

On-Call Right of Way Surveys, Right of Way Plans, and Monumentation Surveys • Statewide Locations

March 29, 2024

Contract Number: 2024-016



Dear Selection Panel Members:

As a provider of continuous survey and right of way (R/W) plans services to the Arizona Department of Transportation (ADOT) for nearly 40 years, AECOM Technical Services Inc. (AECOM) is excited to continue providing these services to ADOT. Our team continuity provides a wealth of knowledge and experience with ADOT's specific requirements and procedures, as well as historical knowledge of prior surveys and the unique challenges that certain areas of the state present. Our team is experienced in performing R/W surveys for highway design construction plans preparation, location field surveys, and other related activities to support the highway development process.

This work will require varied staffing, minimal mobilization time, and diverse expertise to respond to each task order. All tasks under this contract will be performed by Arizona staff. Ilija Knezevic, RLS, is the AECOM project manager and single point of contact. As the AECOM Arizona Survey Manager and previous R/W technician, Ilija has been involved in similar contracts with ADOT for 22 years, and in a management role for the past 10 years. Additionally, all our survey personnel have been with AECOM for more than 25 years and all have extensive experience in ADOT surveying and R/W projects.



AECOM brings to ADOT the following specific strengths:

- Familiarity with ADOT on-call services contracts
- Delivery of services for previous on-call contracts
- In-depth understanding of ADOT's R/W procedures and requirements
- Strong management support to continue to provide high-quality right of way surveying and technical services to ADOT
- Ability to respond to work requests with minimal lead time
- In-house field surveying capabilities and R/W surveying experience
- Commitment to providing long-term services to ADOT



Our key personnel identified in this submittal are committed to this contract and will be made available to the extent necessary to meet ADOT's quality and schedule expectations. We have the personnel resources to commit to the contract without hiring additional personnel. AECOM is not a Disadvantaged Business Enterprise (DBE). In support of ADOT's DBE goals, we have teamed with JT2 Enterprises LLC (JT2), a certified ADOT DBE firm, for supplemental surveying services and quality control plans review.

We look forward to continuing working with you on this contract to deliver quality right of way plans and surveys statewide.

Sincerely,

AECOM Technical Services, Inc.

Jennifer Bixby, PE (AZ #33782), PTOE
Vice President, Principal-in-Charge
480.363.0447
jennifer.bixby@aecom.com
Authorized SOQ Signer

Ilija Knezevic, RLS (AZ #39229)
Project (Contract) Manager
602.418.3731
ilija.knezevic@aecom.com



Engineering Consultants Section SOQ Proposal Certifications Form

Contract #: 2024-016

Consultant Name: AECOM Technical Services, Inc.

Please read the fifteen (15) statements below. The statements are to ensure Consultants are aware and in agreement with Federal, State and ECS guidelines related to the award of this contract. Consultants shall submit the specific Certification form attached to each RFQ advertised, as revisions to the form may occur from time to time. Failure to sign and submit the certification form specified in the RFQ with the SOQ proposal will result in the SOQ proposal being rejected.

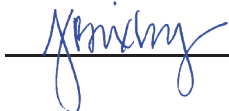
Submission of the SOQ by the Consultant certifies that to the best of its knowledge:

1.	The Consultant and its subconsultants have not engaged in collusion with respect to the contract under consideration.
2.	The Consultant, its principals and subconsultants have not been suspended or debarred from doing business with any government entity.
3.	The Consultant shall have the proper Arizona license(s) and registration(s) for services to be performed under this contract. Furthermore, the Consultant shall ensure that all subconsultants have the proper Arizona license(s) and registration(s) for services to be performed under this contract.
4.	The Consultant's signature on any SOQ proposal, negotiation document or contract constitutes that a responsible officer of the Consultant has read and understands its contents and is empowered any duly authorized on behalf of the Consultant to do so.
5.	The Consultant's Project Team members are employed by the Consultant on the date of submittal.
6.	All information and statements written in the proposal are true and accurate and that ADOT reserves the right to investigate, as deemed appropriate, to verify information contained in proposals.
7.	Key members of the Project Team, including subconsultants, are currently licensed to provide the required services as requested in the RFQ package.
8.	All members of the Project Team who are former ADOT employees did not have or provide information that gives the Consultant a competitive advantage; and either (1) concluded their employment with ADOT at least 12 months before the date of the SOQ or (2) have not made any material decisions about this project while employed by ADOT.
9.	Work, equating at least 51% of the contract value, shall be completed by the Consultant unless otherwise specified in the SOQ or contract.
10.	No Federally appropriated funds have been paid or shall be paid, by or on behalf of the Consultant for the purpose of lobbying.
11.	The Consultant understands that it is required to have a compliant accounting system, in accordance with Generally Accepted Accounting Principles (GAAP), Federal Acquisition Regulation (FAR) of Title 48, Code of Federal Regulations (CFR)-Part 31, applicable Cost Accounting Standards (CAS), and ADOT Advance Agreement Guideline.
12.	If project is funded with Federal Aid funds, the Consultant affirmatively ensures that in any subcontract entered into pursuant to this advertisement, Disadvantaged Business Enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award, in accordance with Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations.
13.	The Consultant shall utilize all Project Team members, subconsultants and DBE firms, if applicable, submitted in the SOQ, and shall not add other Project Team members or subconsultants, unless the Consultant has received prior written approval from ADOT.
14.	The Consultant shall either meet its DBE goal commitment and any other DBE commitments or make Good Faith Efforts to meet the DBE goal commitments as stated in its SOQ proposal or Cost Proposal and shall report on a timely basis its DBE utilization as detailed in the contract.
15.	If selected, the Consultant is committed to satisfactorily carry out the Consultant's commitments as detailed in the contract and its SOQ proposal.

I hereby certify that I have read and agree to adhere to the fifteen (15) statements above and/or that the statements are true to the best of my knowledge as a condition of award of this contract.

Print Name: Jennifer Bixby, PE, PTOE

Title: Vice President

Signature: 

Date: March 29, 2024

Revised 2/11/2022

**ARIZONA DEPARTMENT OF TRANSPORTATION
ENGINEERING CONSULTANTS SECTION
PARTICIPATION IN BOYCOTT OF ISRAEL - CONSULTANT CERTIFICATION FORM
ADOT ECS Contract No.: 2024-016**

This Certification is required in response to legislation enacted to prohibit the State from contracting with companies currently engaged in a boycott of Israel. To ensure compliance with A.R.S. §35-393, this form must be completed and returned with any response to a solicitation (SOQ), Contract Cost Proposals, and Contract Time Extensions. The Consultant understands that this response will become public record and may be subject to public inspection.

Please note that if any of the following apply to this Solicitation, Contract, or Contractor, then the Offeror shall select the “Exempt Solicitation, Contract, or Contractor” option below:

- The Solicitation or Contract has an estimated value of less than \$100,000;
- Contractor is a sole proprietorship;
- Contractor has fewer than ten (10) employees; OR
- Contractor is a non-profit organization.

Pursuant to A.R.S. §35-393.01, public entities are prohibited from entering into contracts “unless the contract includes a written certification that the company is not currently engaged in, and agrees for the duration of the contract to not engage in, a boycott of goods or services from Israel.”

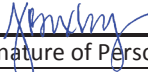
Under A.R.S. §35-393:

1. "Boycott" means engaging in a refusal to deal, terminating business activities or performing other actions that are intended to limit commercial relations with entities doing business in Israel or in territories controlled by Israel, if those actions are taken either:
 - (a) Based in part on the fact that the entity does business in Israel or in territories controlled by Israel.
 - (b) In a manner that discriminates on the basis of nationality, national origin or religion and that is not based on a valid business reason.
2. "Company" means an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, limited liability company or other entity or business association, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate, that engages in for-profit activity and that has ten or more full-time employees.
- ...
5. "Public entity" means this State, a political subdivision of this State or an agency, board, commission or department of this State or a political subdivision of this State.

The certification below does not include boycotts prohibited by 50 United States Code Section 4842 or a regulation issued pursuant to that section. See A.R.S. §35-393.03.

In compliance with A.R.S. §§35-393 *et seq.*, all offerors must select one of the following:

- The Company submitting this Offer **does not** participate in, and agrees not to participate in during the term of the contract, a boycott of Israel in accordance with A.R.S. §§35-393 *et seq.* I understand that my entire response will become public record in accordance with A.A.C. R2-7-C317.
- The Company submitting this Offer **does** participate in a boycott of Israel as described in A.R.S. §§35-393 *et seq.*
- Exempt Solicitation, Contract, or Contractor.**
Indicate which of the following statements applies to this Contract:
 - Solicitation or Contract has an estimated value of less than \$100,000;
 - Contractor is a sole proprietorship;
 - Contractor has fewer than ten (10) employees; and/or
 - Contractor is a non-profit organization.

AECOM Technical Services, Inc.				
Company Name			Signature of Person Authorized to Sign	
7720 North 16th Street, Suite 100			Jennifer Bixby, PE, PTOE	
Address			Printed Name	
Phoenix	AZ	85020	Vice President	March 29, 2024
City	State	Zip	Title	Date



FORCED LABOR OF ETHNIC UYGHURS BAN Certification Form

Forced Labor of Ethnic Uyghurs Ban

Please note that if any of the following apply to the Consultant, then the Offeror shall select the "Exempt Consultant" option below:

- Consultant is a sole proprietorship;
- Consultant has fewer than ten (10) employees; OR
- Consultant is a non-profit organization.

Pursuant to A.R.S. § 35-394, the State of Arizona prohibits a public entity from entering into or renewing a contract with a company unless the contract includes written certification that the company does not use the forced labor, or any goods or services produced by the forced labor, or use any consultants, subconsultants, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

Under A.R.S. §35-394:

1. "Company" means an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, limited liability company or other entity or business association, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate, that engages in for-profit activity and that has ten or more full-time employees.
 - (a) Based in part on the fact that the entity does business in Israel or in territories controlled by Israel.
 - (b) In a manner that discriminates on the basis of nationality, national origin or religion and that is not based on a valid business reason.
2. "Public entity" means this State, a political subdivision of this State or an agency, board, commission or department of this State or a political subdivision of this State.

In compliance with A.R.S. §§ 35-394 et seq., all offerors must select **one** of the following:

<input checked="" type="checkbox"/>	The Company submitting this Offer does not use, and agrees not to use during the term of the contract, any of the following: <ul style="list-style-type: none"> • Forced labor of ethnic Uyghurs in the People’s Republic of China; • Any goods or services produced by the forced labor of ethnic Uyghurs in the People’s Republic of China; or • Any Consultants, Subconsultants, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People’s Republic of China.
<input type="checkbox"/>	The Company submitting this Offer does participate in use of Forced Uyghurs Labor as described in A.R.S. § 35-394.
<input type="checkbox"/>	Exempt Consultant. Indicate which of the following statements applies to this Consultant (may be more than one): <ul style="list-style-type: none"> <input type="checkbox"/> Consultant is a sole proprietorship; <input type="checkbox"/> Consultant has fewer than ten (10) employees; and/or <input type="checkbox"/> Consultant is a non-profit organization.

AECOM Technical Services, Inc.
Company Name

7720 North 16th Street, Suite 100
Address

Phoenix **AZ** **85020**
City State Zip

Signature of Person Authorized to Sign

Jennifer Bixby, PE, PTOE
Printed Name

Vice President
Title

1. CONTRACT UNDERSTANDING & APPROACH

1A • GENERAL TASKS & ISSUES

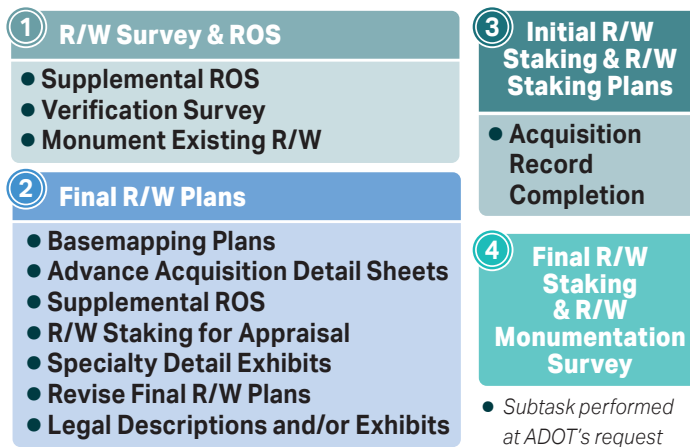
CONTRACT OVERVIEW • MAJOR TASKS

AECOM has continuous experience with the Arizona Department of Transportation's (ADOT) On-Call Right of Way (R/W) Plans and Surveys contract processes, as evidenced by the work we have performed through on-call contracts since 1986.

This contract includes a wide variety of tasks, shown in **Figure 1**, **Figure 2** (Page 7), and discussed in the Project Approach section, (Pages 6–10).

The following section highlights our understanding of the contract's major tasks. Additional tasks (shown in **Figure 1**) may be required to complete specific task orders.

FIGURE 1 | ADOT R/W Survey Major Tasks & Subtasks



We will use our in-depth knowledge of the required tasks, proven project approach, and experienced in-house staff to continue to support these important projects for ADOT. ADOT R/W projects often have compressed schedules to allow subsequent tasks to proceed as planned. AECOM brings a strong record of completing these tasks on time and on budget.

1 R/W Survey & ROS

R/W surveys inventory existing sectional, R/W, street, and other monumentation in the field. They define existing highway centerlines and R/W on the portions of ADOT highways where existing plans are old and not up to the current ADOT R/W standards. Parallel with field survey, AECOM will prepare ROS plans depicting field findings and establish highway centerlines and R/W. The information shown on the ROS will be based on observation and evaluation of physical collaborating evidence in the field and a review and analysis of existing drawings, plats, and notes available at the time the survey was prepared.

2 Final R/W Plans

AECOM will prepare final R/W plans for the portions of existing ADOT highways where new acquisitions are needed for new construction and/or highway improvements. The information shown on final R/W plans will be based on evaluation of ADOT-provided title reports, existing R/W reports, and design-provided acquisition requirements. These plans depict and record new acquisition areas on formal R/W plans per the latest ADOT R/W plans, CADD standards.

3 Initial R/W Staking & R/W Staking Plans

AECOM will perform initial R/W staking in the field to mark limits of new acquisition areas with temporary R/W monuments prior to beginning new construction. Together with the field staking, AECOM will prepare R/W staking plans depicting set temporary monuments in the field.

4 Final R/W Staking & R/W Monumentation Survey

When the construction project is nearing completion or is complete, final monumentation in the field will be set to mark the new acquisition areas with final ADOT R/W monuments. Together with the field staking, AECOM will prepare a R/W monumentation survey depicting set final monuments.

INSTITUTIONAL ELEMENTS

Having worked with ADOT for decades, our team understands the policies and processes, both formal and informal, that guide task orders under this contract.

These processes include meeting with the ADOT PM to review and confirm the scope of work, establishing concurrence on the schedule and budget, submitting timely invoices, coordinating with other disciplines and stakeholders, securing permits in a timely fashion, and implementing our established Quality Management System (QMS) throughout the contract.

