manage the required services if multiple projects are assigned to it by the City.

Our organization was developed in anticipation of multiple assignments with three Task Leaders/ Constructability Champions. Our organization chart (Figure B1) identifies our current key staff availability. We have multiple staff identified that can perform the tasks called for in the RFP. In addition to the listed staff, the Jacobs Phoenix Office has 200 staff members, and if needed we frequently work with our peers in the Las Vegas and California offices to meet the needs of our clients when schedule and availability are driving forces to “getting the job done”.

B1. LOCATION OF OFFICE PERFORMING THE SERVICES

This contract will be managed out of our downtown Phoenix office, located less than 30 minutes from the Peoria City Complex, and many of the proposed projects in the current Capital Improvement Plan.

C. PAST/SIMILAR PROJECT:

C1. PROVIDE A DESCRIPTION (WRITTEN NARRATIVE) OF THE FIRM’S EXPERIENCE WITH SIMILAR TYPES OF WORK.

Jacobs has a long tradition of performing ongoing Project Management/Construction Management and Construction Management services in Arizona. A key element of these services will typically include constructability and biddability reviews. Furthermore, our experienced construction management staff routinely provides input on how improve construction documents and to identify ways to reduce costs.

City of Peoria – Happy Valley Road: Jacobs (Evan Leander, Paul Ward, Kelly Renyer, Gary Fromm, Ed Corral, Debra Drecksell) is providing PM/CM/Design services to the City of Peoria for this CMAR project to improve the existing roadway and provide a new alignment. The project limits are from Lake Pleasant Road to Terramar Boulevard on the Happy Valley Road alignment, a distance of 3.25 miles. Our staff on this project developed the plan for the conversion of APS overhead to underground. The plan developed allowed the project to stay on track. Our staff furthermore has provided reviews and negotiated the contractor’s pricing for the four GMPs and the changes on this fast paced contract.



City of Surprise – Bell Road Rehabilitation Phase I, II & III: For the past three years, Jacobs (Greg Armeiy) has been providing PM/CM services for the City of Surprise’s \$25 million “Build a Better Bell” Road Program. Services include programming, budgeting, development of project requests for proposals and requests for bid, management of design consultants and construction administration and management. A responsibility of Greg’s was to review the constructability. Greg oversaw the field construction management and work the City’s contractor to minimize change orders and costs.



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City of Peoria - Beardsley Road Connector: Jacobs (Gary Fromm, Ed Corral, Paul Ward) has been performing design services for this project. The project will extend Beardsley Road east of 81st Avenue to a new southbound frontage road between 75th Avenue and Union Hills Drive, two new freeway ramps, a U-Turn structure (Texas U-Turn) that provides access to eastbound 101L, and reconstructs the Union Hills Drive ramp to eastbound 101L. Paul provided an independent cost estimate for this project and developed a constructability scheme for the Union Hills Bridge and U-turn structure which is located directly under an APS high voltage line.

City of Glendale – 67th Avenue Improvements: Jacobs (Gary Lasham, Peggy Kmak) provided Design, and Project Management/Construction Management services for the CMAR project to provide improvements along 67th Avenue for the City of Glendale under their “Go Glendale” process. Four intersections along 67th Avenue at Olive Road, Cactus Road, Thunderbird Road, and Bell Road including roadway widening for far-side PCCP bus bays and right-turn lanes, median landscaped islands, drainage improvements, curb and gutter, sidewalk with ramps, driveway entrances, bus shelters, pavement overlay, traffic signal and roadway lighting modifications, major utility relocations, signing, striping and landscaping. As a part of our scope of work we provide reviews of the projects constructability.



Town of Gilbert – Higley Road, Ocotillo to Queen Creek Roads: Jacobs (Evan Leander) completed PM/CM and inspection services for the CMAR reconstruction of a two-lane paved roadway with dirt shoulders into a six-lane major arterial with raised median, a slab bridge at Sonoqui Wash, curb and gutter, meandering sidewalks, landscaping and lighting. Additional improvements included the widening of the existing Queen Creek Wash Bridge, subgrade preparation, grading, roadway paving, catch basins, manholes, storm drainage, grading for detention/retention basins, signing and striping and traffic control.



Town of Gilbert — Santan Basin Parks (Discovery & Cosmo Parks): Jacobs (Greg Arme) provided PM/CM and inspection services of two detention basin parks near Ray Road and the Santan Freeway. Design and construction components included landscape master plan, sport fields (including lighting), dog park (Cosmo Park), lakes, ADA-accessible (hard surface) trails, park lighting, parking lots and lighting, curb and gutter, sidewalk and traffic circulation and control layout. Utility construction included water for irrigation, water/sewer lines for rest rooms and concession building, and fire line system. These parks were recognized by the ACEC Excellence Awards.

C2 PROVIDE AT LEAST THREE (3) OWNER REFERENCES FROM PROJECTS COMPLETED OR ONGOING WITHIN THE PAST FIVE (5) YEARS

Reference #1	Reference #2	Reference #3
Chris Kmetty	Nick Mascia	Tami Ryall
City of Peoria	City of Surprise	Town of Gilbert
9875 N 85th Avenue	12425 W. Bell Road, Ste D100	50 E Civic Center Dr
Peoria, AZ	Surprise, AZ	Gilbert, AZ
Phone 623-773-7247	Phone 623-222-3400	Phone 480-503-6765
Project: Happy Valley Road Beardsley Connector	Project: Bell Road Rehabilitation Phase I, II & III	Project: Santan Basin Parks



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C3 COMPLETE QUESTIONNAIRE PROVIDED ON PAGE 23, MAKE ADDITIONAL COPIES AS NECESSARY.

Please list a minimum of three (3) owner references from similar projects whom the City of Peoria materials Management Division may contact.

1. Company: City of Peoria
 Contact Chris Kmetty Phone 623-773-7247
 Address: 9875 N 85th Avenue
Peoria, AZ
 Project Happy Valley Road
Beardsley Connector

2. Company: City of Surprise
 Contact Nick Mascia Phone 623-222-3400
 Address: 12425 W Bell Road, Suite D100
Surprise, AZ 85374
 Project Bell Road

3. Company: City of Glendale
 Contact Jim McMains Phone 623-930-3667
 Address: 5850 W Glendale Ave, Suite 315
Glendale, AZ 85301
 Project 67th Avenue Improvements

4. Company: Town of Gilbert
 Contact Tami Ryall Phone 480-503-6765
 Address: 50 E. Civic Center Dr.
Gilbert, AZ
 Project Santan Basin Parks

Fred S. Tallarico, PE

PRINCIPAL-IN-CHARGE

Years of Experience

With Jacobs: 7

Total Career: 22

Education

B.S., Structural Design and
Construction Engineering,
Pennsylvania State University

Registration

Professional Engineer,
Arizona, #25017

Professional Engineer,
New Mexico, #14037

Professional Engineer, New York,
#076150-1

Professional Engineer, Texas, #82194,
Civil/Structural

Professional Affiliations

American Public Works Association

American Society of Civil Engineers

QUALIFICATIONS SUMMARY

Mr. Fred Tallarico, PE, has 22 years of management and design experience in transportation engineering ranging from technical oversight and production management/plan production, feasibility studies and realignments, urban arterial street improvements and contract document development including cost estimates and specifications. As Jacobs' Director of Arizona Operations (North America Infrastructure), he serves as Principal on all Phoenix transportation engineering projects. He has the authority to commit the personnel and resources to successfully complete this project. He fully supports the Jacobs Project Manager and team.

Mr. Tallarico is also experienced in the design-build practice having served in a quality review role and as scoping manager and technical oversight manager. He is keenly aware of client expectations, keeps current with design standards for federal, state and local agencies and uses current technology to maintain open and thorough communication with clients and staff.

Fred has been the Principal on Jacobs' On Call Engineering contract with MCDOT for the past 3 years.

RELEVANT PROJECT EXPERIENCE

- **City of Peoria — Happy Valley Road**
Project Principal
This \$55 million CMAR project entails improvements to existing roadway as well as a new alignment. The project limits are from Lake Pleasant Road to Terramar Boulevard on the Happy Valley Road alignment, approximately 3.25 miles. Major work items includes mass earthwork, a new bridge over New River, box culverts, sound walls, waterline and utility installation, and signalized intersection at 83rd Avenue.
- **City of Peoria — Beardsley Road Connector**
Project Principal
This \$25 million dollar project with the City of Peoria required the development for the design solution presented in a DCR for a project that adds access to SR 101L between Union Hills Drive and 75th Avenue. The project extends Beardsley Road east of 81st Avenue to a new southbound frontage road between 75th Avenue and Union Hills Drive, swaps two freeway ramps, add a U-Turn ramp that provides access to eastbound 101L, and reconstructs (lengthens) the Union Hills Drive ramp to eastbound 101L.
- **City of Surprise — "Build a Better Bell Road"**
Project Principal
Services have included programming, budgeting, development of project request for proposals and requests for bid, management of design consultants and construction administration and management. Projects include bridge joint replacements; pavement rehabilitation, turn lane improvements, streetlight replacement landscape improvements; Bell Road Pavement Rehabilitation, Grand Avenue to Beardsley Canal; Bell Road Reclaimed Water Line and Pump Station; and three roadway improvements construction documents submittals on Reems Road, from Waddell to Peoria. Jacobs also assists the City of Surprise in prioritizing their projects and identifying cost-effective solutions on their transportation infrastructure deficiencies.
- **MCDOT — El Mirage Road, Bell Road to SR 303L**
Project Principal
Design for four miles of new roadway alignment. Coordination with various stakeholders within MCDOT, ADOT, the City of Surprise, adjacent developments, as well as adjacent capital improvement projects was required. This corridor's design sequencing has been broken into phases to assist MCDOT with managing and maximizing the funding of the construction costs over several fiscal years.

▪ **MCDOT — Low Volume Roads (LVR) Program**

Project Principal

Under the current MCDOT On-Call contract, Jacobs developed the Dust Mitigation Design Guidelines Memo, which enabled the County to develop a short and long term approach to assess design criteria of each independent road. In addition to preparing scoping documents for projects on the Transportation Advisory Board's (TAB) project list, Jacobs prepared three phases of final construction documents for the LVR improvements. Jacobs is currently working on LVR latest phase, LVR-North Valley, scheduled for completion in October, 2009.

▪ **MCDOT — Power Road - Pecos Road to Santan Freeway Design Concept Report, Maricopa County, AZ**

Project Principal

The DCR will include 30% level design plans for approximately two miles of ultimate roadway configuration requiring new intersection alignment at Williams Field Road, storm drain with basin design, new bridge structure, signing, marking, utility coordination, coordination with the City of Mesa and Town of Gilbert, new right-of-way and public involvement.

ADDITIONAL PROJECT EXPERIENCE

Mr. Tallarico has been involved on hundreds of roadway projects in the Valley, throughout Arizona and other states such as New York, New Jersey and Texas. He has been the Principal on the following Jacobs projects over the past six years:

- On-Call General Engineering Services for City of Phoenix
- On-Call Construction Management Services for City of Phoenix Water Services Department
- On-Call Temporary Technicians Services for City of Phoenix Water Services Department
- CMAR Design — Various Roadway Intersection Improvements, City of Surprise CIP Program Management
- CMAR Project Management/Construction Management — Pecos Road, Gilbert, Arizona
- Fast Track Design — Litchfield Road Overpass, Luke AFB, Glendale, Arizona
- Final Design — McQueen Road, Queen Creek Road to Pecos Road, Chandler, Arizona
- Final Design — McDonald Drive, Scottsdale Road to 104th Street, Scottsdale, Arizona
- PM/CM — Higley Road Improvements, Ocotillo Road to Queen Creek Road, Gilbert, Arizona
- PM/CM — Ocotillo Road, Higley to Recker Road, Gilbert, Arizona
- On-Call Traffic Engineering Services for MCDOT
- Peoria Intersection Studies, Peoria, Arizona
- "Build a Better Bell Road" Program Management for the City of Surprise
- I-17, SR 74 to Anthem Way, ADOT
- Town of Gilbert Annual Traffic Signal Design Projects
- Traffic Signal Plans, 67th Avenue and Bell Road; City of Glendale
- Peoria Intersection Studies, Peoria, Arizona
- 91st Avenue Access Management and Corridor Study, City of Peoria
- 85th Avenue/Olive Avenue Intersection Safety Study, City of Peoria
- Beardsley Road, 111th Avenue to 99th Avenue, City of Peoria
- Traffic Signal Plans, 67th Avenue and Bell Road; City of Glendale
- Roundabout Feasibility Study at Power and Chandler Heights Roads
- 51st Avenue/Olive Avenue Intersection Improvements, Glendale, AZ
- DCR and Final Design — Bullard Avenue, Van Buren to Yuma, Goodyear, Arizona
- DCR and Final Design — Beardsley Road Rehabilitation, Peoria, Arizona
- CMAR Design — 67th Avenue Interior Improvements Design (at Olive Avenue, Cactus, Thunderbird, and Bell Roads), Glendale, Arizona: Utility, roadway and drainage improvements.



