ARIZONA DEPARTMENT OF TRANSPORTATION

ENGINEERING CONSULTANTS SECTION

STATEMENT OF QUALIFICATIONS PACKAGE

FOR CONTRACT NO. 07-19

TEMPORARY TECHNICAL ENGINEERING PERSONNEL FOR VARIOUS CONSTRUCTION ADMINISTRATION PROJECTS

ENGINEERING CONSULTANT SECTION

ECS

Quest for Quality • Dedicated to Service

Arizona Department of Transportation

APRIL 2007

STATEMENT OF QUALIFICATIONS PACKAGE
FOR

CONTRACT NO. 07-19
TEMPORARY TECHNICAL ENGINEERING PERSONNEL
FOR VARIOUS CONSTRUCTION ADMINISTRATION PROJECTS
TRACS# VARIOUS

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SECTION I

PUBLIC ADVERTISEMENT

FOR PUBLICATION May 4, 2007 and May 11, 2007
IN THE TRIBUNE NEWSPAPERS.
(Mesa Tribune, Chandler Arizonan & Tempe Daily News)

ARIZONA DEPARTMENT OF TRANSPORTATION
ENGINEERING CONSULTANTS SECTION

PUBLIC NOTICE FOR CONSULTANTS INTERESTED IN PROVIDING
TEMPORARY TECHNICAL ENGINEERING PERSONNEL SERVICES FOR
VARIOUS CONSTRUCTION ADMINISTRATION PROJECTS

ECS CONTRACT NO. 07-19
TRACS NO. VARIOUS

Statements Due: May 30, 2007

The ARIZONA DEPARTMENT OF TRANSPORTATION is accepting Statements of Qualifications from firms to provide temporary technical engineering personnel for various construction administration projects.

Statements of Qualifications will be received until 4:00 p.m. Arizona Time on the above referenced date, at ADOT Engineering Consultants Section, 205 South 17th Avenue, Room 293E, Mail Drop 616E, Phoenix, Arizona 85007. No Statements will be accepted after the time specified.

A Pre-Submittal Conference has been scheduled by the Project Manager for Tuesday, May 15, 2007 at 10:00 a.m., in ADOT Auditorium, 206 S. 17th Ave., Room 107, Phoenix, Arizona, 85007. All questions must be addressed at this time. Following the Pre-Submittal meeting, no further contact regarding this project will be allowed with ANY ADOT personnel except for those in Engineering Consultants Section. "Persons with a disability may request a reasonable accommodation such as a sign language interpreter, by contacting Rosie Nunez at 602-712-8652. Requests for accommodations must be made 48 hours in advance of the event, to allow time to arrange the accommodation."

For further information contact ADOT Engineering Consultant Section, (602) 712-7525 or www.azdot.gov/Highways/ECS. Statement of Qualification packages for Contract 07-19 are available for pickup at the ADOT Engineering Building, 205 South 17th Avenue, Room 293E, Phoenix, Arizona 85007.

SECTION II

INFORMATION COPY TO CONSULTANTS

ARIZONA DEPARTMENT OF TRANSPORTATION
ENGINEERING CONSULTANTS SECTION

INFORMATION COPY TO CONSULTANTS

REQUEST FOR STATEMENTS OF QUALIFICATION FOR CONSULTANTS INTERESTED IN PROVIDING TEMPORARY TECHINICAL ENGINEERING PERSONNEL SERVICES FOR VARIOUS CONSTRUCTION ADMINISTRATION PROJECTS STATEWIDE

ECS CONTRACT NO. 07-19

TRACS NO. VARIOUS

Statements Due: **May 30, 2007**

Statements of Qualifications expressing interest in the project will be received until 4:00 P.M. (Arizona Time) on the date shown above, at the office of Engineering Consultants Section, 205 South 17th Avenue, Room 293E, Mail Drop 616E, Phoenix, Arizona 85007. NO Statements will be accepted after the time specified.

Statements will be accepted from any firm or corporation who is properly registered with the Arizona Board of Technical Registration and who has a principal or officer responsible for this contract that is properly registered with the Arizona Board of Technical Registration at the time the Statements of Qualifications are due.

The selected consultant will provide certified temporary technical engineering personnel, on an as-needed basis to supplement ADOT staff in the administration of highway construction projects in the State of Arizona.

The consultant may be required to perform services including, but not limited to:
Construction Project Supervision and Management
Construction Survey
Construction Inspection (Roadway, Structures, Electrical, Landscape, Permits, etc.)
Construction Quality Control or Quality Acceptance
Support of Construction Office Engineering and Administrative. Construction work required by or in the support of Highway Construction Activities.
Materials Lab Techinicans
Tech Training

A Pre-Submittal Conference has been scheduled by the Project Manager for Tuesday, May 15, 2007, at 10:00 a.m. in ADOT Auditorium, 206 S. 17th Ave., Room 107, Phoenix, Arizona, 85007. All questions **to the Project Manager** must be addressed at this time. Following the Pre-Submittal meeting, no further contact regarding this project will be allowed with **ANY** ADOT personnel except for those in Engineering Consultants Section. "Persons with a disability may request a reasonable accommodation such as a sign language interpreter, by contacting Rosie Nunez at 602-712-8652. Requests for accommodations must be made 48 hours in advance of the event, to allow time to arrange the accommodation."

Questions of an administrative or contractual nature can be directed to Rosie Nunez, Contract Specialist, Engineering Consultants Section, telephone (602) 712-8652 Effective this date April 17, 2007 no further contact is allowed with the Project Manager **and members of the Construction Group.**

The Engineering Consultants Section Statement of Qualifications format for Contract No. 07-19 shall be followed when expressing interest in this project. The Statement of Qualifications package, or information regarding same, may be obtained from the address shown above, telephone (602) 712-7525. **Statements of Qualifications not following the correct format will be rejected.**

In order to qualify for selection, a firm must have on file with the Department a current 2006/2007 "Prequalification Package" or submit it with the Statement of Qualifications. Prequalification Statement forms may be obtained from the address shown above, telephone (602) 712-7525.

The Department may select one (1) or more firms from among those submitting Statements of Qualification for further consideration. Previous experience in supplemental services to other municipalities/private sector within our right of way will be a factor in the selection.

The selected consultant and their subconsultants will be required to submit the Consultant Audit Questionnaire and comply with the Advance Agreement Checklist as detailed in SECTION IX of the SOQ Package.

All material submitted in accordance with this solicitation becomes the property of the State of Arizona.

Lobbying certification/disclosure certification statement will be required in the introductory letter from those submitting Statements of Qualifications.

The right is reserved by the Department to reject any and all Statements of Qualification.

Professional Liability Insurance will be required.

The Boiler Plates for all Engineering Consultant Section Contracts are not negotiable.

Partnerships (joint-ventures) will not be considered.

Reviewing the successful Proposal(s) would be allowed but copying is not permitted.

Inclusion of work hour and/or plan sheet estimates in the SOQ will not be allowed.

SECTION III

TEMPORARY TECHNICAL ENGINEERING PERSONNEL CONTRACT POLICIES

TEMPORARY TECHNICAL ENGINEERING PERSONNEL CONTRACT POLICIES

1.) Consultant firms awarded Temporary Technical Engineering Personnel contracts will hereafter be identified as the Prime Consultant. This contract is between ADOT and the Prime Consultants selected. Compensation to the Prime for technical engineering services will be at the negotiated hourly rates established between ADOT and the Prime Consultant for each classification with in their contract. All business transactions between the Prime and his Sub-consultant(s) for their services are governed by their contract, which is to include participation and compensation. For clarification purposes of this contract, the Prime and Sub-consultant(s) loaded rate will be evaluated during the negotiations period.

2.) Guidelines for holders of current contracts and their Sub-consultant(s) will be as follows: Upon selection of the new contracts, personnel that have project assignments under the current (old) contracts will remain working under the old contract until the Department completes final negotiation on new contracts. At that time, work on the old contract will be transferred to the new contract. If you are currently working under an old contract and are not selected on the new one, your work will be transferred to one of the new contracts when negotiations are complete.

Assignments under the new contracts will be made from multiple Consultants selected on a rotational basis, qualifications, certifications, dollars, training and past performance. In accordance with the contract policy only the Prime Consultant's Contract Manager is to make contact with the Consultant Contracts Administration office, District's Construction Management Analyst (CMA) or project personnel in filling a personnel request. Failure to abide by these policies may result in termination of the contract.

3.) In selection of the new contracts, the Firm is to submit as either a Prime Consultant or a Sub-consultant, submission of both is not permitted. Also, the Sub-consultants listed in the SOQ's submitted will be the only authorized firms utilized unless it is in the best interest of the Department to add additional firms at a future date.

SECTION IV

STATEMENT OF QUALIFICATIONS FORMAT INSTRUCTIONS

ENGINEERING CONSULTANTS SECTION
STATEMENT OF QUALIFICATIONS FORMAT INSTRUCTIONS
CONTRACT NO. 07-19

Provided for your use is the format for submission of a **STATEMENT OF QUALIFICATION.**

1. **SIX (6) COPIES OF THE STATEMENT OF QUALIFICATION ARE REQUIRED BY ADOT.**

2. **There is a TOTAL PAGE LIMIT of (17) pages. The proposal may include clear report covers, covers, dividers, table of contents, tables, figures, maps, etc., but these must fit within the 17 page limit. A page shall be 8 1/2 X 11 inches, blank, or printed on one side only. Fold out pages are not allowable.**

3. **The SOQ proposal must follow the format outlined below:**

	FORMAT CONTENT	MAXIMUM POINTS	TOTAL NUMBER OF PAGES
	FRONT COVER **(Optional, but if included will count as a page)**		
PART A	INTRODUCTORY LETTER		
PART B	EVALUATION CRITERIA **May include information to support Criteria.**		
	1. Project Understanding & Approach	30	
	2. Project Team	50	
	3. Firms Capability	20	
PART C	CONSULTANT FIRM INFORMATION PAGE		
	BACK COVER **(Optional, but if included will count as a page)**	**TOTAL POINTS**	**TOTAL PAGES**
	TOTAL POINTS	100	17

4. **Any amendments issued on the SOQ and included in the SOQ, as required, will NOT be counted as pages.**

5. **Submissions failing to follow all instructions outlined above will be rejected and the Consultant notified in writing of the reason(s) for rejection.**

ENGINEERING CONSULTANTS SECTION
Statement of Qualifications
Format and Evaluation Criteria
for Contract No. 07-19

The following describes more specifically, the content of each part.

PART A, INTRODUCTORY LETTER

The introductory letter should be addressed to:

Arizona Department of Transportation
Engineering Consultant Section
205 South 17th Avenue
Room 293E, Mail Drop 616E
Phoenix, Arizona 85007

The introductory letter should contain the following items:

- An expression of the firm's interest in being selected for the project.
- A statement that the firm is pre-qualified with ADOT, or that the necessary pre-qualification information is being submitted with the proposal.
- A statement confirming the commitment of the key personnel identified in the submittal to the extent necessary to meet ADOT's quality and schedule expectations.
- Provide name and Professional Engineers registration number of the principal or officer responsible for this contract that is properly registered with the Arizona Board of Technical Registration at the time the Statements of Qualifications are due.
- A summary of key points regarding the firm's qualifications.
- A statement that the Consultant certifies, by signing and submitting this proposal to the best of his or her knowledge and belief, that no Federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned for the purpose of lobbying (Refer to Section V).

PART B, EVALUATION CRITERIA

The information that should be included in the discussion of qualifications is outlined here.

1. Project Understanding and Approach

   a. Discuss generally the tasks involved in this project. Identify any special issues or problems that are likely to be encountered. Demonstrate clearly and concisely your understanding of the technical and institutional elements with which the consultant must deal.

   b. Outline your proposed approach for dealing with the tasks and issues of this project. A graphical depiction may be included with the evaluation criteria.

   c. Explain how your firm will use Partnering in this project. (Relates to Construction Administration only.)

2. Project Team

   Identify your proposed project team and its collective qualifications for this particular project. In particular, discuss the following:

   a. Project Principal. Identify the person (or persons) who (1) will be responsible for ensuring that adequate personnel and other resources are made available for this project; (2) will handle contractual matters, and; (3) will be ultimately responsible for the quality and timeliness of the

consultant's performance. State that person's position and authority within the firm. Discuss previous similar projects for which this person has performed a similar function.

b. Project Manager. State who will actively manage this project. Identify any projects that person will be involved with concurrently and time committed to each project. List recent similar services for which this person has performed a comparable function. Discuss relevant experience, professional registrations, education and other components of qualifications applicable to this project.

c. Project Engineer(s) and/or Other Key Personnel. Identify other members of the project team including subconsultants that provide special expertise or will perform key tasks. Describe their anticipated roles. Discuss their relevant experience, registration, education and other elements of qualification applicable to this project.

d. Identify ADOT training in a matrix format.

3. Firm Capability

a. Discuss recent relevant experience of the firm. Projects listed should be similar in nature to the current project and to the extent possible involve team members proposed for this project.

b. Discuss quantitatively how this project would impact the current and anticipated work load of the office which will perform this work. If "staffing up" will be necessary, discuss which areas and how that would be accomplished.

c. Describe any special equipment, software or other resources your firm has which will enhance your ability to accomplish this project. If you propose to use CADD, describe the applicable training and experience of your staff and identify any previous projects for which you have used CADD.

d. Describe your internal procedures for developing, monitoring and maintaining project schedules and budgets.

e. Describe your internal quality control procedures.

f. Describe any notable expertise, increase in capacity or other special capabilities of your subconsultants that are critical to your proposal.

g. Describe how your quality program would enhance the development of this project.

h. Describe your internal procedures for providing partnering education and development. (Relates to Construction Administration only.)

F.

STATEMENT OF QUALIFICATIONS/SELECTION PANEL COMMENT FORM

FIRM NAME_____ #_____ PANEL MEMBER_____

1. PROJECT UNDERSTANDING AND APPROACH

What did you like about the firm's understanding and approach?

_____
_____
_____

What did you dislike about the firm's understanding and approach?

_____
_____
_____

What did you think about the way the firm handled special problems and/or special situations?

_____
_____
_____

What parts of the understanding and approach did you think were well done?

_____
_____
_____

What suggestions would you make to the firm to improve this section for the next time?

_____
_____
_____

SCORE (30 Maximum) _____

F.

PANEL RANKING FORM - Page Two

2. **PROJECT TEAM**

Team Strengths:

_____
_____
_____

Team Weaknesses:

_____
_____
_____

How are the team member's qualifications geared to this specific project?

_____
_____
_____

SCORE (50 Maximum) _____

3. **FIRM'S CAPABILITIES**

Firm's strong areas as related to this project:

_____
_____
_____

Firm's weak areas as related to this project:

_____
_____
_____

F.

PANEL RANKING FORM - Page Three

3. **FIRM'S CAPABILITIES, CONTINUED**

How did the firm fit the subconsultant's qualifications/duties into overall picture?

_____
_____
_____

SCORE (20 Maximum) _____

(SCORES ARE TO BE ENTERED AND TOTALED ON SCORE SHEET)

==========

OTHER:

Any comments on the format and presentation of the SOQ?

_____
_____
_____

Any other comments or suggestions?

_____
_____
_____

SECTION V

CONSULTANT FIRM INFORMATION PAGE

PART C - CONSULTANT FIRM INFORMATION PAGE

CONTRACT NO.: _____

CONTACT PERSON: _____

E-MAIL ADDRESS: _____

CONSULTANT FIRM: _____

ADDRESS: _____

_____

_____

CITY, STATE ZIP: _____

TELEPHONE: _____

FAX NUMBER: _____

ADOT CERTIFIED DBE FIRM? _____

AFFIRMATIVE ACTION ON FILE WITH ADOT? _____

SUBCONSULTANT(S)	TYPE OF WORK	ADOT CERTIFIED DBE FIRM

NOTE: The Consultant Firm Information Page <u>must be a separate full page and is included in the total page count.</u> This page is not evaluated by the Selection Panel, but is used by Engineering Consultants Section for administrative purposes.

SECTION VI

LOBBYING CERTIFICATION

Lobbying Certification

The Consultant certifies, by signing and submitting this proposal (see statement in "Introductory Letter"), to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract grant, loan, or cooperative agreement.

(2) If any funds other than Federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. Copies of Form-LLL "Disclosure Form to Report Lobbying', are available at ADOT Engineering Consultants Section, 205 S. 17th Avenue, Mail Drop 616E, Room 293E, Phoenix, AZ 85007.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, and U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The proposer also agrees, by submitting its proposal, that it shall require that the language of this certification be included in all subcontracts and lower tier subcontracts which exceed $100,0000 and that all such subcontracts and lower tier subcontractors shall certify and disclose accordingly.

The Department will keep the Consultants certification on file as part of their original proposals. The Consultant shall keep individual certifications from all subcontractors and lower tier subcontractors on file. Certifications shall be retained for 3 years following completion and acceptance of any given project.

Disclosure forms for the Prime Consultant and or their subcontractors and lower tier subcontractors shall be submitted to the Contract Manager at the date Statements of Qualifications are due, when said subcontracts exceed $100,000. During the performance of the contract the Consultant and any affected subcontractors shall file revised disclosure forms at the end of each calendar year quarter in which events occur that materially affect the accuracy of any previously filed disclosure form. Disclosure forms will be submitted by the Contract Manager to the Federal Highway Administration for further processing.

SECTION VII

ADOT EMPLOYEE POST EMPLOYEE EMPLOYMENT RESTRICTIONS

SUPPLEMENTAL SERVICES RESTRICTIONS

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ENGINEERING CONSULTANTS SECTION
205 South 17th Avenue - Room 293E, Mail Drop 616E
Phoenix, Arizona 85007

FIFE SYMINGTON
Governor

LARRY S BONINE
Director

THOMAS G SCHMITT
State Engineer

March 7, 1996

Engineering Consultants Section

INFORMATION BULLETIN 96-04

TO: CONSULTANTS

FROM: ENGINEERING CONSULTANTS SECTION

SUBJECT: ADOT Employee Post Employment Restrictions

The purpose of this bulletin is to provide guidance to consultants in the employment of current or former ADOT employees to work on contracts administered by the Engineering Consultants Section. The following guidelines and policy are intended to avoid actual or perceived conflicts of interest. The reference to "current ADOT employee" applies to both full time employees and temporary employees.

1. A current ADOT employee cannot be employed by a consultant to work on active ADOT contracts.

2. A current ADOT employee cannot be included in a Statement Of Qualifications proposal for an ADOT consultant contract as an owner, an individual, or as a member of the consultants team. If an employee resigns to comply with this rule their last day of ADOT employment must be prior to the date that the proposals are due.

3. If a current or former ADOT employee is employed by a consultant which has an active ADOT contract for which the employee was a decision maker in the selection process or negotiated/approved billings or contract modifications, the employee is prohibited from working on these contracts (Policy and Implementation Memorandum 92-12)

Arizona Department of Transportation
Intermodal Transportation Division
206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano
Governor

Victor M. Mendez
Director

Debra Brisk
Deputy Director

August 18, 2004

REVISED
INFORMATION BULLETIN NO. 04-05

TO: ADOT Project Managers/Monitors, Resident Engineers
And Consultant Engineering Firms

FROM: Engineering Consultants Section

SUBJECT: CONFLICT OF INTEREST
SUPPLEMENTAL SERVICES RESTRICTIONS

The purpose of this bulletin is to provide guidance to firms supplying supplemental service employees to ADOT under contracts administered by the Engineering Consultants Section (ECS).

The following restrictions are intended to avoid actual or perceived conflicts of interest. The reference to "ADOT contract employee" applies to both full time and part time contract employees.

1. A current ADOT contract employee cannot be included in a Statement of Qualifications proposal for an ADOT consultant contract as a member of the consultant's team. Exceptions would be:

    a. if the contract employee resigns to comply with this rule their last day of ADOT contract employment must be prior to the date that the proposals are due; or

    b. if the employee's contract is in it's third year and within 4 months of the contract completion date; or

    c. if the Department exercises it's option not to extend the existing contract.

2. If a current or former ADOT contract employee is employed by a consultant which has an active ADOT contract for which the contract employee was a decision maker (for example: involved in the final scope preparation, involved in the selection process or negotiated/approved billings or contract modifications), the employee is prohibited from working on these contracts.

As of this date, a copy of this information bulletin will be included in each ECS Statement of Qualifications package.

If a waiver is requested from the above restrictions, a statement must be submitted to ECS describing the nature of their involvement prior to proposal submittal or work assignment. Resolution of potential conflicts of interest will be determined by ECS in conjunction with the applicable Deputy State Engineer.

SECTION VIII

SCOPE OF WORK

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
HIGHWAY OPERATIONS GROUP
206 SOUTH 17TH AVENUE
PHOENIX, ARIZONA 85007

CONSTRUCTION TEMPORARY TECHNICAL PERSONNEL SERVICES

CONTRACT NUMBER 07-19

SCOPE OF WORK

April 2007

TABLE OF CONTENTS

GENERAL SCOPE OF WORK

CONSULTANT SERVICES

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APPENDIX 'B' (Supervisor Requirements)

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APPENDIX 'F' (Tech Request Form)

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APPENDIX 'H' (Payment Report Format)

APPENDIX 'I' (Evaluation Schedule)

GENERAL SCOPE OF WORK

The work consists of providing Temporary Technical Engineering Personnel during peak workloads on an as needed basis. The additional temporary personnel will serve as an extension of the Arizona Department of Transportation (ADOT) staff, to assist in the administration of highway construction projects through out the State of Arizona and other work in the support of the construction program. Technician classifications will be based on ADOT job classifications. Depending on the specific classification and task, the consultant may perform duties including but not limited to, the following:

- Construction project supervision, management and training.
- Construction survey (provide total survey workstation and vehicle).
- Construction inspection roadway, structures, electrical, landscape, permits, etc.
- Construction quality control or quality acceptance (Materials sampling and testing).
- Support of construction office engineering and administration. Construction work required by or in the support of highway construction activities.
- Materials Lab Technicians.