We will verify work is performed in accordance with current ADOT R/W plans, CADD standards, and the established project schedule. CADD files will be prepared using MicroStation V8i SS3/InRoads along with the ADOT-provided R/W cell library.

SPECIAL ISSUES OR PROBLEMS

Based on our previous ADOT R/W on-call experiences over the past three decades, the following issues might require special attention during R/W project development.

• Insufficient Existing Monumentation

Lack of established monumentation, older ADOT R/W plans/strip maps, and illegible plats may result in insufficient information to establish existing R/W centerline and existing R/W and sectional control on an ADOT R/W project. This issue can delay production of ROS and Final R/W Plans.

APPROACH • As demonstrated on our current and past on-call contracts, we manage these types of situations through problem-solving and swift communication with ADOT. Our PM will communicate any potential issues with ADOT immediately. We will perform additional documentation research and field surveys to resolve issues, and contact other agencies such as local municipalities and/or counties for additional survey information. We have also accessed original plats in the Arizona State Library Archives to obtain missing documentation.

PROOF • **SR77, Town of Mammoth, Copper Street, Redwood Drive** • Our team was working with illegible maps and could not define the town R/W. Our team identified other potential sources for information, including the Pinal County Recorder, which also had illegible maps. AECOM obtained copies of the original map from the Arizona State Library Archives to successfully complete the project.

SPECIAL ISSUES OR PROBLEMS (CONTINUED)

● Acquisition Condemnation Process Delays

New R/W acquisitions going into the condemnation process could delay final R/W plans preparation and completion. Stop-and-go on the project could result in schedule slippage and budget overruns.

APPROACH • AECOM will assign experienced staff with the ability to adjust between various ongoing ADOT task orders. We bring a proven track record of quickly adjusting to contract needs. AECOM has successfully delivered previous ADOT R/W projects with condemnation processes.

✓ PROOF • **US 60/Bell Road Traffic Interchange (TI)** • The condemnation process delayed the final R/W plans development and our team was put on hold. We shifted efforts to other task orders until the condemnation process expired and then shifted the team back to this task. This avoided negative impacts to the budget.

● Field Safety

Field safety due to traffic hazards

APPROACH • AECOM will follow the safety procedures defined by AECOM Health and Safety guidelines. Our field surveyors are trained to work under heavy traffic conditions. A project-specific Health and Safety Plan will be prepared for each task order. We will acquire required encroachment permits from ADOT Districts.

✓ PROOF • **All R/W survey projects completed by AECOM to date** were closed out with no reportable incidents or injuries thanks to our AECOM safety trainings and mindset.

● Potential Schedule Issues

Schedule escalation may be required due to ADOT's priorities on other R/W projects.

APPROACH • AECOM will effectively address ADOT's needs for accelerated schedules by re-directing all available personnel from AECOM's robust pool of resources.

✓ PROOF • **R/W Survey and Plans On-calls: 2006-008.13, 2009-034.13, 2013-003.05, and 2020-007.01** • Our team has consistently demonstrated a quick adjustment from task to task per ADOT's priority requests over the duration of past on-call contracts.

Schedule escalation may be required due to delays in receiving existing R/W reports and title reports from ADOT. This may result in delays in establishing existing R/W and parcel boundaries.

APPROACH • AECOM will perform additional research of available recorded information, such as vesting deeds and plats, to effectively establish existing R/W and parcel boundaries. We will confirm this information against the R/W reports.

✓ PROOF • **SR 69, SR 169 Roundabout** • Our team successfully established existing R/W by performing independent document research through the Yavapai County Recorder and performing additional field surveys while awaiting the Existing R/W Report and title reports from ADOT.






● Maintaining Budget and Schedule

Our project manager, Ilija Knezevic, uses AECOM's automated project management system to review weekly reports of work-hours used, outside costs to date, and percent of project complete. He performs a daily or weekly review of the task order progress (depending on total schedule) to immediately address and correct any potential issues. Ilija is responsible for schedule control and for meeting ADOT's schedule and budget requirements. He updates ADOT with detailed monthly project status reports.

Ilija achieves effective cost control through close project monitoring, strong communication with ADOT, and accurate cost estimates based on past ADOT experience. He reviews and approves labor hours and costs charged to the project before they are input into the system. If a discrepancy is noted, he reviews it with the task team leader, identifies the factors causing the discrepancy, and develops a plan of corrective action. The key to correction is early detection.

1B • PROJECT APPROACH

Based on our continuous on-call experience, we follow a systematic process for completing each task order successfully, as shown in the flowchart in **Figure 2** (Page 7). All work under this contract will be performed under the direction of an Arizona Registered Land Surveyor (RLS). Our process for completing R/W projects incorporates the following general stages:

-  Review scope of work, prepare cost proposal and schedule, and receive Notice to Proceed
-  1 R/W Survey and ROS
-  2 Final R/W Plans (Basemapping Plans)
-  3 Initial R/W Staking and R/W Staking Plans
-  4 Final R/W Staking and R/W Monumentation Survey

Review Scope of Work & Prepare Cost Proposal

AECOM will participate in the initial kickoff meeting with the ADOT R/W Plans Group to outline special areas of concern, such as tie-ins to other projects, ground adjustment factors, and multiple deeded lines. This meeting will be held in person or via video conferencing platforms (Google Meet or Microsoft Teams).

Following the initial scope of work review meeting, AECOM will submit the scope and fee proposal to ADOT for review, potential renegotiation, and acceptance. **▶ AECOM's history on numerous projects enables us to prepare realistic work-hour estimates that correspond with ADOT's expectations.**

Upon Notice to Proceed (NTP), AECOM will analyze the project documents, centerline geometry, title reports, and survey control. If required, we will request additional information or survey control from the ADOT R/W Plans Technician or ADOT R/W Plans Technical Leader. If the scope includes field surveys, we will secure the necessary permits at this time.


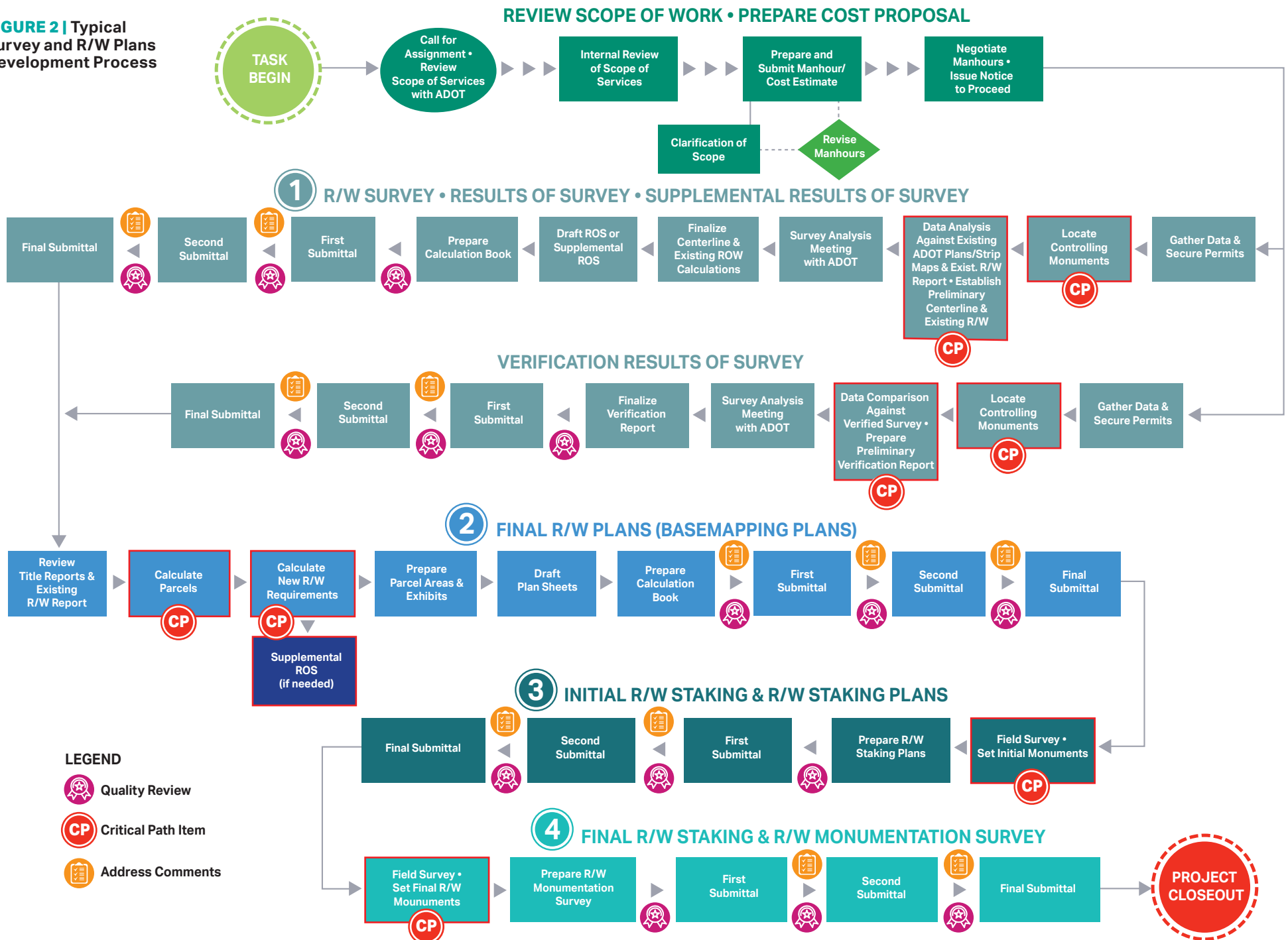
 **The document review step is important to confirm that all necessary information has been obtained and understood, avoiding project delays and confusion.**

FIGURE 2 | Typical Survey and R/W Plans Development Process



The final deliverables for Tasks 1–4 (discussed below) will be a signed and sealed full-size (22x34) plans set and half-size (11x17) plans set containing the items shown in Table 1.

TABLE 1 | R/W Survey Task Deliverables

	Plan Sets					Data CD/DVD Contents												
	ROS/Supplemental ROS Plans	Final R/W Plans	Basemapping Plans	R/W Staking Plans	R/W Monumentation Survey Plans	Signed Checklist	Calculation Book	Data CD/DVD	Coordinate List	MicroStation Drawings	Scanned Calculation Book	ROS Plans	Final R/W Plans	Basemapping Plans	R/W Staking Plans	R/W Monumentation Survey Plans	Recorded Documentation	Monument Photos
1	✓					✓	✓	✓	✓	✓	✓	✓					✓	✓
2		✓				✓	✓	✓	✓	✓	✓						✓	
2*			✓			✓	✓	✓	✓	✓	✓						✓	
3				✓		✓	✓	✓	✓	✓	✓				✓			✓
4					✓	✓	✓	✓	✓	✓	✓					✓		✓

Plan Sets: ✓ Mylar | ✓ Bond

CD/DVD File Formats: ✓ ASCII | ✓ DGN | ✓ PDF | ✓ JPG

*Basemapping Plans under Task 2

1 R/W Survey & ROS

AECOM will perform a R/W survey in the field conforming to current ADOT standards and Arizona Boundary Survey Minimum Standards. Our team will follow provided guidelines per the ADOT-issued scope of work.

We will establish the primary survey control network based on available NGS, GDACS, county, and/or municipal survey control points. Sometimes primary control will be based on the ADOT Engineering Survey Section-provided control network. Whenever possible, we will use GPS technology as the method of survey. We will apply a proper Ground Adjustment Factor (GAF) to North American Datum 1983 (NAD83), Epoch 1992 coordinates depending on the project's location within the state.



Found NGS/ADOT Control Point (1977)

After establishing control, our team will locate and photograph requested sectional corners, existing ADOT and miscellaneous R/W monuments, centerline monuments, street monuments, property corners, and other available monuments. We will identify, re-establish, and re-monument lost or obliterated sectional corners as required. After completing the field surveys, our team will process field data and analyze it against existing ADOT R/W plans and strip maps, ADOT-provided existing R/W reports, and other recorded information to develop preliminary existing R/W centerline and R/W lines. After analyzing the field data, we will meet with ADOT at a Survey Analysis Meeting to discuss the centerline and existing R/W calculation methodology, field data collected, and the next steps in ROS development.



Found Section Corner (1914)

If no issues arise, AECOM will prepare the ROS plans, which will contain:

- Cover sheet (if a separate project)
- Standard abbreviation and symbol sheet (if a separate project)
- Sectional control and key map layout sheets
- R/W corridor survey plan sheets
- Coordinate table/note sheets

If requested, a modified cover sheet (Notice of R/W Project) will be prepared for posting on the ADOT R/W Existing Plans Index webpage.

Together with the ROS or Supplemental ROS, a Calculation Book will be prepared containing:

- NGS/GDACS and sectional corners reconnaissance sheets
- Field notes
- Verification Report (as required)
- Sectional lines traverse
- Centerlines stationing and traverse
- Sectional line ties
- Station/offset to found ADOT and miscellaneous R/W monuments
- Station/offset to calculated ADOT and city R/W lines
- A list of all coordinates
- A signed ADOT ROS checklist
- A data CD/DVD

Additional Tasks (If Requested by ADOT)

Supplemental ROS | We will prepare a Supplemental ROS if additional information is needed within an already-recorded ADOT ROS. The procedure of preparing the supplemental ROS is the same as a standard ROS, with different titles and additional survey notes shown on the plans.

Verification Survey | A verification survey is required to verify, inventory, and analyze information shown on a recorded original ROS that is more than 6 years old. The field survey will consist of locating ADOT-selected sectional corners, existing ADOT R/W monuments, miscellaneous R/W monuments, street monuments, property corners, and other available monuments for verification purposes. The verification survey results in a Verification Report of ROS.

Monument Existing R/W | This task will monument existing ADOT R/W on projects that have no construction or acquisition activities and are missing existing ADOT monumentation. These ROSs are also known as "documentation" surveys. The final monument locations may include:

- Existing R/W control points
- Existing R/W intersects with sectional lines and replacement of out-of-tolerance found monuments
- On the existing R/W line, left and right of any station equation of controlling centerline where existing R/W line is parallel to centerline
- Un-monumented permanent easement corners such as drainage, ponding, slope, or maintenance

After we complete the existing R/W monumentation in the field, we will modify affected ROS plan sheets with staking information such as monument detail diagrams and special notes. These kinds of modified ROSs will serve a dual purpose as ROSs and R/W monumentation surveys.



Bearing Tree found during survey of SR 260, Lion Spring Section.

2 Final R/W Plans

ADOT will provide AECOM with title reports for the acquisition-affected parcels. Our experienced R/W technicians will calculate parcel boundaries and define existing easements (Schedule "B" Items) per the information provided in the title reports. If the project requires an accelerated schedule, we will prepare the final R/W plans and calculate parcel boundaries from vesting deeds if official title reports are not available.