Introductions

Fred Tallarico, PE • Project Principal

Paul Ward, PE • Contract Manager

Evan Leander, PE • Lead Constructability Reviewer

Kelly Renyer, Cost Engineer • Construction Inspector

Gary Fromm, PE • Civil Design Engineer



Discussion Points

- ✓ Merits of Constructability Review Process
- ✓ Jacobs Partnering with Peoria
- ✓ Biddability/Constructability Philosophy
- ✓ Potential Tasks
- ✓ Implementation
- ✓ Wrap Up
- ✓ Q&A

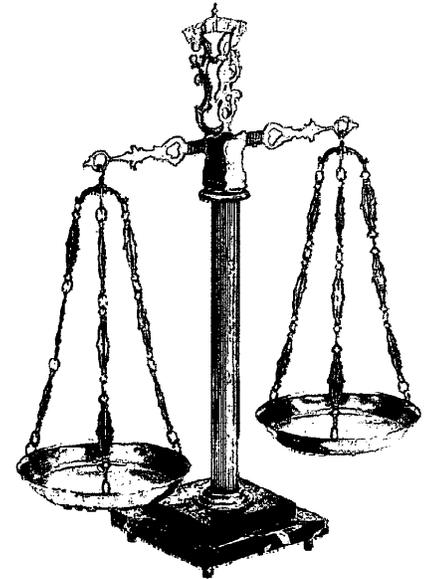


Merits of Constructability Review



A New City Process

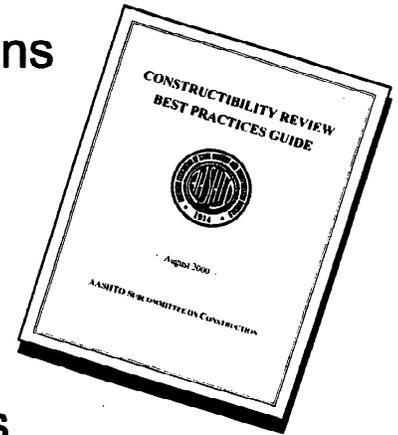
- ✓ Balance constructable design with integral contractor bids through Design/Bid/Build APDM
 - Keep Low Bids Low
 - ▲ Roadway
 - ▲ Parks
 - ▲ Utilities
 - Reduce Risk for Change Orders





Biddability/Constructability Value-Added Benefits

- ✓ Encourages Early Planning
- ✓ Minimizes Scope Changes
- ✓ Reduces Design Related Change Orders
- ✓ Improves Contractor's Productivity
- ✓ Develops Construction-Friendly Specifications
- ✓ Enhances Quality
- ✓ Reduces Delays
- ✓ Improves Public Image
- ✓ Promotes Construction Safety
- ✓ Reduces Conflicts/Disputes
- ✓ Decreases Construction/Maintenance Costs





BIDDABILITY / CONSTRUCTABILITY REVIEWS

City of Peoria
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Jacobs – Partnering with Peoria

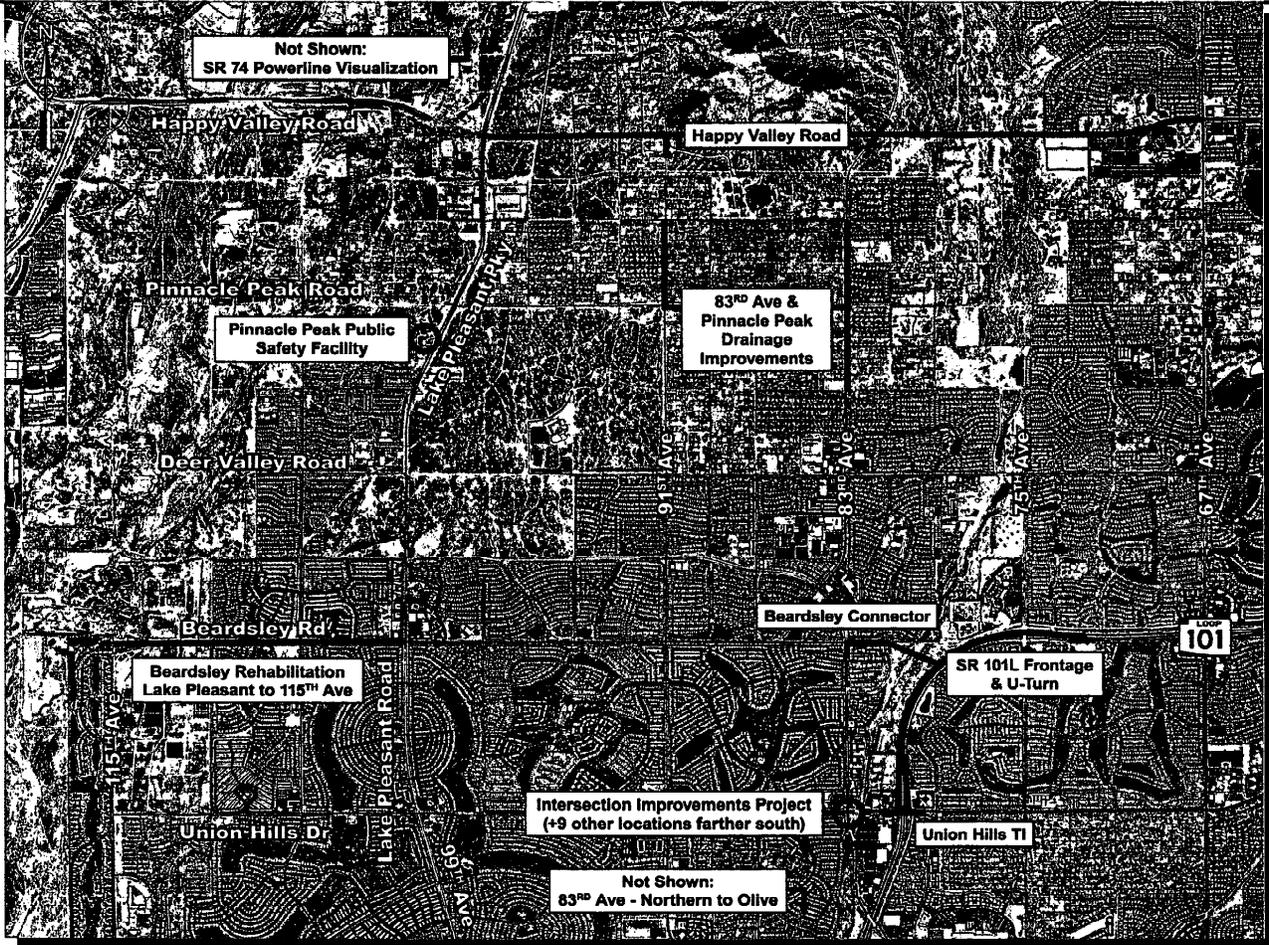
JACOBS

A decorative horizontal line consisting of a series of repeating, stylized, slanted rectangular shapes.



BIDDABILITY / CONSTRUCTABILITY REVIEWS

City of Peoria
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BIDDABILITY / CONSTRUCTABILITY REVIEWS

City of Peoria
Materials Management
Procurement



Dan Nissen, PE
Capital Projects
Manager

Fred Tallarico, PE
Project Principal

Paul Ward, PE
Contract Manager

**Lead Reviewers
Constructability
Champions**
Gary Lasham, PE
Evan Leander, PE
Paul Ward, PE

RESPONSIBILITIES

	Role	Licenses/Certs.	Years Experience	Current Availability	Field Reviews	Constructability Reviews	Design Peer Review	Estimate Review	Biddability Review	Partnering	Post Construction Reviews
Paul Ward	Sr. Construction Manager	PE	18	50%	•	•	•	•			•
Gary Lasham	Sr. Construction Manager	PE	33	75%	•	•			•		•
Evan Leander	Sr. Construction Manager	PE	25	25%	•	•			•		•
Kelly Renyer	Construction Manager	NICET, ATSSA	32	25%	•	•		•	•		•
Greg Arney	Construction Manager	ACI, ATTI, ATSSA, ICC	30	75%	•	•		•	•		•
Peggy Kmak	Construction Manager	NICET, ACI, ATTI, ATSSA	19	75%	•	•			•		•
Gary Fromm	Design Manager	PE	18	60%			•				
Pat Fyle	Senior Designer	PE	36	70%			•				
Debra Drecksel	Partnering Facilitator		17	n/a						•	
Greg Presto	Landscape Reviewer	RLA	30	60%	•	•	•	•	•		•
Ed Corral	Landscape Designer	RLA	23	60%	•	•	•		•		•

Over 275 years of combined experience
Availability

JACOBS



Partnering With Peoria

- ✓ Biddability / Constructability saves money
 - Small investment – reduces risk for:
 - ▲ RFIs
 - ▲ Change Orders
 - ▲ Claims
 - ▲ Delays
- ✓ Savings result in City delivering more projects positively impacting City staffing capacity





Biddability/Constructability Philosophy





Jacobs Philosophy

- ✓ Experienced construction staff involved in the design phase
- ✓ Process that systematically reviews the project for risks
- ✓ Perform reviews early enough to assure the greatest impact
- ✓ Seamless integration across technical groups

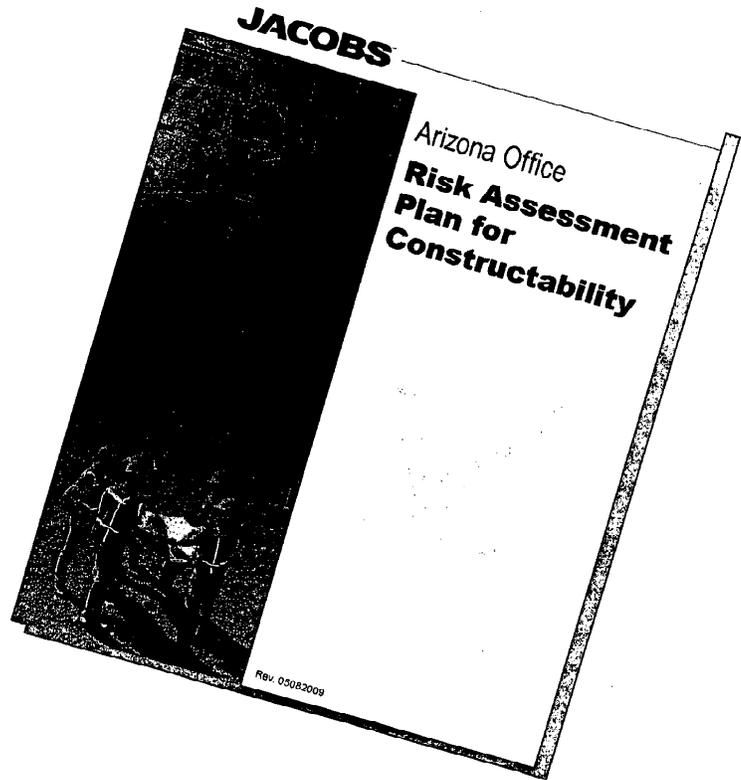




Risk Assessment Checklist



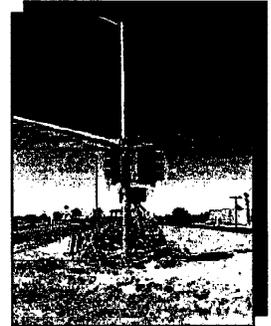
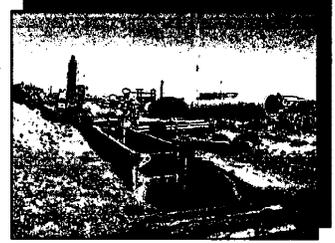
SAFETY





Risk Assessment Checklist

- ✓ General Items
- ✓ Maintenance and Protection of Traffic
- ✓ Utilities
- ✓ Earthwork and Grading
- ✓ Bases and Pavements
- ✓ Drainage and Pipes
- ✓ Water and Sewer
- ✓ Structures
- ✓ Signals
- ✓ Landscape Architecture and Irrigation
- ✓ Right of Way
- ✓ Maintenance





How Our Philosophy Can Work for Peoria

✓ Provides a Documented Checklist

...*Process Simplification*

✓ Is Conducted at Key Steps Throughout the Development of the Project

...*Focuses on features that affect construction means and methods*

✓ Systematically Minimizes Waste

...*Keeps projects within budget and schedule*

✓ Factors Safety into Design

...*Minimizes Risk for Everyone*





Potential Tasks





Potential Tasks

- ✓ City Involvement
- ✓ Constructability/Field Reviews
- ✓ Biddability Review
- ✓ Estimate Reviews
- ✓ Design Review
- ✓ Value Engineering
- ✓ Change Order Reviews
- ✓ Partnering Meetings
- ✓ Post Construction Reviews
- ✓ BIM (Building Information Modeling)





City Staff Involvement

✓ Build on the City's Framework

- Project Sponsors
- Project Managers
- City Technical Staff



✓ Define a Biddability/Constructability Review

- Goals and Benefits
- Involve City staff in developing the process
- Demonstrate the effort undertaken provides measurable results



City Staff Involvement

- ✓ Work together in developing the ***Tools*** to support the process
 - Customized Peoria Risk Assessment Checklist
 - Create a Peoria cost database {Unifier}
 - Utilize outside resources (*Means, ADOT E2C2, Blue Book*)
 - Bring the construction perspective during the design reviews



City Staff Involvement

✓ Hands-On Element

- One-on-One

- ▲ include Peoria staff members in the processes

- ▲ be a resource

- ▲ watch, do, contribute

- Group Environment – Many of the concepts lend themselves to classroom or small group environment

- ▲ Cost estimating

- ▲ General constructability review process



Providing Predictable Results

- ✓ Provides a tailored ~~Jacobs~~ Peoria Risk Assessment Checklist
- ✓ Provides focused and thorough Peoria-specific reviews
- ✓ Constructability Champions (Gary Lasham, Evan Leander, Paul Ward)
 - ▲ Have decades of experience as Resident Engineers
- ✓ Lead Staff Reviewers (Kelly Renyer, Greg Armey)
 - ▲ Both have over 30 years of construction estimating and superintendent experience
 - ▲ Both have worked for contractors (as estimators and superintendents)
- ✓ Peoria Experience
 - ▲ 8 of our team members have current City of Peoria experience



BIDDABILITY / CONSTRUCTABILITY REVIEWS

City of Peoria
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Implementation

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About Peoria

- ✓ Construction Window Limitations
 - Spring Training
 - Holiday Season
 - Snowbirds
- ✓ Construction Details
 - Pipeline shading requirements
 - Materials preferences (RGRCP Class V, DIP)
- ✓ Specifications
- ✓ Ensure all work has respective bid items or is noted as “incidental” to a certain bid item
 - Are the plans and specs in alignment with each other and Peoria’s requirements – eliminate ambiguity



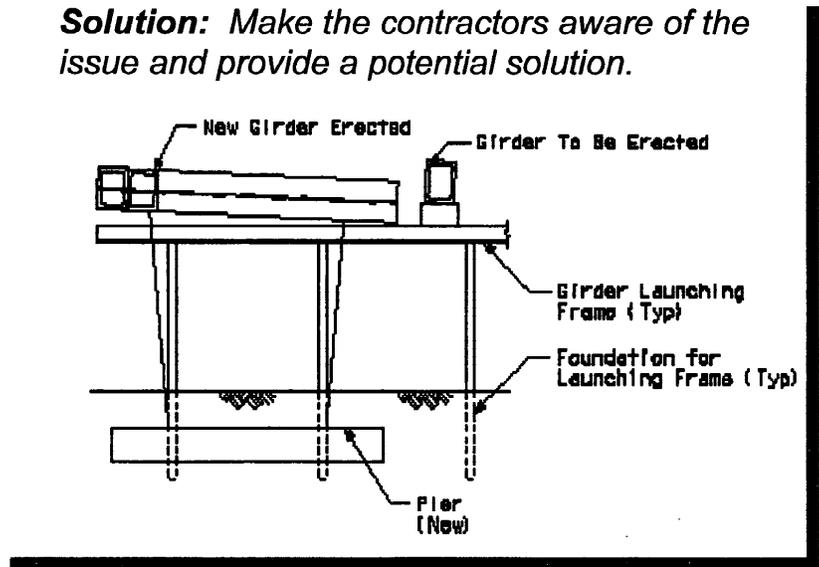
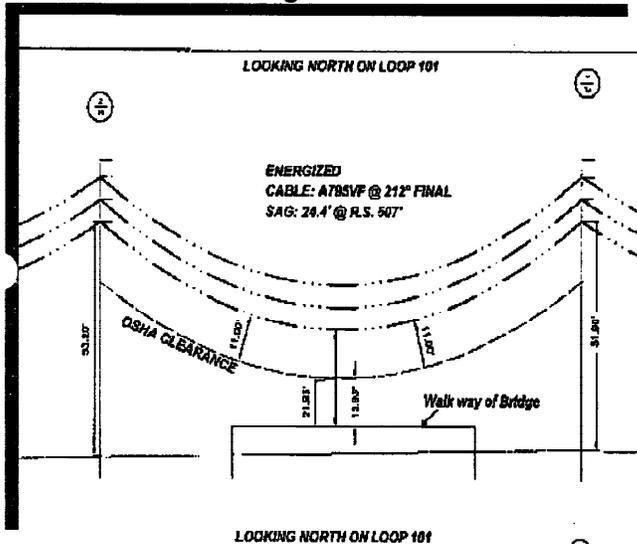


Union Hills TI Risk Assessment Example

✓ *Does structure site have any overhead utilities which will conflict with operation of cranes? Can the overhead lines be temporarily rerouted, or shut down?*

Risk: Power lines too close to north side bridge construction.