All work performed by the Consultant's staff will be in accordance with current ADOT requirements and guidelines, i.e.

- 1990, and 2000 Standard Specifications for Road and Bridge Construction
- Construction Manual
- ADOT Materials Testing Manual
- ADOT Materials Policy and Procedure Directives Manual
- ADOT Traffic Control Manual
- ADOT Construction Progress Estimate Program (CPE)
- ADOT Construction Management Program (CMP) Manual
- ADOT Partnering Evaluation Program (PEP)
- ADOT Supplemental Agreement Tracking System (SATS)

Survey services provided under this contract may require professional liability insurance to cover survey work performed and the use of a registered land surveyor to direct survey personnel. All work by technical personnel shall express their knowledge and experience of currently accepted Arizona Department of Transportation methods, procedures, techniques, requirements and guidelines used in construction of highway projects for the State of Arizona.

Personnel provided by the Consultant to supplement ADOT's staff under terms of this contract are employees of the Consultant, not ADOT. The Consultant in accordance with employment statutes must adhere to all Federal, State and Local regulations while performing work for ADOT. These include paying Workmen's Compensation Insurance for their personnel and the payment and withholding of all taxes i.e., Social Security and Unemployment Taxes.

To insure ADOT the Consultant's personnel are meeting the requirements of this contract an individual at the Org will be assigned to monitor the work assignment. This individual will be the Org Manager and be identified by name on the Notification Letter provided by ADOT's Consultant Contract Administrator.

CONSULTANT SERVICES

STAFFING

The consultant shall provide sufficient personnel who possess the experience, knowledge requirements and character to adequately perform the duties of each specific assignment. Assignment may not exceed **1 year** unless recommended by the District Engineer and approved by ADOT's Consultant Contract Administrator. To assist in meeting the contract requirements the consultant will use the information in Appendix 'A', ADOT's Classification Guidelines for Construction Technicians, to examine, recruit, and classify technical personnel.

Consultant Classifications are as follows:

- Senior Resident Engineer
- Resident Engineer
- Registered Landscape Architect
- Registered Land Surveyor
- Tech V (S9)
- Tech IV (S7)
- Tech III (S6)
- Tech II (S5)
- Tech I (S4)
- Engineer Worker (S1)

Major requirements included within the Classification guidelines are – See Below: In addition, 80% of the CONSULTANTS Roadway Construction Inspection Team shall meet one of the following requirements:

- Arizona Technical Institute (ATI – Field and Lab) Certifications for Construction Techs. I, II, III, IV, and Tech V classifications as required per job tasks.
- American Concrete Institute (ACI – Field and Lab) Certifications for Construction Techs. I, II, III, IV, and Tech V classifications as required per job tasks.
- National Society of Professional Surveyors (NSPS – Survey) Certifications for Survey Techs. I, II, III, IV and V classifications as required per job tasks.
- International Municipal Signal Association (IMSA – Electrical) Certifications for Construction Techs. I, II, III, IV, and Tech V classifications as required per job tasks.
- Consultant Personnel (Supervisor – Field, Lab) must meet the requirements of Table - 2. (See Appendix 'B')
- Consultant Personnel (Technician – Field, Lab) must meet the requirement of Table – 3. (See Appendix 'C')
- Consultant and his technicians must posses a sound knowledge and experience of the Partnering Concept utilized presently in ADOT's Construction Program.
- Certification in the National Institute for Certification in Engineering Technologies (NICET) for Construction Techs, II, III, IV, and V classifications **maybe** considered for up to one year if approved by ADOT's Consultant Contract Administrator.
- See Matrix's (Appendix 'D') as a guide on requirements, experience and training to
- supplemental construction staff.
- College or university engineering course work.

- Certification for use of nuclear equipment to include successful completion of the nuclear gauging equipment manufacturer's radiation safety and equipment operation course, the ADOT radiation safety course, or other courses with similar content and requirements
- that have been approved by the Arizona Radiation Regulatory Agency

For continuity of work and balance of construction staff during extreme workloads, other Engineering Technology certification will be taken in to consideration; sanction will be dependent on need and task responsibility.

While on assignment the technician(s) may be empowered to perform specific duties that coincide with their specific classification and experience that may include the following:

- Accept or reject unsuitable construction materials.
- Reject unacceptable workmanship.
- Confer with the contractor on specific problems to seek resolution.
- Acknowledge contractor questions and make recommendations under direction of ADOT Org. Manager.
- Resolve minor problems.
- Supervising and training subordinates.
- Document payment of work performed by Contractor.

Under this contract ADOT will provide computers for field personnel to utilize for imputing daily diaries that document contractor activities, etc. into the PEN / FAST system. The Consultant shall provide all necessary equipment for density and concrete acceptance. This equipment shall be in good working condition and meet the approval of AASHTO / ASTM test methods.

KEY PERSONNEL

The CONSULTANT in management of this contract will identify an individual and an assistant who are experienced in the Transportation Industry with special emphasis on Civil Engineering (highway and road building), to function as the Consultant Contract Manager. The Consultant' s Contract Manager will be the liaison person between ADOT and their employees, and will be the sole responsible person to assure that all the requirements of this contract are being met; in his/her absence the assistance will fill this need. The assistant required for that position is to assure ADOT that a contact person for the Consultant will always be available. These two individuals shall be considered as Key Personnel to this contract and may not be replaced or roles reversed without written approval from ADOT' s Consultant Contract Administrator. To better serve this contract, these two individuals should be thoroughly familiar with the firm's workload and have the authority to obligate the firm. The Consultant Contract Manager or their assistant in his/her absence will be expected to maintain monthly communications with their personnel assigned to ADOT projects; purpose is to assure they are meeting ADOT expectations, quality assurance and performance for the task(s) assigned.

Communication may be done by telephone or project visit, either method will be acceptable. All project field visits by the Consultant's Contract Manager or his/her assistant must be approved by the Org in advance. There will be no exception to this policy. Upon completion of a Techs assignment, it will be the responsibility of the Consultant Contract Manager or their assistant to assure this office receives an evaluation on the individual in a timely manner.

PERFORMANCE

The Consultant personnel on assignment are required to perform in a professional, proper, and skillful manner and maintain a good working relationship with ADOT personnel and the Contractor. If the technicians work performance is determined to be unsatisfactory or the Org Manager takes his/her conduct to be intemperate or disorderly, verbal action will be taken for immediate termination and the employee will be relieved of his duties. Written notification from Org Manager will follow, identifying reason(s) for dismissal for the record. This type of dismissal may restrict the technician(s) of any future statewide assignment. Upon completion of his/her assignment the Org Manager will complete the PERFORMANCE EVALUATION REPORT form. The ADOT Consultant Contract Administrator's office provides this form. Results of this report will be provided to the consultants.

TRAVEL (Travel Policy 4/28/2000)

In accordance with ADOT travel policy per diem and mileage will only be paid on assignments exceeding 35 miles from the home base. Home base within Metro Phoenix and Metro Tucson will be identified as the construction field office, and no reimbursement will be considered for per diem unless approved by Org Manager and ADOT's Consultant Contract Administrator in advance. Home Base outside the Metro Phoenix and Metro Tucson will be identified as the Consultant's main office or the technician's residence which ever is the less distance to the assignment.

Per diem for short or long term assignments (30 days + or -) will be in accordance with ADOT's travel policy Section II-D-6 "Reimbursement Rate Index", or for the default amount, plus tax if cities are not listed in the index. Receipts for per-diem and mileage may be required to show proof of charges. Reporting of travel expenses is to be done on Consultant's time record. Mileage is not reimbursable if the traveler returns to his/her residence during long term subsistence travel. M&IE (Meals and Incidental Expenses) are not reimbursable, only lodging, when the traveler is at his/her residence. Non-refundable lease deposit will be reimbursed by ADOT with receipt, if the long-term assignment is terminated early. ADOT will make every effort to satisfy call-out assignment span.

WORK SCHEDULE AND TIME RECORDS

RESPONSE TIME

Response time for temporary technical for most assignments will be a minimum of 48 hours. The Department will attempt to give the Consultant 48 hours notice prior to the required shift show up time. At times, however, the Department may call the same day that the service is required. The length of any assignment duration will be determined on need, weather and the contractor schedule. To meet this requirement the Consultant must have an experienced working staff of certified technicians that are available to be assigned on this 48 hours notice. First consideration, of the call out, will be given to the Prime Consultant.

The responsible person for temporary technician call outs at the District level is the Construction Management Analyst (CMA) or designee. Each district is assigned a CMA or designee; names of these individuals and the districts they represent will be provided upon request from ADOT's Consultant Contract Administrator. The CMA or designee in turn will contact ADOT's Consultant Contract Administrator to fill their temporary staff needs after they have contacted all other Districts for available FTE's to fill the assignment.

The CMA will provide the following on their request: (See Appendix F)

Number of Technician(s) require and Classification:
Type of Assignment (Duties):
Start date and time:
Approximate length of assignment (Duration):
Project contact person:
Project telephone number:
Project office address:
Org Number:
Project TRACs Number:
Indicate if vehicle, per diem or phone is applicable:
Certifications:
Any Comments:

The ADOT Consultant Contract Administrator will follow up all call out requests to the Consultant for temporary assistance in writing.

Requests (call-outs) from ADOT's Consultant Contract Administrator to consultant will always identify the following:

Number of Technician(s) require and Classification:
Type of Assignment (Duties):
Start date and time:
Approximate length of assignment (Duration):
Project contact person:
Project telephone number:
Project office address:
Org Number:
Project TRACs Number:
Indicate if vehicle, phone, per diem is applicable
Certifications:
Any Comments:

Org number is ADOT's means of identification of project field office for audit purpose.

Technician(s) at the direction of the Org Manager or his assigned representative may be assigned task(s) not identified in the initial notification for work assignment. Any new task(s) assigned will always relate to Technician's classification and experience. ADOT's Consultant Contract Administrator must be advised of new task(s) assigned to technician by Org Manager / assigned representative and Consultant Contract Manager.

WORK SCHEDULE

The Consultant's normal work schedule will be as follows:

Work Week:	Monday through Friday
Work Hours:	Will be determined by Org. Manager. Work hours may change due to weather, need, or at times may include night work.
Holidays:	May correspond to STATE Holiday Schedule.
Leave Time:	Time away from assigned Tasks(s) must be approved by the Org. Manager or his representative.
Overtime:	Payable hours worked in excess of forty (40) hours per week.

CONSULTANT will be paid only for actual hours worked. The Consultant must meet essential certifications to be considered for a particular Tech class. The Consultant must also get prior approval when changes need to be made in personnel for vacation, illness, termination, etc.

Other factors that may effect the duration of an assignment are as follows:

- An ADOT person comes available.
- Adjustment in contractor work schedule
- Equipment failures (Contractors or ADOT)
- Technician lacks knowledge of his/her assignment.

INCLEMENT WEATHER

The following guidelines will be used for inclement weather:

1. If the technician is notified the day before that there will be no work the next day due to weather conditions, no salary will be paid for that day.
2. If the technician has reported for work and is not utilized due to weather conditions, salary will be paid for two (2) hour's show up time only.
3. If the technician is released after work has commenced and work is halted in four (4) hours or less due to weather, salary will be paid for four (4) hours.
4. If the technician is released after work is halted after four (4) hours or more due to weather conditions, salary will be paid for hours worked only.

RECORDS

The CONSULTANT must maintain updated resumes of all personnel including Professional Engineers scheduled to be utilized on this contract. The resume must contain accurate and detailed description of work experience and NICET, ATI, ACI and other applicable Certifications. Copies of this information will be provided to ADOT's Consultant Contract Administrator. The Consultant shall classify each technician's resume according to the Construction Technician Classification Guidelines established in Appendix 'A'.

Technical personnel on assignment under this contract will be requested to maintain a descriptive Daily Diary in the ADOT's PEN program to verify daily activities to include daily start and end of work assignment day, weather conditions, task(s) assigned, all project contacts, bid quantities, pay items and vehicle project mileage. Daily Diaries are the property of ADOT and must remain at the field office (ORG) upon completion of assignment.

Technical personnel on assignment under this contract will be responsible for maintaining a clear updated single source time document that meets ADOT's requirements and will be provided by the Consultant for record keeping. ADOT's Consultant Contract Administrator prior to use, to insure that it meets ADOT's requirements for record keeping must approve this document. The document must be designed to provide ADOT billing with accurate required information such as; Name, Classification, Org, District, Project number, TRACs number, CMP activity function codes, Daily hours worked, Project(s) mileage, Days claimed for per diem, Vehicle usage (personal or leased) and signature of technician. The Org Manager or his designee must insure the time document includes the required information and verifies that the information is accurate. All pertinent information on time documents must be accurate prior to submitting to ADOT's Consultant Contract Administrator. The ADOT Project Numbering Reference Book is available from ADOT's Accounting section to verify TRACs numbers are valid and open for charges.

The Consultant must prepare a Monthly Summary and CEMS (Construction Engineering Manpower System) Report along with monthly billing backup documentation for them to enter into ADOT's automated invoicing system. This will then be sent to ADOT's Consultant Contract Administrator for review and processing. ADOT's Consultant Contract Administrator will return incomplete billing invoices.

APPENDIX 'A'

Classification Guidelines for Construction Technicians

CONSTRUCTION TECHNICIAN ENGINEERING WORKER (S1)

THIS IS A TRAINING CLASS

This position is open to first year engineering students and non-construction experience personnel.

Work description:
This is a training class. Incumbents perform engineering work with progressing responsibility as skills and knowledge increase. Incumbents are expected to be moved ahead to entry/journey level position in the area of assignment upon meeting the minimum requirements.

Work conditions:
Depending on the assignment, incumbent may be required to spend some amount of time away from home base or work in rugged terrain.

Supervision:
This class has no supervisory role. Training in the area of assignment will provide the required skills and knowledge for advancement. Direct supervision will be provided through the training period.

Knowledge and skills preferred:

Knowledge of procedures and techniques of surveying, construction standards inspection, quality control and/or materials analysis.

Knowledge of proper construction documentation procedures.

Knowledge of function of this contract.

Knowledge of safety practices and procedures

Responsibility:
For completing work assignment assigned by the supervisor for applying one's self in order to increase and expand knowledge base at elementary working level.

CONSTRUCTION TECHNICIAN ENGINEERING WORKER ADOT EQUIVALENT (S1)
THIS IS A TRAINING CLASS OPEN TO FIRST YEAR ENGINEERING STUDENTS AND NON-CONSTRUCTION EXPERIENCE PERSONNEL.

- TRANSPORTATION ENGINEERING WORKER

NOTE: REFER TO HUMAN RESOURCES POSITION SPECIFICATIONS ATTACHED TO THIS SCOPE OF WORK

ATE OF ARIZONA POSITION SPECIFICATION
ass Title: Transportation Engineering Worker Class Code: 97320
ganizations/Work Settings: Highways Division Class Established: 04/23/84
SA: NE Department of Transportation Revised: 01/24/92

Pay Grade: 10

RK DESCRIPTION:
is is a training class. Appointment to this class may
: exceed 24 months. There will be no permanent
locations in this class. Incumbents perform
gineering work with progressing responsibility as
ills and knowledges increase. Incumbents are expected
be promoted to an entry/journey level position in
e area of assignment upon meeting the minimum
quirements.
RK CONDITIONS:
pending on the assignment, incumbent may be required
spend considerable amount of time away from home
se or work in rugged terrain.
PERVISION:
is class has no supervisory role. Training in the
ea of assignment will provide the required skills and
owledges for advancement. Direct supervision will be
ovided through the training period.
OWLEDGES APPLIED:
owledge of procedures and techniques of surveying,
nstruction standards, inspection, quality control,
d/or materials analysis.
owledge of proper construction documentation
ocedures.
owledge of organization and function of the agency.
owledge of agency safety practices and procedures.
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WORK RESULTS/PRODUCTS:
Completed work assignment applicable to the work unit.
RESPONSIBILITY:
For completing work assignments assigned by the supervisor; for applying one's self in order to increase and expand knowledge base at elementary working level.
AUTHORITY:
Decisions that affect the work assignment as delegated by the supervisor.
SKILLS APPLIED:
Skill in surveying, computation, construction, inspection, and/or materials analysis.
Skill in reading and interpreting highway maps/plans.
Skill in the operation of electronic calculator and performing basic engineering calculations.
Skill in the safe operation and care of various tools and equipment used in the work unit.

RK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
COUNTS PASSING VEHICLES WITH COUNTER, AND FILLS IN REPORT TO ESTABLISH DATA BASE FOR TRAFFIC ENGINEERING.
TOTALS AND SUMMARIZES VEHICLES COUNTED IN HIGHWAY COUNT, BY SIZE, NUMBER OF AXLES, AND OTHER FEATURES.
WEIGHS HEAVY EARTH-MOVING EQUIPMENT TO DETERMINE AMOUNT OF CONSTRUCTION MATERIALS BEING USED; WRITES WEIGHT TICKETS.
COLLECTS WEIGHT TICKETS FROM TRUCK DRIVERS AT DUMPING SITES AND COMPUTES, USING WEIGHT FIGURES, THE AREA TO BE COVERED WHEN MATERIAL IS DUMPED.

Class Code: 97320

COMPARES TWO OR MORE FORMS, LISTS, COLUMNS, OR AGGREGATIONS OF FIGURES, USING VISUAL OBSERVATION AND ADDING MACHINE, AND TOTALS BOTH SETS OF FIGURES, NOTING DISCREPANCIES, AND RECHECKING OWN WORK FOR ERRORS.
READS AND STUDIES INSTRUCTIONAL OR INFORMATIONAL MATERIAL IN ORDER TO INCREASE AND EXPAND KNOWLEDGE BASE AT ELEMENTARY WORKING LEVEL IN THE WORK SYSTEM.
PERFORMS ALL TASKS NECESSARY FOR SETTING UP TRAFFIC CONTROL.
DURING THE PERFORMANCE OF SURVEYS, ACTS AS RODMAN; ERECTS SIGNALS AND TARGETS; CLEANS LINE OF OBSTACLES; DRIVES

USING SIEVE SCALES AND CALCULATOR, ANALYZES CRUSHED AGGREGATES FOR GRADATION REQUIREMENTS BY FINDING THE PERCENTAGE OF GIVEN AGGREGATE SIZES OF MATERIALS SAMPLED.
TAKES SOIL SAMPLES OF CONSTRUCTION PROJECT AND THEN ANALYZES SAMPLES IN FIELD LABORATORY TO DETERMINE COMPACTION AND MOISTURE CONTENT.
OPERATES CORE DRILLING MACHINE TO TAKE MATERIALS SAMPLES FROM ROAD FOR ANALYSIS.
PERFORMS TESTS IN LABORATORY ON SOIL COMPOSITION, SURFACING MATERIAL AGGREGATES, OIL AND WATER CONTENT, EMBANKMENT COMPACTION, PLANT MIX DENSITY, AND OTHER FACTORS AS REQUIRED.
STAKES; ERECTS SURVEY STATIONS.
ERECTS AERIAL PHOTOGRAPHY TARGETS, CLEANS AREA OF OBSTACLES, BRUSH, ETC.
PERFORMS DAILY MAINTENANCE OF VEHICLES; ADDS GAS, WATER, OIL, AND AIR AS NEEDED.
Confers with supervisor on regular basis, discussing work processes, incidents, problems and plans, and receiving advice, counseling, and instruction.
Performs relates work as required.

NIMUM QUALIFICATIONS:
ility as determined by the Personnel Division through evaluation of training, experience, and/or examination to perform or arn to perform the outlined duties.
ecial Selection Factors:
ility to lift a minimum of 35 pounds and carry loads over rough terrain. A medical/physical evaluation is required prior appointment.
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CONSTRUCTION TECHNICIAN I

IDEAL CANDIDATE SHALL BE ATI OR ACI CERTIFIED – IF THIS CERITIFICATION IS NOT OBTAINED, NO COMPENSATION FOR THIS CLASS WILL BE MADE

Performs a variety of semi skilled activities.

Examples of duties assigned to this classification are:

Rodding, chaining, or setting stakes or pins on a survey crew.

Conducting quality control tests such as soil densities, sieve analysis test, operation scales and inspecting spread operations.

Sampling and transporting produced construction materials from point of application or production to testing laboratory.

Knowledge and skills required:

Knowledge of tools, equipment and vehicles utilized in highway construction.

Knowledge of standard equipment and materials used for the sampling and testing of construction material.

Knowledge of basic mathematics used in the computation of a variety of construction items.

Knowledge of record keeping preparing of documents and reports.

One year experience as a Engineer Worker or equivalent is required.

Please note: Tech I Office / Administrative personnel must have successfully completed CPE and Certified Payroll training.