We will calculate the required acquisition areas, and proceed with area calculations (total, gross, net, new permanent easement, temporary construction easement, and remainder areas) and prepare parcel area exhibits for acquisition-affected parcels.

AECOM will prepare Final R/W Plans, which will include:

- Cover sheet
- Standard abbreviation and symbol sheet
- Ownership record sheet
- Vicinity map
- Plan sheets
- Parcel insert map, if needed

Along with the submittal of final R/W plans, a R/W Plans Calculation Book will be prepared, including:

- Sectional lines traverse
- New centerlines stationing, traverse and ties,
- New R/W station/offset and ties
- Parcels areas and exhibits
- R/W plans point identification sheets
- A list of all coordinates
- A signed ADOT R/W plans checklist
- A data CD/DVD

● Additional Tasks (If Requested by ADOT)

Basemapping Plans | Basemapping plans may be required prior to finalizing new acquisition areas on the project. These plans are considered a "footprint" of the final R/W plans and allow project teams begin work prior to finalizing new acquisition requirements.

Using title reports provided by ADOT, our experienced R/W technicians will calculate parcel boundaries and define existing easements (Schedule "B" Items). We will provide parcel area calculation files and prepare parcel exhibits for total areas only. If available, preliminary/proposed acquisition requirements for new R/W and permanent easements will be shown graphically on the plan sheets as well as preliminary centerlines.

AECOM will prepare basemapping plans, which will include a cover sheet, standard abbreviation and symbol sheet, ownership record sheet, vicinity map, plan sheets, and parcel insert map (if needed). We will prepare and include point identification sheets in the Basemapping Plans Calculation Book.

Subsequent with the submittal of basemapping plans, we will prepare a Basemapping Plans Calculation Book, including all contents of the R/W Plans Calculation Book, without depiction of any new acquisitions.

Advance Acquisition Detail Sheets | If final R/W plans are not ready for submittal but the acquisition process on certain parcels is required to begin work, AECOM will produce Advance Acquisition Detail Sheets (AADS) in accordance with ADOT standards and specifications. The AADS depict new acquisitions and portions of the area tables similar to tables on the ownership record sheets. The AADS are prepared for each individual parcel with partial acquisitions only.

Parcel Exhibits | AECOM will prepare parcel exhibit maps ahead of the official submittal of R/W plans, if required by ADOT. These exhibits will provide ADOT with the earliest opportunity to begin the appraisal process. AECOM will submit parcel exhibit sheets depicting the acquisition areas, consisting of an 8.5x11 exhibit including area calculation sheets.

Supplemental ROS (R/W Plans) | An additional field survey might be required when a controlling new R/W monument is located on a property line. The field survey will determine the proper location of the property line. In this case, a separate task order is issued for a supplemental ROS. An additional supplemental ROS drawing will be prepared with this task per ADOT standards.



Our experienced surveyors have worked statewide, from rural areas to throughout the Phoenix Metropolitan region. AECOM provides a variety of surveying services, including R/W surveys, boundary and topographic surveys, aerial mapping control surveys, large-scale control surveys, environmental surveys, and preparation of R/W plans and legal descriptions.

R/W Staking for Appraisal | Occasionally, the ADOT R/W group appraiser assigned to the project or property owner may request field staking of the new acquisition and existing R/W lines in specified areas of the project. Staking is temporary using nails or wood stakes with pink whiskers and appropriate markings. In hard surface areas such as pavement or concrete, PK or MAG nails might be used with paint markings on the surfaces. Staking of these areas will help acquisition-affected property owners visualize the new acquisition on the ground.

Specialty Detail Exhibits | Some projects will require specialty detail exhibits/sheets in addition to final R/W plans. Examples are Arizona State Land Department (ASLD) exhibit sheets, railroad exhibit sheets, and Salt River Project/Bureau of Reclamation (SRP/BOR exchange exhibit sheets. These specialty exhibits are prepared as early as possible to start the acquisition process. In some cases, this process takes more than 12 months to complete with some of the above-mentioned agencies.

Revise Final R/W Plans | Revisions to final R/W plans may be necessary due to changes in design requirements, ADOT decisions, or as a result of negotiation with acquisition-affected property owners. AECOM will revise the final R/W plans and supply ADOT with updated plans as well as additional R/W plans markup with changes highlighted.

Legal Descriptions and/or Exhibits | At ADOT's request, AECOM sometimes prepares legal descriptions and/or exhibit maps to help accelerate the acquisition process and to aid ADOT R/W Plans Group with workload.

3 Initial R/W Staking & R/W Staking Plans

The initial monuments will be magnetically detectable, set firmly in place based on ground conditions (i.e., rebar, spikes, or PK/MAG nails), and will be affixed with RLS tag or cap with the AECOM survey manager's registration number. The initial monuments will be set in accordance with current Arizona Boundary Survey Minimum Standards. The construction contractor will be responsible for preserving the integrity of all initial or final R/W monuments by protecting them from destruction, disturbance, and/or vandalism. Initial R/W monuments will generally be set at new R/W control point locations, per the R/W plans associated with the project.

At ADOT's request, we will also stake new R/W corners for areas that ADOT will transfer to the local jurisdiction after construction. For these corners, we will set a rebar with an aluminum cap or RLS tag. The only stamped information on the cap will be the surveyor's registration number.

After initial staking is complete, AECOM will prepare the R/W staking plans to illustrate the type and kind of monuments set, point numbers, coordinate information, stations, and offsets for all set monuments. Notes will be placed for any additional information. The cover sheet will be updated with R/W staking plans information.

At ADOT's request, AECOM may also set final markers at existing R/W corners and/or permanent easement locations. At existing R/W locations, 3.25-inch aluminum caps will be set on 5/8-inch rebar (or epoxied to hard surfaces such as concrete or pavement) with brown Carsonite fiberglass witness posts as the locations allow. At permanent easement locations, a 2.5-inch aluminum cap will be set in ground on 5/8-inch rebar (or epoxied to hard surfaces) with white Carsonite fiberglass witness posts as the locations allow. This will also be shown on the R/W staking plans.

Additional Task (If Requested by ADOT)

Acquisition Record Completion | Following the completion of all acquisitions, the ADOT R/W Plans Group will receive recorded acquisition information and documentation for each parcel. AECOM will update/add recording information on ownership record sheets for parcels affected by these acquisition documents.

4 Final R/W Staking and R/W Monumentation Survey

When the construction project has been completed or is close to completion, AECOM will set the final ADOT R/W monuments. Generally, 3.25-inch aluminum caps will be set on 5/8-inch rebars (or epoxied to hard surfaces such as concrete or pavement) at new or existing R/W locations. A 2.5-inch aluminum cap will be set in the ground on 5/8-inch rebar (or epoxied to hard surfaces) in the locations of new and/or existing permanent easements.



Set 3.25-inch Aluminum Cap



Set 2.5-inch Aluminum Cap

If needed, witness corners or reference markers will be set if monuments cannot be set at the original locations. Final R/W monuments will be marked with brown Carsonite fiberglass witness posts as the locations allow. All permanent easement monuments will be marked with white fiberglass witness posts as the locations allow. Our team will re-survey any sectional corners that may have been reset during construction.

At ADOT's request, we will stake new R/W corners for areas that ADOT will transfer to the local jurisdiction after construction. For these corners, AECOM will set a rebar with an aluminum cap or RLS tag and the surveyor's registration number.

After final R/W staking, we will revise the R/W staking plans (prepared during the initial staking stage) to create the R/W monumentation survey plans. If this is standalone task, new R/W Monumentation Survey Plans will be prepared. These plans will reflect the results of the final monumentation process, including the type and kind of monuments set, the point number and coordinate information for set monuments, and any existing R/W monuments that were removed or destroyed. Special notes will be placed for any additional information. The cover sheet will be updated with R/W monumentation survey information.

Final deliverables of ROS, Final R/W Plans, and R/W Monumentation Surveys will be stored in the ADOT R/W Plans Group file room and posted on the ADOT R/W Existing Plans Index webpage. All plans and drawings will conform to current ADOT standards for line styles, patterns, cells, and levels.

AECOM'S EQUIPMENT & SOFTWARE

Our field crews and office personnel use the latest survey instruments and technology to complete the tasks identified in our project approach.

We are fully field-to-office automated, using regular and robotic total stations and electronic data collectors to perform field survey services. In addition, we offer GPS with Real Time Kinematic (RTK) and static Online Positioning User Service (OPUS) capabilities, radios, proper safety signage, and other required survey equipment. Using this equipment results in more accurate (if not error-free) data transmission from field to office. With these in-house resources, R/W, topography, control, and boundary survey information is transmitted quickly from field to office to ADOT. AECOM staff use personal computer workstations with the latest software for calculations, analysis, and production of maps and exhibits. We also have the latest CADD software, as well as MicroStation with the InRoads tools package. Detailed equipment and software include, but are not limited to the items shown in **Table 3** (Page 13).

1C • PROPOSED SCHEDULE

Making timely decisions on key survey elements during project scoping is critical to maintaining and adhering to each task order schedule. A typical schedule for a regular size ADOT R/W task order is shown in **Figure 3**.

STRATEGIES FOR AVOIDING SCHEDULE SLIPPAGE

- Communicate critical decision dates to ADOT R/W Plans Group management and reviewers at the start of the project to maintain progress goals.
- Apply additional resources to accelerate tasks if they fall behind schedule.
- Expedite portions of the survey that are critical to keeping the project on track.
- Conduct QC reviews with experienced reviewers prior to submittal of all deliverables.
- Research other sources to begin defining existing R/W if existing R/W reports are delayed or unavailable.
- Maintain nimble team members with strong multi-tasking skills who can efficiently and effectively move between projects. This is especially beneficial if projects are delayed due to acquisition or other reasons.

R/W ON-CALL CONTRACT

SUCCESSSES & LESSONS LEARNED



We use our experience and long history of successfully performing on ADOT R/W on-call contracts to expedite tasks and proactively solve problems, saving ADOT money and streamlining schedules.

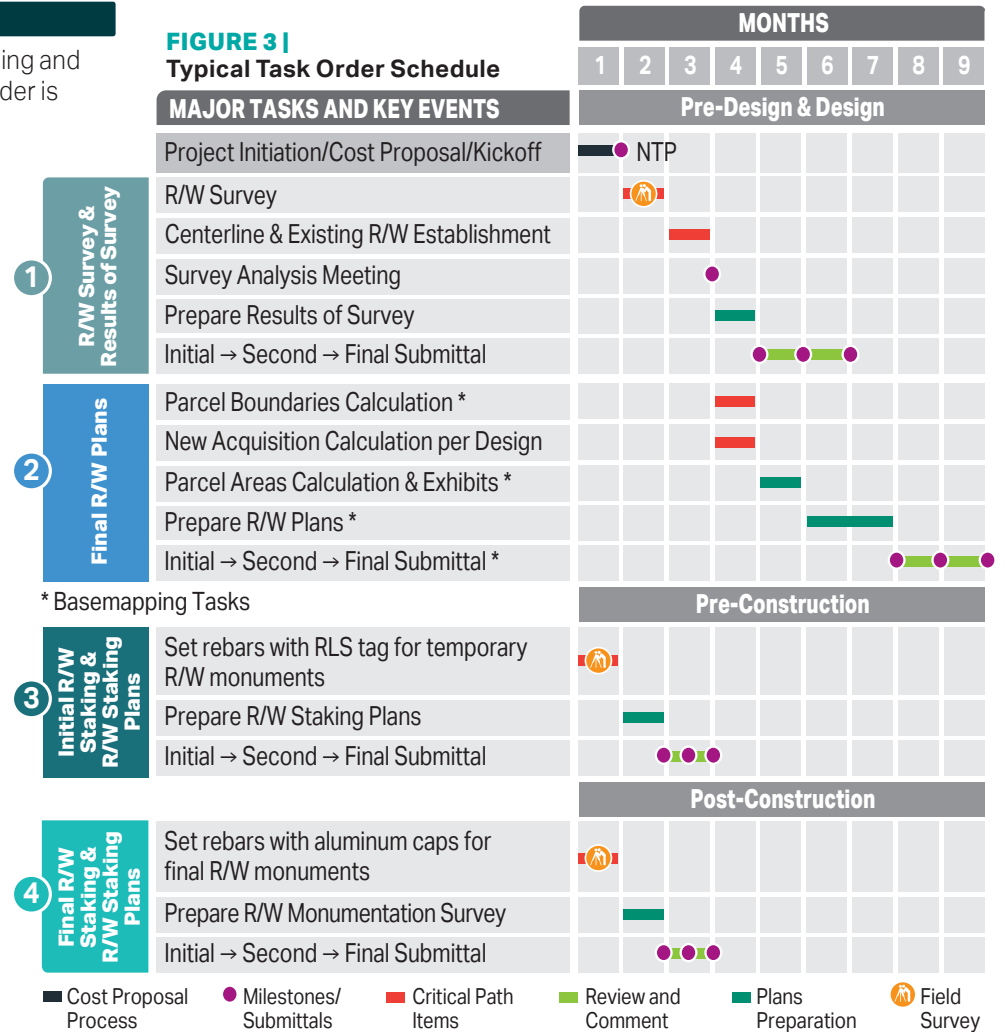
SR 303L, 51st Avenue & 43rd Avenue TIs (2020-007.01) | Our team also worked on task orders during the 2002, 2006, and 2009 ADOT R/W on-call contracts. We were able to re-use our team's original field information, calculation files, and drawings, saving time and money.

SR 260, Lion Springs Section (2013-003.05 • 2020-007.01) | AECOM re-used our team's original field information, calculation files, and drawings from our work on the 1999 ADOT R/W on-call task order. We also modified the GAF on the current project without issues.

SR 189, Nogales POE-SR 19B (2013-003.05 • 2020-007.01) | Dennis Bruns worked on this task order in 1993. Our team re-used the original field information, calculation files, and drawings from that task order, saving time and unnecessary work.

SR 77, Town of Mammoth, Copper Street, Redwood Drive (2013-003.05) | Our team was working with illegible maps and could not define the town R/W. We obtained copies of the original maps from the Arizona State Library Archives to successfully complete the project.

FIGURE 3 | Typical Task Order Schedule



* Basemapping Tasks

Scored 5

- ✓ Response to Written & Verbal Requests
- ✓ Cohesive Relationships with Stakeholders
- ✓ Effective Dispute Resolution
- ✓ Meets Project Requirements
- ✓ Quality of Work
- ✓ Submits Deliverables and Schedules On Time
- ✓ Deliverables Within and/or Under Budget
- ✓ Professional Leadership & Cohesive Team
- ✓ Focus on Big Picture and Task Completion

2023 ADOT Annual Evaluation (2020-007.01)

2. CONTRACT TEAM

2A. PROJECT TEAM'S RELEVANT EXPERIENCE

The AECOM team is a combination of experienced registered surveyors, party chiefs, instrument men, and technicians, as shown in our organization chart (Figure 4). Our team members have experience working on ADOT on-call R/W projects throughout Arizona, performing R/W surveys, and preparing R/W plans, legal descriptions, and mathematical computations. Members of our survey team have worked on ADOT R/W projects since the beginning of ADOT R/W on-call process. Dennis Bruns has worked on these or similar on-call R/W contracts continuously since 1986.