Solution: Make the contractors aware of the issue and provide a potential solution.

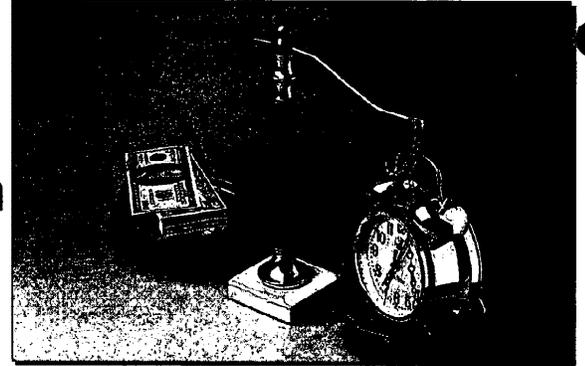




Cost Estimating

“More Important than Ever”

- ✓ Integral estimates allow more projects to get constructed
- ✓ Well developed plans result in lower contingencies
- ✓ Identifies and manages risks
 - Materials price escalation
 - Rock excavation





Cost Estimating

Jacobs Approach to an Accurate Estimate

✓ Method One – Top Down (Similar Work Comparison)

- Use databases (Peoria recent bid history, *ADOT E2C2*, Phoenix recent bid history)

▲ Used on Happy Valley Road and Beardsley Connector

- Provides quick and accurate results for common work
- Does not address unique work or situation, depends on reasonable historical sample to provide accurate results

Beardsley Road Example

Description	Unit	Quantity	Contractor Proposed Cost	Jacobs Estimate	%age	Impact
REMOVAL OF CONCRETE CURB AND GUTTER	LF	3,458.00	\$ 9.21	\$ 4.08	56%	\$17,734.46
REMOVAL OF CONCRETE SIDEWALKS, DRIVEWAYS AND SLABS	SF	17,690.00	\$ 5.26	\$ 3.95	25%	\$23,241.97
REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SY	10,842.00	\$ 9.37	\$ 2.49	73%	\$74,608.82





Cost Estimating

Reaching an Accurate Estimate

- ✓ Bottoms Up Approach (Labor-Equipment-Materials)
 - Think like a contractor to determine all of the steps needed
 - ▲ Assign labor, equipment, and materials
 - ▲ Contact major material suppliers to verify material costs
 - ▲ Use estimating resources to validate our assumptions
 - Accurate because it takes into account the site specific conditions
 - A good estimate is time and labor intensive

Happy Valley Road Soundwall

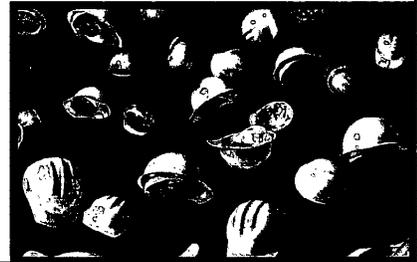
Construction Estimate Page 1
File Name: Estimate1

Qty	Crat@Hours	Unit	Material	Labor	Equipment	Total
Job layout						
Large job, easy work						
24600.00	@.0000	SF	0.00	0.00	0.00	13,377.00
Sandblasting						
Medium, to expose aggregate						
3800.00	S4@180.0	LF	900.00	6,732.00	8,640.00	18,272.00
Paint masonry walls						
Spray scored concrete block or brick						
245000.00	PA@980.0	SF	0.00	46,550.00	0.00	46,550.00
Water blasting (pressure washing)						



Partnering

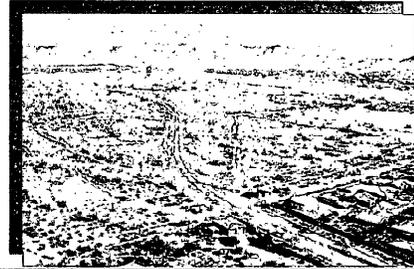
- ✓ Consistent with City's goals of reduced conflicts, delays and added costs during construction
- ✓ Debra Drecksel – successfully led partnering on many projects, including Happy Valley Road
- ✓ After the meeting - Surveys like those used on HVR provide a quick measurement of the construction team attitude toward the project and other team members





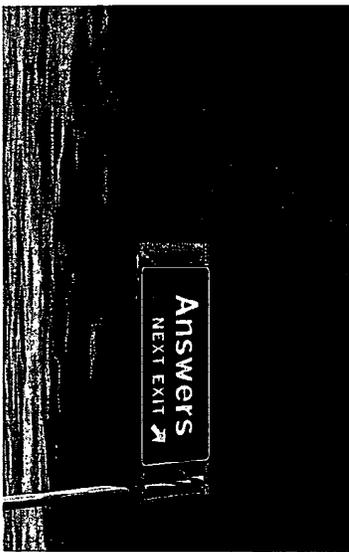
Jacobs - Peoria

- ✓ Right Staff and Skill Sets for Peoria's Projects
- ✓ Process Easily Transferable to Peoria
- ✓ Proven Biddability/Constructability Review Experience
- ✓ Proven Estimating Resources
- ✓ Industry-Leading Technologies and Methodologies
 - Building Information Modeling (BIM)
- ✓ Seamless Team Integration





QUESTIONS



JACOBS

June 30, 2009

Ms. Christine Finney, CPPB
Materials Management Procurement
City of Peoria
8314 West Cinnabar Street
Peoria, AZ 85345-6560

**RE: Biddability Constructability Reviews
P09-0069**

Dear Ms. Finney:

It has been said that out of chaos comes opportunity. The current economic times have created an opportunity to refine how we are doing business and this has extended to the way construction services are procured. In order to continue to deliver the needed improvements within tight financial constraints, every dollar must be used efficiently and this has led to a shift back toward the low-cost, design-bid-build project delivery method. One way of reducing construction costs is by making sure the project plans have been optimized through a structured Constructability and Biddability Review process.

Jacobs has long standing relationship with the City of Peoria. This includes providing Project Management, Design, and Construction Management services on two of its most significant transportation projects: Happy Valley Road and Beardsley Connector. Jacobs is uniquely qualified to provide constructability / biddability services to the City of Peoria. Our team's specific strengths include:

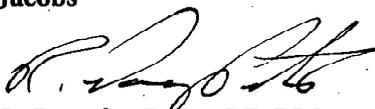
- An in-depth working knowledge of the City's staff, policies and procedures;
- Tenured well-rounded local staff led by Fred Tallarico as Director of Operations, Paul Ward as the Contract Manager, and staff such as Kelly Renyer, who oversaw Peoria's Offsite Inspection team for several years;
- An understanding of the City's goal of predictable results on its projects during construction and what it takes to accomplish this;
- The tools that are needed to assure these predictable results occur;
- A Shared commitment to quality;
- Motivation to succeed

The 200 employees of the Arizona Office of globally recognized Jacobs Engineering Group Inc., under the direction of Fred Tallarico, are located at 101 N. First Avenue, Suite 3100, 602.253.1200 (p) and 602.253.1202 (f). Fred can be emailed directly at fred.tallarico@jacobs.com.

We have reviewed the City's contract and take no exceptions. Further, we acknowledge receipt of the Addenda issued for this project. Our qualifications for Biddability and Constructability Reviews are solid, and our dedication to the City of Peoria is sincere. We look forward to your favorable consideration.

Sincerely,

Jacobs



R. Douglas Peter, PE, RLS
Manager of Project Operations, Arizona



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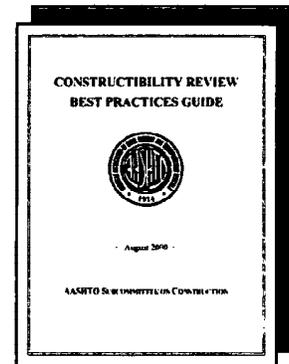
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A. PROJECT UNDERSTANDING & APPROACH

A1. UNDERSTANDING OF THE SCOPE OF WORK

Recent changes in economic conditions have led public agencies [owners] in Arizona to shift away from qualifications-based selection contracting back to a cost-based selection, such as design-bid-build. In order to accomplish this shift successfully, it is necessary to have project plans, specifications, and estimates that are clear, complete, and concise. This will reduce change orders, delays and other impacts that can be costly and which can cause increased staffing needs, design costs, and inconvenience to the citizens of Peoria. Assuring that this shift back toward the design-bid-build project delivery method is accomplished, the City of Peoria is seeking to retain the services of qualified consultants to provide professional Biddability and Constructability reviews for various elements of its Capital Improvement Program (CIP). Constructability/Biddability brings value to an owner by:

- Enhancing Early Planning
- Minimizing Scope Changes
- Reducing Design Related Change Orders
- Improving Contractor's Productivity
- Developing Construction-Friendly Specifications
- Enhancing Quality
- Reducing Delays/Meeting Schedules
- Improving Public Image
- Promoting Construction Safety
- Reducing Conflicts/Disputes
- Decreasing Construction/Maintenance Costs



In developing our approach to conducting this work, we will be working from the *AASHTO Best Practices Guide* for Constructability Review. AASHTO has defined "Constructability Review" as "a process that utilizes construction personnel with extensive construction knowledge early in the design stages of projects to ensure that the projects are buildable, while also being cost-effective, biddable, and maintainable."

Biddability is part of the Constructability Review Process and is the review of the contract documents to identify errors, omissions and conflicts in the plans, specifications and bid item schedule. Biddability reviews identify uncertainty and minimize unquantifiable risks to the bidder.

Jacobs adds one more element to this process, and that is "*safety by design.*" Minimizing risk on behalf of the City is an important goal to achieve as part of the constructability / biddability services. The mindset still exists within the construction industry that construction work is "inherently unsafe" and one remedy for it is to design safety into the construction process. As a design project passes through the design phases, we believe simplified documentation, improved communication and improved auditing to ensure implementation enhances safety during construction. Further, the detailed design phase is a critical stage for considering safety, as typically, insufficient time is dedicated to the implementation of safety procedures during the design phase and more information is needed during the design phase about the project's potential safety hazards in order to increase safety during construction. The way we integrate construction knowledge into design is through the conduct of a thorough risk assessment of each component of the design. This is done by implementation of a safety review process that guides the designer in evaluating the risks associated with different design approaches and provides direction with which the appropriate "safe" design can be created. This is part of the *Jacobs "Risk Assessment Checklist."*

Jacobs, as a full-service Design, Program and Construction Management firm with a local Phoenix Office since 1968, is staffed to accomplish these three very important processes on behalf of the City of Peoria. It is part of the Jacobs Best Practices to exercise this level of scrutiny on our own design plans; and full service construction management on behalf of our clients is a core competency of our local staff in their own right. The key staff who will be dedicated to this assignment for Constructability and



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Biddability Reviews are Paul Ward, PE as Contract Manager and Lead Reviewer; Gary Lasham, PE and Evan Leander, as Lead Reviewers; and Kelly Renyer, Greg Armeay, Peggy Kmak as Reviewers.

A2. PLAN AND METHOD OF APPROACH TO ACCOMPLISH THE SCOPE OF WORK

Jacobs brings the right tools and the right staff to this assignment. Our staff has significant recent experience for the City of Peoria with the completion of the Peoria Connector project, the on-going design and construction of Happy Valley Road, and the design/pending construction of the Beardsley Connector project as examples. Additionally, Jacobs has been performing project management, design and construction management services for many of Peoria's neighbors including the "Build a Better Bell Road" for the City of Surprise, 67th Avenue for the City of Glendale, and the award-winning Glendale Park and Ride at SR101L and 99th Street.

Our experience with the City of Peoria and your neighbors tells us that each construction project is unique in several ways such as schedule demands, geographic location, construction phasing, coordination with adjacent projects, utility coordination and impacts to the traveling public, etc.; and each constructability and biddability review will also be unique. *The staff for this project needs to provide flexibility as a member of a plan review team and approach each review on a case by case basis with input from the City's Project Manager to assess the level of risk to the City for the design and construction of the project.* With the right staff already in place, Paul Ward, Contract Manager and an assigned Lead Reviewer will schedule a kick-off meeting with the City's Project Manager to confirm the important considerations for performing a constructability / biddability review. From this meeting, we will refine the budget and schedule for performing either constructability, biddability reviews, or both. Additionally, the Jacobs Team is structured to provide services such as Partnering Workshops and design peer reviews should these be determined to be of value to the City.

Our staffing and organization are discussed in Section B.