CONSTRUCTION TECHNICIAN I. ADOT EQUIVALENT (S4)

CANDIDATE SHALL BE ATI OR ACI CERTIFIED OR AN ENGINEERING STUDENT WITH 30 SEMESTER HOURS AND NO HIGHWAY CONSTRUCTION EXPERIENCE.

Performs a variety of semi-skilled activities

- TRANSPORTATION CONSTRUCTION TECHNICIAN I
- TRANSPORTATION MATERIALS TECHNICIAN II

NOTE: REFER TO HUMAN RESOURCES POSITION SPECIFICATIONS ATTACHED TO THIS SCOPE OF WORK

STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Construction Technician I Class Code: 34396
Organizations/Work Settings: Department of Transportation Class Established: 05/08/92
FLSA: NE Highways Division Revised: 09/07/00
Pay Grade: S4

WORK DESCRIPTION:
Performs a variety of technical highway work of routine difficulty and is normally assigned to more than one area of construction. Examples of duties assigned to this class are: chaining, rodding, and staking on a survey crew; receiving training in the inspection of minor construction items and the operation of survey instruments; conducting quality control tests such as nuclear density and sieve analysis tests and operating scales and inspecting spread operations; and performing introductory level engineering and constructions records maintenance and verification in a construction field office.
WORK CONDITIONS:
Depending on area of assignment, may be exposed to extreme weather conditions, required to travel frequently and/or required to lift heavy materials. Subject to hazards of moving traffic when working in construction areas.
SUPERVISION:
Regularly assigned duties will be performed under general supervision. Close supervision will be provided when performing unfamiliar or advanced level duties in a training capacity.
KNOWLEDGES APPLIED:
Tools, equipment, and vehicles utilized within the area(s) of assignment.
Agency standards, policies, and procedures applicable to the area(s) of assignment.
Approved record keeping and documentation methods, procedures, and techniques.
Basic mathematics used in the computation of a variety of construction items.
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WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
SETS SAFETY CONES AND FLAGS IN STREET.
DIRECTS VEHICULAR TRAFFIC AROUND ROAD CONSTRUCTION

WORK RESULTS/PRODUCTS:
Completed work assignments within assigned area(s) of construction; completed training in multiple areas of construction and in advanced level duties within area(s) of assignment; established construction project files; payroll verification.
RESPONSIBILITY:
For timely and accurate completion of assigned projects; proper use, operation, maintenance, and repair of assigned equipment; maintaining records of construction project payrolls, and ensuring accuracy of payroll calculations.
AUTHORITY:
To notify supervisor of construction items or procedures which are not in compliance with specifications. Determine acceptability and mathematical accuracy of payrolls and reports submitted by contractors.
SKILLS APPLIED:
Operating and maintaining a variety of construction survey and quality control equipment.
Operating a variety of office equipment including a calculator.
Reading and interpreting a variety of construction documents, including highway maps and plans.
Safe operation of automotive equipment.
Verbal and written communications.

Class Code: 34396
MAINTAINS PROJECT FILES, CONSTRUCTION DOCUMENTS AND QUANTITATIVE CONSTRUCTION RECORDS; EXAMINES FORMS AND DOCUMENTS FOR ACCURACY; PERFORMS BASIC MATHEMATICAL

SITES WITH HAND-HELD FLAG OR SIGNS.
WEIGHS HEAVY EARTH-MOVING EQUIPMENT TO DETERMINE AMOUNTS OF CONSTRUCTION MATERIALS BEING USED; WRITES WEIGHT TICKETS.
COLLECTS WEIGHT TICKETS FROM TRUCK DRIVERS AT DUMPING SITES AND COMPUTES, USING WEIGHT FIGURES, THE AREA TO BE COVERED WHEN MATERIAL IS DUMPED.
USING SIEVE SCALES AND CALCULATOR, ANALYZES CRUSHED AGGREGATES FOR GRADATION REQUIREMENTS BY FINDING THE PERCENTAGE OF GIVEN AGGREGATE SIZES OF MATERIALS SAMPLE.
TAKES SOIL SAMPLES OF CONSTRUCTION PROJECT AND THEN ANALYZES SAMPLES IN FIELD LABORATORY TO DETERMINE COMPACTION AND MOISTURE CONTENT.
PARTICIPATES IN FIELD ENGINEERING SURVEYS, INCLUDING SETTING UP LEVEL AND TRANSIT, TAKING NOTES, HOLDING ROD AND CHAIN.
CALCULATIONS.
Fills in precise information on a variety of forms, reports, and records, from a variety of highly specific sources.
Fills in time sheets, records of work performed, expense vouchers, vehicle reports, or other routine work reports.
Confers with supervisor on regular basis, discussing work processes, incidents, problems and plans, and receiving advise, counseling, and instruction.
Inspection of minor construction items.
Performs related work as required.

MINIMUM QUALIFICATIONS:
One year of experience using sieve scales and calculator; OR collecting and analyzing soil samples in field laboratory, performing laboratory test on soils or surfacing materials aggregates and related duties; OR performing introductory level engineering and construction documentation; OR assisting in minor construction project inspection. 30 semester hours applicable toward a Bachelors degree in engineering or closely related curriculum may substitute for the required experience.
Special Selection Factors:
A medical/physical evaluation is required prior to appointment.
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STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Materials Technician II Class Code: 97396
Organizations/Work Settings: Highways Division Class Established: 04/23/84
FLSA: NE Department of Transportation Revised:

Pay Grade: 15 $

WORK DESCRIPTION:
Operates a variety of pavement performance equipment, such as the Mu-Meter, Mays Ride Meter and Dynaflect to collect data on roadway conditions on the State highway system; transports equipment to and from test site; may supervise staff assigned to assist with field tests.
WORK CONDITIONS:
Extensive daily travel; frequent overnight stays away from home base; exposure to those hazards normally associated with working in moving traffic.
SUPERVISION:
Most tasks are performed in the field independent of any direct supervision. Technical advice and assistance will be provided as requested.
KNOWLEDGES APPLIED:
Knowledge of the purpose and proper usage of all pavement performance testing equipment.
Knowledge of inspection methods, procedures and techniques.
Knowledge of the State highway system.
Knowledge of acceptable traffic safety procedures used during testing.

WORK RESULTS/PRODUCTS:
Completed field test data; complete field records and reports.
RESPONSIBILITY:
Scheduling and prioritizing work assignments for self and/or subordinate staff within established time frames; proper care, maintenance and operation of pavement testing equipment.
AUTHORITY:
Determines most efficient routing of equipment within established schedule; decisions affecting scheduling of self and/or subordinate staff; decisions regarding types of traffic control needed.
SKILLS APPLIED:
Skill in the operation, calibration and maintenance of pavement testing equipment.
Skill in analyzing and evaluating the completeness and accuracy of test data.
Skill in visually observing and evaluating roadway conditions.
Skill in coding and reducing field data.

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WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
RECORDS DATA FROM CONTROLLED FIELD OPERATIONS.
OPERATES THE RIDE-METER BY POSITIONING THE INK-PENS, SWITCHING THE MACHINE ON AND INSCRIBING ROAD DESCRIPTIONS ON THE CHART PAPER TO INDICATE THE LOCATION OF THE TESTING.
ASSISTS IN PERFORMING SKID TESTS BY TURNING WATER ON AND OFF AT THE APPROPRIATE TIMES AND MARKING THE TEST LOCATION ON THE PAPER.

Class Code: 97396
SEARCHES FOR AND RETRIEVES INFORMATION FROM FILES, AND RESPONDS TO INFORMATIONAL REQUESTS REQUIRING SOME JUDGMENT OR DISCRETION REGARDING CURRENT AND SPECIFIC BUSINESS OF THE WORK SYSTEM, AS REFLECTED IN THE RECORDS; THIS COMMUNICATION MAY BE BY TELEPHONE OR BY DIRECT PERSONAL CONTACT.
Conducts road survey in various parts of State by driving on roads and noting location, physical features, bridge types, right-of-way and other features.
Performs related work as required.

MINIMUM QUALIFICATIONS:
Two years of experience equivalent to the Transportation Materials Technician I.
Special Selection Factors: None.
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CONSTRUCTION TECHNICIAN II

IDEAL CANDIDATE SHALL BE ATI AND ACI CERTIFIED – IF THIS CERITIFICATION IS NOT OBTAINED, NO COMPENSATION FOR THIS CLASS WILL BE MADE

Performs a variety of skilled activities for field and office including preparing weekly time reports, reviewing certified payrolls and developing the monthly progress estimate, etc.

Examples of duties assigned to this class are:

Operating instruments for a survey for a survey crew, inspecting minor construction items, sampling and inspection of concrete placing operation.

Collect and analyze soil samples of construction materials to determine compaction and moisture content.

Inspection and sampling of all phases of asphaltic concrete paving operation in progress and its conformance to specifications and construction plans. Answers questions and resolves problems.

Inspects construction in progress, to ensure conformance with specifications, agreements, and established requirements.

Keep daily diary of work progress.

Prepares reports on all field inspections, and submits project quantities on a daily basis.

Keep accurate documentation for force accounts and possible claims.

Knowledge and skills required

All knowledge and skills required of lower classification.

Knowledge of currently accepted methods, procedures, and techniques used in highway construction inspection, survey, materials testing, and quality control equipment.

Skill in interpersonal relations, as applied to contact with contractors, representatives of other governmental jurisdictions, and other ADOT staff.

Two years as a Tech I or equivalent is required.

Please note: Tech II Office / Administrative personnel must have successfully completed CPE, Force Accounts, Certified Payroll and PEN training.

CONSTRUCTION TECHNICIAN II, ADOT EQUIVALENT (S5)

CANDIDATE SHALL BE ATI AND ACI CERTIFIED OR AN ENGINEERING STUDENT WITH 60 HOURS AND 3 MONTH HIGHWAY CONSTRUCTION EXPERIENCE.

Performs a variety of highly skilled activities

- TRANSPORTATION CONSTRUCTION TECHNICIAN II
- TRANSPORTATION MATERIALS TECHNICIAN III

NOTE: REFER TO HUMAN RESOURCES POSITION SPECIFICATIONS ATTACHED TO THIS SCOPE OF WORK

STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Construction Technician II Class Code: 34397
Organizations/Work Settings: Department of Transportation Class Established: 05/08/92
FLSA: NE Highways Division Revised: 09/07/00

Pay Grade: S5

WORK DESCRIPTION:
Performs a variety of journey-level survey, inspection, materials sampling and analysis, and/or project control and administrative support work in a highway construction environment. Examples of duties assigned to this class are: operating instruments for a survey crew; inspecting minor construction items, hot plants, and concrete plants; performing a wide range of the more complicated lab or field quality control tests; maintaining adequate documentation of all assigned activities; performs routine tests on soil, aggregate and other construction materials in a construction lab; performs administrative or advanced engineering and construction records maintenance duties in a construction field office.

WORK CONDITIONS:
Depending on area of assignment, may be exposed to extreme weather conditions, required to travel frequently and/or required to life heavy materials. Subject to hazards of moving traffic when working in construction areas.

SUPERVISION:
Many tasks performed in a highway construction environment are independent of any direct supervision. Close supervision will be provided when performing unfamiliar or advanced level duties in a training capacity.

KNOWLEDGES APPLIED:
Methods, procedures, and techniques used in highway construction project inspection, survey, materials testing, documentation, and contract compliance.
Federal and state statutes and agency standards, policies, and procedures applicable to the area(s) of assignment.
Tools, equipment, and vehicles utilized within the area(s) of assignment.
Approved record keeping and documentation methods, procedures, and techniques.

WORK RESULTS/PRODUCTS:
Completed work assignments within assigned area(s) of construction; completed documentation of all phases of assignments; completed training as prescribed.

RESPONSIBILITY:
For timely and accurate completion of assigned projects; proper use, operation, maintenance, and repair of assigned equipment.

AUTHORITY:
To recommend rejection of materials or workmanship, which are not in compliance with agency specifications; recommend stop work orders for project procedures not in compliance with agency specifications; decide on proper materials testing techniques and procedures in accordance with prescribed standards.

SKILLS APPLIED:
Operating and maintaining a variety of construction survey, materials testing, and quality control equipment.
Reading and interpreting a variety of construction documents, including highway maps and plans, and materials test results.
Interpersonal relations, as applied to contacts with contractors and other agency staff.
Safe operation of automotive equipment.
Operation of a variety of office equipment.
Verbal and written communications.

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Class Code: 34397

WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:

WEIGHS, MEASURES, AND PERFORMS ELEMENTARY TEST ON DRILL CORE MATERIALS AND RECORDS RESULTS.

INSPECTS HIGHWAY CONSTRUCTION ON AN ONGOING BASIS TO ASSURE COMPLIANCE WITH CONTRACT AND STATE AND FEDERAL STANDARDS; INSPECTIONS AND EXAMINATIONS ARE MADE OF MATERIALS, SURFACE CONDITION, PROPER TRACKING, STRUCTURAL FEATURES, AND OTHER RELEVANT FACTORS.

PERFORMS TESTS IN LABORATORY ON SOILS COMPOSITION, SURFACING MATERIAL AGGREGATES, OIL AND WATER CONTENT, EMBANKMENT COMPACTION, PLANT MIX DENSITY, AND OTHER FACTORS AS REQUIRED.

USING SURVEY INSTRUMENTS AND EQUIPMENT, PERFORMS LOCATION, STRATA, TOPOGRAPHIC, BOUNDARY, DRAINAGE, AND OTHER MEASUREMENTS AS REQUIRED IN THE CONSTRUCTION OF HIGHWAY OR OTHER CONSTRUCTION PROJECTS.

INTEGRATED INTO WORK ROUTINE, OR IN TIME SET ASIDE FOR TRAINING, ACQUIRES KNOWLEDGE AND SKILLS NEEDED FOR ADVANCEMENT TO OR FOR EFFECTIVE PERFORMANCE AS JOURNEYMAN WORKER OR SKILLED TECHNICIAN LEVEL IN THE WORK SYSTEM.

CONSULTS MANUAL, RULEBOOK, CODES, OR REGULATIONS IN ORDER TO FIND EXACT REQUIRED COURSE OF ACTION, DETERMINATION, OR AUTHORIZATION.

MAINTAINS HIGHWAY CONSTRUCTION CONTRACT DIARIES, PROGRESS REPORTS, ROYALTY RECORDS, DOCUMENTATION OF PAY QUANTITIES, AND FINAL SUMMARIES OF ALL RELEVANT DATA PERTAINING TO HIGHWAY CONSTRUCTION PROJECTS.

Checks or verifies calculations on quantity summaries for highway construction bid items.

Examines and verifies numeric data and specifications on source documents by recalculating computations, using geometry or trigonometry.

Compares two or more forms, lists, columns, or aggregation of figures, using visual observation and adding machine and totals both sets of figures, noting discrepancies and rechecking own work for errors.

Calculates expenses, cumulative charges, receipts, or other fiscal data for daily ad other periodic records; changes computations if necessary.

Examines payroll documents from public contractors to assure completeness, accuracy and compliance with contract.

Performs related work as required.

MINIMUM QUALIFICATIONS:

Two years of technical highway work, such as chaining, rodding and staking on a survey crew, operating survey equipment; OR conducting quality control tests; OR performing engineering and construction records maintenance and verification or related duties; OR assisting in inspecting highway construction projects, material laydown and concrete placement. 60 semester hours applicable towards a Bachelor degree in Engineering or closely relates curriculum may substitute for one year of the required experience.

Special Selection Factors:

A medical/physical evaluation is required prior to appointment.

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STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Materials Technician III Class Code: 97397
Organizations/Work Settings: Highways Division Class Established: 04/23/84
FLSA: NE Department of Transportation Revised:

Pay Grade: 16 $

WORK DESCRIPTION:
Supervises and directs the activities of staff involved in maintaining project status files and updating pavement management information; codes pavement management data for computer input; reviews and evaluates computer output; may conduct field tests as required.

WORK CONDITIONS:
No unusual work conditions.

SUPERVISION:
Works under the general direction of a Transportation Engineer - Team Leader and exercises some independent judgment within established program parameters and guidelines.

KNOWLEDGES APPLIED:
Knowledge of methods, procedures and techniques used in reducing and interpreting pavement management data.
Knowledge of computer entry methods, procedures and techniques.
Knowledge of the Highway Surface Condition rating system.
Knowledge of computer programs available for use in the work unit.

WORK RESULTS/PRODUCTS:
Complete, up-to-date pavement history files; completed reports; pavement management data entered into computer.

RESPONSIBILITY:
Timely and accurate completion of assigned work projects; scheduling and assigning work projects for self and subordinate staff.

AUTHORITY:
Approve or disapprove computer output; approve or disapprove work assignments completed by subordinate staff.

SKILLS APPLIED:
Skill in reducing and coding pavement management system data.
Skill in the operation of a variety of pavement performance test equipment.
Skill in analyzing and evaluating a variety of technical data.
Skill in interpersonal relations, as applied to contacts with other agency staff.

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Class Code: 97397

WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:

- INSTRUCTS, GUIDES AND COUNSELS SUBORDINATE-LEVEL WORKERS IN CARRYING OUT A VARIETY OF TASKS.
- REVIEWS, VERIFIES OR INSPECTS WORK OF SUBORDINATE-LEVEL WORKERS, FOR QUALITY CONTROL.
- CONDUCTS ROAD SURVEY IN VARIOUS PARTS OF STATE BY DRIVING ON ROADS AND NOTING LOCATION, PHYSICAL FEATURES, BRIDGE TYPES, RIGHT-OF-WAY AND OTHER FEATURES.
- SORTS, SEPARATES AND CODES DATA IN ACCORDANCE WITH ESTABLISHED METHODS AND FORMAT.
- ENCODES DATA FOR COMPUTER USE IN ORDER TO PRODUCE ENGINEERING REPORTS.
- CORRECTS ERRORS IN COMPUTER OUTPUT DATA, AND RESUBMITS TO OPERATIONS SUPERVISOR FOR A RERUN.
- SEARCHES FOR AND RETRIEVES INFORMATION FROM FILES, AND RESPONDS TO INFORMATIONAL REQUESTS REQUIRING SOME JUDGMENT OR DISCRETION REGARDING CURRENT AND SPECIFIC BUSINESS OF THE WORK SYSTEM, AS REFLECTED IN THE RECORDS; THIS COMMUNICATION MAY BE BY TELEPHONE OR BY DIRECT PERSONAL CONTACT.
- RECORDS DATA FROM CONTROLLED FIELD OPERATIONS.
- Assists in performing skid tests by turning water on and off at the appropriate times and marking the test location on the paper.
- Operates the mu-meter by positioning the ink-pens, switching the machine on and inscribing road descriptions on the chart paper to indicate the location of the testing.
- Performs related work as required.

MINIMUM QUALIFICATIONS:
One year of experience equivalent to the Transportation Materials Technician II.
Special Selection Factors: None.

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CONSTRUCTION TECHNICIAN III

IDEAL CANDIDATE SHALL BE ATI AND ACI CERTIFIED – IF THIS CERITIFICATION IS NOT OBTAINED. NO COMPENSATION FOR THIS CLASS WILL BE MADE

Performs a variety of skilled activities for field and office including preparing weekly time reports, reviewing certified payrolls and developing the monthly progress estimate, etc. In addition, prepares all final documents to be submitted to Field Reports.

Example of duties assigned to this classification is:

Inspection of major construction work, such as structures, structural steel, concrete and asphaltic concrete.

Documents all phases of project progress, including material and equipment use.

Documents force account work and possible claims.

Calculates land areas, earth forms, circular curves, material quantities and other quantitative measurements.

Two years experience as a Tech II or equivalent is required. Tech III Office / Administrative personnel must have successfully completed SATS, CPE, Force Accounts, Certified Payroll, and PEN training.

Or

Possess a degree in Business / Project Administration or Education with an emphasis in Math or Science and completion of all training classes listed above.

CONSTRUCTION TECHNICIAN III, ADOT EQUIVALENT (S6)

CANDIDATE SHALL BE ATI AND ACI CERTIFIED OR AN ENGINEERING STUDENT WITH 90 SEMESTER HOURS AND 6 MONTHS HIGHWAY CONSTRUCTION EXPERIENCE.

Performs a variety of highly skilled activities

- TRANSPORTATION CONSTRUCTION TECHNICIAN III
- TRANSPORTATION MATERIALS LABORATORY TECHNICIAN III

NOTE: REFER TO HUMAN RESOURCES POSITION SPECIFICATIONS ATTACHED TO THIS SCOPE OF WORK

STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Construction Technician III Class Code: 34398
Organizations/Work Settings: Department of Transportation Class Established: 05/08/92
FLSA: NE Highway Division Revised: 09/07/00

Pay Grade: S6

WORK DESCRIPTION:
Serves as a senior level technician performing variety of highly skilled technical work related to highway construction activities. Activities include the inspection of minor construction items such as fence, grade, as subgrade materials; acting as survey party chief; performing a full range of laboratory tests on soils, aggregate, asphalt products, and other highway construction materials; or performing the most complex engineering office work; documents types and amount of materials used for each phase of construction.

WORK CONDITIONS:
Depending on area of assignment, may be exposed to extreme weather conditions; required to travel frequently and/or required to lift heavy materials; subject to hazards of moving traffic when working in construction areas.

SUPERVISION:
Works under general supervision of a project engineer or first-line supervisor and exercises some independent judgment within well established program parameters.