AECOM has teamed with DBE specialty subconsultant **JT2 Enterprises, LLC**, led by James Trujillo, RLS. James has been in the surveying profession for 37 years and has worked on ADOT projects since 1989. **JT2 has provided QA/QC review for AECOM on ADOT R/W task orders for the past 8 years.**

AECOM TEAM STRENGTHS

- ✓ A tested, available PM who can organize, communicate, and lead the team
- ✓ An experienced survey team 25+ years of ADOT R/W survey and plans experience
- ✓ A team that can move from one R/W project to another with minimal adjustment time
- ✓ Ability to commence rapid plans production by using ample staffing resources to meet accelerated project schedules
- ✓ Technologically advanced field survey team with the latest surveying instruments in the industry and latest office software
- ✓ Health- and safety-oriented team adequately trained for field surveying purposes
- ✓ Delivering within scope, schedule, and budget
- ✓ History of providing prompt, responsive communication with ADOT

% Available/Committed ⌚

2B. PROJECT (CONTRACT) MANAGER



Ilija Knezevic, RLS • 25 Years • Survey/Geodetic Technician • AZ #39229 • Ilija is responsible for all surveying activities AECOM undertakes in Arizona. He has more than 25 years of experience in surveying for pre-design, final design, and highway R/W plans for ADOT, the U.S. Federal Highway Administration (FHWA), and other government clients. Ilija's expertise includes topographic surveys, aerial mapping control, R/W plans and surveys, boundary, and American Land Title Association (ALTA) surveys. He manages all internal and external surveying coordination, planning, review, scheduling, accounting, and billing. He is authorized to secure additional survey and/or other specialist personnel, if needed, to meet critical deadlines. His 22 years managing and working on ADOT R/W contracts greatly enhances AECOM's ability to be responsive to ADOT's needs.



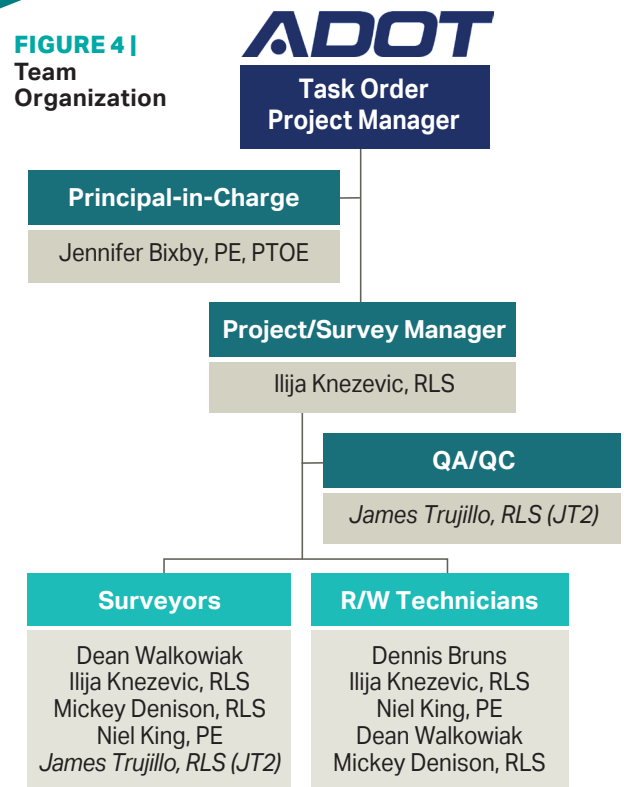
As AECOM's survey manager and ADOT's primary contact for this contract, Ilija has been responsible for quality, schedule, and cost control on hundreds of ADOT task orders on Arizona interstates, state highways, and rural roads.

Ilija has worked on ADOT R/W on-call contracts since 1998. Over the past 10 years, he has successfully delivered projects totaling \$4.9M for ADOT. Ilija is 95% dedicated to task orders under the current ADOT R/W Plans and Surveys contract (2020-007.01); this commitment will transfer to the new contract. The following task orders are proceeding on schedule and on budget under Ilija's direction:

- I-17, Anthem Way–Cordes Junction
- SR 303L, 51st Avenue & 43rd Avenue TIs
- US 95, Avenue 9E–Fortuna Wash (two task orders)
- SR 30, 127th Avenue–SR 202L South Mountain
- I-10, SR 85–Verrado Way
- I-10, Jackrabbit Trail TI
- SR 189, Nogales Port of Entry–SR 19B
- SR 260, Lion Springs Section
- SR 69, SR 169 Roundabout
- US 89, North Lake Powell Blvd
- SR 101L, SR 101L and I-10 TI

AECOM scored 4s and 5s for technical performance on our current contract (#2020-007.01), including meeting schedules and budgets.

FIGURE 4 | Team Organization



Subconsultant (DBE)
JT2 Enterprises LLC (JT2)

2C. PROJECT SURVEYOR(S) & OTHER KEY PERSONNEL

Dennis Bruns • R/W Technician • 49 Years • 95% ⌚

• Dennis has been AECOM's lead survey technician for the past 44 years, serving on all previous ADOT R/W on-call contracts. He is experienced in R/W plans, legal descriptions and calculations, precise control surveys, aerial mapping control, boundary/ALTA surveys, section breakouts, and predesign surveys. **Dennis has performed a similar role on ADOT R/W on-call contracts continuously since 1986.**

As one of the pioneers of modern ADOT R/W plans with hundreds of projects completed over the years, Dennis brings the knowledge and archival experience to facilitate any needed updates or revisions to previous R/W projects.

Dean Walkowiak • R/W Survey Party Chief/ Survey Technician • 34 Years • 95% ⌚ • Dean is experienced as a field surveyor and survey technician, including 29 years as a R/W surveyor. His background includes R/W surveys; precise control surveys; aerial mapping control; boundary surveys; section breakouts; ALTA surveys; predesign (location and topographic) surveys; residential and commercial buildings, bridges, and other major structures; and staking for subdivisions and major and minor highways. **Dean has performed a similar role on ADOT R/W on-call contracts continuously since 1994.**

Mickey Denison, RLS • R/W Survey Party Chief • Survey Technician • RLS CO #38425 • 21 Years • 95% ⌚ • Mickey brings experience in all aspects of surveying, including field work and data collection for R/W, boundary, property, topographic, subdivision layout, bench lines, construction layout, sectional breakdown, traverse, and mortgage surveys. He has experience in geometric calculations and in using Total Station theodolites and data collectors, robotic Total Stations, and GPS instruments (Trimble). Mickey has knowledge of MicroStation, AutoCAD, and Trimble Business Center.

Niel King, PE • Survey Technician/Civil Engineer • BSCE • PE AZ #53204 • 17 Years • 50% ⌚ • Niel brings both engineering and survey experience for both contractors and consultants. He has worked on survey teams responsible for setting initial and final R/W monuments, conducting topographic surveys, and carrying out construction staking on a variety of transportation projects. In addition to his understanding of the field survey methods, Niel is also experienced in reviewing title reports and creating R/W plans for land acquisition. His technical education, combined with his field and design experience, makes him a versatile member of our survey team. His job also entails general roadway design, general civil design, track design, drainage design, and 3D modeling. Niel has knowledge of MicroStation, InRoads, OpenRoads, and GEOPAK. **Niel has performed a similar role on ADOT R/W on-call contracts since 2019.**

James Trujillo, RLS (JT2) • QA/QC Plans Review • R/W Survey Technician • Field Surveyor • RLS AZ #35870 • 37 Years • 50% ⌚ • James has worked or managed R/W plans and surveys contracts for 30 years, beginning as a plans reviewer with ADOT in 1989. In 1993, he became a liaison for all R/W activities for several ADOT projects. He led a prime consultant contract for R/W plans and legal descriptions (1999–2012) and served as an assistant chief R/W agent for ADOT, managing the Plans and Title Sections. He has also assisted the Attorney General with condemnation cases and prepared 150 excess land parcels for disposal. This unique experience gives him the knowledge to oversee quality reviews for any R/W project. **James has performed similar roles on ADOT R/W on-call contracts and projects since 1989.**

2D. TEAM'S WORK EXPERIENCE

Table 4 (Page 15) shows the AECOM team's successful work experience under previous ADOT R/W Plans and Survey contracts.

3. DEMONSTRATED KNOWLEDGE, SKILLS, & ABILITIES (KSAs)

3A. AECOM TEAM'S DEMONSTRATED KSAs

• The AECOM Team's Expertise

AECOM's survey team has provided on-call services to ADOT for R/W Plans and Surveys for nearly 40 years with essentially the same staff. Most of our personnel bring a longstanding legacy of working on ADOT R/W projects and have been with AECOM for more than 25 years. As a firm that has continuously provided on-call R/W services to ADOT, AECOM's survey team is more than capable of carrying out the tasks anticipated for this new contract.

Table 2 provides our team members' individual expertise in survey-related tasks. They are also experienced in the equipment and software shown in **Table 3**.

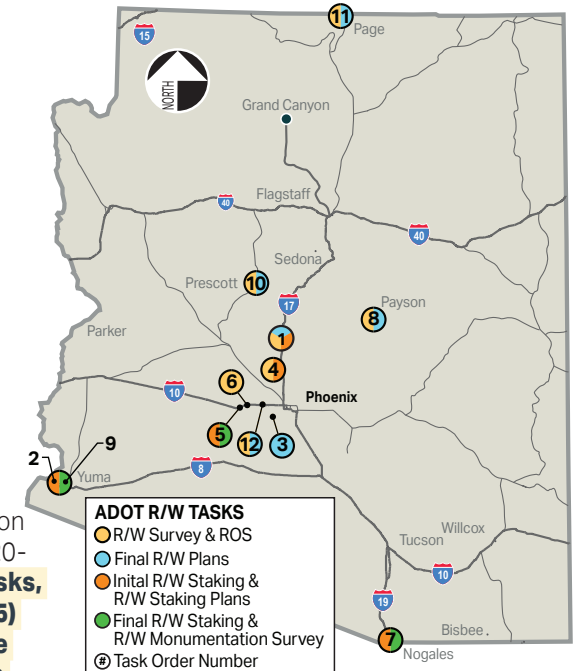
TABLE 3 | Software & Equipment Expertise

SURVEY INSTRUMENTS	
Global Positioning Systems (GPS)	
● 2 Leica Captivate GS-18 Dual Frequency GPS Receivers with RTK capabilities	
● 2 Leica VIVA GS-14 Dual Frequency GPS Receivers with RTK capabilities	
● 2 Leica System 1200 Dual Frequency GPS Receivers with RTK capabilities	
Digital Robotic Total Station	
● 1 Leica TS 15 with on-board data collection	
Levels	
1 Leica DNA03 Digital Level	1 Leica NA 2002 4 Wild NA2
SURVEY SOFTWARE	
Star-Net	MicroStation V8i SS34
Star-Lev	MicroStation InRoads
Leica Infinity	MicroStation OpenRoads
Leica Geo Office	AutoCAD 2024 AutoCAD Civil 2024

Figure 5 shows AECOM's statewide experience on the current R/W Plans and Surveys contract (2020-007.01), consisting of 12 task orders. **These tasks, along with those presented in Table 4 (Page 15) demonstrate our team's extensive experience with developing ADOT R/W plans and surveys.**

	Expertise												
	R/W Survey	R/W Staking	Control Surveys	Location Surveys	Topographic Surveys	Boundary Surveys	Aerial Mapping Surveys	Survey Data Processing	Document Research	Mathematical Computations	CADD Mapping	Legal Descriptions & Exhibits	ROS & R/W Plans Preparation
Ilija Knezevic, RLS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dennis Bruns								✓	✓	✓	✓	✓	✓
Dean Walkowiak	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Mickey Denison, RLS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Niel King, PE									✓	✓	✓	✓	✓
James Trujillo, RLS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

FIGURE 5 | AECOM Task Orders (2020-007.01)



4. RELEVANT EXPERIENCE

4A. AECOM TEAM'S SIMILAR PROJECT EXPERIENCE

● I-17, Phoenix to Cordes Junction Highway • Anthem Way TI to Cordes Junction

AECOM performed a Verification of ROS of two separate R/W projects (each using different GAF due to elevation gain) and prepared Final R/W Plans under the 2013-003.05 contract. AECOM prepared ASLD legal descriptions and exhibits to accelerate the acquisition process. Under 2020-007.01, AECOM was tasked with preparing ROS in the area where there was no current survey information. AECOM also modified final R/W plans under the task.

KEY FEATURES

- Prepared ASLD Legal Descriptions & Exhibits to accelerate acquisition process.
- Two different GAFs due to length of the project was challenging
- Critical schedule to keep the R/W acquisition on track
- Discovery of "moved" published NGS control points at the project's north end
- Cliffside terrain made surveying difficult

PROJECT DETAILS

- **Firm Role:** Prime Firm (R/W)
- **Key Staff:** Knezevic, Bruns, Walkowiak, King, Trujillo
- **Contract Amount:** \$435K
- **Owner:** ADOT

● SR 303L, Bob Stump Memorial Parkway, 51st Avenue & 43rd Avenue TIs

AECOM conducted a 50-mile-long survey of existing (at the time) and proposed portions of SR 303L from I-17 to MC 85 under the 1999–2003 on-call contract. AECOM previously developed R/W plans for this undeveloped area (51st and 43rd Avenues) under 2006-008.13. Under AECOM's 2020-007.01 on-call contract, we were tasked with verification of original ROS (completed by our current team close to 20 years ago), final R/W plans, and initial R/W staking and R/W staking plans.

KEY FEATURES

- Even though 10 years lapsed between the original and current tasks on SR 303L projects, AECOM retrieved the previous files and performed the required revisions with the same staff members, saving ADOT time and money
- Prepared ASLD legal descriptions and exhibits to accelerate acquisition process
- The critical schedule was maintained to keep R/W acquisition on track

PROJECT DETAILS

- **Firm Role:** Prime Firm (R/W)
- **Key Staff:** Knezevic, Bruns, Walkowiak, Trujillo
- **Contract Amount:** \$132K
- **Owner:** ADOT

● SR 189, Nogales Point of Entry to SR 19B (Grand Avenue)


AECOM prepared ROS, R/W plans, and R/W staking plans for approximately 4 miles of the SR 189, I-19, and SR 19B corridors through Nogales under the 2013-003.05 contract. Work included recovering sectional corners and existing R/W monumentation in an urban area, and preparing R/W plans. The project also included initial R/W staking and preparing R/W staking plans. Under 2020-007.01, AECOM was scoped with final R/W monumentation and preparation of R/W monumentation survey.