What Reviews We Will Perform

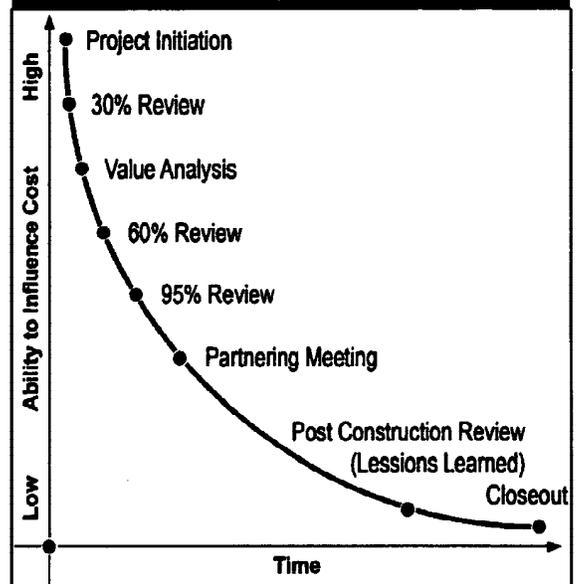
Successful constructability and biddability reviews have a clear scope of services for each project under review. The *AASHTO Constructability Best Practices Guide* states, and we are in agreement with, that *the earlier constructability reviews are performed, the greater their impact on the project.* (See Figure A1). While a larger project might benefit from all of the following activities, a smaller project might only require a few of them. These reviews are generally independent of each other and can be performed on an as-needed basis. As such, this framework is flexible for each project's requirements. *We have developed the following list of activities, that when implemented as appropriate, result in predictable construction costs and safe construction sites, equating to measurable value to the City of Peoria.*

- Field Reviews
- Constructability Reviews
- Design Peer Review
- Estimate Reviews
- Biddability Review
- Partnering Meeting(s)
- Post Construction Reviews
- City Staff Training

How We Will Perform the Reviews

Jacobs has a constructability and biddability review structure in place that assures continuity between the identified activities noted above, the respective Review Leaders performing the work and compliance with the *Jacobs Risk Assessment Checklist*. The *Jacobs Risk Assessment Checklist* is a series

Figure A1. Ability for Constructability Reviews to Impact Project Costs – Source Construction Industry Institute





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of checklists that provide guidance to our constructability reviewers as part of our Quality Control / Quality Assurance (QA/QC) and Health and Safety Action Program (HASAP). In maintaining consistency during our reviews, we utilize in-house experience and industry publications, and the *Jacobs Risk Assessment Checklist*. The checklist will be a tool used to train the City staff. *It is also a tool that identifies and minimizes issues that pose risk to the City early in the design process – safety by design.*

With sustainability principles making their way into horizontal construction, Jacobs will utilize the guidelines in our recently published *2009 Sustainability Report*, available at www.jacobs.com. We understand that sustainable development decisions are driven by three overlapping and interacting segments – social factors; ecological factors, economic factors. These three drivers are often called the “triple bottom line” when translated into business metrics. Keeping sustainability in mind, we will find opportunities to work sustainability principles into the design and construction of a project keeping an eye on the financial impacts sustainable principles may have on the project budget while weighing the pros and cons.

APPROACH TO INDIVIDUAL TASKS

Field Reviews

One indispensable task is the field visit. There is no replacement for a site visit to get a full understanding of the project. During this field visit, our staff will photo-document the site and identify issues that might indicate constructability issues. A few of the items on our checklist for the field visit include:

- Is there sufficient access to the project site?
 - Providing for the contractor’s efficiency is their ability to mobilize appropriately sized equipment for the project.
- Have all the utilities been identified?
 - One of the most common delays on a project is unidentified utility conflicts. At this stage, we are trying to find any information that would indicate that there are any utilities that have not been previously identified or appear significant.
- How will pedestrian and business access be maintained?
 - Maintaining pedestrian and business access has rapidly become a key issue on most projects. A project that does not address them, or does so in a manner that is perceived as unfriendly, will rapidly lose public support.

Constructability Reviews

The earlier in the project a constructability review is performed the greater potential it has to have a positive impact on the project outcome and cost. On larger projects, we recommend they be performed at the 30%, 60% and 95% design level. For less complex projects, 60% and 95% levels would be adequate. Starting them at an early stage can help reduce re-engineering by the designer and provide time for safety during construction to be built into the design plans. Our reviewers will utilize the *Jacobs Risk Assessment Checklist* that addresses all of the major elements of the project. Each item helps assure a complete review is accomplished.



An important note to this process is that Jacobs knows what needs to be done, and what doesn't need to be done. There is the rare instance of a “perfect set of plans”. Pouring over the plans for the purpose of finding mistakes that do not equate to minimizing risk and improving constructability can be counterproductive to the City, as effort is spent on the part of the designer “perfecting” plans. The result can be change orders submitted by the designers for re-work that is unnecessary for the purposes of procuring an integral bid from the contractor. Jacobs has earned several partnering awards, including the Marvin M. Black award for our ability to see a project’s design and construction from multiple perspectives and partner with the entire team on behalf of our client to realize a successful project. We will work in tandem with the City’s reviewers as a member of the project team to aid in the development of constructable/biddable plans and constructions documents. This includes full review of the specifications and cost estimates.





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The following will provide the general structure of our reviews, based on the *Jacobs Risk Assessment Checklist*:

- **General Items**
 - Are there adequate staging areas? Not having staging areas can result in the need to double handle materials, or use equipment that is not sized for the volume of work.
 - Are the work areas accessible for personnel, materials delivery and equipment operations? Work sites that are difficult to access can result in higher costs. An example is a site that cannot easily accommodate concrete trucks might require the use of a pump.
 - Is the design setup to enable efficient construction? Construction equipment is available in certain sizes. Sizing work that does not fit often results in lower quality and higher costs.
 - Do the Construction documents clearly denote the applicable standards to be used on this project? It is not uncommon to use MAG, City of Phoenix, and City of Peoria standards in a project. It needs to be clear how and where each is applied.
- **Maintenance and Protection of Traffic**
 - Is the proposed signing clear and understandable? Safety of the traveling public and the construction forces is paramount. The signing must be clear and concise both day and night.
 - Can the detour handle the trucks and other large vehicles? It is often necessary to have transitions and reduced lane widths in construction zones. Large trucks and vehicles with trailers often drift. This needs to be considered in the MPT design or an alternate route might be necessary.
 - Has access for local businesses been considered? Unless arrangements have been made, the plans need to provide for access to the local businesses while being constructed. A claim for inverse condemnation can be very costly.
- **Utilities**
 - Are the utilities shown on the plans in their new location, and have any relocations been verified? The relocation of utilities prior to construction is common practice. But often, verification or observation of the new locations is not done. When a dry utility is relocated it is often placed in a trench dug by a backhoe with a two foot bucket. This means even if the trench is in the right place, the conduit can be off up to two feet. In a congested area that can make the difference between a conflict and no conflict.
 - Have all the conflicts been identified? This might sound like an obvious item, but it is often missed. Many times the plans fail to consider the actual size of the utility, or the confidence of the information source identifying the utility location. We would recommend that projects use the APWA's Public Improvement Project Guide and the American Society of Civil Engineer's Standard 38-02 when showing utilities on plans.
 - Have the Designer's provided the utility clearance documentation? What the Designer intended to happen prior to construction do not always occur, even though the plans might indicate that it has. Making sure this is in sync will prevent conflicts during construction.
 - Have areas where support will be necessary been indicated? It is sometimes necessary to temporarily support a utility while work progresses beneath it. The plans should identify these locations and provide clear guidance on what is an acceptable level of support.
- **Earthwork and Grading**
 - Do the driveways meet standards? This is an all too common issue, where driveway grades are not designed properly. This results in a driveway that is too great of a breakover or compromising the sidewalk width behind the driveway. These should be designed and shown on the plans.
 - Can removed materials be incorporated into the project? A great way to save costs is to recycle materials. This can include allowing rubble to be placed in fills, or using recycled asphalt on resurfacing projects. We have identified over \$50,000 in these type of cost saving measures on the Happy Valley Road project.
 - Are the widths compatible with equipment sizes? This item is a key to improving the contractor's efficiency. If the minimum width of the contractor's paving equipment is 10' and



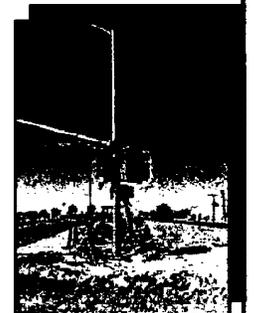


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the width of the paving is 8', it is likely that some of the greater material costs will be offset by increase productivity and improved quality.

- Bases and Pavements
 - Have low production areas been minimized? The contractor can spend an inordinate amount of time on irregular shaped areas. When possible, these should be avoided.
 - Can milled asphalt be used for base material, pipe bedding, or shoulder backing? Any opportunity to reduce trucking cost has the potential for large project cost savings. Running the millings through an on-site screen can remove any oversize pieces that might be objectionable and allow for its reuse
Jacobs worked successfully as the designer and construction manager with the contractors who were mixing and installing the first use of pervious concrete in Arizona on a \$12M construction project for the City of Glendale.
- Drainage and Pipes
 - Limit the use of non-standard drainage structures. The more non-standard items used the higher the cost. If contractor's spend time figuring out how to form and construct catch basins and other drainage structures, it costs money. Having one-of-a-kind structure will increase their forming costs.
 - Verify no conflicts with new or existing utilities. Most project plans do not consider the volume of the drainage structures and utilities. When space is congested, it is necessary to look at the actual size of catch basins, pull boxes, vaults, etc. One tool we have available is that we can create a 3-dimensional model. This can be used to identify both physical conflicts, and conflicts that would cause the need for encasement and other costly protections.
 - Has temporary drainage been considered? Rain events in Arizona, while typically brief, can generate significant volumes of water. If this water cannot be channeled, it can cause great damage to both the new and existing facilities, as well as impact adjacent parcel owners.
 - Have end treatments been provided for? This is a common oversight, or the designer chooses an end treatment that may be subject to scour.
 - Is there adequate cover? This is a basic item that is commonly overlooked, especially on roadways that are in super-elevation.
- Water and Sewer
 - Do the water and sewer plans have MCESD approvals? This process can be lengthy and can cause delays and additional costs if not in place prior to the start of construction.
 - Is the design using City of Peoria standard materials and plans? Peoria has standards for pipe types, wet barrel hydrants, etc. Incorrect materials will not be accepted by the City causing additional costs and delays.
 - Are the correct bedding and backfill shown? The City has specific standards for backfill and shading. Incorrect materials can cause damage and reduce the life span.
- Structures
 - Are the pilings and bridge elements of a uniform size or shape? The more consistent the bridge elements are the more cost effective it will be. If the contractor can use the same formwork for the entire bridge rail, it will save costs over requiring several sets of forms or formliners.
 - Are there adequate staging areas near the worksite? Structures require considerable formwork, and adequate staging area is a key to their efficient construction.
 - Is there sufficient area for cranes to operate? Cranes can be a significant cost for a project. Ideally, we want to assure that the contractor can use the smallest crane possible. This lowers costs and enhances safety.
- Signals
 - Is the signal visible from the controller? If the signals are not visible from the controller it makes future maintenance more labor intensive.





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- Is the controller in a visually undesirable location? The City desires for their intersections to be visually pleasing. Many of them have extensive landscaping. This effect can be disturbed if the controller is misplaced.
- Are the sidewalk ramps per the latest ADA standards? These standards are constantly being refined. Unfortunately, it is not uncommon to remove and replace sidewalk ramps because they do not meet the most current ADA standards.
- Are the push buttons accessible for a disabled person? These must be accessible or an apron must be constructed or the pole relocated.
- Landscaping and Irrigation
 - Are the plant materials proposed available locally? Using materials not available locally can drive up the cost of the project, and make future replacements difficult
 - Are the irrigation controllers located in an accessible location? Maintenance forces need to access these frequently.
 - Are the sleeves clearly identified? Many elements of landscaping plans are schematic, but sleeves need to be clearly shown since they are often constructed as a part of the roadway element of the project.
 - Is there a meter provided and is it clear who will pay the meter fees? This item changes from City to City, and it needs to be clear or there is a potential for a costly change.
- Maintenance
 - Can the finished product be accessed for routine maintenance? This is a paramount issue. The ability to clean out catch basins, repaint items, or replace a light pole should be considered in how the project is laid out. It might be necessary to provide a pullout or a reinforced sidewalk in some areas.
 - Will fences and other elements retain garbage and other debris? We want to avoid items that will become high maintenance. An example is isolated areas that will collect trash and is hard to access.
 - Do maintenance forces have the tools to maintain the finishes used on surfaces? *We recently experienced this on the Happy Valley Road project. The bridge railing was scheduled to be powder coated, but the City's maintenance forces do not have the tools to patch damage to the railing. We therefore changed it to a durable paint.*



Design Peer Reviews

Using the "Cross Discipline" Approach to Plan Reviews for Constructability

On many larger projects, it is worthwhile to have a separate set of experienced eyes look at the project plans. This review is to double check that the appropriate design standards and guidelines are being used. With Jacobs' recent experience on several City of Peoria projects it is evident, our staff is well versed in the standards used by the City and how they are applied. This check would help assure that changes are not needed during the construction phase where they are the most costly.

Estimate Reviews

Using the "Cross Discipline" Approach to Developing Cost Estimates



In the current economic climate, having confidence in the cost of construction has taken center stage. There are two primary ways to develop a cost estimate. The first is a parametric estimate that utilizes historical data from previous projects for similar work. In addition to historical data accumulated by the City, there are several other sources of information available to the public, and even others that might be available with City staff's assistance working with peer organizations. These include the City of Phoenix listing of bid openings, and the ADOT E2C2 database. *We have recently used this method to review and assist in the negotiations of all four GMPs on the Happy Valley Road project, and the anticipated Beardley Road project GMP.* Utilizing this data is a very effective way of validating a cost estimate. It does rely on historical information, therefore one needs to be careful to select the appropriate timeline. An example would be to choose work on historical projects that is of similar quantity. The second type of estimating is a "bottom" up estimate where you start with a blank sheet of paper and develop the labor, equipment, and materials that will be necessary to accomplish a given task. This is the only

Paul Ward, PE**SENIOR CONSTRUCTION MANAGER – CONTRACT MANAGER
AND LEAD REVIEWER****Years of Experience**

With Jacobs: 1
Total Career: 17

Education

B.E., Civil Engineering,
Concentration in Structures, Stevens
Institute of Technology

Registration

Civil Engineer, Arizona,
#42886
Civil Engineer, California,
#52912

QUALIFICATIONS SUMMARY

Paul Ward has experience in construction management, project and program management and project controls. Paul's construction management background includes experience as a Resident Engineer on projects ranging from \$100,000 to over \$500 million. This includes inspection staff coordination, leading teams of over 60 engineers and inspectors, plan and specification interpretation, change order preparation and negotiation, claims analysis and defense, and inspection for contract and specification compliance for projects involving the construction and rehabilitation of highways and highway structures. Paul has reviewed schedules and cost proposals prepared by contractors.