KNOWLEDGES APPLIED:
Methods, procedures, and techniques used in highway construction project inspection, survey, materials testing, and documentation.
Federal, state statutes and agency standards, policies, and procedures applicable to the area(s) of assignment.
Approved record keeping and documentation methods, procedures, and techniques.
Materials and equipment used for highway construction purposes.
Principles and practices of office engineering, drafting, inspection, and mathematical calculations used in construction and land surveying.

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WORK RESULTS/PRODUCTS:
Completed work assignments within assigned area(s) of construction; completed documentation of all phases of assignments

RESPONSIBILITY:
For timely and accurate completion of assigned projects; proper use, operation, maintenance, and repair of assigned equipment; scheduling and assigning work activities to assigned staff.

AUTHORITY:
To issue stop work orders when project materials and procedures are not in compliance with agency specifications; determine appropriate surveying or material testing techniques to be used.

SKILLS APPLIED:
Operating and maintaining of a variety of construction, survey, materials testing, and quality control equipment.
Analyzing and evaluating a wide variety of technical engineering data, including construction plans, field survey and quality control documentation, and completed material test results.
Interpreting and implementing standards; policies, procedures, and regulations applicable to the area of assignment.
Interpersonal relations, as applied to contacts with contractors, representatives of other governmental agencies, and other agency employees.
Verbal and written communications.

Class Code: 34398

WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
INSPECTS HIGHWAY CONSTRUCTION ON AN ONGOING BASIS TO ASSURE COMPLIANCE WITH CONTRACT AND WITH STATE AND FEDERAL STANDARDS, INSPECTIONS AND EXAMINATIONS ARE MADE OF MATERIALS, SURFACE CONDITIONS, PROPER TRACKING, STRUCTURAL FEATURES, AND OTHER RELEVANT FACTORS.
INSPECTS AND EXAMINES ENGINEERING PROJECT RECORDS, FIELD NOTES, COMPUTATIONS, AND OTHER DOCUMENTATION TO ASSURE THAT METHODS OF MEASUREMENT AND BASES FOR PAYMENT ARE IN ACCORDANCE WITH PROJECTED TRENDS, SPECIFICATIONS, SPECIAL PROJECTS, AND OTHER EXTRA WORK ORDERS.
CONFERS WITH CONSTRUCTION ENGINEERS AND CONTRACTORS REGARDING CONSTRUCTION IN PROGRESS AND ITS CONFORMANCE TO SPECIFICATIONS AND CONSTRUCTION PLANS, ANSWERS QUESTIONS, AND RESOLVES PROBLEMS.
PERFORMS TESTS IN LABORATORY ON SOIL COMPOSITION, SURFACING MATERIAL AGGREGATES, OIL AND WATER CONTENT, EMBANKMENT COMPACTION, PLANT MIX DENSITY, AND OTHER FACTORS AS REQUIRED.
CONSULTS MANUAL, RULEBOOK CODES, OR REGULATIONS IN ORDER TO FIND EXACT REQUIRED COURSE OF ACTION, DETERMINATION OR AUTHORIZATION.
USING SURVEY INSTRUMENTS AND EQUIPMENT, PERFORMS LOCATION, STRATA, TOPOGRAPHIC, BOUNDARY, DRAINAGE, AND OTHER MEASUREMENTS AS REQUIRED IN THE CONSTRUCTION OF HIGHWAYS.
Logs or records all work flowing into the work unit, processed, or flowing out, in order to have accurate history of work or work performed.
Inspects sites on proposed highway facilities in order to review all factors relating to proposals and to confirm or verify data as presented.
Draws maps showing vegetation patterns, from notes based on visual observation.
Performs related work as required.

MINIMUM QUALIFICATIONS:
Three years journey level experience in operating survey equipment; OR inspecting minor highway constructions projects, hot mix plants and concrete plants; OR performing administrative or advanced engineering and construction records maintenance and related duties; OR performing construction related materials testing/inspections. 90 semester hours applicable toward a Bachelor degree in engineering technology or closely related curriculum may substitute for one year of the required experience.
Special Selection Factors:
A medical/physical evaluation is required prior to appointment.
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STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Materials Laboratory Technician III Class Code: 97373
Organizations/Work Settings: Highways Division Class Established: 04/23/84
FLSA: NE Department of Transportation Revised: 10/02/87

WORK DESCRIPTION:
Supervises a staff of technicians engaged in inspection, sampling, and/or testing of highway construction materials on assigned projects; provides technical assistance to area project staff regarding materials sampling and testing techniques; conducts inspections of projects labs to ensure compliance with agency standards.
WORK CONDITIONS:
Frequent exposure to those hazards associated with laboratory testing; occasional exposure to those hazards associated with roadway construction.
SUPERVISION:
Works under the general direction of a first-line supervisor and exercises some independent judgment within agency standards.
KNOWLEDGES APPLIED:
Knowledge of materials inspection, sampling, and testing methods, procedures, and techniques used in highway construction.
Knowledge of Federal and State statutes and agency standards, policies, and procedures applicable to the area of assignment.
Knowledge of standard equipment and materials used for sampling and testing construction materials.
Knowledge of pertinent records and documentation required in the work unit.
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WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
DEVISES A SCHEDULE OF WORK OR ITINERARY, AGENDA, OR TIMETABLE OR ESTABLISHES PRIORITIES FOR SELF AND SUBORDINATE-LEVEL WORKERS ON A DAILY OR WEEKLY BASIS.
RESOLVES TECHNICAL OR WORK PROCEDURE PROBLEMS AND QUESTIONS PRESENTED BY SUBORDINATE-LEVEL WORKERS.
INSTRUCTS, GUIDES, AND COUNSELS SUBORDINATE-LEVEL WORKERS IN CARRYING OUT A VARIETY OF TASKS.

Pay Grade: 17
WORK RESULTS/PRODUCTS:
Completed testing of construction materials for use on the highway construction project; proper documentation of test results.
RESPONSIBILITY:
Timely and accurate completion of all materials testing assigned; scheduling and prioritizing work assignments within established time frames.
AUTHORITY:
Decisions affecting acceptance or rejection of materials; make recommendations for revisions to work unit standards, policies and procedures.
SKILLS APPLIED:
Skill in operation and maintenance of a variety of materials sampling and testing equipment used in the area of assignment.
Skill in reading and interpreting highway construction plans and specifications.
Skill in the evaluation and interpretation of completed materials test results.
Skill in the operation of motorized vehicles.

Class Code: 97373
PERFORMS TESTS IN LABORATORY ON SOIL COMPOSITION, SURFACING MATERIAL AGGREGATES, OIL AND WATER CONTENT, EMBANKMENT COMPACTION, PLANT MIX DENSITY, AND OTHER FACTORS AS REQUIRED.
MAKES CALCULATIONS BASED ON OBSERVABLE DATA IN LABORATORY.
Attends work unit staff meetings; gives and receives information; participates in problem solving and decision-making.
Confers with superior, presenting and resolving difficult problems or questions, discussing plans and actions to be

REVIEWS, VERIFIES, OR INSPECTS WORK OF SUBORDINATE-LEVEL WORKERS, FOR QUALITY CONTROL.
TRAINS NEW WORKERS ON THE JOB TO PERFORM TASKS THAT WILL BECOME PART OF EVERYDAY WORK ROUTINE.
CONSULTS MANUAL, RULE BOOK, CODES, OR REGULATIONS IN ORDER TO FIND EXACT REQUIRED COURSE OF ACTION, DETERMINATION, OR AUTHORIZATION.
OPERATES CORE DRILLING MACHINE TO TAKE MATERIALS SAMPLES FROM ROAD FOR ANALYSIS.
INSPECTS HIGHWAY CONSTRUCTION MATERIALS ON AN ONGOING BASIS TO ASSURE COMPLIANCE WITH CONTRACT AND WITH STATE AND FEDERAL STANDARDS; INSPECTIONS AND EXAMINATIONS ARE MADE OF MATERIALS, SURFACE CONDITION, PROPER TRACKING, STRUCTURAL FEATURES, AND OTHER RELEVANT FACTORS.

taken, making decisions.
Gives and receives information requiring considerable judgment and authority regarding current and specific business of the work unit by telephone or direct contact.
Using sieve scales and calculator, analyzes crushed aggregates for gradation requirements by finding the percentage of given aggregate sizes of materials sampled.
Takes soil samples of construction project and then analyzes samples in field laboratory to determine compaction and moisture content.
Performs related work as required.

MINIMUM QUALIFICATIONS:
One year of experience equivalent to a Transportation Materials Laboratory Technician II; OR a Bachelor of Science degree in civil engineering or a closely related field and six months of the required experience.
Special Selection Factors:
None.
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CONSTRUCTION TECHNICIAN IV

IDEAL CANDIDATE SHALL BE ATI AND ACI CERTIFIED – IF THIS CERITIFICATION IS NOT OBTAINED, NO COMPENSATION FOR THIS CLASS WILL BE MADE

Performs a variety of skilled activities for field and office including preparing weekly time reports, reviewing certified payrolls and developing the monthly progress estimate, etc. In addition, prepares all final documents to be submitted to Field Reports.

Exercises considerable independent judgement within general ADOT standards and guidelines.

Examples of duties assigned to this classification are:

Inspect highway construction on an ongoing basis to assure compliance with contract and in accordance with State and Federal standards.

Perform a variety of structural material tests and inspections.

Reviews construction plans and verified that these are in accordance with designated specifications and other requirements.

Participates in the preparation of completed work estimates, to determine compensation due contractor.

Examines and verifies numeric data and material specifications on project cost source documents, utilizing geometry and trigonometry calculations.

Supervises all work activities involved in construction projects, including survey, laboratory, and quality control work.

Recommends approval of proposed project changes.

Knowledge and skills required:
All knowledge and skills required of lower classifications.

Knowledge of the principles and practices of Civil Engineering as applied to the construction of state highways.

Skill in analyzing and evaluating a wide variety of highly technical engineering data, including construction plans, field survey and quality control documentation.

Skill in interpreting and implementing ADOT Standards, policies, procedures, and regulations.

Skill in interpersonal relations, as applied to contacts with contractors, representatives of other governmental jurisdictions, and other ADOT staff.

One year as a Tech III or equivalent. Tech IV Office / Administrative personnel must have successfully completed SATS, CPE, Force Accounts, Certified Payroll, Business Writing, PEN training and be proficient in Power Point, Excel, Word, etc. **OR** Possess a degree in Business /

Project Administration or Education with an emphasis in Math or Science and completion of all training classes listed above.

CONSTRUCTION TECHNICIAN IV. ADOT EQUIVALENT (S7)

CANDIDATE SHALL BE ATI AND ACI CERTIFIED or BSCE.

Exercises considerable independent judgment within general ADOT standards and guidelines.

- TRANSPORTATION CONSTRUCTION TECH IV
- TRANSPORTATION ENGINEERING ASSOCIATE
- TRANSPORTATION ENGINEERING SURVEY SENIOR TECHNICIAN
- TRAINING OFFICER I

NOTE: REFER TO HUMAN RESOURCES POSITION SPECIFICATIONS ATTACHED TO THIS SCOPE OF WORK

STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Construction Technician IV Class Code: 34399
Organizations/Work Settings: Department of Transportation Class Established: 05/08/92
Intermodal Transportation Division Revised: 09/07/00

FLSA: NE Pay Grade: S7

WORK DESCRIPTION:
Serves as a lead technician, under the direction of Engineer-In-Charge or designated representative, coordinates activities on highway construction project(s), including survey, quality control, inspection, project lab, and project office. Inspects and documents the most complex contract items, such as structures and concrete or asphalt pavement; performs related duties as necessary due to staffing requirements. Oversees the activity of a project lab performing project-related tests, and the work activities of a construction project office. May function as the primary contact for contractors, consultants, and ADOT employees on either a minor project or a segment of a major project. May resolve issues of conflict with contractors, initiate change orders, or force accounts. Schedules and reviews completed work of other employees and provides training.

WORK CONDITIONS:
Frequent travel. Considerable exposure to extreme weather conditions and hazardous traffic conditions depending upon assignment.

SUPERVISION:
Works under the general supervision of an Engineer-In-Charge of a project or representative. Assigns and directs work of project employees.

KNOWLEDGES APPLIED:
Principles and practices of civil engineering related to the construction of state highway system roadways.
Construction inspection methods, procedures, and techniques.
Construction survey and materials testing and procedures.
Project-related contract, plans, specification and documentation
Verification and review procedures and practices.
Federal, state and agency standards, policies and practices.
Approved record-keeping and documentation procedures.

WORK RESULTS/PRODUCTS:
Highway construction projects completed in compliance with agency standards and specifications. Project documentation prepared and submitted within established timelines and conforming to accepted standards and practices. Materials tests and documents completed as required by applicable specifications and standards. Project-related surveys performed timely and to acceptable tolerances.

RESPONSIBILITY:
As delegated, for ensuring the safe completion of all work assigned personally and to subordinate employees. Timely completion of assignments to acceptable standards. Ensuring that materials, equipment, and procedures used comply with agency standards. Scheduling, assigning, and reviewing the daily work activities of other technicians

AUTHORITY:
As delegated within the area of assignment. Reject materials and workmanship not in compliance with agency specifications and plans. Approve or disapprove work performed under delegated direction.

SKILLS APPLIED:
Work scheduling and management.
Analysis and preparation of data.
Written and verbal communication.
Operation of equipment for completion of assigned duties.

Materials and equipment used for highway construction and Materials testing purposes.
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WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
DEVELOP WORK SCHEDULES AND ASSIGN AND DIRECT EMPLOYEES TO MEET OVERALL EXPECTATIONS RELATED TO ASSIGNMENTS.
REVIEW TECHNICAL PROBLEMS AND DEVELOP PROCEDURES AND RECOMMENDATIONS FOR RESOLUTION OF ISSUES RELATED TO ASSIGNMENTS.
REVIEW, VERIFY AND APPROVE CALCULATIONS, TEST RESULTS AND DOCUMENTATION FOR ASSIGNMENTS.
PERFORM INSPECTION, SURVEY, DOCUMENTATION, AND TESTING AS REQUIRED FOR CONSTRUCTION PROJECTS.
CONSULT WITH CONTRACTORS, LOCAL AGENCIES, AND CITIZENS TO DEVELOP ALTERNATIVE SOLUTIONS TO RESOLVE ISSUES IN CONFLICT AT THE LOWEST LEVEL IN THE FIELD, AND PREPARE RECOMMENDATIONS FOR PROJECT MANAGEMENT.
REVIEW CONSTRUCTION PLANS, SPECIFICATIONS, AND DOCUMENTATION TO ENSURE COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.

WORK ACTIVITIES (CONTINUED) Class Code:34399
PREPARE PROJECT RELATED DOCUMENTATION TO ENSURE CONFORMANCE WITH ALL APPLICABLE LAWS, RULES, REGULATIONS, AND STANDARDS.
PROVIDE TRAINING, COACHING, AND GUIDANCE TO EMPLOYEES AS DIRECTED.
REVIEW AND VERIFY CONTRACTOR PAY QUANTITIES BEFORE DOWNLOADING INTO CPE PROGRAM.
REVIEW AND/OR PREPARE CONTRACT DOCUMENTS RELATED TO FORCE ACCOUNTS, CHANGE ORDERS, SUPPLEMENTAL AGREEMENTS, AND FINANCIAL DOCUMENTATION FOR COMPLETED PROJECTS.
Attend meetings and represent the Division as directed.
Perform related work as required.

MINIMUM QUALIFICATIONS:
Four years of experience in operating survey equipment, inspecting minor highway construction projects, hot mix and concrete plants, performing administrative or advance engineering and construction records maintenance or related duties; or a Bachelors degree in Engineering Technology or closely related profession may be substitute for the required experience.
SPECIAL SELECTION FACTORS: Employment is contingent upon passing a physical examination.
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STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Engineering Associate Class Code: 75210
Organizations/Work Settings: Highways Division Class Established: 04/23/84
FLSA: NE Department of Transportation Revised: 01/01/94
Pay Grade: 18

WORK DESCRIPTION:
Performs a variety of engineering duties for a period not to exceed 24 months in any of the areas of the Highways Division including Highway Development, Highway Operations, Traffic Engineering, or the Districts as a training program for progression to entry/journey level classes in these areas.

WORK CONDITIONS:
May be required to travel and/or work outdoors occasionally, depending on area of assignment.

SUPERVISION:
Training will be provided in the area of assignment to provide the knowledges and skills required for advancement. Direct supervision will be provided during the training period.

KNOWLEDGES APPLIED:
Knowledge of principles and practices of civil engineering, as applied to the location, design, construction, and maintenance of a State highway system.
Knowledge of agency organization and functions of the work units.
Knowledge of Federal and State statutes and agency standards, rules, and regulations applicable to the area of assignment.
Knowledge of agency safety practices and procedures.

WORK RESULTS/PRODUCTS:
Completed work projects applicable to the area of assignment.

RESPONSIBILITY:
Timely and accurate completion of all assigned projects; scheduling and prioritizing work projects within established time frames.

AUTHORITY:
Decisions that affect the work assignment as delegated by the supervisor.

SKILLS APPLIED:
Skill in the evaluation and interpretation of technical engineering records and reports.
Skill in the operation and maintenance of a variety of equipment used in the area of assignment.
Skill in interpersonal relations, as applied to contacts with other agency personnel.

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WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:

INTEGRATED INTO WORK ROUTINE, OR IN TIME SET ASIDE FOR TRAINING, ACQUIRES KNOWLEDGE AND SKILLS NEEDED FOR ADVANCEMENT TO JOURNEYMAN WORKER LEVEL IN THE WORK SYSTEM.
ATTENDS PERIODIC WORKSHOPS OR TRAINING SESSIONS TO IMPROVE WORKING KNOWLEDGE AND SKILLS AT

Class Code: 75210

CHECKS OR VERIFIES CALCULATIONS ON QUANTITY SUMMARIES FOR HIGHWAY CONSTRUCTION BID ITEMS.
CALCULATES LAND AREAS, EARTH FORMS, CIRCULAR CURVES, MATERIAL QUANTITIES, AND OTHER QUANTITATIVE MEASUREMENTS, USING GEOMETRIC AND TRIGONOMETRIC COMPUTATIONS.
EXAMINES AND VERIFIES NUMERIC DATA AND SPECIFICATIONS ON SOURCE DOCUMENTS BY RECALCULATING COMPUTATIONS, USING GEOMETRY OR

ELEMENTARY WORKING LEVEL IN WORK SYSTEM.
READS AND STUDIES INSTRUCTIONAL OR INFORMATIONAL MATERIAL IN ORDER TO INCREASE AND EXPAND KNOWLEDGE BASE AT ELEMENTARY WORKING LEVEL IN THE WORK SYSTEM.
CALCULATES HORIZONTAL ALIGNMENT OF ROADWAY FOR HIGHWAY CONSTRUCTION, FROM PRELIMINARY SURVEY DATA; LAYS OUT FOR DRAFTING
CALCULATES VERTICAL ALIGNMENT (GRADE LINE) OF ROADWAY FOR HIGHWAY CONSTRUCTION, FROM PRELIMINARY SURVEY DATA; PLOTS AND CONNECTS POINTS OF INTERSECTION TO CONSTRUCT ORIGINAL GROUND AND CONSTRUCTION PROFILES.
DEVELOPS QUANTITY SUMMARIES OF BASIC LEVEL FOR HIGHWAY CONSTRUCTION BID ITEMS; SUBMITS FOR APPROVAL OF TEAM LEADER OR SUPERVISOR.
TRIGONOMETRY.
INSPECTS CONSTRUCTION IN PROGRESS, TO ASSURE ITS CONFORMANCE WITH SPECIFICATIONS, AGREEMENTS, AND ESTABLISHED REQUIREMENTS.
REVIEWS CONSTRUCTION PLANS AND VERIFIES THAT THESE ARE IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS AND OTHER REQUIREMENTS.
WRITES FINAL DESIGN PLAN FOR A HIGHWAY CONSTRUCTION PROJECT, INCORPORATING SUMMARIES OF QUANTITY COMPUTATIONS (MATERIALS AND SERVICES), CONTRACT DOCUMENTS, AND DESIGN DETAILS.
Performs related work as required.

MINIMUM QUALIFICATIONS:
Bachelor's degree from an accredited college or university with a major in civil engineering or closely related engineering field.
Special Selection Factors:
None.
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ARIZONA STATE PERSONNEL Class Code: 97313
FLSA: NE Pay Grade: 18
Transportation Survey Group

CLASS TITLE: Transportation Engineering Survey Senior Technician

CHARACTERISTIC OF THE CLASS:

Under the direction of a Transportation Engineering Survey Specialist, performs as a lead instrument person; prepares and surveys selected sites and assists in the supervision of a field survey crew and related duties.

EXAMPLES OF DUTIES:

Prepares and surveys assigned locations; directs and assists a field survey crew to locate existing survey monuments, sets traverse points for control, sets new survey monuments for use as control points, and paints and/or sets targets for aerial mapping; directs and assists a survey crew on multiple transportation construction projects; makes minor adjustments to the organizational structure, methods and workflow to accommodate changing conditions; verifies locations of construction project items in the field and in the plans; clarifies and interprets plans for subordinates, project field personnel and contractor personnel; provides advice to project personnel, keeping them informed of project construction plan changes; performs daily tasks by demonstrating proper procedures for using specialized equipment; operates a variety of survey equipment including Global Positioning System (GPS) Satellite Receiver, and electronic levels to establish horizontal and vertical control; compiles field survey books; prepares maps, diagrams, and sketches, annotates photographs and writes field survey notes; writes detailed descriptions of survey site control points and monuments for geodetic positions and later recovery; draws maps for each project, notes angles, distances, and calculates slopes; composes and completes a transit book to record all survey data; sets or directs others to set traffic control signals on job site for workers' safety; reviews subordinates' work in progress, or upon completion, to ensure the accuracy and completeness of computations and measurements; explains and demonstrates basic survey field methods to agency field personnel; and performs other related duties such as testing and maintaining survey equipment and operating and maintaining assigned vehicle(s).