KEY FEATURES

- Maintained the schedule to keep R/W acquisition on track
- Overcame challenges of working with old deeds and plats, and a lack of existing monumentation
- The GAF was adjusted to fit existing deeds and plats
- The project had a large number of double sectional corners and underwent a lot of acquisition modifications
- AECOM completed the full ADOT R/W project cycle

PROJECT DETAILS

- **Firm Role:** Prime Firm (R/W)
- **Key Staff:** Knezevic, Bruns, Walkowiak, King, Trujillo
- **Contract Amount:** \$523K
- **Owner:** ADOT

 ADOT projects presented on the following pages were selected from the hundreds of projects our staff has completed for ADOT to demonstrate the versatility, expertise, and history our team brings.

● SR 30, Tres Rios Freeway, 127th Avenue – SR 202L South Mountain

This project encompasses an 8-mile corridor of the future SR 30. AECOM was first scoped with a R/W survey and ROS task during the 2013-003.05 contract, which included field survey and analysis of large amounts of recorded data. Final ROS was submitted in 2022. At the beginning of 2020-007.01, AECOM was scoped with developing basemapping plans. The work includes calculation of more than 250 parcels affected by future acquisition. This task is ongoing.

KEY FEATURES

- The project had a significant amount of double monument corners
- AECOM overcame the challenges of working with old deeds and plats, and a lack of existing monumentation
- AECOM researched and analyzed 250+ title reports and vesting deeds
- AECOM produced 24 AADS

PROJECT DETAILS

- **Firm Role:** Prime Firm (R/W)
- **Key Staff:** Knezevic, Bruns, Walkowiak, Trujillo
- **Contract Amount:** \$746K
- **Owner:** ADOT

● SR 260, Payson Show Low Highway, Lion Springs Section

AECOM performed R/W survey and prepared ROS along SR 260 east of Payson for approximately 5.5 miles through Tonto National Forest with the 2013-003.05 contract. In 2000, our team worked on the original ROS covering the same area under the 1999 on-call contract. The R/W plans task was issued under 2020-007.01, as well as ROS modifications. During the R/W plans process, AECOM discovered additional cadastral corners that required additional field surveys and ROS modifications.

KEY FEATURES

- Key staff worked on this project originally in 2000
- The critical schedule was maintained to keep R/W acquisition on track
- The GAF changed since the original survey
- Homestead Entry Survey (HES) and un-surveyed area

PROJECT DETAILS

- **Firm Role:** Prime Firm (R/W)
- **Key Staff:** Knezevic, Bruns, Walkowiak, Trujillo
- **Contract Amount:** \$257K
- **Owner:** ADOT

4B. AECOM TEAM'S EXPERIENCE & RECORD OF PERFORMANCE

TABLE 4 | Firm/Team Experience

Table 4 shows AECOM's history of work on previous ADOT R/W contracts, as well as on-time and on-budget completion.

	ACTIVITY					Delivered on Schedule/Budget	KEY PERSONNEL					
	R/W Survey & ROS	Basemapping Plans	Final R/W Plans	Initial R/W Staking & R/W Staking Plans	Final R/W Staking & R/W Monumentation Survey		Ilija Knezevic, RLS	Dennis Bruns	Niel King, PE	Dean Walkowiak	Mickey Dennison, RLS	James Trujillo, RLS (JT2)
Contract: 2020-007.01 (2020–Present)												
I-17, Anthem Way–Cordes Junction	✓		✓	✓		✓	✓	✓	✓	✓	✓	
SR 303L, 51st Avenue & 43rd Avenue TIs	✓		✓	✓		✓	✓	✓		✓	✓	
US 95, Avenue 9E–Fortuna Wash			✓	✓	✓	✓	✓	✓	✓	✓	✓	
SR 30, 127th Avenue–SR 202L South Mountain		✓				✓	✓	✓	✓	✓	✓	
I-10, SR 85–Verrado Way				✓	✓	✓	✓	✓		✓	✓	
I-10, Jackrabbit Trail TI	✓					✓	✓	✓	✓	✓	✓	
SR 189, Nogales Port of Entry–SR 19B			✓		✓	✓	✓	✓	✓	✓	✓	
SR 260, Lion Springs Section	✓		✓			✓	✓	✓	✓	✓	✓	
SR 69, SR 169 Roundabout	✓		✓			✓	✓	✓	✓	✓	✓	
US 89, North Lake Powell Boulevard	✓		✓			✓	✓	✓		✓	✓	
SR 101L, SR 101L & I-10 TI	✓		✓			✓	✓	✓	✓	✓	✓	
Contract: 2013-003.05 (2013–2021)												
SR 51, Black Mountain Boulevard	✓		✓	✓	✓	✓	✓	✓	✓	✓		
I-8, Giss Parkway TI	✓		✓	✓	✓	✓	✓	✓	✓	✓		
US 191, Junction SR 181–Pearce Road Intersection				✓	✓	✓	✓	✓	✓	✓		
US 95, Avenue 9E–Fortuna Wash Bridge	✓		✓	✓	✓	✓	✓	✓	✓	✓		
US 191, I-10–SR 266				✓	✓	✓	✓	✓	✓	✓		
SR 202L, Junction I-10 Maricopa–17th Avenue		✓				✓	✓	✓	✓	✓		
SR 51, Noise Mitigation on MAG RFS			✓			✓	✓	✓	✓	✓		
SR 303L, Happy Valley Road–I-17				✓	✓	✓	✓	✓	✓	✓		
SR 303L, I-10 Traffic Interchange			✓	✓	✓	✓	✓	✓	✓	✓		
US 60, Meridian Road TI				✓	✓	✓	✓	✓	✓	✓		
US 60, Bell Road TI	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
SR 75, Little Sand Wash–Apache Creek				✓	✓	✓	✓	✓	✓	✓		
I-10, Twin Peaks–Linda Vista TI				✓	✓	✓	✓	✓	✓	✓		
I-17, Thomas Road–Bethany Home Road	✓					✓	✓	✓	✓	✓		
I-17, 19th Avenue–Arizona Canal Trail			✓			✓	✓	✓	✓	✓		
US 95, Avenue 8E Intersection	✓		✓	✓		✓	✓	✓	✓	✓		

✓ Task orders are progressing or were delivered on time and on budget based on shifting ADOT priorities

	ACTIVITY					Delivered on Schedule/Budget	KEY PERSONNEL					
	R/W Survey & ROS	Basemapping Plans	Final R/W Plans	Initial R/W Staking & R/W Staking Plans	Final R/W Staking & R/W Monumentation Survey		Ilija Knezevic, RLS	Dennis Bruns	Niel King, PE	Dean Walkowiak	James Trujillo, RLS (JT2)	
Contract: 2013-003.05 (2013–2021) • Continued												
SR 77, Town of Mammoth, Copper St–Redwood Dr	✓		✓	✓	✓	✓	✓	✓		✓	✓	
SR 189, Nogales Port of Entry–SR 19B	✓		✓			✓	✓	✓	✓	✓	✓	
US 93, Carrow–Stephens Ranch			✓	✓		✓	✓	✓		✓	✓	
US 60, Greenway–Thompson Ranch Road	✓		✓	✓	✓	✓	✓	✓		✓	✓	
SR 288, South of Young, MP 288	✓		✓		✓	✓	✓	✓		✓	✓	
I-10, SR 85–Verrado Way	✓		✓			✓	✓	✓	✓	✓	✓	
I-17, Anthem Way–Cordes Junction	✓		✓			✓	✓	✓	✓	✓	✓	
I-17, Indian School Rd TI	✓		✓			✓	✓	✓		✓	✓	
US 95, Avenue 8E Intersection	✓		✓			✓	✓	✓	✓	✓	✓	
SR 30, 127th Avenue – SR 202L South Mountain	✓					✓	✓	✓		✓	✓	
SR 260, Lion Springs Section	✓					✓	✓	✓		✓	✓	
Contract: 2009-034.13 (2009–2013)												
US 93, Deluge Wash to Hackberry Springs			✓			✓	✓	✓		✓	✓	
US 60, Grand Avenue, 99th Avenue to 83rd Avenue				✓	✓	✓	✓	✓		✓	✓	
I-40, Fort Rock TI	✓					✓	✓	✓		✓	✓	
US 93, Big Sandy to Deluge Wash			✓	✓	✓	✓	✓	✓		✓	✓	
US 60, SR 303L to 99th Avenue			✓	✓		✓	✓	✓		✓	✓	
US 191 South, Sunsites at High Street				✓	✓	✓		✓		✓	✓	
US 95, Joy Lane Intersection			✓			✓		✓		✓	✓	
SR 87, Payson, Airport Road Intersection			✓	✓	✓	✓		✓		✓	✓	
SR 202L, San Tan Freeway			✓			✓		✓		✓	✓	
US 191 North, I-10 to SR 266			✓	✓	✓	✓		✓		✓	✓	
I-40, Rancho Santa Fe TI	✓		✓			✓		✓		✓	✓	
SR 303L, Estrella Parkway				✓		✓		✓		✓	✓	
SR 75, Little Sand Wash/Apache Creek	✓		✓			✓		✓		✓	✓	
US 191, SR 181, Pearce Road Intersection	✓		✓			✓		✓		✓	✓	
US 60, Meridian Road TI	✓		✓			✓	✓	✓		✓	✓	
SR 95, Sterling Road Intersection	✓	✓				✓	✓	✓		✓	✓	

4C. LEVEL OF EXPERIENCE OF KEY PERSONNEL

With nearly 200 Arizona employees (six on our survey team), AECOM has ample resources to fulfill the services required under this contract. Though all 12 task orders under our current contract are open, our team members are actively providing office and field work for Tasks 3, 9, 10, 11, and 12. They will shift focus as needed to other open tasks as requested by ADOT.

This contract is the the focus of our team's work at AECOM; most of our team members are 95% dedicated to performing ADOT R/W on-call task orders. We have the resources and availability to respond quickly to any ADOT requests on this on-call contract.

In addition, our team's knowledge of working with ADOT allows us to prepare accurate cost estimates and scopes of work, and to mobilize quickly to perform the work. If the need arises, we will add supplemental qualified staff to our team. We can accomplish this by engaging the resources of our experienced regional survey teams in neighboring states to help us fulfill ADOT's project needs.

4D. SUBCONSULTANT EXPERIENCE

AECOM has teamed with a DBE firm, JT2 Enterprises, LLC (JT2), to support our surveying efforts for this contract. We are committed to contributing to ADOT's DBE goals by using ADOT DBE-certified firms such as JT2. **JT2 has provided independent technical review on AECOM submittals to ADOT R/W Group for the past 8 years (contracts 2020-007.01 and 2013-003.05).**

JT2's experienced survey professionals have performed the complete range of surveying services for many years in Arizona. JT2 has worked for ADOT under the R/W Plans and Surveys on-call for many years, including the following projects:

- US 89, North Lake Powell Boulevard
- US 60, SR 101L to SR 202L: Diamond Grind (R/W Abandonments)
- US 60, 85th Avenue – I-17 (R/W Abandonments Project)
- SR 69, SR 169 Roundabout
- SR 303L, 51st Avenue & 43rd Avenue Tl's
- SR 30, 127th Avenue – SR 202L South Mountain
- I-10, Jackrabbit Trail Tl
- SR 260, Thousand Trails Road – Junction I-17
- SR 260, Lion Springs Section
- I-17 Flex Lanes, Anthem Way Tl to Cordes Junction
- I-10, SR 85 to Verrado Way
- SR 189, Nogales Port of Entry to SR 19B
- US 95, Avenue 8E Intersection
- US 95, Avenue 9E – Fortuna Wash
- US 60, Greenway Road to Thompson Ranch Road

5. QUALITY CONTROL

5A. INTERNAL QUALITY CONTROL PROCEDURES

AECOM Quality Management System (QMS) meets the standards of AECOM's ISO 9001:2015 certification. It requires the preparation of a Project Execution Plan and QA/QC plan at the project outset. The QA/QC plan includes a comprehensive program of detailed checking, independent technical review (ITR), and documentation (see **Figure 5**). All technical work is first detail-checked for accuracy at the design level with a color-coded check and back-check system. Next, ITRs are performed prior to each submittal by James Trujillo (JT2). The ITRs examine the plans and supporting documents for clarity, completeness, and conformance with the scope of work and ADOT's design procedures. The ITR is also responsible for checking and signing ADOT provided Checklists (dependent on the task). Each member of our design team is intimately familiar with the details of the QMS through everyday implementation. **All of the projects identified in Section 4, Relevant Experience (including the task orders listed in Table 4), successfully used AECOM's QMS.**

FIGURE 6 | AECOM's Quality Process



5B. QUALITY CONTROL PROCESS FOR TASK ORDERS

As contract manager, Ilija Knezevic, RLS, is responsible for verifying that the AECOM team meets day-to-day QC requirements. While Ilija has direct responsibility for quality control, each team member will be responsible for performing quality survey work, methods, and procedures, which are verified through comprehensive checking, back-checking, and review to confirm quality in the final product. Ilija will be supported by Jim Trujillo, RLS (JT2) who will be responsible for Independent Technical Review (ITR) on R/W projects, including verifying that all submittals to ADOT have undergone detailed checking and ITRs. Ilija will also be supported by AECOM's office quality manager. AECOM's formal QC program is on file with, and has been approved by, ADOT. Regular project team meetings are also a part of our QC program. Meeting discussions center on project goals, schedule, budget, and client standards. Proper surveying methods and procedures are also an inherent QC measure. Redundant satellite observations, multiple angles, and double-run leveling loops are just a few examples of processes we use to give a confidence of repeatability.

AECOM implements our structured quality program on all task orders under the ADOT R/W Plans and Survey on-call contracts, resulting in quality submittals with no (or minimal) client comments. Per AECOM's quality policy, every submittal to ADOT is required to undergo quality review.



ILIJA KNEZEVIC, RLS
PROJECT (CONTRACT) MANAGER

Education:

- Survey, Geodetic Technician, Geodetic Technical School, Belgrade, Serbia

Registrations:

- Registered Land Surveyor, AZ #39229

Years of Experience: 25

Company Title: Arizona Survey Manager, responsible for managing all survey services in Arizona

Ilija is experienced in survey with survey technician/coordination and managerial responsibilities. His background includes R/W plans, legal descriptions and calculations, precise control surveys, aerial mapping control, boundary surveys, section break-outs, ALTA surveys, underground utilities surveys, digital survey GIS maps, pre-design (location and topographic) surveys, lay-out for houses, commercial buildings, bridges and other major structures, and staking for subdivisions and major and minor highways.