RELEVANT PROJECT EXPERIENCE

- **City of Peoria — Happy Valley Road PM/CM Services, Peoria, AZ**
Project Controls Engineer
This \$55 million CMAR project entails improvements to existing roadway as well as a new alignment. The project limits are from Lake Pleasant Road to Terramar Boulevard on the Happy Valley Road alignment, approximately 3.25 miles. The new alignment will be from 91st Avenue to 83rd Avenue; and 83rd Avenue will be reconstructed along with roadway improvements north and south of Happy Valley Road. Major work items includes mass earthwork, a new bridge over New River, box culverts, soundwalls, waterline and utility installation, and signalized intersection at 83rd Avenue.
- **Town of Gilbert — Vaughn Avenue Parking Garage, Downtown Gilbert , AZ**
Project Manager / Construction Manager
Construction of a parking structure in downtown Gilbert. The project is being delivered via CMAR and is being constructed in conjunction with the Heritage Marketplace Development.
- **Loop 202 Santan Freeway, Dobson Road to Arizona Avenue, ADOT, Chandler, AZ**
Resident Engineer
Resident engineer, starting at 90% project completion, for the \$32 million, 2.4-mile construction of new 6-lane divided urban freeway. The project involved extensive coordination between the prime contractor, subcontractors, subdivisions and adjacent commercial developers. The remaining project work included asphalt rubber concrete finish course, sound barrier walls, drainage facilities, signing and pavement markings, lighting, and traffic signals. Duties included negotiating and preparing supplemental agreements for almost \$1 million for current and previous extra work, field reviews, developing technical and scheduling solutions necessary to the project's scheduled opening date, advising the owner on schedule and claims issues, preparing analysis and review of potential claims, inspection staff coordination, and coordination with project management and design staff.
- **US 60 Traffic Interchanges at Stapley, Gilbert, and Val Vista, ADOT, Mesa, AZ**
Assistant Resident Engineer
Worked in concert with the resident engineer to successfully complete the widening of two bridges and construction of two pedestrian bridges over US 60. Duties focused on negotiating and preparing 20 supplemental agreements, performing field reviews, providing guidance to field staff, and advising ADOT management on escalation issues.
- **Heritage Trail Multi-Use Path, ADOT, Gilbert, AZ**
Resident Engineer
Resident engineer for the construction of a 3-mile multi-use path. This \$1.7-million project is immediately adjacent to the Consolidated Canal and had a very tight construction area. This project included working closely with the Town of Gilbert, Salt River Project, and local residents. One example of the cooperative working environment was being able to get approval for several types of retaining

walls without any delay to the project's completion. Duties included leading field staff, field reviews, construction management, budget management, developing solutions for technical and administrative challenges, and working with ADOT and Town of Gilbert management staff.

- **Pima Road: Inner Circle to Via Linda, ADOT, Scottsdale, AZ**
Resident Engineer
Resident engineer on a 2-mile multi-use path. This \$1.8-million project is adjacent to Pima Rd, the Salt River Pima Maricopa Indian Community and the McCormick Ranch subdivision. This project has several technical and community challenges. These include extensive drainage facilities and comprehensive landscaping. One of the challenges that had to be overcome was conflicts with Cox and APS facilities and planned improvements. Duties include leading field staff, field reviews, construction management, budget management, developing solutions to technical and administrative challenges, and working with ADOT and City of Scottsdale management staff.
- **Paseo Trail Multi-Use Path, ADOT, Chandler, AZ**
Resident Engineer
Construction of approximately 3 miles of multi-use path construction. This \$2-million project is immediately adjacent to the Consolidated Canal, and has several very tight construction areas. This project included working closely with the City of Chandler and Salt River Project. Duties include leading field staff, field reviews, construction management, budget management, developing solutions to technical and administrative challenges, and working with ADOT and City of Chandler management staff.
- **Mesa Chip Seal, ADOT, Mesa, AZ**
Resident Engineer
Construction of chip seal placement at 20 locations throughout Mesa (\$600,000 budget). This fast paced project required close coordination with City staff and local residents. The proposed chip seal binder was inappropriate for temperature conditions at the time of construction. Paul quickly facilitated identifying a binder solution and construction proceeded with minimal delay. This project was completed without any claim, and under both the construction and construction administration budgets.
- **North Apron Lighting/Runway Shoulder Rehabilitation, Phoenix Mesa Gateway Airport Authority, Mesa, AZ**
Assistant Resident Engineer
Served as a consulting engineer to the Airport Engineer for the \$5-million lighting and shoulder rehabilitation project. Duties included leading field staff, performing field reviews, construction administration, budget management, and working with the Airport Engineer to review and develop strategies for mitigation and management of project issues.
- **Richmond-San Rafael Bridge Seismic Retrofit (\$770 M), Northern, CA**
Resident Engineer
Paul managed a team of 70 people, contributed on all major technical and construction issues, negotiated and prepared contract change orders and claim settlements. He served as the project's representative on the Dispute Review Board and a member of the executive partnering team. His project controls duties included reviewing and directing staff in the review of schedules and disputes. Paul also implemented a web-based submittal and request for information system that significantly reduced the response time, and improved coordination between project team members spread around the country by creating a document control system.

Gary Lasham, PE**SENIOR CONSTRUCTION MANAGER – LEAD REVIEWER****Years of Experience***With Jacobs: 2**Total Career: 32***Education***BS, Civil Engineering,
University of North Dakota***Registration***Professional Engineer,
Arizona, #23733**Professional Engineer,
Ohio, #E47302***Professional Affiliations***Society of American Military
Engineers**Arizona Association of
County Engineers**American Society of Civil Engineers**Naval Reserve Association***Additional Qualification Skills***Budget Preparation**Civil Engineering**Construction Management**Contract Administration**DOD Integrated Vulnerability
Assessment**FAA Rules and Regulation**Facilities Planning**Fleet Management**Managing for Results**Project Management**Public Administration**Public Works Operation**Safety and OSHA Requirements**Work Zone Traffic Control***QUALIFICATIONS SUMMARY**

As a civil engineer and public works professional Mr. Lasham has gained over 30 years of experience in civil engineering, public administration, construction management, public works operation, facilities planning, budget preparation, project management, construction administration and fleet safety management.

As a public works professional, Gary has the flexibility to work effectively with citizens, as well as people from other local governments and the private industry. He has a clear understanding of policies and their impact on facilities acquisition and maintenance and is also familiar with modern management methods. Mr. Lasham has directed over 235 professional and technical personnel for over 2700 miles of county roads in the maintenance, minor construction, and operation. He has prepared and administered an annual \$30M operation budget and \$10M capital budget, successfully staying within 2-3% under budget. Gary has also managed over 125 traffic signals, over 85,000 installed traffic control signs, plus pavement markings, for 1265 miles of paved roads. He has also managed a fleet of 300 units of vehicles and construction equipment.

Gary was worked extensively on planning future roadway projects, ensuring effective solution or reconstruction of roadway surfaces. Items considered in this planning include International Roughness Index (IRI), pavement condition rating (PCR), traffic counts and designed speed limits. He has also been responsible for evaluating, recommending, and approving, engineer designs and change orders for roadway reconstruction. In addition, Gary has planned, directed and monitored current and future highway maintenance and surface treatment strategies using a Pavement Management System. He has also managed Work Zone Traffic Control Plans for in-house construction and maintenance activities and prepared cost estimates for roadway construction and rehabilitation, to ensure conformance with Maricopa Associated Government (MAG) specifications, where applicable. Gary has also managed Entente Maintenance Agreements with local and adjacent county governments.

After 30 years of dedicated service, Mr. Lasham retired as a Captain from the Civil Engineer Corps. While he was Chief of Staff, Reserve Affairs, Third Naval Construction Brigade, he was responsible for providing guidance and employment recommendations to the Commander, Third Naval Construction Brigade as they relate to Reserve Naval Construction Force of over 5000 Seabees; as well as the administrative management of reserve issues within the Brigade.

RELEVANT PROJECT EXPERIENCE

- **67th Avenue – Camelback Road to Grand Ave Improvements, City of Glendale (CMAR)**

Resident Engineer

Jacobs provided plans, specifications and estimates, post design services, and construction administration services for improvements to 67th Avenue from Camelback Road to Grand Avenue. The work included intersection widening at the Camelback and Glendale intersections; street widening and safety improvements along 67th Avenue; waterline replacements for aged lines; raised medians, curb, gutter and sidewalk; new storm drain facilities; traffic signal and interconnect design; lighting design; traffic engineering design; and utility relocation coordination. Utility relocations included the movement of Southwest Gas facilities; Salt River Project irrigation delivery system, tailwater collection system, transmission lines and distribution lines; Qwest service lines and fiber optics; Cox Communication cable and fiber optics system. Joint trenches were established to run competing utilities communication and power cables in the same trench expediting construction and placing all the utilities within the confined spaces of existing right-of-way.

The time critical construction of the intersection at 67th Avenue and Glendale was constantly visible to the Mayor and City Council as they were preparing to Host the Fiesta Bowl and the BCS National Championship at the University of Phoenix Sports Complex located on Glendale Avenue. Glendale Avenue serves as the main route from the sports complex to the downtown area where the party events were being held. Utility manpower availability became critical as natural disasters in the Midwest were pulling these resources from the state. Rescheduling and work-arounds were required to ensure traffic was not hampered during this critical time for the City.

- **Tierra Montana Development Off-site Water and Sewer Improvements**

Resident Engineer

Managing the construction administration and inspection services for the City's Water Services Department for Taylor Woodrow's Tierra Montana subdivision (Project No. WS90500220). The project includes the installation of approximately 20,000 lineal feet of 30" and 24" off-site gravity sewer line; 16,100 lineal feet of 24" and 16" water line; and 9,000 lineal feet of 12" and 8" off-site water line. The project limits are from 59th Avenue and Baseline to 51st Avenue and Carver Road. Safety is a top priority, with the off-site sewer lines having average trench depths ranging from 18 feet to 28 feet deep and off-site water lines trench depths ranging from 8 ½ feet to 21 feet on the 24" and 16" water lines. Maintaining effective work zone traffic control plans and securing the work site after hours are a must in order to keep the public safe. To avoid falling hazards for pedestrians, the worksite is reviewed daily.

- **Phoenix Fire Training Academy, Driver Training Track, City of Phoenix (CMAR)**

Resident Engineer

Provided design and construction administration services on this Construction Manager at Risk project to develop approximately 46 acres into a new Fire Training Academy. The fire truck driver-training track consists of approximately 29 acres of asphalt concrete pavement and approximately 5 acres of Portland cement pavement. The work was divided into the following three major phases: 1) Site demolition of existing Water Services Department sludge pond structures, grading, drainage and compaction of earthwork and the construction of a mobile burn tower at the existing Fire Academy, 2) placement of concrete and asphalt pavement on the truck driving track and parking lots, and 3) the construction of all building work, site walls, landscaping, irrigation, pump systems, water, sewer, electrical and communication systems. It should be noted that in Phase 3, the buildings, site walls, landscaping, and irrigation have not been funded at this time.

The major utility involvement on this project is with the following utilities: Arizona Public Utility electric distribution power, Southwest Gas, City of Phoenix water, wastewater, and communications and Arizona Department of Transportation storm sewer. As required, these utilities and entities have been requested to attend the weekly construction progress meetings to ensure conflicts and schedules can be coordinated to ensure the project was completed on time, with minimal disruptions to the traffic flow. Although Burlington Northern Santa Fe Railroad is not a utility, it has been a major entity to coordinate with for this project. Coordination efforts continue today to install new water and wastewater lines under the track. When we have the excavation open, we will also place conduits in the same trench for future communication and power needs..

- **Arizona City Sanitary Sewer District On-Call**

Project Manager

Responsible for oversight of the permitting of new sewer installations and hookups, as well as sewer plant operations, design of various system rehabilitations, expansions and improvements and expansion projects. Reviewed the wastewater elements of development proposals and plans submitted within the jurisdiction of the Arizona City Sanitary District. Also providing input to oversize participation and reimbursement agreements. The permitting process included the inspection of new sewer line construction and acceptance testing of the new construction. Working with developers, interfacing with existing utilities and proposed new facilities is part of the job. Coordination meetings are held on an as needed basis. The major utility coordination effort involvement is with the following utilities: Arizona City Sanitary District, Arizona Water Company, Arizona Public Service, Southwest Gas, Qwest, and Eagle West Cable.

- **MCDOT On-Call CM Services:**

Project Manager

Performing construction administration and inspection services of design-bid-build construction contract for the installation of new traffic signals at 99th Avenue and Palmeras Drive in Sun City. Performed construction administration and inspection services of a Job Order Contractor (JOC) for the installation of various new traffic signals or the replacement of existing traffic signals. Locations included: MC 85 and 83rd Avenue, 91st Avenue, 99th Avenue, 107th Avenue, 119th Avenue, El Mirage Road, and Dysart Road and Bethany Home Road. This traffic signal work also included addressing drainage improvements, roadway widening, left turning lanes, restriping, installation of ADA ramps and curb and gutter.

Evan Leander, PE**SENIOR CONSTRUCTION MANAGER – LEAD REVIEWER****Years of Experience**

With Jacobs: 3
Total Career: 24

Education

B.S., Civil Engineering,
University of Arizona

Registration

Professional Engineer,
Arizona, #22887

Professional Affiliations

Construction Management
Association of America, Member

QUALIFICATIONS SUMMARY

Evan Leander offers 24 years of extensive experience as a construction manager, project manager, and resident engineer in the construction and design of numerous projects at the state, county and local government levels. His qualifications, expertise, and many skills include construction management/supervision, contract administration, field inspection/quality control, design/plan reviews, constructability reviews, value engineering studies, public meetings/presentations, partnering concepts and applications.