KNOWLEDGE, SKILLS, AND ABILITIES:

Requires knowledge of construction, location, or photogrammetric surveying methods, procedures and techniques; uses and capabilities of a wide variety of survey equipment such as Global Positioning Systems, geodimeters, automatic and electronic levels and personal computers; mathematics as applied to reduce and adjust field and office survey calculations, and methods and procedures used in analyzing and evaluating a variety of surveying data; Federal and State statutes and agency standards, policies and procedures applicable to the area of assignment and agency safety standards, policies and procedures; principles of supervision, training, and leadership; and computer programs applicable to functional work unit.

Requires skill in the operation of survey instruments including electronic total stations, digital and automatic levels, Global Positioning Systems equipment and theodolites; reading and interpreting a variety of technical data including plans, specifications, topographic and plat maps and aerial photographs; drafting topographic information, recordkeeping, entering data in electronic surveying equipment, field books and computers; oral and written communications, leadership and management; and interpersonal relations.

Requires ability to interpret a variety of technical data from maps, plats and aerial photographs, write field notes and use surveying equipment.

CC# 97313

Transportation Engineering Survey Senior Technician Page 2

MINIMUM QUALIFICATIONS

Four years of experience in surveying, including experience as a technician functioning as a lead worker performing activities on a survey crew. Other combinations of experience, education and/or technical training that meet the minimum requirement may be substituted for the required experience.

Must be capable of lifting and carrying 35 pounds.

A medical/physical evaluation is required prior to appointment.

National Institute for Certification in Engineering Technologies (NICET) Level III in Highway Construction or Surveying; OR National Society of Professional Surveyors (NSPS) Level III: OR registration as a Land Surveyor in Training in Arizona (LSIT) must be obtained before permanent status can be granted.

Revised: 8/18/97
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ARIZONA STATE PERSONNEL Class Code: 73621
FLSA: NE Pay Grade: 19 (Equivalent to S7)
Management Group
Personnel Management Series
CLASS TITLE: Training Officer I
CHARACTERISTICS OF THE CLASS:
Under direction, is responsible for professional work of average difficulty assisting in the development of overall training program objectives and coordinating the execution and evaluation of training activities on a department wide basis; and performs related work as required.
EXAMPLES OF DUTIES:
Participates in preparation, review and coordination of formalized in-service and out-service training programs; writes training manuals, special training materials and prepares special studies; provides technical supervision over training activities, prepares budget recommendations for meeting agency training requirements including handbooks, manuals, audiovisual aids and other related training materials; establishes and maintains training records; assists in training line and staff officials in training strategies and methods; keeps supervisor informed of progress on training objectives.
KNOWLEDGE, ABILITIES AND SKILLS:
Considerable knowledge of training strategies and methods; good knowledge of administrative and management theory and practice; good knowledge of the principles of employee training; good knowledge of the nature of the learning process; good knowledge of trends in employee training.
Ability to plan, organize, and coordinate the execution of training programs; ability to provide technical supervision in training matters; ability establish and maintain effective working relations with individuals, groups, and representatives of other organizations; ability to write training materials; and ability to speak and write effectively.
MINIMUM QUALIFICATIONS:
Bachelor's degree in business administration, public administration, a social or behavioral science or other acceptable field of study from an accredited college or university and one year experience in training; additional experience in training or other closely related personnel work may be substituted for the Bachelor's degree on a year-for-year basis.
Revised: October 1, 1998
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CONSTRUCTION TECHNICIAN (REGISTERED LAND SURVEYOR), CANDIDATE SHALL BE A REGISTERED LAND SURVEYOR

Exercises considerable independent judgement within General ADOT Standards and Guidelines

Examples of duties assigned to this classification are:

Reviews construction plans and verified that these are in accordance with designated specifications and other requirements.

Participates in the preparation of completed work estimates to determine compensation due contractor.

Examines and verifies numeric data on project cost source documents utilizing geometry, and trigonometry calculations.

Supervises all survey work activities involved in construction projects to include locating Right of Markers and lines.

Knowledge and skills required:

Knowledge of the principles and practices of Civil Engineering as applied to the construction of state highways.

Skill in analyzing and evaluating a wide variety of highly technical engineering data including construction plans, and field survey.

Skill in interpreting and implementing ADOT Standards, policies, procedures and regulations.

Skill in interpersonal relations as applied to contacts with contractors, representatives of other governmental jurisdictions, and other ADOT Staff.

CONSTRUCTION TECHNICIAN V

IDEAL CANDIDATE SHALL BE ATI AND ACI CERTIFIED.

Acts as a technical/engineering specialist performing a variety of journey level engineering technician duties in the areas of highway location, design, maintenance, traffic engineering or construction may act as supervisor for lower level staff assigned to work unit. Exercises considerable independent judgment within general ADOT standards and guidelines.

Examples of duties assigned to this classification are:

Under the general direction of a registered engineer, supervises or inspects highway construction on an ongoing basis to assure compliance with contract and in accordance with State and Federal standard.

Inspects and examines engineering project records, field notes, computations and other documentation to assure that methods of measurement and basis for payment are in accordance with projected requirements, specifications, special provisions and extra work orders.

Reviews construction plans and verified that these are in accordance with designated specifications and other requirements to include calculating of land areas, earth forms, circular curves; materials quantities and other quantitative measurements, using geometric and trigonometric computations.

Participates in the preparation of completed work estimates, to determine compensation due contractor. Attends work unit staff meetings, gives and receives information; participates in problem solving and decision making.

May supervise and or inspect all work activities involved in construction projects, including survey, laboratory, and quality control work. Recommends approval of proposed projects changes.

Knowledge and skills required:

All knowledge and skills required of lower classifications.

Knowledge of the principles and practices of Civil Engineering as applied to the development, construction, and maintenance of state highway system.

Skill in analyzing and evaluating a wide variety of engineering data, including construction plans, field survey and quality control documentation.

Skill in researching, reading and interpreting a variety of technical engineering documents such as survey data, highway plans and computer printout.

Skill in oral and written communications to include interpersonal relations, as applied to contracts with contractors, representatives of other governmental jurisdictions, and other ADOT staff.

Skill in organizing and prioritizing work assignments.

CONSTRUCTION TECHNICIAN V. ADOT EQUIVALENT (S9)
CANDIDATE SHALL BE ATI AND ACI CERTIFIED OR ENGINEERING IN TRAINING (E.I.T.) WITH 1 YEAR HIGHWAY EXPERIENCE

Project Supervisor reports directly to Resident Engineer.

- TRANSPORTATION ENGINEERING SPECIALIST
- TRANSPORTATION ENGINEERING SURVEY SPECIALIST
- TRAINING OFFICER II

NOTE: REFER TO HUMAN RESOURCES POSITION SPECIFICATIONS ATTACHED TO THIS SCOPE OF WORK

STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Engineering Specialist Class Code: 75261
Organizations/Work Settings: Highways Division Class Established: 04/23/84
Department of Transportation Revised: 10/01/96
FLSA: NE Pay Grade: 20 $
WORK DESCRIPTION:
Acts as a technical specialist performing a variety of journey level engineering duties in the areas of highway location, design, maintenance, traffic engineering or construction; may act as lead worker for lower level staff assigned to the work unit.
WORK CONDITIONS:
No unusual work conditions.
SUPERVISION:
Works under the general supervision of a first-line supervisor and exercises some independent judgment within established program parameters, policies and procedures.
KNOWLEDGES APPLIED:
Knowledge of the principles and practices of civil engineering, as applied to the development, construction, and maintenance of State Highway systems.
Knowledge of computational and adjustment factors to be applied in the review and analysis of engineering data related to the area of assignment.
Knowledge of computer programs available for use within the work unit.
Knowledge of Federal and State statutes and agency standards, policies, and procedures applicable to the area of assignment.
WORK RESULTS/PRODUCTS:
Completed review of applicable engineering data; complete, current files of engineering data relating to the work unit.
RESPONSIBILITY:
Timely completion of assigned projects; may schedule and assign work to subordinate staff assigned to the work unit.
AUTHORITY:
Determines the accuracy and completeness of information under review; makes recommendations for approval or disapproval of work projects completed in the work unit.
SKILLS APPLIED:
Skill in analyzing and evaluating a wide variety of engineering data.
Skill in researching, reading and interpreting a variety of technical engineering documents such as survey data, highway plans and computer printouts.
Skill in oral and written communications.
Skill in organizing and prioritizing work assignments.
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WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
INSPECTS LAND IN FIELD AND COMPILES DETAILED DESCRIPTION OF LAND AND FACILITIES ON THE LAND.
INSPECTS AND EXAMINES ENGINEERING PROJECT RECORDS, FIELD NOTES, COMPUTATIONS AND OTHER DOCUMENTATION TO ASSURE THAT METHODS OF MEASUREMENT AND BASIS FOR PAYMENT ARE IN ACCORDANCE WITH PROJECTED TRENDS, SPECIFICATIONS, SPECIAL PROJECTS AND EXTRA WORK ORDERS.
ESTIMATES COSTS OF FUTURE CONSTRUCTION PROJECTS IN THE PLANNING PHASE, BASED ON CALCULATIONS FROM AVAILABLE DATA.
GATHERS DATA AND SUPPLIES DATA FOR COMPUTER INPUT IN ORDER TO RECEIVE PRECISE CALCULATIONS FOR DETAILED ENGINEERING DRAWINGS AND EVALUATIONS.
CALCULATES LAND AREAS, EARTH FORMS, CIRCULAR CURVES; MATERIAL QUANTITIES AND OTHER QUANTITATIVE MEASUREMENTS, USING GEOMETRIC AND TRIGONOMETRIC COMPUTATIONS.
EXAMINES AND VERIFIES NUMERIC DATA AND SPECIFICATIONS ON SOURCE DOCUMENTS BY RECALCULATING COMPUTATIONS, USING GEOMETRY OR TRIGONOMETRY.
REVIEWS AND ANALYZES ELECTRICAL BLUEPRINTS TO ENSURE CONFORMANCE OF STANDARDS AND SPECIFICATIONS OR TO PLAN ELECTRICAL INSTALLATIONS.
Class Code: 75261
OBTAINS RELIABLE MEASUREMENTS AND ENGINEERING DATA FOR USE IN ASSIGNED AREA.
PERFORMS A VARIETY OF ENGINEERING AND RELATED DUTIES IN ONE OF A NUMBER OF AREAS, INCLUDING LOCATION, DESIGN, CONSTRUCTION, MATERIALS, AND MAINTENANCE.

Attends work unit staff meetings; gives and receives information; participates in problem solving and decision making.
Confers with agency officials, staff members and representatives of other agencies to acquire information needed for immediate determinations or decisions.
Compiles information for and writes periodic reports on activities of a work unit.
Writes detailed reports based on research, investigation or inquiry, in prescribed format or on established forms provided.
Searches blueprints, maps, charts, records, and diagrams for specific information regarding current facilities buildings construction or past work done in a future work site.
Performs related work as required.
MINIMUM QUALIFICATIONS:
Bachelor of Science degree in civil engineering or a closely related field and two years experience equivalent to a Transportation Engineering Associate; OR three years experience at a Senior Transportation Engineering Technician level (grade 18 or above); OR completion of the Arizona Department of Transportation Engineer-In-Training (E.I.T.) program; OR registration as a professional civil engineer in the State of Arizona.
Special Selection Factors:
Some positions may require a B.S.C.E.
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ARIZONA STATE PERSONNEL Class Code:97308
FLSA: VA Pay Grade: 20 $
Transportation Survey Group

CLASS TITLE: Transportation Engineering Survey Specialist

CHARACTERISTIC OF THE CLASS:

Under the direction of a Transportation Engineering Chief Surveyor, provides specialized surveying services in highway design and construction; OR may supervise a work unit or survey crew.

EXAMPLES OF DUTIES:

Reviews construction projects including details specific to the area of assignment, such as, the placement of structures, rights-of-way, earthwork quantities, signing, and traffic engineering features; reviews project plans and specifications and verifies accuracy and assures compliance; participates in project meetings and field reviews; makes recommendations to ensure plans are in compliance with design intent and established standards; formulates design alternatives; analyzes survey data and summarizes findings and recommendations; reviews project documentation, quantities and correspondence; coordinates with other project teams and agency personnel; provides technical instruction and assistance to project personnel; monitors progress and evaluates work assignments; evaluates consultants' work; participates in project progress meetings; plans and schedules work of assigned staff; long and short term project planning; establishes project deadlines and accomplishes agency goals.

KNOWLEDGE, SKILLS, AND ABILITIES:

Requires knowledge of the principles and practices of civil engineering, and geodetic and/or land surveying as applied to the development, design and construction of Transportation Systems, and/or control, location, and construction field surveys; uses and capabilities of a wide variety of survey equipment; computational and adjustment factors applied in the review and analysis of engineering and/or field surveying data related to the area of assignment; Federal and State statutes and agency standards, policies and procedures applicable to the area of assignment; public, agency and personal safety standards, policies, and procedures, and first aid techniques; and principles of supervision, training, and leadership.

Requires skill in leadership and management; oral and written communications; analyzing and evaluating a wide variety of engineering and/or survey data; operation of a wide variety of surveying equipment.

Requires ability to organize and prioritize; research, read and interpret technical engineering documents such as survey data, highway plans and computer printouts; and interpret technical data from maps, plans and aerial photographs, write field notes and use surveying equipment.

MINIMUM QUALIFICATIONS

Bachelor of Science in Civil Engineering or a closely related field; OR two years experience as a lead instrument person or lead worker assisting in the supervision of field survey crew; OR completion of the Arizona Department of Transportation Engineer-in-Training (E.I.T.) program.

National Institute for Certification in Engineering Technologies (NICET) Level IV in Highway Construction or Surveying; OR National Society for Professional Surveyors (NSPS) Level IV: OR registration as a Land Surveyor in Training (LSIT) must be obtained before permanent status can be granted.

Class Established: 08/18/97

http://www.infoaccess.com/http://www.infoaccess.com/

ARIZONA STATE PERSONNEL Class Code: 73622
FLSA: EX Pay Grade: 20 $
Management Group
Personnel Management Series
CLASS TITLE: Training Officer II
CHARACTERISTICS OF THE CLASS:
Under general direction, is responsible for difficult professional work in employee development and training including establishing training requirements and evaluation of training; and performs related work as required.
EXAMPLES OF DUTIES:
Supervises training staff; confers with line and staff officials concerning training needs and establishes a total staff training and development plan; supervises research and modifies or develops improved training strategies and methods; confers with representatives of educational or training institutions for establishment of specific training programs, seminars or courses; supervises development of training manuals, acquisition and use of audiovisual equipment, handbooks, and other training materials; coordinates and participates in special training activities; prepares reports of training for administrative review.
KNOWLEDGE, ABILITIES AND SKILLS:
Considerable knowledge of the principles of employee training; considerable knowledge of the nature of the learning process; considerable knowledge of trends in employee training; considerable knowledge of training strategies and methods; considerable knowledge of administrative and management theory and practices.
Ability to plan, organize, and coordinate execution of training programs; ability to evaluate and improve training programs' materials and courses; ability to establish and maintain effective working relations with individuals, groups and representatives of diverse agencies; ability to supervise; ability to speak and write effectively.
MINIMUM QUALIFICATIONS:
Bachelor's degree in business or public administration, a social or behavioral science or other acceptable field from an accredited college or university and three years of experience in the training field; OR a Master's degree in one of the above fields and one year of the required experience; additional experience in training administration or a position involving responsibility for a formal training program may be substituted for the required education on a month-for-month basis.
Revised: October 1, 1998
http://www.infoaccess.com/ http://www.infoaccess.com/

LANDSCAPE ARCHITECT

IDEAL CANDIDATE MUST BE REGISTERED IN THE STATE OF ARIZONA

Responsible for work of average difficulty in the design or supervision of design of landscaping projects in accordance with environmental planning concepts such as the preservation or enhancement of natural land features, and performs related work as required.

Knowledge, Abilities and Skills:

Considerable knowledge of principles, problems and methods used in landscape architecture and design, landscape construction and adaptability, requirements and use of plants, shrubs and trees, both native and cultivated in different landscaping situations; good knowledge of common plant diseases and pests and standard methods and materials used in their control and eradication; good knowledge of engineering as applied to landscaping features; good knowledge of Arizona soil conditions, soil preparation, planting, pruning techniques and tree surgery.

REGISTERED LANDSCAPE ARCHITECT. (T2 OR T3)
CANDIDATE MUST BE REGISTERED IN THE STATE OF ARIZONA

- REGISTERED LANDSCAPE ARCHITECT

NOTE: REFER TO HUMAN RESOURCES POSITION SPECIFICATIONS ATTACHED TO THIS SCOPE OF WORK

ARIZONA STATE PERSONNEL Class Code: 75561
FLSA: EX Pay Grade: 20 $

Professional Engineering and Architecture Group
General Engineering and Architecture Series

CLASS TITLE: Landscape Architect

CHARACTERISTICS OF THE CLASS:

Under direction is responsible for work of average difficulty in the design or supervision of design of landscaping projects in accordance with environmental planning concepts such as the preservation or enhancement of natural land features, and performs related work as required.

EXAMPLES OF DUTIES:

Develops preliminary and final design, plans and specifications for landscaping projects in highway roadside development, scenic, recreational or historic park or site development; assists in establishing design standards for highway roadside rest areas and historical sites; supervises initial planting,s follows through on maintenance programs, involving soil and moisture conditions, pruning practices, replacement, etc.; consults with persons within and without the department on matters involving project design development.

KNOWLEDGE, ABILITIES AND SKILLS:

Considerable knowledge of principles, problems and methods used in landscape architecture and design, landscape construction and adaptability, requirements and use of plants, shrubs and trees, both native and cultivated in different landscaping situations; good knowledge of common plant diseases and pests and standard methods and materials used in their control and eradication; good knowledge of engineering as applied to landscaping features; good knowledge of Arizona soil conditions, soil preparation, planting, pruning techniques and tree surgery.

Ability to select proper plant materials to achieve desired effects and prevent soil erosion; ability to prepare sketches and plans for beautification or other landscaping projects; ability to supervise the work of others.

MINIMUM QUALIFICATIONS:

Training and Experience:

Bachelor's degree in landscape architecture or a related field from an accredited college or university and four years experience in the field of landscape architecture; additional qualifying experience may be substituted for education on a month-for-month basis.

Licenses, Certificates or Registrations:

Registration as a landscape architect in the State of Arizona.

Revised: October 1, 1998

http://www.infoaccess.com/ http://www.infoaccess.com/

RESIDENT ENGINEER

IDEAL CANDIDATE MUST BE A REGISTERED PROFESSIONAL CIVIL OR HIGHWAY ENGINEER.

Acts as a project engineer performing a variety of engineering duties in the areas of highway location, design, maintenance, traffic engineering or construction; may act as supervisor for lower level staff assigned to the work unit. Exercises considerable independent judgment within general ADOT standards and guidelines.

Examples of duties assigned to this classification are:
Supervises or inspects highway construction on an ongoing basis to assure compliance with contract and in accordance with State and Federal standards. Inspects and examines Engineering Project Records, Field Notes, Computations and other Documentation to assure that methods of measurement and basis for payment are in accordance with projected requirements, specifications, special provisions, and extra work orders. Reviews construction plans and verifies that these are in accordance with designated specifications and other requirements to include calculating of land areas, using geometric and trigonometric computations. Prepares completed work estimates to determine the compensation due the contractor. Attends work unit staff meetings, gives and receives information; participates in problem solving and decision making. Supervises and or inspects all work activities involved in construction projects, including survey, laboratory, and quality control work. Recommend approval of proposed project changes.

PROJECT ENGINEER / RESIDENT ENGINEER (T2 OR T3)
CANDIDATE MUST BE PROFESSIONAL CIVIL OR HIGHWAY ENGINEER REGISTERED IN ARIZONA.

- TRANSPORTATION ENGINEER I
- TRANSPORTATION ENGINEER II

NOTE: REFER TO HUMAN RESOURCES POSITION SPECIFICATIONS ATTACHED TO THIS SCOPE OF WORK

STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Engineer I Class Code: 34110
Organizations/Work Settings: Department of Transportation - Highways Division
Class Established: 11/22/93 FLSA: EX Revised: 10/01/96 Pay Grade: 22 $

WORK DESCRIPTION:
Supervises the work of technical-level, non-supervisory staff involving engineering analysis, highway or structures design, maintenance, construction, or traffic engineering; OR acts as technical staff engineer engaged in the performance of senior journey-level professional engineering work; OR coordinates programs, or projects, and represents the agency before the public, other governmental agencies, consultants and/or contractors; OR acts as team leader of a professional staff.

WORK CONDITIONS: Depending on work location and assignment, may be required to work full time outside exposed to cold and heat; considerable travel away from home base may be required.

SUPERVISION:
Works under the general direction of a higher level engineer. Exercises considerable and significant independent judgment within established program parameters, policies and procedures.