PROJECT EXPERIENCE

On-call R/W Plans and Surveys (2020-007.01), Arizona, ADOT (2020–Present). *Survey Manager.* Ilija prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- I-17, Anthem Way–Cordes Junction
- SR 303L, 51st Avenue & 43rd Avenue TIs
- US 95, Avenue 9E–Fortuna Wash (two task orders)
- SR 30, 127th Avenue–SR 202L South Mountain
- I-10, SR 85–Verrado Way
- I-10, Jackrabbit Trail TI
- SR 189, Nogales Port of Entry–SR 19B
- SR 260, Lion Springs Section
- SR 69, SR 169 Roundabout
- US 89, North Lake Powell Boulevard
- SR 101L, SR 101L and I-10 TI

On-Call Services for R/W Plans and Legal

Descriptions (2013-003.05), Arizona, ADOT (2013–

2021). *Survey Manager.* Ilija prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 51, Black Mountain Parkway, Phoenix
- I-8, Giss Parkway, Yuma
- US 191, Pearce Road, Willcox
- US 95, Aberdeen Road, Yuma
- US 191, I-10 to SR 266, Willcox
- SR 202L, South Mountain Freeway, Phoenix
- SR 303L, Happy Valley to I-17, Phoenix
- US 60, Meridian Road TI, Mesa

- SR 303L, I-10 Traffic Interchange, Avondale
- SR 75, Duncan to Guthrie, Duncan
- US 60, Bell Road TI, Phoenix
- I-10, Twin Peaks TI, Marana
- I-17, Thomas Road to Bethany Home Road, Phoenix
- 59th Avenue and Olive Avenue, Glendale
- SR 77, Town of Mammoth, Copper Street to Redwood Dr.
- SR 189, Nogales POE to SR 19B (Grand Avenue)
- US 93, Carrow to Stephens Ranch
- US 60, Greenway to Thompson Ranch Road
- SR 288, South of Young, MP 288
- I-10, SR 85 to Verrado Way
- I-17 Flex Lanes, Anthem Way TI to Cordes Junction
- I-17, Indian School Rd TI
- US 95, Avenue 8E Intersection
- SR 30, 127th Avenue – SR 202L South Mountain
- SR 260, Lion Springs Section

On-Call Services for R/W Plans and Legal

Descriptions (2009-034.13), Arizona, ADOT (2009–

2013). *Survey Manager.* Ilija prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- US 93, Deluge Wash to Hackberry Springs
- US 60, Grand Avenue, 99th Avenue to 83rd Avenue
- I-40, Fort Rock TI
- US 93, Big Sandy to Deluge Wash
- US 60, SR 303L to 99th Avenue
- US 60, Meridian Road TI
- SR 95, Sterling Road Intersection

On-Call Services for R/W Plans and Legal

Descriptions (2006-08.13), Arizona, ADOT (2006–

2009). *Survey Technician/Project Manager.* Ilija prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 303L, Happy Valley/I-17
- US 191 South, Cochise SPRR Overpass
- US 191 North, Junction SR 80 North
- US 191 South, Sunizona – Pearce
- US 60, 99th – 83rd Avenue
- US 93, Cottonwood Canyon – Bridle Creek
- US 93, Big Sandy – Deluge Wash
- US 191 North, I-10/SR 266
- SR 66, Mohave Airport Drive
- I-40, North Park TI
- US 191 South, Sunsites at High Street
- SR 303L, MC 85/I-17
- US 93, Pliocene Cliffs/Big Sandy
- US 60, SR 303L – 99th Avenue
- I-10, Fort Grant TI
- US 93, Deluge Wash – Hackberry Springs
- SR 87, Airport Road Intersection



Ilija has served on six consecutive ADOT R/W contracts as a survey manager and/or survey technician. This history with ADOT's survey program provides him with the knowledge, skills, and abilities to deliver task orders on time, on budget, and to ADOT's satisfaction.

ILIJA KNEZEVIC, RLS**Page 2****On-Call Services for R/W Plans and Legal**

Descriptions, Arizona, ADOT (2002–2005). *Survey Technician/Project Manager.* Ilija prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 87, Payson North to Pine
- US 191, I-10 to SR 266
- US 93, No Name/Placerita
- US 60, 59th Avenue/Glendale
- US 60, 75th Avenue/Olive
- SR 202L, Arizona Avenue to Gilbert Drive
- US 60, 51st Avenue/Bethany Home Road
- I-10, Fort Grant TI
- SR 89A, Banjo Bill Rockfill
- US 93, Pliocene Cliffs
- US 93, Burro Creek
- US 93, Cottonwood/Bridle
- US 60, 27th Avenue/Thomas
- US 191, Sunizona/Pearce
- US 93, Big Sandy/Deluge Wash
- US 93, Deluge Wash/Hackberry Spring
- Pan American Avenue
- US 181, US 191 to Cochise National Monument
- SR 80 North ROW Plans
- US 93, Tres Alamos–Santa Maria
- SR 87, Payson
- SR 303L, Happy Valley Road to I-17
- Cochise Overpass #157
- SR 66, East Kingman TI to Anteres
- Mohave Airport Drive

On-Call Services for R/W Plans and Legal

Descriptions, Arizona, ADOT (1999–2003). *Survey Technician/Project Manager.* Ilija prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 202L, Arizona Avenue to Gilbert Drive
- US 93 Pliocene Cliffs
- Excess Land Disposals
- US 60, 27th Avenue Structures
- US 60, 101L/91st Avenue
- US 60, 51st Avenue/Bethany Home Road
- US 60, 43rd Avenue/Camelback Road
- B-10/Quartzsite
- SR 260, Lion Springs Section
- US 60, 59th Avenue/Glendale Avenue
- US 93, Kaiser Springs
- US 93, Deluge Wash/Big Sandy
- US 191, I-10/SR 266

Ironwood Drive Safety Improvements, Pinal County, AZ, ADOT.

Survey Manager. Ilija had management responsibilities in the field and in the office. He established a horizontal and vertical survey control network using GPS technology (RTK). Survey included verification of sectional corners, parcel calculation and preparation of legal description and exhibits for the ASLD depicting new acquisition areas.

SR 95, Teller Road to Aztec Road, Mohave Valley, AZ, ADOT.

Survey Manager. Ilija managed responsibilities in the field and in the office. He established a horizontal and vertical survey control network using GPS technology (RTK). Survey included setting aerial targets in and around SR 95.

Aerial and Ground Survey, SR 97 Improvements, US 93 to SR 96, Bagdad, AZ, Confidential Client.

Project Survey Manager/Field Surveyor. Ilija managed responsibilities in the field and in the office. Tasks included establishing a horizontal and vertical survey control network using GPS technology. Survey included setting aerial targets in and around SR 97 for aerial photogrammetry mapping. Survey data was then post-processed using OPUS services provided by NGS, a portion of NOAA. AECOM teamed with AeroTech Mapping Inc. (aerial photogrammetry) to complete this project.

I-40, Rancho Santa Fe Parkway TI, DCR, and Final

Design, Kingman, AZ, ADOT. *Survey Manager.* Ilija and his team prepared R/W plans, Results of Survey for the ADOT portion of the project, and prepared legal descriptions and exhibits for the City of Kingman portion of the project.

On-Call Engineering Services, Survey Support on Various Projects, City of Scottsdale, AZ.

Survey Technician. Ilija provided surveying services for a variety of project types, including ALTA, boundary, and topographic surveys; R/W definition, and R/W surveys. Task orders include:

- Sidewalk Improvements: Westland Drive, Legend Trail Parkway and Indian Bend Road
- Shea Boulevard Tunnel Access at 124th Street
- Traffic Calming Improvements: Granite Reef and 86th Street
- North Bank Canal Improvements

Survey Support on Various Projects, Town of Oro Valley, AZ.

Survey Manager. Ilija provided surveying services for a variety of project types, including topographic surveys, R/W definition, R/W surveys, and R/W acquisitions support. Task orders include:

- Lambert Lane improvements
- Tangerine Road improvements

Desert Sky Transit Center, City of Phoenix AZ.

Survey Manager. Ilija managed responsibilities in the field and in the office. Tasks included establishing a horizontal and vertical control network using GPS technology (RTK). The team surveyed property for the future City of Phoenix transit center on 79th Avenue and Thomas Road. Services included topographic survey, boundary establishment, R/W definitions, data processing, CADD drafting of topographic survey, property legal description preparation, preparation of final subdivision plat, preparation of ALTA plat, and new acquisition support.

DENNIS BRUNSSURVEY &
R/W TECHNICIAN**Education:**

- Coursework, Civil Engineering, Arizona State University

Years of Experience: 49

Company Title: R/W Technician, responsible for providing survey services on Arizona roadway projects

Dennis is an experienced survey technician in the areas of R/W plans, legal descriptions and calculations, precise control surveys, aerial mapping control, boundary/ALTA surveys, section break-outs, pre-design surveys, and in civil engineering design and drafting for all phases of land development. Municipal project experience includes paving improvement districts. Highway design and drafting projects include hydrology/hydraulics earthwork, alignment alternatives, construction phasing, and traffic phasing.

PROJECT EXPERIENCE**On-call R/W Plans and Surveys (2020-007.01), Arizona, ADOT (2020–Present).** *R/W Technician.* Dennis prepared

R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- I-17, Anthem Way–Cordes Junction
- SR 303L, 51st Avenue & 43rd Avenue TIs
- US 95, Avenue 9E–Fortuna Wash (two task orders)
- SR 30, 127th Avenue–SR 202L South Mountain
- I-10, SR 85–Verrado Way
- I-10, Jackrabbit Trail TI
- SR 189, Nogales Port of Entry–SR 19B
- SR 260, Lion Springs Section
- SR 69, SR 169 Roundabout
- US 89, North Lake Powell Boulevard
- SR 101L, SR 101L and I-10 TI

On-Call Services for R/W Plans and Legal Descriptions (2013-003.05), Arizona, ADOT (2013–2021). *R/W Technician.* Dennis prepared R/W plans,

Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 51, Black Mountain Parkway, Phoenix
- I-8, Giss Parkway, Yuma
- US 191, Pearce Road, Willcox
- US 95, Aberdeen Road, Yuma
- US 191, I-10 to SR 266, Willcox
- SR 202L, South Mountain Freeway, Phoenix
- SR 303L, Happy Valley to I-17, Phoenix
- US 60, Meridian Road TI, Mesa
- SR 303L, I-10 Traffic Interchange, Avondale

- SR 75, Duncan to Guthrie, Duncan
- US 60, Bell Road TI, Phoenix
- I-10, Twin Peaks TI, Marana
- I-17, Thomas Road to Bethany Home Road, Phoenix
- 59th Avenue and Olive Avenue, Glendale
- SR 77, Town of Mammoth, Copper Street to Redwood Dr.
- SR 189, Nogales POE to SR 19B (Grand Avenue)
- US 93, Carrow to Stephens Ranch
- US 60, Greenway to Thompson Ranch Road
- SR 288, South of Young, MP 288
- I-10, SR 85 to Verrado Way
- I-17 Flex Lanes, Anthem Way TI to Cordes Junction
- I-17, Indian School Rd TI
- US 95, Avenue 8E Intersection
- SR 30, 127th Avenue – SR 202L South Mountain
- SR 260, Lion Springs Section

On-Call Services for R/W Plans and Legal Descriptions (2009-034.13), Arizona, ADOT (2009–2013). *R/W Technician.* Dennis prepared R/W plans,

Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- US 93, Deluge Wash to Hackberry Springs
- US 60, Grand Avenue, 99th Avenue to 83rd Avenue
- I-40, Fort Rock TI
- US 93, Big Sandy to Deluge Wash
- US 60, SR 303L to 99th Avenue
- US 191 South, Sunsites at High Street
- US 95, Joy Lane Intersection
- SR 87, Payson, Airport Road Intersection

- SR 202L, San Tan Freeway
- US 191 North, I-10 to SR 266
- SR 303L, Estrella Parkway
- SR 75, Little Sand Wash/Apache Creek
- US 191, SR 181, Pearce Road Intersection
- US 60, Meridian Road TI
- SR 95, Sterling Road Intersection

On-Call Services for R/W Plans and Legal Descriptions (2006-08.13), Arizona, ADOT (2006–2009). *R/W Technician.* Dennis prepared R/W plans,

Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 303L, Happy Valley/I-17
- US 191 South, Cochise SPRR Overpass
- US 191 North, Junction SR 80 North
- US 191 South, Sunizona – Pearce
- US 60, 99th – 83rd Avenue
- US 93, Cottonwood Canyon – Bridle Creek
- US 93, Big Sandy – Deluge Wash
- US 191 North, I-10/SR 266
- SR 66, Mohave Airport Drive
- I-40, North Park TI
- US 191 South, Sunsites at High Street
- SR 303L, MC 85/I-17
- US 93, Pliocene Cliffs/Big Sandy
- US 60, SR 303L – 99th Avenue
- I-10, Fort Grant TI
- US 93, Deluge Wash – Hackberry Springs
- SR 87, Airport Road Intersection

DENNIS BRUNS

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On-Call Services for R/W Plans and Legal Descriptions, Arizona, ADOT (2002–2005). *R/W Technician.*

Dennis prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 87, Payson North to Pine
- US 191, I-10 to SR 266
- US 93, No Name/Placerita
- US 60, 59th Avenue/Glendale
- US 60, 75th Avenue/Olive
- SR 202L, Arizona Avenue to Gilbert Drive
- US 60, 51st Avenue/Bethany Home Road
- I-10, Fort Grant TI
- SR 89A, Banjo Bill Rockfill
- US 93, Pliocene Cliffs
- US 93, Burro Creek
- US 93, Cottonwood/Bridle
- US 60, 27th Avenue/Thomas
- US 191, Sunizona/Pearce
- US 93, Big Sandy/Deluge Wash
- US 93, Deluge Wash/Hackberry Spring
- Pan American Avenue
- US 181, US 191 to Cochise National Monument
- SR 80 North ROW Plans
- US 93, Tres Alamos–Santa Maria
- SR 87, Payson
- SR 303L, Happy Valley Road to I-17
- Cochise Overpass #157
- SR 66, East Kingman TI to Anteres
- Mohave Airport Drive

On-Call Services for R/W Plans and Legal Descriptions, Arizona, ADOT (1999–2003). *R/W Technician.*

Dennis prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 202L, Arizona Avenue to Gilbert Drive
- US 93 Pliocene Cliffs
- Excess Land Disposals
- US 60, 27th Avenue Structures
- US 60, 101L/91st Avenue
- US 60, 51st Avenue/Bethany Home Road
- US 60, 43rd Avenue/Camelback Road
- B-10/Quartzsite
- SR 260, Lion Springs Section
- US 60, 59th Avenue/Glendale Avenue
- US 93, Kaiser Springs
- US 93, Deluge Wash/Big Sandy
- US 191, I-10/SR 266

General Civil Engineering On-Call, Survey and R/W Acquisition Support, Ironwood Drive, Germann Road to Elliot Road Alignment Final Design, Pinal County, AZ. *Survey Technician.*

Dennis provided survey services support, including:

- Defined existing R/W limits and parcel boundaries calculations
- Established new acquisition limits and preparation of legal descriptions and exhibits for all acquisition needs

Contract for Professional Services, Survey and R/W Acquisition Support, 59th Avenue and Olive Avenue Intersection Improvements, City of Glendale, AZ. *Survey Technician.* Dennis provided survey services support, including:

- Defined existing R/W limits and parcel boundaries calculations
- Established new acquisition limits and preparation of legal descriptions and exhibits for all acquisition needs

Kingman Crossing Boulevard, Southern Avenue to I-40, R/W Acquisition Support, City of Kingman, AZ. *Survey Technician.*

Dennis provided parcel calculation and prepared legal description and exhibits depicting new acquisition areas. AECOM teamed with Tierra Right of Way to complete this project.