RELEVANT PROJECT EXPERIENCE**City of Peoria — Happy Valley Road PM/CM Services***Project Manager / Construction Manager*

This \$55 million CMAR project entails improvements to existing roadway as well as a new alignment. The project limits are from Lake Pleasant Road to Terramar Boulevard on the Happy Valley Road alignment, approximately 3.25 miles. The new alignment will be from 91st Avenue to 83rd Avenue; and 83rd Avenue will be reconstructed along with roadway improvements north and south of Happy Valley Road. Major work items includes mass earthwork, a new bridge over New River, box culverts, soundwalls, waterline and utility installation, and signalized intersection at 83rd Avenue. Due to new development in the area, coordination with the developer at Terramar, as well as home owners in the area will be conducted.

Town of Gilbert — Ocotillo Road, Higley to Recker Road*Project Manager / Construction Manager*

This design-build project includes the construction of one mile of new alignment on Ocotillo Road; the installation of a 20-inch and 36-inch water main on Ocotillo Road from the South Water Treatment Plant to Higley Road that will serve the Town of Gilbert's water distribution systems; a 36-inch water main will be installed along Ocotillo Road from the treatment plant to Higley Road that will serve the City of Chandler's water distribution system. Other utility installations include a 48-inch raw water line and a 15-inch sewer main.

Town of Gilbert — Higley Road Improvements, Ocotillo to Queen Creek Roads*Project Manager / Construction Manager*

Reconstruction of a two-lane paved roadway with dirt shoulders into a six-lane major arterial with raised median, a slab bridge at Sonoqui Wash, curb and gutter, meandering sidewalks, landscaping and lighting. Additional improvements include subgrade preparation, grading, roadway paving, catch basins, manholes, storm drainage, grading for detention/retention basins, signing and striping and traffic control.

City of Phoenix — Broadway Road Sanitary Sewer and Waterline Improvements, 67th to 91st Avenue*Resident Engineer*

Installation of 10,500 linear feet of 48-inch sanitary sewer; 70 linear feet of 36-inch sanitary sewer; 70 linear feet of 18-inch sanitary sewer; 140 linear feet of 10-inch sanitary sewer; 800 linear feet of jack and bore steel casings ranging in size from 30-inch through 84-inch diameter; sanitary sewer manholes and structures; 10,000 linear feet of 24-inch water main; 6,200 linear feet of 12-inch water main; four 24-inch butterfly valves with vaults; 6,500 tons of asphaltic concrete for roadway reconstruction; 1,500 tons of asphaltic concrete pavement replacement; traffic control; utility relocations; and other miscellaneous work.

MCDOT — Bush Highway / Usery Pass Roadway Improvements*Resident Engineer*

Project consisted of widening shoulders, repairing culverts, and installing end sections and riprap. The basic elements of work were roadway subgrade, aggregate base course, chip seal coat, corrugated metal pipe and other miscellaneous items of work. The work had elements that were sensitive to weather conditions (NPDES) and periods of heavy recreational traffic.

- **City of Phoenix — Madison Street 42-Inch Water Transmission Main Relocation**
Resident Engineer
Supervised job site inspections and provided in-depth reporting to the City of Phoenix. The project was difficult from the standpoint that coordination was required between the City of Phoenix (Owner) and the Maricopa County Facilities Management Department who was administering the relocation contract. The project was complicated further due to several major utility conflicts, day and night shifts and differing site conditions. The work consisted of relocating 1,848 linear feet of 42-inch diameter prestressed concrete cylinder pipe and tying in both ends to the existing water main. In addition, there was incidental work performed in installing both 12-inch and 8-inch waterlines, installing fire hydrants, removing abandoned utilities, etc.

- **City of Chandler — Dobson-Elliot Roads Intersection**
Resident Engineer
Reconstructing the intersection to add left turn, and through lanes in all directions. Work consisted of the removal and construction of SRP irrigation pipe facilities; removal and construction of water, and sewer lines; installation of a new storm drainage system; asphalt, and Portland cement concrete pavements; traffic signals; street lighting; signing; pavement markings; curb / gutter / sidewalk; utility adjustments; traffic control; and related incidental work. In addition, since this location is a heavily traveled intersection in the heart of the City the roadways were constructed in phases while maintaining traffic, and entailed complex traffic control, as well as good public relations with the residents and businesses.

- **MCDOT — 75th Avenue Widening and Utility Improvements, Glendale Avenue to Olive Avenue**
Resident Engineer
Constructed a storm drainage system, subgrade preparation, furnishing and placing aggregate base course and asphalt concrete pavement, constructing curb and gutter, excavating retention basins, installing 400 mm water mains and sanitary sewer stub-outs, traffic signal installation and striping. This project was constructed while maintaining existing traffic. This required phased construction as well as good public relations with the residents and businesses. Coordination with both the City of Peoria and the City of Glendale was required with regard to utility improvements, traffic closures, etc.

- **ADOT — Pima Freeway, Thomas Road to McDonald Drive**
Resident Engineer
Construction of three miles of new ADOT freeway. The project required significant coordination with the City of Scottsdale, City of Phoenix and the SRPMIC. It also included relocation of City of Phoenix utilities (60 inch water line), construction of new SRPMIC water and sewer lines, coordination with Bureau of Indian Affairs irrigation facilities, construction of extensive retaining/noise walls, significant earthwork (819,000 cubic yards), topsoil plating, significant concrete and asphaltic concrete paving, box culverts, cast-in-place and pre-cast pipe, signing, striping, lighting, etc.

- **City of Peoria — Northern Avenue Relief Sewer**
Resident Engineer
Supervised job site inspections, survey control layout, quality assurance measures and contract administration duties. The work consisted of installing varying lengths of 42-, 36- and 24-inch sanitary sewer pipe including reinforced concrete, vitrified clay and PVC pipe. Three large junction / diversion structures along with numerous manholes, pavement replacement, etc. were also included as part of this construction project. Coordination of issues such as traffic control, permits, etc. represented one of the greatest challenges as this project involved the City of Peoria, City of Glendale, Maricopa County and the Arizona Department of Transportation.

Kelly Renyer, NICET II/IV, ATSSA**CONSTRUCTION MANAGER - REVIEWER****Years of Experience***With Jacobs: 1**Total Career: 31***Education***Civil Engineering, Northern Arizona
University***Certifications***NICET Level II Highway Construction**NICET Level IV Underground Utilities**Erosion Control Coordinator**Certified Competent Person
Excavation**ATSSA Traffic Control Supervisor**Certification Number 00165691***Professional Affiliations***American Public Works Association***QUALIFICATIONS SUMMARY**

Kelly Renyer offers 31 years experience as a construction manager, project manager, estimator, and inspection supervisor for numerous projects statewide.

Kelly was construction manager in charge of inspection division as well as the materials lab for the City of Flagstaff for 17 years. Kelly was also a project manager and estimator for 6 years for Eagle Mountain Construction in Flagstaff. Most recently, Kelly was the inspection supervisor in charge of 17 inspectors for the City of Peoria.

RELEVANT PROJECT EXPERIENCE**City of Peoria--Happy Valley Road PM/CM Services***Inspection Supervisor*

This \$55 million CMAR project entails improvements to existing roadway as well as a new alignment. The project limits are from Lake Pleasant Road to Terramar Boulevard on the Happy Valley Road alignment, approximately 3.25 miles. The new alignment will be from 91st Avenue to 83rd Avenue; and 83rd Avenue will be reconstructed along with roadway improvements north and south of Happy Valley Road. Major work items includes mass earthwork, a new bridge over New River, box culverts, sound walls, waterline and utility installation, and signalized intersection at 834d Avenue. Due to new development in the area, coordination with the developer at Terramar, as well as home owners in the area will be conducted.

City of Peoria*Inspection Supervisor*

In charge of 13 inspectors and hundreds of construction projects, such as:

- Vistancia Planned Community: Construction inspection and acceptance of the entire community.
- Quintero Planned Community: Construction inspection and acceptance of the entire development.
- 75th Avenue Waterline Installation: Construction inspection and acceptance of the entire project.
- Sweetwater Storm Drain Project: Construction inspection and acceptance of approximately 4 miles of 48-inch storm drain.

Eagle Mountain Construction*Project Manager*

- United States Park Service, Sewer Line Replacement at Grand Canyon National Park's Public Housing.
- City of Winslow Waterline Replacement. Replacement of approximately 60,000 feet of water mains in existing neighborhoods.
- Tuba City Water and Sewer Main Replacement: Replacement of approximately 40,000 feet of existing water and sewers.
- Sedona Golf Resort Phase II: New installation of underground utilities approximately 20,000 feet.

City of Flagstaff*Construction Manager*

In charge of inspection division and materials labs and hundreds of construction projects, such as:

- Lake Mary Water Transmission Main: Approximately 10 miles of 36 inch water line
- Downtown Flagstaff Reconstruction: Water and sewer line replacements, complete construction of all roadway surfaces and drainage in the downtown area.
- Fort Valley Waterline: Approximately 8 miles of 24-inch waterline.

Years of Experience
With Jacobs: 6
Total Career: 30

Certifications
American Traffic Safety Services
Association (ATSSA)

ACI Concrete Field Testing Technician
Grade I, (Expires December 2010)

ATTI Field Technician
(Expires July 2007)

QUALIFICATIONS SUMMARY

Greg Arme y has 30 years of experience in the construction industry. His positions have included journeyman carpenter, general foreman, building inspector, project engineer, superintendent and general contractor. He has significant supervisory and engineering expertise. Mr. Arme y's experience in construction administration includes the preparation and administration of project budgets and approval of expenditures and payroll. He has participated in the development and implementation of policies and procedures and verified project compliance with government regulations. In addition, Mr. Arme y is very knowledgeable in construction quality control, construction material and labor review, traffic control, safety and coordination of multiple subcontractors.

RELEVANT PROJECT EXPERIENCE

- **City of Surprise — Bell Road Rehabilitation Program, Surprise, AZ**
Construction Supervisor
For the past 3 years, Jacobs (prime firm) has been providing program management and construction management services for the City of Surprise's \$25 million "Build a Better Bell" Road Program. Services have included programming, budgeting, development of project request for proposals and requests for bid, management of design consultants and construction administration and management. A significant part of this contract includes providing construction management, administration and inspection services. Specific projects to date include: Freedom Bridge Joint Replacement; Bell Road Pavement Rehabilitation, Grand Avenue to 115th Avenue; Westbound Right Turn Lane, Bell Road at Grand Avenue; Bell Road Pavement Rehabilitation, Grand Avenue to Beardsley Canal; Bell Road Improvements (Phase 1) Grand Avenue to L303; and Reems Road, from Wadell to Peoria. Work on these projects includes but is not limited to pavement rehabilitation, roadway widening, right-and left-turn lanes; APS conduit place and relocation, and APS duct banks and vaults.
- **Scottsdale Airpark — Entrance Road and Parking Lot Improvements, Scottsdale, AZ**
Construction Supervisor
Construction management for the improvements to the roadway entrance to the Scottsdale Airpark and improvements to parking lot.
- **Scottsdale Airpark — Runway and Taxiway, Scottsdale, AZ**
Construction Supervisor
Construction management for the slurry seal placement of the Airpark's runway and taxiways.
- **Town of Gilbert —Santan Basin Parks (Discovery Park and Cosmo Park), Gilbert, AZ**
Construction/Project Manager
Construction of two detention basin parks near Ray Road and the Santan Freeway. The purpose of the parks was to provide a detention facility as part of the Santan Freeway Storm Drainage System. The Town approached these projects as a means to provide the Town of Gilbert residents with multi-use parks in their newly-developing areas, at the same time maintaining it as a flood control facility. Design and construction components included landscape master plan, sport fields (including lighting), dog park (Cosmo Park), lakes, ADA-accessible (hard surface) trails, park lighting, parking lots and lighting, curb and gutter, sidewalk, and traffic circulation and control layout. Utility construction included water for irrigation, water/sewer lines for rest rooms and concession buildings, and fire line system. These award-winning parks were recognized by the ACEC Excellence Awards.
- **Town of Gilbert — PM/CM Services, Higley Road Improvements, Ocotillo Road to Queen Creek Road, Gilbert, AZ**
Construction/Project Manager
Reconstruction of a two-lane paved roadway with dirt shoulders into a six-lane major arterial with raised median, a slab bridge at Sonoqui Wash, curb and gutter,

meandering sidewalks, landscaping and lighting. Additional improvements include subgrade preparation, grading, roadway paving, catch basins, manholes, storm drainage, grading for detention/ retention basins, signing and striping and traffic control.

- **Town of Gilbert — PM/CM Services, Pecos Road, Gilbert, AZ**
Construction/Project Manager
Reconstruction of three miles of arterial roadway. Work included roadway reconstruction to a seven-lane major arterial section, including a new alignment of Pecos Road between Eastern Canal and Greenfield Road. The work also included significant utility coordination, with relocation of overhead 12kV and 69Kv lines, installation of water and sewer lines, and relocation of RWCD irrigation facilities. This is the first construction manager at risk for The Town of Gilbert; Jacobs had assisted the town in development of the scope of work for both the designer and contractor.
- **Town of Gilbert — Ray Road, Val Vista to Greenfield Road, Gilbert, AZ**
Construction/Project Manager
Construction management services for this \$20 million roadway widening project. The work required extensive coordination with MCDOT, ADOT, RWCD, adjacent landowners and developments. The roadway section consisted of asphaltic concrete pavement, sidewalks, curb and gutter, raised median, intersection pavers and landscaping. The work had considerable dry and wet utility relocations, and the relocation of a RWCD irrigation lateral and private irrigation system. A bridge over the Eastern Canal, a box culvert for the RWCD lateral and a storm drain with a detention basin and two dry wells were constructed. The project impacted access to a County island on the north side, and the Town of Gilbert requested that design revisions be constructed to improve this access and safety to the properties.
- **Carefree Water District — Reservoir, Pump Station and Arsenic Compliance Project, Carefree, AZ**
Construction/Project Manager
Inspection services for the installation of approximately 2,500 linear feet of six-inch diameter pipe connecting a new reservoir to Carefree's existing well; an additional 10- and 12-inch waterline along Pima Road, which is 2,800 linear feet; and a million gallon storage reservoir and pump station.
- **MCDOT — 51st Avenue Bridge Design-Build, Maricopa County, AZ**
Construction Project Engineer
Design-build of a \$12.5 million bridge (1,530-foot-long, 65-foot-wide concrete girder bridge) that spans over the Salt River. There were 36 (8 feet wide x 110 feet deep) caissons augured, slurried, rebar-caged and concrete-filled. There were 13 spans of 123-foot-long, single post tension concrete girders on top of a set of three columns with a pier cap. Was responsible for construction quality control, scheduling material testing, site safety inspections, coordinating and scheduling subcontractor, maintaining unit and job cost controls, surveying grading and elevations, controlling prints and documents, administering time, material and labor take-offs and participating in weekly project meetings. This was MCDOT's first design-build project.