KNOWLEDGES APPLIED:
Principles and practices of civil engineering as applied to design, development, construction and maintenance of the state highway system.
Federal and State statutes, agency standards, regulations, policies and procedures pertaining to area of assignment.
Safety and public relations practices.
Methods, procedures and techniques utilized in management of assigned resources.
Computer applications as they pertain to area of assignment.
Research techniques related to highly complex assignments.

WORK RESULTS/PRODUCTS:
Produces a variety of engineering related solutions and/or studies; completed project plans and specifications; completed construction projects; properly maintained highway systems; engineering related materials, reports and documents.

RESPONSIBILITY:
Schedules and assigns work activities to subordinate staff; develops detailed technical solutions, studies, documents and reports; timely and accurate completion of assigned projects.

AUTHORITY:
Approves or disapproves work related to specific area of assignment; assigns priorities as required for area of assignment.

SKILLS APPLIED:
Work supervision and leadership
Interpreting and analyzing a wide range of technical engineering data.
Oral and written communications.
Writing technical reports pertaining to assignment.
Interpersonal relations, as applied to contacts with subordinate personnel, other governmental agencies, contractors, consultants, and the public.
Developing and implementing appropriate standards procedures and priorities related to area of assignment.
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WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
ATTENDS SUPERVISORY OR WORK SYSTEM RELATED MEETINGS; GIVES AND RECEIVES INFORMATION; PARTICIPATES IN PROBLEM SOLVING AND DECISION MAKING.
DIRECTS, INSTRUCTS AND COUNSELS SUBORDINATE PERSONNEL AS REQUIRED.
REVIEWS WORK PRODUCTS FROM SUBORDINATES, CONSULTANTS OR OTHER PERSONNEL, PROVIDING TECHNICAL DIRECTION AND GUIDANCE.
CALCULATES LAND AREAS, EARTH WORK HORIZONTAL AND VERTICAL ALIGNMENTS; MATERIALS QUANTITIES AND OTHER QUANTITATIVE MEASUREMENTS, USING GEOMETRIC AND TRIGOMETIC COMPUTATIONS.
EXAMINES AND VERIFIES COMPLEX NUMERIC DATA, CONSTRUCTION PLANS AND SPECIFICATIONS.

CONFERS WITH REPRESENTATIVES OF OTHER AGENCIES, COMMUNITIES, CONSULTANTS, CONTRACTORS AND THE PUBLIC AS THE REPRESENTATIVE OF THE DEPARTMENT.
PERFORMS PREVENTIVE MAINTENANCE INSPECTIONS ON HIGHWAY STRUCTURES GIVING SPECIAL ATTENTION TO POINTS OF STRESS, FATIGUE AND LOADING.
WRITES DETAILED TECHNICAL REPORTS, AGREEMENTS, RESEARCH, INVESTIGATION, OR INQUIRY IN PRESCRIBED FORMAT.
REVIEWS, ANALYZES AND EVALUATES RESULTS OF TECHNICALLY DIFFICULT TESTS RELATING TO STRUCTURES, CONSTRUCTION AND DESIGN.
SEARCHES PLANS, MAPS, RECORDS, TECHNICAL JOURNALS FOR INFORMATION REGARDING CURRENT PROFESSIONAL PRACTICES AND PROCEDURES.

Class Code: 34110

Attends professional work seminars, meetings, conferences as a participant and representative of the department.
Analyzes, evaluates and reviews work procedures, methods and rules to make and develop work related practices.
Gives and receives information requiring judgment and knowledge regarding current and specific business practices.
Confers with supervisors to discuss work processes, incidents, problems and plans.
Pursues self improvement training to further professional development.
Reads and interprets federal, state and local codes and regulations in order to prepare or utilize reports used in work activity.
Performs related work as required.

MINIMUM QUALIFICATIONS:

Registration as a Professional Engineer in Civil Engineering or closely related field is appropriate to the area of assignment in the State of Arizona; OR eligibility for reciprocity in the State of Arizona.
Special Selection Factors:
None.
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STATE OF ARIZONA POSITION SPECIFICATION
Class Title: Transportation Engineer II Class Code: 34111
Organizations/Work Settings: Department of Transportation - Highways Division
Class Established: 11/23/93
FLSA: EX Revised: 10/01/96

Pay Grade: 23 $

WORK DESCRIPTION:
Manages, through non-professional level subordinate supervisors/professional level team leaders, work involving engineering analysis, highway or structures design, traffic engineering, maintenance, construction, or traffic engineering, which may include supervision of administrative units or function; OR acts as one of a small number of technical staff experts engaged in professional engineering consultative work requiring possession of special knowledge and application of advanced engineering practices and procedures, advising management and field staff on the most difficult, complex and technically demanding engineering assignments, and representing the agency before the public and other agencies, consultants, and contractors.

WORK CONDITIONS:
Depending on work location and assignment, may be required to work full-time outside, thus exposed to cold and heat; considerable travel away from home base may be required.

SUPERVISION:
Works under the direction of a Service Manager, District Engineer or Transportation Engineer III within established policies and procedures. Exercises considerable and significant independent judgment.

KNOWLEDGES APPLIED:
Principles and practices of civil engineering as applied to design, development, construction and maintenance of the state highway system.
Federal and State statutes, agency standards, regulations, policies and procedures pertaining to area of assignment.
Safety practices and of public relations practices.
Methods, procedures and techniques utilized in management of assigned resources.
Computer applications that pertain to area of assignment.
Research techniques related to highly complex assignments.

WORK RESULTS/PRODUCTS:
Produces a variety of engineering solutions and/or studies; completed complex project plans and specifications; completed construction projects; properly maintained highway systems; engineering materials, reports and documents.

RESPONSIBILITY:
Schedules and assigns work activities to subordinate staff; develops detailed technical solutions, studies, documents and reports; timely and accurate completion of assigned projects.

AUTHORITY:
Approves or disapproves work related to specific area of assignment; prioritizes assigned tasks as required for area assignment.

SKILLS APPLIED:
Work management and leadership.
Interpreting and analyzing a wide range of highly technical engineering data.
Oral and written communications.
Writing technical reports pertaining to assignment.
Interpersonal relations, as applied to contacts with subordinate personnel, other governmental agencies, contractors, consultants, and the public.
Developing and implementing appropriate standards, procedures and priorities related to area of assignment.
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WORK ACTIVITIES (Characteristic Tasks) - MAJOR and minor:
DIRECTS, INSTRUCTS AND COUNSELS SUBORDINATE PERSONNEL AS REQUIRED.
REVIEWS WORK PRODUCTS FROM SUBORDINATES, CONSULTANTS OR OTHER PERSONNEL PROVIDING TECHNICAL DIRECTION AND GUIDANCE.
CALCULATES LAND AREAS, EARTH WORK, HORIZONTAL AND VERTICAL ALIGNMENTS; MATERIALS QUANTITIES AND OTHER QUANTITATIVE MEASUREMENTS, USING GEOMETRIC AND TRIGOMETIC COMPUTATIONS.

EXAMINES AND VERIFIES COMPLEX NUMERIC DATA, CONSTRUCTION PLANS AND SPECIFICATIONS.
CONFERS WITH CONSTRUCTION AND OTHER CONSTRUCTION RELATED PERSONNEL AND DESIGNERS REGARDING, CONSTRUCTION, SPECIFICATIONS, PLANS AND STANDARDS
CONFERS WITH REPRESENTATIVES OF TO OTHER AGENCIES, COMMUNITIES, CONSULTANTS, CONTRACTORS AND THE PUBLIC AS THE REPRESENTATIVE OF THE DEPARTMENT.
PERFORMS PREVENTATIVE MAINTENANCE INSPECTIONS ON HIGHWAY STRUCTURES GIVING SPECIAL ATTENTION TO POINTS OF STRESS, FATIGUE AND LOADING.
WRITES DETAILED TECHNICAL REPORTS, AGREEMENTS, RESEARCH, INVESTIGATION, OR INQUIRY IN PRESCRIBED FORMAT.
REVIEWS, ANALYZES AND EVALUATES RESULTS OF TECHNICALLY DIFFICULT TESTS RELATING TO STRUCTURES, CONSTRUCTION AND DESIGN.

ATTENDS SUPERVISORY OR WORK SYSTEM RELATED MEETINGS; GIVES AND RECEIVES INFORMATION; PARTICIPATES IN PROBLEM-SOLVING AND DECISION-MAKING.
ATTENDS PROFESSIONAL WORK SEMINARS, MEETINGS, CONFERENCES AS A PARTICIPANT AND REPRESENTATIVE OF THE DEPARTMENT.
SEARCHES PLANS, MAPS RECORDS, TECHNICAL JOURNALS FOR INFORMATION REGARDING CURRENT PROFESSIONAL PRACTICES AND PROCEDURES.
TESTIFIES IN COURT OR INFORMAL HEARINGS AS AN EXPERT WITNESS.
Analyzes, evaluates and reviews work procedures, methods and rules to make and develop work related practices
Gives and receives information requiring considerable judgment and knowledge regarding current and specific business practices.
Confers with supervisors to discuss work processes, incidents, problems and plans.
Pursues self improvement training to other professional development.
Reads and interprets federal, state and local codes and
regulations in order to prepare or utilize reports used in work activity.
Performs related work as required.

MINIMUM QUALIFICATIONS:

Two years of experience equivalent to a Transportation Engineer I.
Special Selection Factors:
Registration as a Civil Engineer or closely related field which is appropriate for the area of assignment in the State of Arizona or proof of eligibility for reciprocity is required at the time of appointment.
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APPENDIX 'B'

TABLE 2 SUPERVISOR REQUIREMENTS	
Soils and Aggregate	
Field	Laboratory
Arizona Technical Institute (ATI) "Field" Certification required plus one of (a) through (g) Below.	Arizona Technical Institute (ATI) "Soils/Aggregate" Certification required plus One of (a) through (g) below.
Asphalt Concrete	
Field	Laboratory
Arizona Technical Institute (ATI) "Field" Certification required plus one of (a) through (g) Below.	Arizona Technical Institute (ATI) "Asphalt" Certification required plus one of (a) through (g) below.
Concrete	
American Concrete Institute (ACI) "Concrete Field Testing Technician Grade I" Certification plus one of (a) through (g) below.	

(a) Professional Engineer, registered in the State of Arizona, with one year of highway materials testing experience acceptable to the Department.

(b) Engineer-In-Training, certified by the State of Arizona, with two years of highway materials testing experience acceptable to the Department.

(c) Obtained a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology, Construction, or related field acceptable to the Department; and with three years of highway materials testing experience acceptable to the Department.

(d) Certified by the National Institute for Certification in Engineering Technologies (NICET) in the Construction Materials Testing field as an Engineering Technician (Level III) or higher in the appropriate subfield in which sampling and testing is being performed.

(e) Certified by NICET in the Transportation Engineering Technology field as an Engineering Technician (Level III) or higher in the Highway Materials subfield.

(f) Certified by NICET as an Engineering Technician, or higher, in Civil Engineering Technology with five years of highway materials testing experience acceptable to the Department.

(g) An individual with eight years of highway materials testing and construction experience acceptable to the Department.

APPENDIX 'C'

TABLE 3 TECHNICIAN REQUIREMENTS	
Soils and Aggregate	
Field	Laboratory
Arizona Technical Institute (ATI) "Field" Certification	Arizona Technical Institute (ATI) "Soils/Aggregate" Certification
Asphalt Concrete	
Field	Laboratory
Arizona Technical Institute (ATI) "Field" Certification	Arizona Technical Institute (ATI) "Asphalt" Certification
Concrete	
American Concrete Institute (ACI) "Concrete Field Testing Technician Grade I" Certification	

Construction Inspection

Certifications Matrix Showing Certifications Required to Receive Permanent Status to the Following Grades

Construction Technician Name: _____ **Current Grade:** _____

Tr. Engineer Worker (S1)			Tr. Construction Tech. I (S4)		Tr. Construction Tech. II (S5)		Tr. Construction Tech. III (S6)		Tr. Construction Tech. IV (S7)		Tr. Engineer Specialist (S9)	
	R		ATI Field Cert. OR		ATI Field Cert CRT3400		ATI Field Cert CRT3400		ATI Field Cert CRT3400		ATI Field Cert CRT3400	
	C											
	R		ACI Field Cert CRT3400-3410		ACI Field Cert CRT3410		ACI Field Cert CRT3410		ACI Field Cert CRT3410		ACI Field Cert CRT3410	
	C											
	R		*Earthwork Series* Sampling and Test. Module 101 TCH3300		*Earthwork Series* Excavation/ Embankment 102 TCH3301		*Earthwork Series* Subgrade/ Base 104 TCH3303		*Earthwork Series* Coach one module (+ Constr. Man.) TCH3301C-03C		*Earthwork Series* Coach Series (+ Constr. Man.)	
	T											
	C											
	R				Pipe Module 103 TCH3302		Incidental Module 105 TCH3304					
	T											
	C											
	R		*Concrete Series* Sampling and Test. Module 201 TCH3306		*Concrete Series* Incidentals Module 202 TCH3307		*Concrete Series* Major Structures Module 204 TCH3309		*Concrete Series* Coach one module (+ Constr. Man.) TCH3306C-09C		*Concrete Series* Coach Series (+ Constr. Man.)	
	T											
	C											
	R				PCCP Module 203 TCH3308							
	T											
	C											
	R		*Bituminous Series* Sampling and Test. Module 301 TCH3311		*Bituminous Series* Prime/Flush/Tack Module 302 TCH3312		*Bituminous Series* Plant Inspection Module 304 TCH3314		*Bituminous Series* Coach one module (+ Constr. Man.) TCH3311C-15C		*Bituminous Series* Coach Series (+ Constr. Man.)	
	T											
	C											
Daily Diary Documentation TCH3058	R		Workmanship Checklists TCH3043		Seal Coat Module 303 TCH3313		Paving Module 305 TCH3315					
	T											
	C											
Highway Plans Reading TCH3002	R		Force Account Documentation TCH3000				Construction Office Quantities TCH3012		Applied Const.Statistics TCH3010		Asphalt Unit Price Adj TCH3014	
	T											
	C											
Basic Work Zone Traffic Control TCH3004	R		Pay Item Documentation TCH3001		Basic Surveying TCH3120		Adv Work Zone Traffic Control TCH3005		Coaching Techniques TCH3316		Supplemental Agreements TCH3039	
	T											
	C											
Intro Applied Math TCH3015	R		Inter Applied Math TCH3016		Adv Applied Math TCH3017		Erosion and Pollution Control TCH3055		CPE Construction Progress Estimate TCH3041		CMP Procedures (CEMMS) TCH3048	
	T											
	C											
	R		Fast Inspection Forms (Pen-based) TCH3037		Roadside Safety Devices TCH3116				Cost Estimating TCH3011		Complete Project Final (1)	
	T											
	C											
Introduction to Partnering GEN5179	R		How to Conduct Partnering in the Field GEN5157						S.A.T.S TCH3038			
	T											
	C											

Note: Qualification to coach requires certification in the corresponding module.

Legend: Dates R = Registered T = Training Completed C = Passed Certification *(Dates shown are targets for training and certification availability).*

(1)Federal Aid project must be greater than $1 million with asphaltic concrete. Project final must be submitted with accurate & complete documentation with no financial errors. .**April 2, 2007**

APPENDIX "D"

Construction Lab Technician
Certifications Matrix Showing Certifications Required to Receive Permanent Status to the Following Grades

Laboratory Technician Name: **Current Grade:**

Tr. Engineer Worker (S1)			Tr. Construction Tech. I (S4)		Tr. Construction Tech. II (S5)		Tr. Construction Tech. III (S6)		Tr. Construction Tech. IV (S7)		Tr. Engineer Specialist (S9)	
›ficiency in 50% of : tests Required for ATI Soils/Agg certification (All Labs) *	R		ATI Soils/Agg certification (All Labs) CRT3401		ATI Soils/Agg certification (All Labs) CRT3401		ATI Soils/Agg certification (1,2,3,4,6,7) CRT3401		ATI Soils/Agg certification (1,2,3,4,6,7) CRT3401		ATI Soils/Agg certification (3,6) CRT3401	
	T											
	C											
Daily Diary Documentation (1) TCH3058	R				ATI Asphalt Certification (1) CRT3402		ATI Asphalt Certification (1,2,3,5,6) CRT3402		ATI Asphalt Certification (1,2,3,5,6) CRT3402		ATI Asphalt Certification (3,6) CRT3402	
	T											
	C											
	R				ACI Concrete Strength Testing Certification (1) CRT3412		ACI Concrete Strength Testing Certification (1,2,6,7) CRT3412		ACI Concrete Strength Testing Certification (1,2,6,7) CRT3412		ACI Concrete Strength Testing Certification (6) CRT3412	
	T											
	C											
	R				ACI Field Technician Grade 1 Certification (1) CRT3410		ACI Field Technician Grade 1 Certification (1,6,7) CRT3410		ACI Field Technician Grade 1 Certification (1,2,6,7) CRT3410		ACI Field Technician Grade 1 Certification (6) CRT3410	
	T											
	C											
›roductory Applied Math (All Labs) TCH3015	R		Intermediate Applied Math (All Labs) TCH3016		Advanced Applied Math (All Labs) TCH3017		Demonstrate Proficiency in PG Binder Testing (5)		ATI Field Technician Certification (2,6) CRT3400		ATI Field Technician Certification (6) CRT3400	
	T											
	C											
›asic Work Zone Safety (All Labs) TCH3004	R		Introduction to Partnering (All Labs) GEN5179		Advanced Work Zone Safety (All Labs) TCH3005		Demonstrate Proficiency in Asphalt Rubber Testing (5)					
	T											
	C											
	R						Demonstrate Proficiency in Asphalt Emulsion Testing (5)		Applied Construction Statistics (All Labs) TCH3010			
	T											
	C											
	R						Coaching Techniques (All Labs) TCH3316		Coach for 2 Certifications (All Labs)		Coach All Applicable Certifications (All Labs)	
	T											
	C											

Note: All elements in prior grades required to receive permanent status. (if applicable).
Qualification to coach requires certification in corresponding module.
R = Registered T = Training Completed C = Passed Certification

*** Proficiency required in the following test procedures** for the S1 classification:

April 2, 2007

APPENDIX 'D'

Survey Technician

Certification Matrix Showing Certifications Required to Promote to the Following Grades:

Survey Technician Name:_____ Current Grade:_____

Tr. Engineer Worker (S1)			Tr. Construction Tech. I (S4)		Tr. Engr. Survey Tech. (S5)		Tr. Engr. Senior Survey Tech. (S7)		Tr. Engr. Survey Spec. (S9)	
			NSPS Level I Certification CRT3020	Date Available	NSPS Level II Certification CRT3022	Date Available	NSPS Level III Certification CRT3025	Date Available	LSIT (AZ) or NSPS Level IV Certification CRT3027	
			Survey 101 (P) * TCH3121		Survey 201 (P) ** TCH3125		Survey 301 (P)*** TCH3129		Coach Survey 100 series	
			Survey 102 (P) * TCH3122		Survey 202 (P) ** TCH3126		Survey 302 (P) *** TCH3130		Coach Survey 200 series	
			Survey 103 (P) * TCH3123		Survey 203 (P)** TCH3127		Survey 303 (P) *** TCH3131		Coach Survey 300 series	
			Survey 104 (P) * TCH3124		Survey 204 (P) ** TCH3128		Survey 304 (P)*** TCH3132		Coaching Techniques TCH3316	
							Microstation Intro TCH3026		Intermediate Microstation TCH3027	
			Introduction to Partnering GEN5179				InRoads / Survey Select Intro.TCH3030		Intermediate InRoads / Survey Select TCH3249	
Basic Surveying TCH3120										
Highway Plans Reading TCH3002			Pay Item Documentation TCH3001		Excel Intro. GEN1306		Excel Intermediate GEN1307		Excel Advanced GEN1308	
Daily Diary Documentation TCH3058					Intro. To Word GEN1316		Intermediate Word GEN1317		Advanced Word GEN1318	
Introductory Applied Math TCH3015			Intermediate Applied Math TCH3016		Advanced Applied Math TCH3017					
Basic Work Zone Traffic Control TCH3004			Advanced Work Zone Traffic Control TCH3005		Intro to Access GEN1301		Intermediate Access GEN1302		Advanced Access GEN1303	

Note: Qualification to coach requires certification in corresponding module.

Legend: Dates R = Registered T = Training Completed C = Passed Certification N/A = Not Available (P) = Prerequisite Required Introductory Applied Math, ** Intermediate Applied Math, * Advanced Applied Math.**

April 2, 2007

APPENDIX 'D'

Construction Office

Matrix Showing Certifications Required to Receive Permanent Status to the Following Grades

Name: _____ **Current Grade:** _____

Tr. Engineer Worker (S1)			Tr. Construction Tech. I (S4)			Tr. Construction Tech. II (S5)			Tr. Construction Tech. III (S6)		
Word Introduction: Creating Documents GEN 1315	R		Powerful Business Writing GEN 5170			Access Introduction: GEN 1301			Word Intermediate GEN 1315B		
	T										
	C										
Excel Introduction: Creating Spreadsheets GEN 1305	R		**Advantage GEN 1200			**HRIS Training GEN 1242		04/03	Excel Intermediate GEN 1305B		
	T							04/03			
	C							04/03			
Intro to Outlook 2000 GEN 1335	R		Pay Item Documentation TCH 3001			ZM, Communication Skills for Employees GEN 5200-5212 (3 Days)			Construction Office Qtys TCH 3012		
	T										
	C										
**Payroll (BTS) GEN 1230	R		Introductory Applied Math TCH 3015			Intermediate Applied Math TCH 3016			Advanced Applied Math TCH 3017		
	T										
	C										
**2-Way Radio TCH 4808	R		Certified Payroll Workshop TCH3046			Highway Plans Reading TCH 3002			Asphalt Unit Price Adjustment TCH 3014		
	T										
	C										
Daily Diary Documentation TCH3058	R		Construction Progress Estimate (CPE) TCH 3041			Force Account Documentation TCH 3000			Coaching Techniques TCH 3316		N/A
	T										N/A
	C										N/A
	R										
	T										
	C										

Legend: Dates R = Registered T = Training Completed C = Passed Certification N/A = Not Available

**** Not required for Field Reports**

(1) Federal Aid Project must be greater than $1 million with asphalt concrete. Project final submitted with accurate and complete documentation and no financial errors.