Bopp Road to Sarasota Boulevard at Kinney Road Improvements, R/W Acquisition Support, Tucson, AZ, Pima County. *Survey Technician.*

This project included responsibilities in the field and in the office. Work included establishing a horizontal and vertical survey control network using GPS technology (RTK). Survey included verification of sectional corners, parcel calculation, and preparation of legal descriptions and exhibits depicting new acquisition areas.

Survey Support on Various Projects, Town of Oro Valley, AZ. *Survey Technician.*

Dennis provided surveying services for a variety of project types, including topographic surveys, R/W definition, R/W surveys, and R/W acquisitions support. Task orders include:

- Lambert Lane improvements
- Tangerine Road improvements

Desert Sky Transit Center, City of Phoenix, AZ. *Survey Technician.*

The team surveyed property for the future City of Phoenix transit center on 79th Avenue and Thomas Road. Tasks included establishing a horizontal and vertical control network using GPS technology (RTK). Services included topographic survey, boundary establishment, R/W definitions, data processing, CADD drafting of topographic survey, property legal description preparation, preparation of final subdivision plat, preparation of ALTA plat, and new acquisition support.



As one of the pioneers of modern ADOT R/W plans with hundreds of projects completed over the years, Dennis brings the knowledge and archival experience to facilitate any needed updates or revisions to previous R/W projects.

DEAN WALKOWIAKR/W SURVEY PARTY CHIEF
SURVEY TECHNICIAN

95%

Education:

- High School Diploma

Years of Experience: 34

Company Title: Survey Technician,
responsible for providing survey services on
Arizona roadway projects

Dean has 29 years of surveying experience as Party Chief. His background includes Right of Way surveys, precise control surveys, aerial mapping control, boundary surveys, right-of-way surveys, section break-outs, ALTA surveys, predesign (location and topographic) surveys, layout for houses, commercial buildings, bridges, and other major structures, and staking for subdivisions, major and minor highways.

PROJECT EXPERIENCE

On-call R/W Plans and Surveys (2020-007.01), Arizona, ADOT (2020–Present). *Survey Party Chief, R/W Technician.* Dean prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona.

- I-17, Anthem Way–Cordes Junction
- SR 303L, 51st Avenue & 43rd Avenue TIs
- US 95, Avenue 9E–Fortuna Wash (two task orders)
- SR 30, 127th Avenue–SR 202L South Mountain
- I-10, SR 85–Verrado Way
- I-10, Jackrabbit Trail TI
- SR 189, Nogales Port of Entry–SR 19B
- SR 260, Lion Springs Section
- SR 69, SR 169 Roundabout
- US 89, North Lake Powell Boulevard
- SR 101L, SR 101L and I-10 TI

On-Call Services for R/W Plans and Legal Descriptions (2013-003.05), Arizona, ADOT (2013–2021). *Survey Party Chief, R/W Technician.* Dean prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 51, Black Mountain Parkway, Phoenix
- I-8, Giss Parkway, Yuma
- US 191, Pearce Road, Willcox
- US 95, Aberdeen Road, Yuma
- US 191, I-10 to SR 266, Willcox
- SR 202L, South Mountain Freeway, Phoenix
- SR 303L, Happy Valley to I-17, Phoenix
- US 60, Meridian Road TI, Mesa
- SR 303L, I-10 Traffic Interchange, Avondale

- SR 75, Duncan to Guthrie, Duncan
- US 60, Bell Road TI, Phoenix
- I-10, Twin Peaks TI, Marana
- I-17, Thomas Road to Bethany Home Road, Phoenix
- 59th Avenue and Olive Avenue, Glendale
- SR 77, Town of Mammoth, Copper Street to Redwood Dr.
- SR 189, Nogales POE to SR 19B (Grand Avenue)
- US 93, Carrow to Stephens Ranch
- US 60, Greenway to Thompson Ranch Road
- SR 288, South of Young, MP 288
- I-10, SR 85 to Verrado Way
- I-17 Flex Lanes, Anthem Way TI to Cordes Junction
- I-17, Indian School Rd TI
- US 95, Avenue 8E Intersection
- SR 30, 127th Avenue – SR 202L South Mountain
- SR 260, Lion Springs Section

On-Call Services for R/W Plans and Legal Descriptions (2009-034.13), Arizona, ADOT (2009–2013). *Survey Party Chief, R/W Technician.* Dean prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- US 93, Deluge Wash to Hackberry Springs
- US 60, Grand Avenue, 99th Avenue to 83rd Avenue
- I-40, Fort Rock TI
- US 93, Big Sandy to Deluge Wash
- US 60, SR 303L to 99th Avenue
- US 191 South, Sunsites at High Street
- US 95, Joy Lane Intersection
- SR 87, Payson, Airport Road Intersection

- SR 202L, San Tan Freeway
- US 191 North, I-10 to SR 266
- SR 303L, Estrella Parkway
- SR 75, Little Sand Wash/Apache Creek
- US 191, SR 181, Pearce Road Intersection
- US 60, Meridian Road TI
- SR 95, Sterling Road Intersection

On-Call Services for R/W Plans and Legal Descriptions (2006-08.13), Arizona, ADOT (2006–2009). *Survey Party Chief, R/W Technician.* Dean prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona.

- SR 303L, Happy Valley/I-17
- US 191 South, Cochise SPRR Overpass
- US 191 North, Junction SR 80 North
- US 191 South, Sunizona – Pearce
- US 60, 99th – 83rd Avenue
- US 93, Cottonwood Canyon – Bridle Creek
- US 93, Big Sandy – Deluge Wash
- US 191 North, I-10/SR 266
- SR 66, Mohave Airport Drive
- I-40, North Park TI
- US 191 South, Sunsites at High Street
- SR 303L, MC 85/I-17
- US 93, Pliocene Cliffs/Big Sandy
- US 60, SR 303L – 99th Avenue
- I-10, Fort Grant TI
- US 93, Deluge Wash – Hackberry Springs
- SR 87, Airport Road Intersection

DEAN WALKOWIAK

Page 2

On-Call Services for R/W Plans and Legal

Descriptions, Arizona, ADOT (2002–2005). *Survey Party Chief, R/W Technician.* Dean prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 87, Payson North to Pine
- US 191, I-10 to SR 266
- US 93, No Name/Placerita
- US 60, 59th Avenue/Glendale
- US 60, 75th Avenue/Olive
- SR 202L, Arizona Avenue to Gilbert Drive
- US 60, 51st Avenue/Bethany Home Road
- I-10, Fort Grant TI
- SR 89A, Banjo Bill Rockfill
- US 93, Pliocene Cliffs
- US 93, Burro Creek
- US 93, Cottonwood/Bridle
- US 60, 27th Avenue/Thomas
- US 191, Sunizona/Pearce
- US 93, Big Sandy/Deluge Wash
- US 93, Deluge Wash/Hackberry Spring
- Pan American Avenue
- US 181, US 191 to Cochise National Monument
- SR 80 North ROW Plans
- US 93, Tres Alamos–Santa Maria
- SR 87, Payson
- SR 303L, Happy Valley Road to I-17
- Cochise Overpass #157
- SR 66, East Kingman TI to Anteres
- Mohave Airport Drive

On-Call Services for R/W Plans and Legal

Descriptions, Arizona, ADOT (1999–2003). *Survey Party Chief, R/W Technician.* Dean prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 202L, Arizona Avenue to Gilbert Drive
- US 93 Pliocene Cliffs
- Excess Land Disposals
- US 60, 27th Avenue Structures
- US 60, 101L/91st Avenue
- US 60, 51st Avenue/Bethany Home Road
- US 60, 43rd Avenue/Camelback Road
- B-10/Quartzsite
- SR 260, Lion Springs Section
- US 60, 59th Avenue/Glendale Avenue
- US 93, Kaiser Springs
- US 93, Deluge Wash/Big Sandy
- US 191, I-10/SR 266

On-Call Engineering Services, Survey Support on

Various Projects, City of Scottsdale, AZ. *Survey Party Chief.* Dean provided surveying services for a variety of project types, including ALTA, boundary, and topographic surveys; R/W definition, and R/W surveys. Task orders include:

- Sidewalk Improvements: Westland Drive, Legend Trail Parkway and Indian Bend Road
- Shea Boulevard Tunnel Access at 124th Street
- Traffic Calming Improvements: Granite Reef and 86th Street
- North Bank Canal Improvements

Harrison-Greenway Pathway Survey Support, Pima

County, Tucson, AZ. *Survey Party Chief.* Dean provided surveying services, including boundary survey and topographic surveys.

Survey Support on Various Projects, Town of Oro

Valley, AZ. *Survey Party Chief.* Dean provided surveying services for a variety of project types, including topographic surveys, R/W definition, R/W surveys, and R/W acquisitions support. Task orders include:

- Lambert Lane improvements
- Tangerine Road improvements

Contract for Professional Services, Aerial and Ground Survey, Tempe Town Lake, City of Tempe, AZ.

Survey Party Chief. This project included duties in the field and in the office. The team established a horizontal and vertical survey control network using GPS technology (RTK). Survey included setting aerial targets in and around Tempe Town Lake while the lake was empty to define lake-bottom topography and volumes of the lake. The AECOM survey team teamed with AeroTech Mapping Inc. (aerial photogrammetry) to complete this project.

Desert Sky Transit Center, City of Phoenix, AZ.

Survey Party Chief. The team surveyed property for the future City of Phoenix transit center on 79th Avenue and Thomas Road. Tasks included establishing a horizontal and vertical control network using GPS technology (RTK). Services included topographic survey, boundary establishment, R/W definitions, data processing, CADD drafting of topographic survey, property legal description preparation, preparation of final subdivision plat, preparation of ALTA plat, and new acquisition support.

2A-R7 PRV and Water Line Project, City of Phoenix AZ.

Survey Party Chief. Dean managed responsibilities in the field and in the office. The team established a horizontal and vertical control network using GPS technology (RTK). The project surveyed approximately 2 miles of Sweetwater Avenue for a future water line. Services included topographic survey, R/W definitions, data processing, and CADD drafting of topographic survey.



Dean has worked on ADOT R/W survey on-call contracts since 1994, including hundreds of roadway-related task orders.

MICKEY DENISON, RLS
R/W SURVEY PARTY CHIEF
SURVEY TECHNICIAN



Education:

- Certificate, Surveying Fundamentals 1 & 2, Delta Montrose Technical College
- Certificate, Technical Drafting (AutoCAD 2000), Delta Montrose Technical College

Registrations:

- Professional Land Surveyor, CO # 38425

Years of Experience: 20

Company Title: Land Surveyor

Mickey brings experience in all aspects of surveying, including field work and data collection for R/W, boundary, property, topographic, subdivision layout, bench lines, construction layout, sectional breakdown, traverse, and mortgage surveys. He has experience in geometric calculations and in using Total Station theodolites and data collectors, robotic Total Stations, and GPS instruments (Trimble). Mickey has knowledge of MicroStation, AutoCAD, and Trimble Business Center.

PROJECT EXPERIENCE

On-call R/W Plans and Surveys (2020-007.01), Arizona, ADOT (2020–Present). *Survey Party Chief.*

Mickey prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- US 89, North Lake Powell Boulevard

US 550 Rockfall Mitigation, Ridgway, CO, CDOT. *Crew Chief.* Mickey managed all aspects of R/W design for a highway widening project. This project consisted of establishing project control tied to the previous project work CDOT completed in the 1990s. Tasks included establishing a partial or complete section breakdown, and retracement of historic townsite boundaries within the project corridor. Mickey and his team searched for the existing R/W and boundary documents and rectified the record information against the physical evidence. Once the R/W model and ownership model were completed, he identified locations on the project where R/W or easement would be required for construction. He prepared R/W plans and legal descriptions for CDOT's use in the acquisition of additional R/W and easements. The team monumented the existing and new R/W and prepared a set of R/W plans for depositing with Ouray County.

Terrain Modeling Survey System (TMOSS), City of Sterling, CO. *Crew Chief.* Mickey managed a TMOSS survey of a large portion of the existing roadways through the City of Sterling. The project was supported the design of a new highway alignment through the city.

US 6, Gypsum to Eagle, Eagle, CO, CDOT. *Crew Chief.*

This project consisted of establishing project control tied to the Colorado HARN and NAVD 88. Mickey surveyed the position of BLM Tract and Lot corners in the corridor that control the R/W location. He surveyed the position of all found R/W monuments and boundary evidence, searched for existing R/W and boundary documents, and rectified the record information against the physical evidence. He prepared a complete set of R/W plans identifying locations on the project where R/W monumentation was needed.

SH 55, Bathymetric Survey South Platte River, CDOT. *Surveyor.* Mickey used Trimble GPS equipment and a Seafloor Sonarmite echosounder to perform a bathymetric survey of the South Platte River to aid in the repair of flood damage to the State Highway 55 bridge.

SH 145 Deep Creek, Control and TMOSS Survey, CDOT. *Surveyor.* Mickey established a control network using fast static GPS methods and differential leveling and surveyed +/- 2 miles of highway corridor using the CDOT Terrain Modeling Survey System (TMOSS), which was then processed using InRoads/MicroStation software.

SH 145, Telluride, CO, CDOT. *Crew Chief.* Mickey managed the TMOSS mapping of 5 miles of SH 145 to aid in road improvements. This project consisted of establishing local control tied into Colorado High Accuracy Reference Network and TMOSS topographic survey.

SH 287, Lamar, CO, CDOT. *Crew Chief.* Mickey managed the LiDAR mapping of a proposed SH 287 bypass corridor. This project consisted of establishing local control tied into Colorado High Accuracy Reference Network. Aerial mapping panels were set and surveyed, and a photogrammetric and LiDAR mapping flight was completed as well as TMOSS topographic surveys. A digital terrain model was developed for the site, and ortho-rectified digital aerial photos were created.

Calhan Road Bridge Replacement, El Paso County, CO. *Survey Lead.* This project consisted of researching the county record for deeds and survey plats affecting properties within the project limits. Mickey surveyed the position of aliquot corners and property boundary monuments controlling the position of property boundaries and R/W within the project corridor. He analyzed record information and reconciled it with the found boundary evidence. He created an ownership map of the project corridor and prepared R/W plans and legal descriptions for R/W and easements required for construction.

Black Forest Road Widening, City of Colorado Springs, CO. *Lead Surveyor.* Mickey was responsible for creating an ownership map of the project corridor and preparing legal descriptions and exhibits for use in establishing additional R/W and easements for road widening and improvements.