Peggy Kmak, NICET, ACI, ATTI, ATSSA**CONSTRUCTION MANAGER - REVIEWER****Years of Experience***With Jacobs: 3**Total Career: 19***Education:***Certificate, Construction Management, Phoenix College
A.A., Computer Aided Drafting Technology, Bakersfield College***Certifications***Concrete Field Testing Technician**2002, #101826**Certified Engineering Technician**2002, #105517**ATTI Field Technician, 2002, Arizona**#14876F***Organization***National Association of Women in Construction (NAWIC)***Computer Skills***AutoCAD 2005**Microsoft Excel**Microsoft Word**Softdesk***QUALIFICATIONS SUMMARY**

Peggy Kmak serves as a construction supervisor with Jacobs' Construction Management Group. She has 19 years of experience in the construction and engineering industry. Her experience includes construction supervision, construction administration and construction observation, acting as an owner's representative for transportation and municipal projects, survey coordination and drafting. Her survey experience included cadastral land surveys and construction surveys. She supervises a construction technician, performs daily project observations and prepares reports, manages the shop drawing review process, and reviews testing results and payment applications. In addition, she processes changes and claims, including negotiations, settlements and documentation, and resolves contractor questions, providing drawing clarification and utility coordination. Ms. Kmak's experience has focused on highway and roadway improvement projects.

RELEVANT PROJECT EXPERIENCE

- **Bell Road / 67th Avenue, Glendale, Arizona**
Construction Supervisor
Supervised one construction observer. Performed daily observations and prepared reports. Coordinated progress meetings with general contractor and owner. Managed shop drawing review process. Reviewed testing results and payment applications. Processed changes and claims, including negotiations, settlements and documentation. Resolved contractor questions. Performed drawing clarification and utility coordination.
- **Town of Gilbert — Ocotillo Road, Higley to Recker Road**
Construction Supervisor
This design-build project includes the construction of one mile of new alignment on Ocotillo Road; the installation of a 20-inch and 36-inch water main on Ocotillo Road from the South Water Treatment Plant to Higley Road that will serve the Town of Gilbert's water distribution systems; a 36-inch water main will be installed along Ocotillo Road from the treatment plant to Higley Road that will serve the City of Chandler's water distribution system. Other utility installations include a 48-inch raw water line and a 15-inch sewer main. Peggy supervised one construction observer; Performed daily observations and prepared reports; coordinated progress meetings with general contractor and owner; managed shop drawing review process; Reviewed testing results and payment applications; processed changes and claims including negotiations, settlements and documentation; resolved contractor questions; and performed drawing clarification and utility coordination.
- **Town of Gilbert — Higley Road Improvements, Ocotillo to Queen Creek Roads**
Construction Supervisor
Reconstruction of a two-lane paved roadway with dirt shoulders into a six-lane major arterial with raised median, a slab bridge at Sonoqui Wash, curb and gutter, meandering sidewalks, landscaping and lighting. Additional improvements include subgrade preparation, grading, roadway paving, catch basins, manholes, storm drainage, grading for detention/retention basins, signing and striping and traffic control.
- **67th Avenue and Pinnacle Peak Road Improvements, Glendale, Arizona**
Resident Project Representative
Supervised one construction observer, performed daily observations and prepared reports, coordinated progress meetings with general contractor and owner, managed shop drawing review process, reviewed testing results and payment applications. Processed changes and claims, including negotiations, settlements and documentation. Resolved contractor questions, drawing clarification and utility coordination.

- **67th Avenue, Arizona Canal to Bell Road, Glendale, Arizona**
Construction Observer
Performed daily observation of the construction work (on-site) compared to the project's plans and specifications. Daily work activities included preparation of reports, managed shop drawing review process, and review contractor pay applications.
- **Alma School-Elliot Roads Intersection, Chandler, Arizona**
Construction Observer
Performed daily observation of construction work (on-site) compared to project's plans and specifications. Daily work activities included preparation of reports, manage shop drawing review process, certification of contractor payrolls, and review of subcontractor agreements.
- **Anthem 3 Lift Stations, Arizona**
Resident Project Representative
Supervised one construction observer, performed daily observations and prepared reports, coordinated progress meetings with general contractor and owner, managed shop drawing review process, reviewed testing results and payment applications. Processed changes and claims, including negotiations, settlements and documentation. Resolved contractor questions, drawing clarification and utility coordination.
- **Cabela's Infrastructure, Glendale, Arizona**
Resident Project Representative
Worked as a part of the CMAR team as owner's representative in preparation for construction.
- **Dobson-Elliot Roads Intersection, Chandler, Arizona**
Resident Project Representative
Supervised one construction observer, performed daily observations and prepared reports, coordinated progress meetings with general contractor and owner, managed shop drawing review process, and reviewed testing results and payment applications. Processed changes and claims, including negotiations, settlements and documentation. Resolved contractor questions, drawing clarification and utility coordination. Reviewed subcontracts and certified payroll. Performed employee interviews regarding Davis Bacon Wages.
- **Laveen Lift Station, Force Main and Gravity Sewer, Phoenix, Arizona**
Construction Observer
Performed daily observation of the construction work (on-site) compared to project's plans and specifications. Prepared reports.
- **North Agua Fria Lift Station, Force Main and Gravity Sewer, Arizona**
Resident Project Representative
Supervised one construction observer, performed daily observations and prepared reports, coordinated progress meetings with general contractor and owner, managed shop drawing review processed, reviewed testing results and payment applications. Processed changes and claims, including negotiations, settlements and documentation. Resolved contractor questions, drawing clarification and utility coordination.

Gary Fromm, PE**DESIGN MANAGER – LEAD REVIEWER****Years of Experience**

With Jacobs: 8
Total Career: 18

Education

B.S., Civil Engineering, University of
Arizona

Registration

Professional Engineer, Arizona,
#36495

Professional Engineer, California,
#50864

QUALIFICATIONS SUMMARY

Gary offers 18 years of transportation project management and design experience. He has a range of experience working with various governmental agencies including city, county, state, and federal. He was previously employed with CalTrans, where he developed his technical knowledge in transportation planning and design. Gary has proven himself as a leader that has the ability to coordinate with multiple disciplines concurrently to resolve project issues in a timely manner. This is critical to meet or exceed the project schedule of his clients. His experience in roadway design gives him the confidence to evaluate projects and recommend changes to improve the design, make it easier to construct, and to meet design guidelines and standards. Gary has taken many projects through the project development process and understands what it takes to design, advertise, award, and construct a project. He has experience in all phases of the project development process, including planning and programming, design and construction administration. Gary's knowledge, experience and history to bring a team together in working toward a common goal equate to a successful projects and satisfied clients.

RELEVANT PROJECT EXPERIENCE

- **MCDOT — McQueen Road, Pecos to Queen Creek Road, Chandler, AZ**
Project Manager
Designed a two-mile reconstruction and widening project of a two-lane rural roadway to a six-lane urban section with curb, gutter, sidewalk, and storm drain system. The \$4.8 million construction project included construction plans, R/W documents, drainage report and design, utility relocations, field surveys, striping and signing plans, earthwork, cost estimates, specifications and client coordination.
- **City of Peoria-Beardsley Road Connector, Peoria, AZ**
Project Manager
Developed the design solution presented in a Design Concept Report for a project that adds access to SR 101L between Union Hills Drive and 75th Avenue. The project extends Beardsley Road east of 81st Avenue to a new southbound frontage road between 75th Avenue and Union Hills Drive, swaps two freeway ramps, add a U-Turn ramp that provides access to eastbound 101L, and reconstructs (lengthens) the Union Hills Drive ramp to eastbound 101L. The development of construction plans is currently between the 30% and 60% levels. The \$25 million project includes: multiple new roadways and ramps, two new bridges, aerial street widening, new roundabout, retaining walls, traffic signals, roadway lighting, protecting an existing sanitary sewer, construction sequencing, traffic control, cost estimates, special provisions, utility coordination, and coordination with multiple project stakeholders.
- **ADOT — On-Call Pre-Design Services**
Project Manager
Jacobs prepared Project Assessments (PAs) and Design Concept Reports (DCRs) for projects throughout the State. The extent of work varied depending on the project. Under this contract the work included site visit to identify and discuss project issues, public meetings to obtain public comments, coordination with key stakeholders, development of alternatives to be presented to stakeholders and included in the DCR, delineation of right-of-way, and the preparation of drainage and environmental documents. Gary was the Project Manager/Project Engineer finalizing a DCR on US 191 in and near the Town of El Frida. Project issues include drainage impacts on the Town of El Frida, parking within the State's right-of-way, and profile and grade changes.

■ **ADOT — US 191 Pavement Preservation, AZ**

Project Manager

Provided the final construction documents for this 10-mile pavement rehabilitation project near St. Johns on US 191. The existing profile was evaluated and locations were identified to either mill or fill to improve the rideability. A drainage analysis was completed to replace a culvert with a box culvert. Coordination with the railroad was required to work within their right of way during construction

■ **ADOT — Quiet Pavement Program (Phase I)**

Project Manager

The Quiet Pavement Program is an ADOT program developed to reduce the traffic noise levels on the Regional Freeway System. A 1-inch asphalt rubber (AR-ACFC) overlay was placed on 125-lane miles of SR 101L. Jacobs was selected to design Phase I of this program. Extensive coordination with various ADOT sections (materials, bridge, traffic, and the district) was required to develop the details that are being utilized for the remaining five phases of the program. This project was on an accelerated schedule to meet commitments that were made to the public and construction windows for the placement of AR-ACFC. The project scope, construction documents, and special provisions were developed in three-months from the kick-off meeting to project advertisement with minimum questions from the District during construction.

■ **SR 69/SR 89 Connector, Prescott, AZ**

Project Manager

Jacobs prepared the final design plans for the SR 69/SR 89 parkway connector (Prescott Lakes Parkway) in Prescott. The parkway acts as a bypass to the heavily congested intersection of SR 69 and SR 89. This project constructed 2.5 miles of a 4 lane divided roadway in rolling hills terrain. Water and sanitary sewer mains were also provided throughout the project in anticipation of future development along the corridor.

Years of Experience

With Jacobs: 6
Total Career: 37

Education

B.S., Civil Engineering, University of
Illinois

Registration

Professional Engineer, Arizona,
#18509

Professional Engineer, Illinois,
#062034480

Professional Engineer, Mississippi,
#13233

Professional Engineer, Utah,
#4942457-2202

Professional Affiliations

American Society of Civil Engineers
Institute of Transportation Engineers

QUALIFICATIONS SUMMARY

Mr. Pat Fyie has more than 37 years of experience in the management, planning, design and construction of storm water, water & wastewater, transportation and land development projects. His experience includes 22 years in private practice and 8 years as Public Works Administrator/County Engineer for Hamilton County, Tennessee. Water projects include distribution systems, storage, pumping facilities and system analysis. Storm water experience includes hydrology, storm drain and culvert design, retention/detention basin design, storm water master planning, channelization and bank protection, and NPDES and Corps of Engineers permitting. Pat recently served the District and the City of Peoria as Project Manager responsible for the roadway and drainage improvements to 83rd Avenue/Pinnacle Peak Road, 83rd to 91st Avenues, which is the neighboring project to this extension of Pinnacle Peak Road.

RELEVANT PROJECT EXPERIENCE

- **83rd Avenue/Pinnacle Peak Road Drainage Improvements, City of Peoria and District**
Project Manager

Jacobs was responsible for preparation of a Pre-Design Study and Final Design for drainage improvements in the 83rd Avenue and Pinnacle Peak Road area as identified in the Glendale/Peoria ADMP. Recommendations of the study as modified by the Value Engineering included development of storm drains along Calle Lejos, 87th Avenue, Avenida del Sol, 89th Avenue, Cielo Grande, Pinnacle Peak Road and 83rd Avenue. The storm water collected was routed to a regional detention basin at 87th Avenue and Avenida del Sol and to another detention basin at 83rd Avenue and Pinnacle Peak Road. As a result of Value Engineering, the project was expanded to provide 10-year flood protection between 87th Avenue and 91st Avenue. This resulted in MCDOT becoming a partner in the project along with the District and City of Peoria. Roadway plans were prepared for paving Avenida del Sol and Cielo Grande. Landscaping and multi-use opportunities were included for each basin. Public involvement and utility coordination were important features of the project.

- **Pinnacle Peak Public Safety Facility Site and Building Expansion and Improvements to 102nd Avenue, City of Peoria**
Project Engineer

As Sr. Project Engineer, Pat was responsible for leading the overall project drainage analysis and design, grading and civil design for site improvements to the existing Pinnacle Peak Public Safety Facility, preliminary design of site improvements to accommodate future building expansion; and final design of half street improvements to 102nd Avenue to the northern boundary of the facility (just south of Planada Lane alignment). This project was delivered via Design/Build with Hunter Contracting as the prime contractor. This project provided a comprehensive storm water collection and retention plan, and improved the site layout and circulation for the City of Peoria at their Pinnacle Peak Public Safety Facility. Landscape architecture was in accordance with the City of Peoria's Lake Pleasant Parkway Guidelines. Utility identification and plans for their expansion in accordance with future development, and coordination with Fire and Police were important features of the project.

- **Salome Road Reconstruction, La Paz County, Arizona**
Project Manager

Preparation of applications for funding through FHWA, design, plans, specifications, cost estimates, bid documents and construction administration for the reconstruction of Salome Road over Centennial Wash. Improvements included a multiple barrel concrete box culvert, soil cement bank protection and reconstruction of the roadway.