April 2, 2007

APPENDIX 'D'

Traffic Signal and Lighting

Certifications Matrix Showing Certifications Required to Receive Permanent Status to the Following Grades

Technician Name: _____ **Current Grade:** _____

Tr. Engineer Worker (S1)	Tr. Construction Tech. I (S4)	Traffic Signal & Lighting Technician I (S5)		Traffic Signal & Lighting Technician II (S6)	Traffic Signal & Lighting Crew Supervisor (S7)	Traffic Signal & Lighting Section Manager (S9)
		IMSA Work Zone Safety Specialist CRT3180	R T C	IMSA Work Zone Safety Specialist CRT3180	IMSA Work Zone Safety Specialist CRT3180	IMSA Work Zone Safety Specialist CRT3180
		IMSA Traffic Signal Technician Level I CRT3181	R T C	IMSA Traffic Signal Technician Level I CRT3181 **or**	IMSA Traffic Signal Technician Level I CRT3181	IMSA Traffic Signal Technician Level I CRT3181
		**Daily Diary Documentation TCH3058	R T C	IMSA Traffic Signal Inspector CRT3183	IMSA Traffic Signal Technician Level II CRT3182B **or**	IMSA Traffic Signal Technician Level II CRT3182B
		Basic Work Zone Traffic Control TCH3004	R T C	Advanced Work Zone Traffic Control TCH3005	IMSA Traffic Signal Electrician Level II CRT3182A	IMSA Traffic Signal Electrician Level II CRT3182A
		Introduction to Partnering GEN5179	R T C	**Fast Inspection Forms (Pen Based Operations) TCH3037	**Force Account Documentation TCH3000	
		Introductory Applied Math TCH3015	R T C	Intermediate Applied Math TCH3016	Advanced Applied Math TCH3017	**Applied Construction Statistics TCH3010
		Highway Plans Reading TCH3002	R T C	**Pay Item Documentation TCH3001	**Cost Estimating TCH3011	**Supplemental Agreements TCH3039

S1 and S4 are not used in this series

Legend: Dates R = Registered T = Training Completed C = Passed Certification

**Not required for maintenance only personnel

APPENDIX "D"

Landscape Inspection

Certifications Matrix Showing Certifications Required to Receive Permanent Status to the Following Grades

Construction Technician Name:_____ **Current Grade:**_____

Tr. Engineer Worker (S1)			Tr. Construction Tech. I (S4)		Tr. Construction Tech. II (S5)		Tr. Construction Tech. III (S6)		Tr. Construction Tech. IV (S7)		Tr. Engineer Specialist (S9)	
	R		ATI Field Cert. OR		ATI Field Certification		ATI Field Certification		ATI Field Certification		ATI Field Certification	
	C											
	R		ACI Field Certification		ACI Field Certification		ACI Field Certification		ACI Field Certification		ACI Field Certification	
	C											
	R		*Earthwork Series* Sampling and Test. Module 101		*Earthwork Series* Excavation/ Embankment 102		*Earthwork Series* Subgrade/ Base 104		*Earthwork Series* Coach one module (+ Constr. Man.)		*Earthwork Series* Coach Series (+ Constr. Man.)	
	T											
	C											
	R				Pipe Module 103		Incidental Modules 105					
	T											
	C											
	R		*Concrete Series* Sampling and Test. Module 201		*Concrete Series* Incidentals Module 202				*Concrete Series* Coach one module (+ Constr. Man.)		*Concrete Series* Coach Series (+ Constr. Man.)	
	T											
	C											
	R				*Irrigation Series* Basic Module _01		*Irrigation Series* Advanced Module _02		*Irrigation Series* Coach one module (+ Constr Man.)		*Irrigation Series* Coach Series (+ Constr. Man.)	
	T											
	C											
	R		*Landscape Series* Basic Module _01		*Seeding*		*Landscape Series* Advanced Module _02		*Landscape Series* Coach one module (+ Constr. Man.)		*Landscape Series* Coach Series (+ Constr. Man.)	
	T											
	C			6/08		12/07		12/08				
Highway Plans Reading	R		*Pay Item Documentation		*Force Account Documentation		*Construction Office Quantities		*Applied Construction Statistics		*Supplemental Agreements	
	T											
	C											
Basic Work Zone Traffic Control	R		*Fast Inspection Forms (Pen-based Operation)		Basic Surveying		Advanced Work Zone Traffic Control		*CPE Construction Progress Estimate		*CMP Procedures (CEMMS)	
	T											
	C											
Introductory Applied Math	R		Intermediate Applied Math		Advanced Applied Math				Cost Estimating			
	T											
	C											
Daily Diary Documentation	R				Roadside Safety Devices				Coaching Techniques			
	T											
	C											
	R				Introduction to Partnering							
	T											
	C											
	C											

Note: Qualification to coach requires certification in the corresponding module.

Legend: Dates R = Registered T = Training Completed C = Passed Certification *(Dates shown are targets for training and certification availability).*

***Not required for Maintenance only employees**

April 2, 2007

APPENDIX "D"

Transportation Engineering Associate (TEA)

Matrix showing Certifications Required to be Granted Permanent Status to TEA

Name _____ **Current Grade** _____

TEA: required within 2 years of hire date, regardless of assignment			**TEAs with BCSE assigned to or wanting to be assigned to Construction Orgs: These classes are required to be completed within 4 years from the date of hire. An asterisk (*) indicates specific classes that it is desirable to take within the first two years for personnel wanting to be assigned to Construction Orgs.**							
Highway Plans Reading	R		*Earthwork Series* Sampling and Test. Module 101		*Earthwork Series* Excavation/ Embankment 102		*Earthwork Series* Subgrade/Base Module 104		Teach one the following:	
	T									
	C									
Pay Item Documentation	R				*Earthwork Series* Pipe Module 103		*Earthwork Series* Incidental Module 105		Earthwork Series Concrete Series Bituminous Series	
	T									
	C									
Basic Work Zone Traffic Control	R		*Concrete Series* Sampling and Test. Module 201		*Concrete Series* Incidentals Module 202		*Concrete Series* Major Structures Module 204			
	T									
	C									
Roadside Safety Devices	R				*Concrete Series* PCCP Module 203					
	T									
	C									
Daily Diary Documentation	R		*Bituminous Series* Sampling and Test. Module 301		*Bituminous Series* Prime/Flush/Tack Module 302					
	T									
	C									
Introduction to Partnering	R		*Construction Office Quantities		*Bituminous Series* Seal Coat Module 303		*Bituminous Series* Paving Module 305			
	T									
	C									
Advanced Work Zone Traffic Control	R		*Applied Construction Statistic		Force Account Documentation					
	T									
	C									
Cost Estimating	R		*CPE		Asphalt Unit Price Adjustment					
	T									
	C									
Supplemental Agreements	R		*CMP Procedures		How to Make Partnering Work in the Field		Signing Inspection			
	T									
	C									

Note: Qualification to teach requires certification in the corresponding module.

Legend: Dates R = Registered T = Training Completed C = Passed Certification *(Dates shown are targets for training and certification availability).*

March 28, 2007

APPENDIX "F"

ARIZONA DEPARTMENT OF TRANSPORTATION
REQUEST FORM

To (CMA):
District:

From:

Date of Request:

Request Made By:

Report To:

Address:

Org:

Phone:

Classification:

Certifications:

Type of Work:

Misc. Req. (Computers, etc.):

Start Date:

Start Time:

Duration:

Vehicle Required:

Phone Required:

Per Diem:

Tracs Number:

Call Out Name:

SECTION IX

ADVANCE AGREEMENT CHECKLIST

ARIZONA DEPARTMENT OF TRANSPORTATION

ENGINEERING CONSULTANTS SECTION

ADVANCE AGREEMENT CHECK LIST
(See FAR 31.109)

1. Direct Labor

Direct labor will be billed at actual costs, as defined in FAR 31.001, unless a specific classification or individual's billing rate is capped. However, for partners, sole proprietors and Limited Liability Companies (LLCs) where owners may not be paid an hourly wage or salary, direct labor will be billed at rates agreed to by ADOT. (Also see **Compensation for Personal Services.**)

Only the pay rates of those employees who will likely be expected to be directly involved on the Project stated in the Contract can be used in developing cost proposal rates.

2. Home Office Allocations or Similar Allocated Costs

FAR 31.109(h)(14) states, "General and administrative costs (e.g., corporate, division, or branch allocations) attributable to the general management, supervision, and conduct of the contractor's business as a whole." These costs may represent a significant portion of indirect (Overhead) costs.

All Cost Principles addressed in the Contract Cost Allowability Guidelines and Policies ("CCAGP") must be followed by a Consultant/Subconsultant's home office, division or other related entity that allocates costs to the Consultant/Subconsultant (see the CCAGP **A.5. Allocability of Costs**). These costs should be identified and agreed to in advance as to the amounts considered reasonable and allocable to ADOT contracts.

3. Overhead Rates by Type of Engineering Discipline or Specialty

Firms qualified to provide more than one engineering discipline or specialty must be able to substantiate separate overhead rates for each of the following disciplines:

- Construction Administration (CEI)
- Design
- Geotech
- Supplemental Services

4. Compensation for Personal Services

See CCAGP **B.31.205-6 Compensation for Personal Services.**

Compensation for personal services is normally the most significant element of indirect cost. The components of compensation for personal services should be identified and the amounts to be considered reasonable and allocable to ADOT contracts agreed to in advance.

In particular, the following elements of Compensation for Personal Services, if applicable, should be agreed to in advance:

- Both the reasonableness and allocability of compensation paid to partners, sole proprietors, or owners and family members of same, along with highly compensated employees.
- Allowability of bonuses. Under above reference, see 2. *Bonuses and incentive compensation*.

5. Cost of Money

If this item is requested, it must be properly proposed as a separate line item in the Derivation of Costs Proposal, and documented in accordance with 31.205-10. Also see FAR 31.201-1.

6. Bid and Proposal Costs (see FAR 31.205-18) and Selling/Marketing Costs (see FAR 31.205-38)

Bid and proposal costs and selling/marketing costs will be looked at carefully in the preaward review. Any unreasonable and/or unallocable costs being claimed will be disallowed. Adequate documentation will be expected for such claimed costs. Unallowable portions will be expected to be properly identified.

7. Other Direct Costs

It will be expected that Other Direct Costs (any expense/cost other than Direct Labor and Subconsultants) be included in the Overhead cost pool. If a Consultant/Subconsultant proposes Other Direct Costs, it will need to obtain prior approval of its accounting methods by ADOT's Office of Audit & Analysis—External Audit Team before it can include such costs in its Derivation of Costs Proposal submitted to ADOT's Engineering Consultants Section.

7. Other Direct Costs, continued

The list of incidental costs that follow should not be considered to be "all-inclusive". However, the items noted below are specific costs ADOT has identified as being onerous to deal with as Other Direct Costs. Most Consultants/Subconsultants already include such costs in Overhead cost pools.

- Audio/Video equipment and supplies, including VCRs and video cameras
- Cell phones
- Copy machines
- Densometer
- FAX
- Internet/electronic mail
- Mileage for company vehicles
- Office space considered to be "extra". (Exception is for Construction Administration field office.)
- Postage and/or Courier
- Survey supplies
- Telephone calls--both local and long distant

Additional points to consider:

- If a Consultant/Subconsultant does not have separate cost pools (for example CADD and Reproduction Costs), ADOT believes it will be very difficult to adequately substantiate such costs.

- Be aware that if the costs of specific services normally provided by a Consultant/ Subconsultant are included in its Overhead Cost Pool, then any unexpected costs that may be incurred to provide those same services must be charged to an Overhead cost account. Any questions regarding this matter should be directed by ADOT's Office of Audit & Analysis—External Audit Team.

8. Incidental Costs Which Should Normally Be Charged Directly to the Contract

- Lease/rental of vehicles or other specialty equipment. (This cost should be substantiated by evidence of appropriate bidding including support for the bid accepted.)
- Mobilization of equipment.
- Travel and Lodging, including per diem, following ADOT's Travel Authorization Policy.
- Special reproduction costs provided by outside vendors

SECTION X

BOILER PLATE CONTRACT

Contract No.: 07-19
TRACS No.: Various
Project No.: Various

A.G. Contract No: KR94-1408ALS

CONSULTANT CONTRACT

This CONTRACT is made and entered into on _____ by and between the State of Arizona, Arizona Department of Transportation, Intermodal Transportation Division, acting by and through the Director, hereinafter called STATE, and

(Consultants Name and Address Inserted Here)

hereinafter called the CONSULTANT.

The Description and Location of the CONTRACT and related project(s) are as follows:

Description:

TEMPORARY TECHNICAL ENGINEERING PERSONNEL

Location:

Various locations throughout the State of Arizona

RECITALS

1. The STATE desires that professional temporary technical engineering services are provided, on an as-needed basis for locations throughout the State of Arizona. The trained personnel needed for the CONTRACT and related project(s) are not currently available within its own organization.

2. The CONSULTANT firm with its principals and employees is considered to be qualified and otherwise capable of performing the work required by this contract in the time allotted.

3. Therefore, pursuant to Arizona Revised Statutes, Section 28-1803(5) it is deemed to be in the public interest to enter into this contract.

AGREEMENT

Therefore, in consideration of these premises and of the mutual clauses and agreements herein contained, and the faithful performance thereof, the CONSULTANT and the STATE contract and agree:

2.01 SCOPE OF WORK

The CONSULTANT shall perform engineering services for the satisfactory completion of the CONTRACT and related project(s) as detailed and described in the following Scope of Work dated _____ , 20____ which is considered to be a part of this CONTRACT.

(Scope of Work Inserted Here)

3.01 CONTRACT SCHEDULE AND COMPLETION DATE

Work on the CONTRACT and related project(s) is scheduled to commence on _____. Work is to be completed within 365 calendar days from notice to proceed for an estimated completion date of _____. The STATE assumes no liability for work performed or costs incurred prior to the beginning date or subsequent to the CONTRACT completion date. The STATE retains the option of extending the CONTRACT for two additional one year periods. Extensions of time allowed for completing the CONTRACT may be granted under appropriate circumstances.

3.02 CONSULTANT'S COMPENSATION - SPECIFIC RATES OF COMPENSATION

1. The method of payment for this contract is Specific Rates of Compensation. Total compensation for the work performed shall not exceed the sum of $_____ plus approved adjustments.

2. The STATE shall pay the CONSULTANT in monthly installments based upon Progress and Final Payment Reports submitted by the CONSULTANT in ADOT's format and in accordance with the specific rates price schedule in the Contract.

3. a. The Specific Billing Rate includes the CONSULTANT'S direct labor, indirect costs (overhead) and fixed fee costs.

   b. Other Direct Costs shall be separately approved by the STATE. These are direct expenses for travel, subsistence, per diem, or other mutually agreed upon expenses of a non-routine nature which can be identified directly to this CONTRACT.

4. Costs are to be identified separately for each project number. Costs for each category must not exceed the amounts budgeted for those specific categories during the contract time frame without prior written approval of the STATE.

5. The STATE shall not withhold retention on progress payments. However, if satisfactory progress has not been made, the STATE may first retain a maximum of 10% of the current and subsequent billings, or secondly, the STATE may refuse to make full progress payment(s) of such sums which are considered necessary.

6. When all work is delivered, accepted and approved as complete by the STATE, the ADOT Office of Audit and Analysis may prepare a report showing allowable costs incurred. Preparation of this report may require an audit examination of the CONSULTANT'S records. This may also include an examination of subconsultants or subcontractors records.

7. Final payment shall be made as soon as possible after 60 days from the date of acceptance of the audit findings, if applicable, by the STATE and the CONSULTANT.

4.01 CONTRACT MODIFICATIONS

1. Contract modifications, defining and limiting the terms of the contract and compensation, must be approved by the STATE, and shall be submitted in the form and format provided by the STATE. The CONSULTANT will be compensated only with prior written authorization by the STATE. Any administrative/technical costs associated with the preparation of said modifications are solely the responsibility of the CONSULTANT.

   a. Supplemental Agreements

   Significant changes in the scope, character, or complexity of the work may be negotiated if it is mutually agreed that such changes are desirable and necessary. Contract changes defining and limiting the work and compensation must be authorized by the STATE. Such supplemental agreement(s) shall be made inwriting, and it is expressly understood and agreed that no claim for extra work performed or materials furnished shall be made by the CONSULTANT until authorization to proceed is granted, in writing, by the STATE.

   b. Changes Orders

   The STATE may at any time, by written order, and without notice to sureties, if any, make (or direct) changes within the general scope of this CONTRACT in the services to be performed.

4.02 DELAYS AND EXTENSIONS

The CONSULTANT agrees that no charges or claims for damages shall be made against the STATE for any delays or hindrances during the progress of this CONTRACT. Such delays or hindrances, if any, will be covered by an extension of time for such reasonable period as mutually agreed upon between the parties. It is agreed and understood, however, that permission to proceed with the CONTRACT after the established completion date, shall not be construed as a waiver by the STATE of any of its rights herein.

4.03 LATE SUBMITTAL OF INVOICE

Unless waived by the STATE, in writing, all invoices for work performed under this CONTRACT shall be submitted within 60 days from date of acceptance of the completed portion of the work performed.

4.04 PERFORMANCE EVALUATIONS

The CONSULTANT'S performance will be evaluated periodically in accordance with the schedule set forth in Appendix ___ of this CONTRACT.

4.05 GENERAL COMPLIANCE WITH LAWS

The CONSULTANT shall comply with all Federal and State laws, and local ordinances and regulations.

4.06 LITIGATION

In the event of litigation between the CONSULTANT and the STATE involving this CONTRACT, the laws and decisions of the State of Arizona shall apply and any such litigation shall be commenced and prosecuted in the appropriate court of competent jurisdiction of the Federal or State Court System within the geographical boundaries of the State of Arizona.

4.07 DISPUTE ESCALATION (Administrative Review)

A written dispute escalation process will be utilized to resolve questions of fact during the course of this CONTRACT. The final determination will be made by the STATE.

4.08 ARBITRATION

The parties agree to use arbitration, after exhausting applicable administrative reviews, to resolve disputes arising out of this agreement where the sole relief sought is monetary damages of $100,000, or less, exclusive of interest and costs.

4.09 TERMINATION, POSTPONEMENT OR ABANDONMENT

1. The right is reserved by the STATE to terminate, indefinitely postpone work, or abandon the CONTRACT. The STATE may terminate this CONTRACT in any one of the following circumstances:

   a. Failure of the CONSULTANT to perform the services as detailed herein and in any modifications to this CONTRACT.

   b. Failure of the CONSULTANT to complete this CONTRACT within the time specified herein and in any modifications to this CONTRACT.

   c. Failure of the CONSULTANT to comply with any of the terms of this CONTRACT.

   d. When, for any reason, the STATE shall determine that such termination is in its best interest.

2. If the STATE contemplates termination under the provisions of paragraphs 1.a., 1.b., or 1.c. above, the CONSULTANT shall have five (5) days in which to cure such failure. In the event the CONSULTANT does not cure such failure, the STATE may terminate the CONTRACT without further consideration.

3. If, after Notice of Termination of this CONTRACT under the provisions of 1.a., 1.b. or 1.c. of this clause, it is determined that the CONSULTANT was not in violation or default, the Notice of Termination shall be deemed to have been issued under the terms of 1.d. of this clause.

4. Termination shall be effected by delivery to the CONSULTANT of a Notice of Termination specifying whether termination is for default of the CONSULTANT or for the convenience of the STATE, the extent to which performance of the CONTRACT is terminated, and the date upon which such termination becomes effective.

5. In the event of termination, the STATE shall be liable to the CONSULTANT only to the extent and as provided in SECTION 3.02 (CONSULTANTS'S COMPENSATION) of this CONTRACT.

6. In the event this CONTRACT is terminated, the STATE shall have the option of completing the CONTRACT, or entering into an agreement with another party for the completion of this CONTRACT according to the provisions and agreements herein.

7. If the STATE exercises this option, all costs and charges incurred by the STATE, together with the cost of completing the work under CONTRACT, will be deducted from any monies due or which may become due the CONSULTANT.

4.10 CANCELLATION OF STATE CONTRACTS

In accordance with Arizona Revised Statutes 38-511, the STATE may cancel any CONTRACT, without penalty or further obligation, made after the effective date of this section by the STATE 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 STATE 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. The cancellation shall be effective when written notice from the STATE is received by all other parties to the CONTRACT unless the notice specifies a later time.