NIEL KING, PE
SURVEY TECHNICIAN
CIVIL ENGINEER

**Education:**

- BS, Civil Engineering, University of Wyoming

Registrations:

- Professional Engineer, AZ #53204

Years of Experience: 17

Company Title: Transportation Engineer, responsible for providing civil engineering and survey support for roadway projects

Niel brings engineering and survey experience for both contractors and consultants. He has worked on survey teams, responsible for setting initial and final R/W monuments, conducting topographic surveys, and carrying out construction staking on a variety of transportation projects. In addition to his understanding of the field survey methods, Niel is experienced in reviewing title reports and creating R/W plans for land acquisition. His job also entails general roadway design, general civil design, track design, drainage design, and 3D modeling. Niel has knowledge of MicroStation, InRoads, OpenRoads, and GEOPAK.

PROJECT EXPERIENCE

On-call R/W Plans and Surveys (2020-007.01), Arizona, ADOT (2020–Present). *Survey Technician, Civil Engineer.* Niel prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- I-17, Anthem Way–Cordes Junction
- SR 189, Nogales Port of Entry–SR 19B
- SR 101L, SR 101L and I-10 TI

On-Call Services for R/W Plans and Legal Descriptions (2013-003.05), Arizona, ADOT (2013–2021). *Survey Technician, Civil Engineer.* Niel prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- SR 189, Nogales Port of Entry–SR 19B
- I-10, SR 85 to Verrado Way
- I-17 Flex Lanes, Anthem Way TI to Cordes Junction



Niel has worked on ADOT R/W on-call contracts since 2019. His technical education, combined with his field and design experience, makes him a versatile member of our survey team.

I-10 Fairway Drive TI, Phoenix, AZ, ADOT. *Design Engineer.* Niel prepared final design documents to construct a new TI on I-10 between Dysart Road and Avondale Boulevard. The project includes a new two-span bridge over I-10, more than 41,000 square feet of retaining walls, new auxiliary lanes on I-10, 900 linear feet of arterial roadway and associated drainage, signal, FMS, and lighting improvements.

SR 101L GPL Widening DB, I-17 to Pima Road, Phoenix, AZ, ADOT. *Design Engineer.* This project involved adding one GPL to both directions of this 13-mile segment of SR 101L, within the cities of Phoenix and Scottsdale. AECOM was a major subconsultant, providing final design for the segment from I-17 to SR 51. AECOM's scope included roadway design, widening seven bridge structures, roadway lighting upgrades, traffic control plans, signing and pavement marking plans, and design of over 300,000 square feet of retaining and noise walls. Niel provided roadway design, roadway modeling, wall design, QA/QC, and prepared final design documents.

US 93, Deluge Wash, ADOT. *Design Engineer.* Niel was responsible for roadway design, 3D modeling, plan production, cost estimating, and was involved in drainage design, including box culvert and pipe extensions, median drainage, channels, and ditches. He played a major role in earthwork, plan production, and cost estimate. The project involved the addition of a southbound roadway, two structures over Deluge Wash, new access and frontage roads, median crossovers, and temporary connections between each side of the divided highway.

SR 69, Prescott Lakes Parkway to Heather Heights, ADOT. *Design Engineer.* This final design project will widen a 1-mile section of SR 69 asymmetrically from a rural four-lane section to a six-lane urban section with curb and gutter, 10-foot multi-use pathway, and a raised curbed median. The project includes structures design, storm drain design, traffic signing and marking, traffic control, geotechnical investigation, and environmental clearance studies. Niel provided roadway design and QA/QC reviews.

I-10/Prince Road TI Final Design, Tucson, AZ, ADOT. *Design Engineer.* This project involved the final design of a diamond interchange along with the reconstruction of 2.0 miles of eastbound and westbound I-10 mainline, and 1.0 mile of five-lane urban roadway along Prince Road. Niel provided roadway design, 3D modeling, an earthwork report, and final design documents.

SR 101L DB, Baseline Road to SR 202L, Chandler and Tempe, AZ, ADOT. *Design Engineer.* This 6-mile project added one additional outside GPL in each direction along SR 101L between Baseline Road and Frye Road, and upgraded features to current ADA standards at all intersections and along the existing frontage roads. The project included bridge widenings, drainage modifications, and environmental analyses. Niel provided roadway design and QA/QC reviews.

SR 89A Transportation Study, SR 89 to Robert Road, Yavapai County, AZ, ADOT. *Design Engineer.* This project involved alternative evaluation and 15% design to improve SR 89A and the various interchanges along the corridor. Niel provided roadway design, 3D modeling, cost estimating, and preliminary design documents.

US 60, Show Low to 40th Street, Show Low, AZ, ADOT. *Design Engineer.* This project provided final design documents for roadway widening, drainage improvements, and a traffic signal on US 60 on the east side of Show Low. Niel provided roadway design, 3D modeling, cost estimating, and earthwork report, and final design documents.

JAMES TRUJILLO, RLS

QA/QC PLANS REVIEW
R/W SURVEY TECHNICIAN
FIELD SURVEYOR

**Education:**

- Drafting Technology,
Tucson College of Business

Registrations:

- Registered Land Surveyor, AZ #35870

Years of Experience: 37**Company Title:** Owner/Founder,

responsible for managing R/W survey projects.

James has worked or managed ADOT R/W plans and surveys contracts for 35 years, beginning as a plans reviewer with ADOT in 1989. In 1993, he became a liaison for all R/W activities for several ADOT projects. He led a prime consultant contract for R/W plans and legal descriptions (1999–2012) and served as an assistant chief R/W agent for ADOT, managing the Plans and Title Sections. He has also assisted the Attorney General with condemnation cases and prepared 150 excess land parcels for disposal.

PROJECT EXPERIENCE**On-call R/W Plans and Surveys (2020-007.01), Arizona, ADOT (2020–Present).** *R/W Technician, QA/QC Plans Review.*

James provided quality reviews for task orders under this contract. The team prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- I-17, Anthem Way - Cordes Jct
- SR 303L, 51st Avenue & 43rd Avenue TIs
- US 95, Avenue 9E - Fortuna Wash
- SR 30, 127th Avenue – SR 202L South Mountain
- I-10, SR 85 - Verrado Way
- I-10, Jackrabbit Trail TI
- SR 189, Nogales Port of Entry – SR 19B
- SR 260, Lion Springs Section
- SR 69, SR 169 Roundabout
- US 89, North Lake Powell Blvd
- SR 101L, SR 101L & I-10 TI
- US 60, SR 101L to SR 202L: Diamond Grind (R/W Abandonments Project)
- US 60, 85th Avenue – I-17 (R/W Abandonments Project)

On-Call Services for R/W Plans and Legal Descriptions (2013-003.05), Arizona, ADOT (2013–2021). *R/W Technician, QA/QC Plans Review.*

James provided quality reviews for task orders under this contract. prepared R/W plans, Results of Surveys, legal descriptions, boundary and R/W surveys, and documentation plans for projects throughout Arizona. Task orders include:

- US 60, Bell Road TI, Phoenix
- US 95, Avenue 8E Intersection
- SR 77, Town of Mammoth, Copper Street–Redwood Drive
- SR 189, Nogales Port of Entry–SR 19B
- US 93, Carrow–Stephens Ranch
- US 60, Greenway–Thompson Ranch Road
- SR 288, South of Young, MP 288
- I-10, SR 85–Verrado Way
- I-17 Flex Lanes, Anthem Way TI to Cordes Junction
- I-17, Indian School Rd TI
- US 95, Avenue 8E Intersection
- SR 30, 127th Avenue – SR 202L South Mountain
- SR 260, Lion Springs Section

Additional ADOT Experience

- I-10 Corridor, Ina Road to I-10/I-19 Interchange (6 separate projects)
- I-10, SR 303L to SR 101L Results of Survey
- I-10/US 60, Superstition TI
- I-17, Kachina TI
- SR 64, Desert View to Mule Shoe Bend Unit 1
- SR 74, I-17 to MP13 Results of Survey
- U.S. 95, 9E to Aberdeen Road Results of Survey
- SR 95, Courtwright Road to Marina Boulevard (2 Metric projects)
- SR 101L Price Freeway, Ray Road to Pecos Road
- SR 202L Red Mountain, Higley Road – US 60 and US 60 to Warner Road
- SR 303L, Camelback Road to Northern Avenue

ADOT Assistant Chief Right of Way Agent of Planning and Development (2012–2014). James was responsible for meeting the 5-year transportation program and MAP 21 performance measures. He oversaw the Plans and Title Sections within the R/W Group. In this role, he made determinations or decisions regarding budgets, boundary principles, land titles, land acquisitions, selling of excess land (disposals), transportation board resolutions, condemnation packages, and requests from District personnel, risk management, the Attorney General, local public agencies, and the general public.



James has worked on or managed ADOT R/W Plans and Legal Descriptions contracts for 30+ years. This unique experience gives him the knowledge to oversee quality reviews for any R/W project.

From: ADOT Business Engagement and Compliance Office <AZUTRACS-Support@azdot.gov>
Sent: Wednesday, March 27, 2024 2:39 PM
To: Lassiter, Genie
Cc: ContractorCompliance@azdot.gov
Subject: Bidders List for AECOM Technical Services 01

AECOM Technical Services 01, AZUTRACS Number: [10053](#) has submitted a Bidder/Proposer list for **2024-016** on 03/27/2024 at 1:38 PM MST (UTC - 07:00).

Bidders/Proposers for this firm include:

Firm Name	AZUTRACS #	Expiration Date	Email Address	Phone Number
JT2 Enterprises, LLC	10588	07/18/2025	jptrupillo020@gmail.com	602-573-7474

Per RFQ requirement, this list includes any firm that discussed teaming with AECOM, regardless of final teaming agreements.



Our True North: *Safely Home*

Engineering Consultants Section

Katie Hobbs, Governor
Jennifer Toth, Director
Greg Byres, Deputy Director for Transportation/State Engineer
Steve Boschen, Division Director

Date: March 19, 2024
TO: ALL INTERESTED PARTIES
SUBJECT: AMENDMENT NUMBER 01
REFERENCE: REQUEST FOR QUALIFICATIONS
CONTRACT NUMBER 2024-016
ON-CALL RIGHT OF WAY SURVEYS,
RIGHT OF WAY PLANS AND MONUMENTATION SURVEYS

The following questions have been asked in reference to the above Request for Qualifications package:

Question 1:
Will Consultant Information Pages be posted with this procurement, or should consultants use the forms posted here: <https://azdot.gov/business/engineering-consultants/forms-and-templates-engineering-consultants>

Answer 1:
The "Consultant Information Pages (CIP)-Race Neutral Contract" can be found at:
<https://azdot.gov/sites/default/files/media/2022/02/Consultant%20Information%20Pages%20-%20Race%20Neutral%20Contract-Rev1.pdf>

Jessica McCall
Jessica McCall
Contract Specialist
Engineering Consultants Section

AN OFFEROR MUST ACKNOWLEDGE RECEIPT OF THIS AMENDMENT BY SIGNING BELOW AND INCLUDING ALL PAGES OF THIS AMENDMENT IN THE SOQ SUBMITTAL. FAILURE TO DO SO SHALL RESULT IN REJECTION OF THE PROPOSAL.

AECOM Technical Services, Inc.
CONSULTANT NAME

Jessica McCall
SIGNATURE

* This amendment is not included in the total page count in the Statement of Qualification submittal.

CONSULTANT INFORMATION PAGES (CIP)

CONTRACT NO.: 2024-016

CONTACT PERSON: Jennifer Bixby, PE, PTOE

E-MAIL ADDRESS: jennifer.bixby@aecom.com

TITLE: Vice President, Principal-in-Charge

CONSULTANT FIRM: AECOM Technical Services, Inc.

ADDRESS: 7720 North 16th Street, Suite 100

CITY, STATE ZIP: Phoenix, AZ 85020

TELEPHONE: 480.363.0447

FAX NUMBER: 602.371.1615

DUNS #: 03-318-4462

ADOT CERTIFIED DBE FIRM? (YES/NO)

No

SUBCONSULTANT(S):	TYPE OF WORK	ADOT CERTIFIED DBE FIRM (YES/NO)
<u>JT2 Enterprises LLC</u>	<u>Survey Services</u>	<u>Yes</u>
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NOTE: This page is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	JT2 Enterprises LLC
CONTACT PERSON:	James Trujillo
E-MAIL ADDRESS:	<u>jptrujiillo020@gmail.com</u>
TITLE:	Owner/Survey Manager
ADDRESS:	202 East Eugie Avenue
CITY, STATE ZIP:	Phoenix, AZ 85022
TELEPHONE:	602.573.7474
FAX NUMBER:	N/A
DUNS #:	N/A

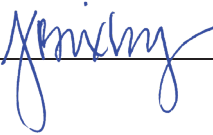
SUBCONSULTANT FIRM NAME:	N/A
CONTACT PERSON:	
E-MAIL ADDRESS:	
TITLE:	
ADDRESS:	
CITY, STATE ZIP:	
TELEPHONE:	
FAX NUMBER:	
DUNS #:	

NOTE: Each Subconsultant listed in the SOQ must be included in the Subconsultant Table of the CIP. Add additional Subconsultant Table pages as necessary. The CIP is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.

DBE GOAL ASSURANCE/DECLARATION

This Contract is Race Neutral (No DBE Goal-DBE use encouraged).

By signing below, and in order to submit an SOQ proposal and be considered to be awarded for this contract, in addition to all other pre-award requirement, the consultant/Proposer certifies that they will meet the established DBE goal or will make good faith efforts to meet the goal for the contract and that arrangements with certified DBEs have been made prior to SOQ and/or Cost Proposal submission. The proposer will meet the established DBE goal or will make good faith efforts to meet the goal on each Task Order assignment associated with the contract and that arrangements with certified DBEs have been made prior to SOQ and/or Task Order proposal submission.

Signature 

Jennifer Bixby, PE, PTOE
 Printed Name

Date 03/29/2024

Vice President, Principal-in-Charge
 Title

SOQ SUBMITTAL CHECKLIST

Place a check mark on the left side of the table indicating compliance with the following:

<input checked="" type="checkbox"/>	Required Page Limit Met
<input checked="" type="checkbox"/>	One PDF Document no larger than 15 MB
<input checked="" type="checkbox"/>	All Amendments Included
<input checked="" type="checkbox"/>	Introduction Letter (Including all required elements/statements)
<input checked="" type="checkbox"/>	SOQ Proposal Formatted According to Requirements Listed in Part C and any applicable amendments
<input checked="" type="checkbox"/>	Correct SOQ Certification List Signed and Dated by a Principal or Officer of the Firm
<input checked="" type="checkbox"/>	Completed Consultant Information Page (Including listing DBE firms, if applicable)
<input type="checkbox"/>	Supplemental Services Disclosure Form (REQUIRED for Supplemental Services Contract)
<input checked="" type="checkbox"/>	All Subconsultants & Proposed Work Type (Including listing DBE firms, if applicable)
<input checked="" type="checkbox"/>	Any Additional Required Documents (Specific Requirements in RFQ such as Resumes, etc.)
<input checked="" type="checkbox"/>	Commenting or User Rights Feature Enabled in SOQ PDF Document
<input checked="" type="checkbox"/>	DBE Goal Assurance/Goal Declaration completed

NOTE: This page is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.