- **Loop 101 Highway Project, Phoenix, Arizona**
Project Drainage Engineer
Pat served as a team member of the Management Consultant for the 52 mile freeway project. His responsibilities included development of hydrology, drainage design concepts, alternative drainage systems and final design and specifications. He also prepared analysis of river mechanics at crossings of waterways, designed detention basins, storm drains, open channels, drop structures and other improvements.
- **Central Phoenix / East Valley Light Rail Transit, Tempe and Phoenix, Arizona**
Project Engineer
For Line Section 4, a 5-mile segment of the project, responsibilities included utility relocation plans, right-of-way plans, dry utility relocation reviews, preparation of a design report, coordination with drainage subconsultant and with street lighting subconsultant. Utility relocations included water services, 4" to 12" water distribution mains, 16" to 54" water transmission mains, fire hydrants, valves and other associated improvements. Sanitary sewer relocations included sewer services, 8" to 15" sewer mains and rehabilitation of existing sewer mains by cured-in-place pipe liners. Right-of-way plans identified existing rights-of-way and proposed rights-of-way, permanent easements and temporary construction easements.
- **Regional Park-and-Ride Facility; City of Chandler, Arizona**
Senior Project Engineer
Overall site design including grading and drainage of the 400-space Regional Park-and-Ride facility with security building at Hamilton Street and Germann Road in the City of Chandler. Special design challenges were addressed due to the location of the primary site in a floodplain. Retention requirements were investigated. County and City records were checked to delineate the limits and elevation of the floodplain. The bus and passenger loading platform is elevated while maintaining compliance with ADA design guidelines.
- **North 24th Drive, City of Phoenix, Arizona**
Project Manager
Prepared construction drawings for street and storm drain improvements to alleviate flooding conditions along North 24th Drive. Services included hydrology, field surveys, design, public involvement and coordination with City agencies.
- **Storm Water Master Plan, City of East Ridge, Tennessee**
Project Manager
Preparation of a storm water master plan which included storm drain inventory, topographic surveys, hydrology using HEC-1, hydraulic modeling with HEC-2, development of design alternatives, public involvement, cost estimates and investigation of funding sources. The master plan addressed drainage issues for this city of 25,000 residents.

DEBRA DRECKSEL

Debra Drecksal, LLC

PROFESSIONAL EXPERIENCE

PARTNERING CONSULTANT

Partnering Consultant

1998 - Present

Serving as Process Coordinator between numerous stakeholders (Arizona Department of Transportation [ADOT], Federal Highway Administration, City of Sedona, U.S. Forest Service, Coconino County, Yavapai County, Village of Oak Creek and community groups on State Route 179 highway project; Served as Partnering Facilitator for Partnership between City of Tempe and ADOT; Directed Partnership and facilitated ongoing meetings between three federal agencies (BLM, USFS and FHWA) and one state agency (ADOT). Served as Lead Partnering Facilitator on Orange County Transportation Authority's and Caltrans' \$500 million Design-Build project. Served as Partnering Facilitator for Light Rail Line Section 4 in Phoenix, Arizona. Served as the Teaming Facilitator for two University of Arizona CM at Risk projects (Highland District Housing and Highland Commons) and one Arizona State University CM at Risk project (Lattie F. Coor Building). Served as Lead Partnering Facilitator on numerous other projects.

TRAINER AND CONSULTANT

Trainer and Consultant

1994 - Present

Trained participants, gave presentations, facilitated meetings and consulted in mediation, law, communication skills and facilitated processes for numerous construction companies, city, county, state and federal agencies, businesses, associations and private trainings offered to the public.

Doctoral Student

1991 - 1992

Studied, researched and taught conflict management, alternative dispute resolution, mediation, communication skills and collaborative problem solving at the Communication Department at the University of Arizona.

Faculty

University of Utah. Taught several Communication courses to undergraduates.

1976-1978

University of Arizona. Taught class titled "Communication in the Legal Process."

1996-1999

MEDIATOR & ARBITRATOR

Mediator

1990 - Present

Mediated disputes privately as well as for the following: Arizona Department of Transportation, State Bar of Arizona (Mediation Before Discipline Program); Pima Community College; City of Scottsdale, Page Medical Community; Attorney General, State of Arizona, Mediation Program; Community Mediation Program (Our Town Family Center, Tucson); United States Arbitration and Mediation.

Arbitrator

1996 - 2003

Served as arbitrator on Construction Panel and Commercial Panel of American Arbitration Association. Trained commercial arbitrators for the AAA.

Judge Pro Tempore

1996 - 2000

Served as Settlement Master in court settlement conferences for the Arizona Superior Court for Pima County.

ATTORNEY**Attorney**

1985 - 1990

Engaged in civil litigation with emphasis in commercial, construction and title insurance law at Molloy, Jones & Donahue, P.C. in both their Phoenix and Tucson offices.

Program Director

1992 - 1994

Directed Legal Specialization, Mandatory Continuing Legal Education and the Southern Arizona Office for the State Bar of Arizona in both their Phoenix and Tucson offices.

Judicial Clerk and Intern

1982 - 1985

Performed legal research, attended oral arguments, attended judges' conferences and drafted legal opinions for the following: Arizona Court of Appeals, Division One, Judge Sarah D. Grant; Utah Supreme Court, Justice Christine Durham; Third Judicial District Court, Judge Philip R. Fishler.

EDUCATION

Juris Doctor degree, University of Utah College of Law, Salt Lake City, Utah, 1984

M.A., Interpersonal Communication, University of Utah, Salt Lake City, Utah, 1979

Honors degree of B.A., Interpersonal Communication, magna cum laude, University of Utah, Salt Lake City, Utah, 1975

Numerous continuing education workshops, seminars, conferences and programs

PROFESSIONAL SOCIETIES / CREDENTIALS

Retired Member, State Bar of Arizona (No. 9670, admitted 1984)

Roster Member, US Institute of Environmental Conflict Resolution, Neutrals Roster

Chair, Alternative Dispute Resolution Section, State Bar of Arizona, 1992 - 1993

Member, Association for Conflict Resolution

Phi Beta Kappa

corral dybas group, inc.
4632 S. 36th Street
Phoenix, Arizona 85040
p. (602) 222-9822
f. (602) 222-9079



GREG PRESTO, R.L.A.
Landscape Architect - Corral Dybas Group, Inc.

PROFESSIONAL EXPERIENCE

Mr. Presto is an experienced Project Manager/Landscape Architect. He has worked in this field for over thirty years where his experience has grown from project designer to his current position with Corral Dybas Group, Inc. (CDG) a local Landscape Architecture and Planning firm. He has managed and completed numerous and varied types of government projects working in a variety of areas including street and Highway projects. He has a extensive government design background in our local desert environment. He is experienced with working for several local Municipalities, as a Landscape Architect reviewing local projects, and designing projects for street right of ways, and open space Parks. His design work has not only covered such developments, as parks playgrounds, ball fields, soccer/football fields, picnic, parking areas, and water treatment facilities, in addition he has worked on large highway, and enhancement projects with the Arizona Department of Transportation. He has worked on many facets of highway landscape, irrigation, hardscape/graphic design and construction. He is familiar with design/build type projects as well. He is familiar with the field inspection requirements that Freeway, and Street rights of way, require. This design and construction familiarity includes safety and maintenance issues which are required for these types of development. Mr. Presto has completed training as an Erosion Control Coordinator and is certified with the Arizona Department of Transportation for this type of work. Mr. Presto has been out in various jobs site throughout the state of Arizona inspecting landscape, and irrigation construction, which has included erosion control measures that are utilized on all highway projects. While at CDG He has utilized his skills in project management, site planning/design, construction administration, erosion control, and environmental mitigation design. Mr. Presto is currently a registered Landscape Architect in the States of Arizona, California, Utah and Nevada and a certified water auditor.

COMPLETED PROJECTS (Construction Oversight/Inspection)

Downtown Glendale Pedestrian Improvements -For the City of Glendale, he provided not only design project management but was responsible for the coordination, construction inspection of landscape and irrigation system installations and staged and final punch list development. Greg was instrumental in coordinating with the contractor in all stages of the construction and also communicating with the City of Glendale Maintenance staff on project requirements and city requests.

Glendale Camelback Ranch Training Facility - For the City of Glendale and the City of Phoenix, Greg provided construction administration oversight for all off site improvements to landscape and irrigation systems. Was responsible for the conducting construction inspection of landscape and irrigation system installations, water/electrical service coordination with the cities and general contractor, plant inspections, and staged and final punch list development. Greg was instrumental in coordinating with the Cities and contractors to facilitate them in meeting an extremely aggressive construction schedule.

67th Avenue, Camelback Road to Glendale – For the City of Glendale, he has provided all coordination and construction inspection of landscape and irrigation system installations and staged and final punch list development. He attended weekly construction meetings, site reviews with the general contractor and City of Glendale Maintenance staff to ensure all project requirements and city requests were implemented.

ADOT, SR-51 Design Build SR 202L to Shea Blvd. – Provided Landscape architectural oversight on this major landscape, irrigation and wall heightening project in central Phoenix for the Arizona Department of Transportation Phoenix District. Project responsibilities include the inspecting and assisting the District on all phases and aspects of the project including field inspection, plant layouts, irrigation system inspections and testing, project material and paint approvals, construction quality control, daily diaries and managing contractor weekly meetings.

EDUCATION

Bachelors Landscape Architecture (B.S. L.A.) 1978, Iowa State University

REGISTRATION

Registered Landscape Architect, Arizona, #18950

Registered Landscape Architect, California, #3521

Registered Landscape Architect, Nevada #436

Registered Landscape Architect, Utah # 4968002-53015301

PROFESSIONAL

Past Government Liaison, ASLA Arizona Chapter 2000 – 2001,
Summerfield I & II HOA, Vice & President September 2001 – Present

EDWARD C. CORRAL
President - Corral Dybas Group, Inc.

PROFESSIONAL EXPERIENCE

Mr. Corral is an experienced Project Principal and Project Manager/Landscape Architect. He has worked in this field for over twenty three years where his experience has grown from project designer to his current position as Principal Owner of Corral Dybas Group, Inc. (CDG) a local Landscape Architecture and Planning firm. He has managed and completed numerous projects working in a variety of disciplines. He is skilled in office management, staff supervision, project management, site planning/design, landscape construction administration, environmental planning and mitigation design.

COMPLETED PROJECTS – Construction Administration

Corral Dybas Group, Inc
Phoenix, Arizona
6/01 to present

SR 202L, Elliot Road to Power Road: Resident Landscape Architect – CDG provided construction management services for the Arizona Department of Transportation on 2.5-mile long landscape and irrigation project in North Phoenix. Project responsibilities include the managing of all phases and aspects of the project including field inspection personnel, project payment requests, project material approvals, construction quality control, preparation and negotiation of all change orders and field changes, progress reports, daily work schedules, project files, public involvement, and managing weekly contractor meetings.

SR 202L, Gilbert Road to Higley Road: Resident Landscape Architect – provided temp tech oncall construction management services on this 4 mile landscape and irrigation project in north Phoenix, for the Arizona Department of Transportation. Project responsibilities include the managing of all phases and aspects of the project including field inspection personnel, project payment requests, project material approvals, construction quality control, preparation and negotiation of all change orders and field changes, progress reports, daily work schedules, project files, public involvement, and managing weekly contractor meetings.

SR 101L, Pima Freeway, 19th Avenue to Scottsdale Road: Resident Landscape Architect – CDG was the construction management firm on this 10 mile landscape and irrigation project in north Phoenix, for the Arizona Department of Transportation. Project responsibilities include the managing of all phases and aspects of the project including field inspection personnel, project payment requests, project material approvals, construction quality control, preparation and negotiation of all change orders and field changes, progress reports, daily work schedules, project files, public involvement, and managing weekly contractor meetings.

SR 51, Shea Blvd to Bell Road – Resident Landscape Architect - provided construction management services for the Arizona Department of Transportation on 4.5-mile long landscape and irrigation project in North Phoenix. Project responsibilities include the managing of all phases and aspects of the project including field inspection personnel, project payment requests, project material approvals, construction quality control, preparation and negotiation of all change orders and field changes, progress reports, daily work schedules, project files, public involvement, and managing weekly contractor meetings.

OTHER DESIGN/CONSTRUCTION Coordination Projects:

S.R. 51 HOV Design Build, I-10 to Shea Boulevard – Was the project Landscape Architect providing project management for all landscape architectural related work. Work includes preparation of resource protection and plant inventory/salvage plans, landscape and irrigation design, artist coordination in removal of sensitive art features along the corridor, liaison with general and subcontractors. Coordination and conducting meetings with Arizona Department of Transportation and City of Phoenix officials is a major role in continuing project development. Project Length – 10 miles, Cost - \$72,000,000

SR 51, Bell Road – Pima Freeway (101L) – Provided final design services for this 2.5 mile urban freeway project. Completed all landscape and irrigation design services including the implementation of a 15 acre Habitat Mitigation Plan. The plan was required as part of the U.S. Army Corp of Engineers (COE) 404 permit requirements for constructing this portion of the freeway. The plan required the design and reconstruction of a natural Mesquite bosque in the Freeway interchange area. The project required close coordination with ADOT, City of Phoenix and the roadway Design Engineers on all aspects of the landscape design as well as coordination of the habitat plan with the COE. Project Construction Budget - \$3,200,000.

S.R. 68 Design Build, Golden Valley to Bullhead City – CDG provided all design and construction field inspection services for all landscape architectural related work items. Work included plant inventory and salvage operations, slope mitigation, topsoil management, visual assessments, and liaison and subcontractor coordination. As project Landscape Architects for this project, CDG completed the design of erosion control measures, aesthetic mitigation, resource protection, planting plans and slope mitigation. Coordination and conducting meetings with Bureau of Land Management, Arizona Department of Transportation officials and construction field personnel on design and construction issues was a major role in continuing project development. Project Length – 14 miles, Cost - \$44,000,000

EDUCATION

Bachelors Landscape Architecture (B.L.A.) 1982

University of Arizona

REGISTRATION

Registered Landscape Architect, Arizona #28447, 1994

PROFESSIONAL

Member, American Society of Landscape Architects (ASLA)

Past President, ASLA Arizona Chapter 2000 – 2001,
President, ASLA Arizona Chapter 1999 – 2000,
Vice President, ASLA Arizona Chapter 1998 – 1999,
Secretary, ASLA Arizona Chapter 1997-1998

City of Mesa, Design Review Board Member July 1997 – July 2001