4.11 SUCCESSORS AND ASSIGNS

The CONSULTANT and all successors, executors, administrators and assigns of CONSULTANT'S interest in the work or the compensation herein provided shall be bound to the STATE to the full legal extent to which the CONSULTANT is bound with respect to each of the terms and agreements of this CONTRACT.

4.12 CONTINUING OBLIGATION

The CONSULTANT agrees that if because of death or any other occurrence it becomes impossible for any principal or employee of the CONSULTANT to render the services required under this CONTRACT, neither the CONSULTANT nor the surviving principals shall

be relieved of any obligation to render complete performance. However, in such event, the STATE may terminate this CONTRACT if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect the CONSULTANT'S ability to satisfactorily complete the performance of this CONTRACT.

4.13 INSURANCE

1. Without limiting any liabilities or any other obligations of the CONSULTANT, the CONSULTANT shall provide and maintain the minimum insurance coverage listed below.

   Coverage will be provided with forms and insurers acceptable to ADOT and maintained at a minimum until obligations under this CONTRACT are satisfied.

   a. If applicable, Workmen's Compensation insurance to cover obligations imposed by Federal and State statutes having jurisdiction of its employees engaged in the performance of the services, and Employers' Liability insurance with a minimum limit of one hundred thousand dollars ($100,000). Evidence of qualified self-insured status shall suffice for this section.

   b. Architects' and Engineer's Professional Liability insurance in the amount of one million dollars ($1,000,000) each claim, with said coverage to remain in force and effect for a minimum of one year past ADOT's acceptance of the CONTRACT.

   c. Comprehensive General Liability insurance with a minimum combined single limit of one million dollars ($1,000,000) each occurrence. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, contractors protective, products and completed operations. Said policy shall contain a severability of interest clause.

   d. Commercial Automobile Liability coverage with a combined single limit for bodily injury and property damage of not less than one million dollars ($1,000,000) for all owned, leased, hired and non-owned vehicles. The State of Arizona and the Arizona Department of Transportation must be named as Additional Insureds and Certificate Holder on the policy.

   e. Valuable Papers insurance in an amount sufficient to assure the restoration of any documents, memoranda, reports, or other similar data relating to the work of the CONSULTANT used in the completion of this CONTRACT.

   f. The policy required by Sections c. and e. above shall be endorsed to include the STATE and ADOT, its agents and officials and employees as additional insureds and shall stipulate that the insurance afforded CONSULTANT shall be primary insurance and that any insurance carried by ADOT, its agents, officials or employees shall be excess and not contributory insurance to that provided by CONSULTANT.

g. A certificate of insurance acceptable to ADOT shall be issued to ADOT prior to commencement of the CONTRACT as evidence that policies providing the required coverages, conditions and limits are in full force and effect. Such certificate shall contain provisions that coverage afforded under the policies will not be cancelled, terminated or materially altered until at least 30 days prior written notice has been given to ADOT.

4.14 INDEMNIFICATION - RESPONSIBILITY FOR CLAIMS AND LIABILITIES

1. For Professional Liability

To the fullest extent permitted by law, the CONSULTANT shall indemnify and hold harmless the State of Arizona, its agents, representatives and employees from and against liability for loss or damage resulting from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant, but only to the extent the loss or damage results from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant.

2. For Other than Professional Liability

To the fullest extent permitted by law, the CONSULTANT shall indemnify and hold harmless the State of Arizona, its agents, representatives and employees from and against liability for loss or damage resulting from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant, but only to the extent the loss or damage results from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant.

4.15 ANTITRUST VIOLATIONS

The CONSULTANT and the STATE recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact borne by Purchaser or ultimate user: in this case, the STATE. Therefore, CONSULTANT, acting as a Vendor, hereby assigns to the STATE any and all claims for such overcharges.

4.16 LIQUIDATED DAMAGES

(This is an optional provision applied, on an exception basis, primarily to contracts initiated and administered by the Arizona Transportation Research Center - Not applicable to this contract)

4.17 CONSULTANT'S RESPONSIBILITY

The CONSULTANT has total responsibility for the accuracy and correctness of plans and related data prepared under the terms of this CONTRACT, and shall check all such material accordingly for completeness, missing items, correct multipliers and consistency. The plans will be reviewed by ADOT for conformity with ADOT procedures and contract terms. Review by ADOT does not include detailed review or checking of design of major components and related details or the accuracy with which such designs are depicted on the plans.

4.18 ACCURACY OF WORK

Acceptance of the work by the STATE will not relieve the CONSULTANT of the responsibility for subsequent correction of any such errors and the clarification of any ambiguities. The CONSULTANT shall make all necessary revisions or corrections resulting from errors and omissions on the part of the CONSULTANT without additional compensation.

4.19 CONSULTANT'S ENDORSEMENT OF PLANS, ETC.

The CONSULTANT'S seal shall be endorsed and affixed to plans, reports and engineering data furnished under this CONTRACT.

4.20 PROFESSIONAL CONDUCT

The CONSULTANT shall comply with the provisions of A.C.R.R.R4-30-301 (which is the official compilation of the Administrative Rules and Regulations for the State of Arizona), entitled Rules of Professional Conduct, Rules of the State Board of Technical Registration for Architects, Assayers, Engineers, Geologists, Landscape Architects and Land Surveyors, which are incorporated herein by reference and hereby made a part of the CONTRACT.

4.21 IMPROPER EXERCISE OF AUTHORITY

It is further understood and agreed that the CONSULTANT shall not in any way exercise any portion of the authority or powers of the State of Arizona, and shall not make a contract or commitment, or in any way represent itself as an agent of the State of Arizona beyond the scope of this CONTRACT unless expressly authorized, in writing, by the STATE.

4.22 CONFLICTS OF INTEREST

1. The CONSULTANT shall not engage the services on this CONTRACT of any present or former STATE employee who was involved as a decision maker in the selection or approval processes or who negotiated and/or approved billings or contract modifications for this CONTRACT.

2. The CONSULTANT agrees that no public or private interest exists and none shall be acquired directly or indirectly which would conflict in any manner with the performance of the CONTRACT.

4.23 ORGANIZATIONAL CONFLICTS OF INTEREST

1. No contract for the construction of a project shall be awarded to the firm that designed the project, or its subsidiaries, affiliates, the parent company or subconsultants, except with the written approval of the STATE.

2. The applicability of the above also applies to a Management and/or General Consultant or any of its subsidiaries, affiliates, the parent company or subconsultants that were involved in any aspect of the design process.

4.23.1 CONSULTANT - CONTRACTOR CONFLICTS OF INTEREST

The CONSULTANT agrees that it shall not perform services on this project for the contractor, sub-contractor or any supplier.

The CONSULTANT shall not negotiate, contract, or make any agreement with the contractor, subcontractor or any supplier with regard to any of the work under this project, or any services, equipment or facilities to be used on this project.

4.24 ORGANIZATION EMPLOYMENT DISCLAIMER

1. The CONTRACT is not intended to constitute, create, give to, or otherwise recognize a joint venture agreement or relationship, partnership, or formal business organization of any kind, and the rights and obligations of the parties shall be only those expressly set forth in the CONTRACT.

2. The parties agree that no persons supplied by the CONSULTANT in the performance of CONSULTANT's obligations under the CONTRACT are considered to be STATE employees, and that no rights of State civil service, retirement or personnel rules accrue to such persons. The CONSULTANT shall have total responsibility for all salaries, wages, bonuses, retirement, withholdings, workmen's compensation, occupational disease compensation, unemployment compensation, other employee benefits and all taxes and premiums appurtenant thereto concerning such persons, and shall save and hold the STATE harmless with respect thereto.

4.25 NONPROCUREMENT DEBARMENT AND SUSPENSION

1. In accordance with 49 CFR 29.505, and by signature on this CONTRACT, the CONSULTANT certifies its' compliance, and the compliance of any subconsultants or subcontractors present or future, by stating that any person associated therewith in the capacity of owner, partner, director, officer, principal investor, project director, manager, auditor, or any position of authority involving Federal Funds:

   a) is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal Agency;

   b) does not have a proposed debarment pending;

c) has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal Agency within the past 3 years; and

d) has not been indicted, convicted, or had a civil judgment rendered against the firm by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years as specified by 49 CFR paragraph 29.305(a).

Where the CONSULTANT or subconsultant is unable to certify to the statement in 4.26.1(a) above, the CONSULTANT or subconsultant will be declared ineligible to enter into CONTRACT or participate in the project.

Where the CONSULTANT is unable to certify to any of the statements as listed in 4.26.1 (b), (c) or (d), the CONSULTANT shall submit a written explanation to the STATE. The certification or explanation will be considered in connection with the STATE's determination whether to enter into CONTRACT.

2. The CONSULTANT shall provide immediate written notice to the Department if at any time the CONSULTANT or any subconsultants or subcontractors, present or future, learn that its Debarment and Suspension certification has become erroneous by reason of changed circumstances.

4.26 COVENANT AGAINST CONTINGENT FEES

The CONSULTANT warrants that he has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this CONTRACT, and that he has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this CONTRACT. For breach or violation of this warranty, the STATE shall have the right to annul this CONTRACT without liability, or in its discretion, to deduct from the contract price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

4.27 SUBLETTING, ASSIGNMENTS AND TRANSFERS

The CONSULTANT firm was chosen to perform the work on this CONTRACT based upon training and qualifications of its members. Therefore, subletting, assignment or transfer of any work to subconsultants and lower tier subconsultants, unless approved in writing by the STATE prior to performance of work, is expressly prohibited.

4.28 SUBCONSULTANTS (Specific Rates of Compensation)

1. The CONSULTANT may retain Subconsultants on an "as required" basis, provided that the Subconsultants selected, and the rates to be paid, are identified on each Subconsultant's DERIVATION OF COST PROPOSAL located in the SCOPE OF WORK section, Appendix _____ of the CONTRACT, or are approved by contract modification, or by Administrative Determination Letter, as applicable. The specific rates for each Subconsultant, when applicable, will be the rate stipulated in each Subconsultant's final DERIVATION OF COST PROPOSAL, as concurred with by the STATE.

   The specific rates for all Subconsultants are developed from the Subconsultant's Direct Labor, Indirect Costs (Overhead) and the Fee. The Indirect Costs (Overhead) of the Subconsultants are subject to audit unless waived by the STATE. All provisions of paragraph 3 apply to the Subconsultants. The cost to the STATE for Subconsultants shall be in amounts equal to the actual allowable costs paid to the Subconsultants.

2. The volume of work performed by the Subconsultants shall not exceed 49% of the total contract value unless waived by the STATE.

4.29 SUBCONTRACTS

The CONSULTANT agrees to insert in all subcontracts the clauses hereof entitled "Civil Rights," "Affirmative Action," "Ownership of Documents," "Patents and Copyrights", "Anti Lobbying and Disclosure," "Retention of Records," and "Immigration". The CONSULTANT further agrees to insert in any subcontract exceeding $100,000 the clause hereof entitled "Environmental Protection."

4.30 KEY PERSONNEL

Any substitution or transfer of personnel specifically identified in CONSULTANT'S proposal as assigned to the work of this CONTRACT shall be subject to prior written approval by the STATE.

4.31 EMPLOYMENT OF PERSONNEL OF PUBLIC AGENCIES

The CONSULTANT shall not engage the service of any person or persons then in the employ of the STATE for work covered by the terms of this CONTRACT without the prior written approval of the STATE.

4.32 ANTI-LOBBYING

1. The CONSULTANT agrees to comply with the provisions of Section 1352 of Title 31, U.S.Code (Public Law 101.121) as codified in Title 48, Federal Acquisition Regulations Subpart 3.8 and Subpart 52.203-11. The legislation prohibits federal funds from being expended by a recipient or any lower tier subrecipients of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence a Federal agency or Congress in connection with the award of any Federal contract, cooperative agreement, including the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement. All disclosure statements are to be furnished to the STATE.

2. The CONSULTANT agrees to require all subconsultants and lower tier subconsultants who have agreements exceeding $100,000 to complete the Certification of Federal Contracts (ECS Form 90-1) and, when appropriate, the Disclosure of Lobbying Activities (ECS Form 90-3) prior to execution of the Prime Consultants Agreement with the STATE. Lower tier certifications are to be maintained by the CONSULTANT.

4.33 OWNERSHIP OF DATA

1. The CONSULTANT agrees to maintain (in sufficient detail as will properly reflect all work done and results achieved in the performance of this CONTRACT) tracings, plans, specifications and maps, basic survey notes and sketches, books, records, reports, research notes, charts, graphs, comments, computations, analyses, recordings, photographs, computer programs and documentation thereof, and other graphic or written data generated in connection with the work called for in the CONTRACT; all such information and documentation to be termed "Data" under this CONTRACT.

2. All Data procured hereunder for the work funded by ADOT shall become the property of ADOT and delivered to ADOT upon request, and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE; provided however, that CONSULTANT shall not be required to retain any Data not requested by ADOT within five years from the date of final payment to the CONSULTANT hereunder; and provided further that until such delivery to ADOT the CONSULTANT agrees to permit representatives of ADOT and the Federal Highway Administration to examine and review at reasonable times all Data still in the possession of the CONSULTANT.

3. 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 State of Arizona and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE.

4.34 ADOT PRODUCTS

ADOT will provide the consultant with the ADOT developed software for the sole purpose of completing this contract, as set forth in the Site License Contract (which includes a detailed list of Software that will be provided to the consultant). The software is provided to the consultant solely for the purpose of completing this contract and for no other purposes. ADOTdeveloped software including: manuals, electronic information, programs, and associated materials, remains the property of ADOT. Any use of this software for purposes other than the fulfillment of this contract is strictly prohibited. The consultant shall not copy the software or provide, distribute or demonstrate the software to other entities. Upon completion of the contract or when otherwise notified by ADOT, the contractor will return all software, backup copies, manuals, electronic information and associated materials to ADOT.

4.35 RETENTION OF RECORDS

1. The CONSULTANT and any subconsultant/subcontractor/vendor shall keep and maintain all books, papers, records, accounting records, files, accounts, reports, costs proposals with backup data and all other material relating to the CONTRACT and related project(s), and shall make all such material available at any reasonable time during the term of work on the CONTRACT and related project(s) and for five (5) years from the date of final payment to the CONSULTANT for auditing, inspection and copying upon the STATE'S request, or at the request of the Federal Highway Administration or any other authorized representative of the Federal Government.

2. The CONSULTANT shall insert in each of its subcontracts the above requirement and also a clause requiring its subconsultants to include the above requirement in any lower-tier subcontracts or purchase orders.

4.36 REVIEW AND INSPECTION

Representatives of the STATE and the Federal Highway Administration are authorized to review and inspect the CONTRACT activities and facilities during normal business hours.

4.37 PROPERTY OR EQUIPMENT

Except as otherwise provided in this CONTRACT, the lease, rental or purchase of property or equipment to perform the work herein described must have the prior written approval of the STATE. The control, utilization and disposition of property or equipment acquired using FEDERAL/STATE funds shall be determined by the STATE in accordance with the property management standards set forth in 49 CFR Part 18 , ADOT Manual - FIN 11.02, and Highways Division Policy and Implementation Memorandum No. 89-04.

4.38 CIVIL RIGHTS

1. The CONSULTANT is required to comply with Executive Order 75-5, "Non-discrimination in Employment by Government Contractors and Subcontractors," which is hereby included in its entirety by reference and considered a part of this CONTRACT.

2. The CONSULTANT is required to comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, Title 49, Code of Federal Regulations, Part 21 through Appendix H and Title 23, CFR 710.405 (b) are made applicable by reference and are hereinafter considered a part of this CONTRACT.

3. The CONSULTANT is required to comply with the provisions of Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in Department of Labor Regulations (41-CFR Part 60). Said provisions are made applicable by reference and are hereinafter considered a part of this CONTRACT.

4. The CONSULTANT shall post in conspicuous places available to employees and applicants for employment, the following notice:

> It is the policy of this company not to discriminate against any employee, or applicant for employment, because of race, color, religion, creed, national origin, sex, age, handicapped, or disabled veterans and Vietnam era veterans. Such actions shall include, but are not limited to: employment, upgrading, demotion, transfer, recruitment, or recruitment advertising; laying-off or termination; rates of pay or other compensation; and selection for training, and on-the-job training. Also, it is the policy to insure and maintain a working environment free of harassment, intimidation and coercion.

4.39 AFFIRMATIVE ACTION

CONSULTANT shall take the following affirmative action steps with respect to securing supplies, equipment or services under the terms of this CONTRACT:

1. Include qualified firms owned by socially and economically disadvantaged individuals on solicitation lists.

2. Assure that firms owned by socially and economically disadvantaged individuals are solicited whenever they are potential sources.

3. When economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum participation by firms owned by socially and economically disadvantaged individuals.

4. Where the requirement permits, establishing delivery schedules which will encourage participation by firms owned by socially and economically disadvantaged individuals.

5. Use the services and assistance of the Small Business Administration, the Office of Minority Business Enterprise of the Department of Commerce and the Community Services Administration as required.

4.40 PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES

The CONSULTANT is required to adhere to the commitment made to participation by ADOT certified Disadvantaged Business Enterprises (DBE) as indicated in the firms Technical Proposal or subsequently agreed to by the STATE during negotiations. The STATE, at its discretion on a case by case basis, may waive the above limitations.

4.41 ENVIRONMENTAL PROTECTION

(This clause is applicable if this contract exceeds $100,000.00. It applies to Federal Aid Contracts Only.)

CONSULTANT is required to comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857 (h), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15) which prohibit the use under non-exempt Federal contracts, grants or loans of facilities included on the EPA List of Violating Facilities. Violations shall be reported to the Federal Highway Administration and to the U.S.E.P.A. Assistant Administrator for Enforcement. (EN-329).

4.42 ENERGY CONSERVATION

(This clause is applicable to Federal Aid Contracts Only.)

CONSULTANT is required to comply with mandatory standards and policies, as applicable, relating to energy efficiency which are contained in the State Energy Conservation Plan issued by the State of Arizona in compliance with the Energy Policy Conservation Act (P.L. 94-163).

4.43 PUBLICATION PROVISIONS

The CONSULTANT shall provide annual, quarterly or monthly written progress reports requested by the STATE. Prior to completion of the CONTRACT and related project(s), the CONSULTANT shall prepare a final report summarizing activities, conclusions, and recommendations in a form as prescribed by the STATE, and this report shall be a prerequisite for final payment. Publication rights to all reports are reserved by the STATE. The CONSULTANT shall not release information developed under the CONTRACT prior to publication, except upon written approval of the STATE.

4.44 PUBLICATION PROVISIONS (RESEARCH AND UNIVERSITIES)
(Not applicable to this contract)

4.45 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 State of Arizona and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE.

4.46 PATENTS AND COPYRIGHTS (RESEARCH AND UNIVERSITIES)
(Not applicable to this contract)

4.48 FEDERAL IMMIGRATION AND NATIONALITY ACT:

1. General: The consultant, including all subconsultant, shall comply with all federal, state and local immigration laws and regulations, as set forth in Arizona Executive Order 2005-30, relating to the immigration status of their employees who perform services on the contract during the duration of the contract. The State shall retain the right to perform random audits of consultant and subconsultant records or to inspect papers of any employee thereof to ensure compliance.

2. Compliance Requirements: By submission of a proposal, the consultant warrants that the consultant and all proposed subconsultants are and shall remain in compliance with all federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the contract. The State may, at its sole discretion, require evidence of compliance from the consultant shall have ten working days from the receipt of the request to supply adequate information.

   The Department will accept, as evidence of compliance, a showing by the consultant or subconsultant that it has followed the employment verification provisions of the Federal Immigration and Nationality Act as set forth in Sections 274A and 274B of that Act, including implementation of regulations and agreements between the Department of Homeland Security and the Social Security Administration's verification service.

   The Consultant shall include the provisions of Subsection 4.30 in all its subcontracts.

3. Sanctions for Non-Compliance: Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of contract. The Department will reduce the consultant's compensation by $10,000 for the initial instance of non-compliance by the consultant or subconsultant. Should the same consultant or subconsultant commit subsequent violations within a two-year time period from the initial violation, the consultant's compensation will be reduced by $50,000 for each violation. The third instance by the same consultant or subconsultant within a two-year period may result, in addition to the $50,000 reduction in compensation, in removal of the offending consultant or subconsultant, suspension of work in whole or in part or, in the case of a third violation by the consultant, termination of the contract for default. In addition, the Department may

debar a consultant or subconsultant who has committed three violations within a two-year period for up to one year. For purposes of this paragraph, a violation by a subconsultant does not count as a violation by the consultant.

Any delay resulting from a sanction under this subsection is a non-excusable delay. The consultant is not entitled to any compensation or extension of time for any delays or additional costs resulting from a sanction under this subsection.

An example of the sanctions under this subsection is presented in the following table:

Offense by:			Reduction in Compensation
Consultant	Subconsultant A	Subconsultant B	
First			$10,000
	First		$10,000
	Second		$50,000
		First	$10,000
	Third		$50,000 *
* May, in addition, result in removal of the subconsultant and/or debarment of the subconsultant.			

In Witness whereof the parties hereto have executed this agreement as of the day and year first herein written.

FOR THE STATE

ARIZONA DEPARTMENT OF TRANSPORTATION

_____
Date

By:_____

_____
Title

FOR THE CONSULTANT

FIRM NAME

_____
Date

By:_____

_____
Title