



# Privately Funded Interchange Development Process Requirements Handbook

A Uniform Protocol for Private Entities

## TABLE OF CONTENTS

<b>Introduction</b>	<b>1</b>
<b>ADOT District Map and Contact Information</b>	<b>2</b>
<b>Privately Funded Interchange Development Process</b>	<b>3</b>
<b>Background</b>	<b>3</b>
<b>Policy</b>	<b>3</b>
<b>Connections to the State Highway System</b>	<b>3</b>
<b>Project Development and Report Requirements</b>	<b>4</b>
<b>Pre-Application Meeting</b>	<b>5</b>
<b>Joint Project Agreements Requirements</b>	<b>6</b>
<b>Subsequent Joint Project Agreements Requirements</b>	<b>7</b>
<b>Bidding Requirements</b>	<b>8</b>
<b>ADOT Contact Information and Requirements by Section</b>	<b>10</b>
<b>Communication and Community Partnerships</b>	<b>10</b>
<b>Statewide/Valley Project Management</b>	<b>12</b>
<b>Right of Way Group</b>	<b>13</b>
<b>Environmental Planning Group</b>	<b>15</b>
<b>Engineering Technical Group</b>	<b>16</b>
<b>Utility and Railroad Engineering Section</b>	<b>17</b>
<b>Traffic Engineering</b>	<b>19</b>
<b>Roadway Engineering</b>	<b>21</b>
<b>Materials Group Pavement Design Section</b>	<b>22</b>
<b>Bridge Group</b>	<b>24</b>



## INTRODUCTION

Dear Applicant:

The Arizona Department of Transportation (ADOT) has established this handbook for the private development community as a uniform protocol for requesting new traffic interchanges or modifications to existing interchanges. The policy requires that private entities proposing the change adequately assess and mitigate impacts of their development on the state highway transportation system. Applicants shall be required to conduct the appropriate level of technical and environmental analysis/studies, public outreach, community involvement, and government relations as determined by ADOT.

The objective of this policy is to manage access, ensure responsible long-term planning, ensure optimal operations given future traffic conditions, and reduce the possibility of future failure and required retrofit, as well as associated expenditures of ADOT-owned transportation facilities.

We look forward to building partnerships, fostering multi-agency collaborations, and strengthening relationships between ADOT, developers, and the community. This process is an example of agency-level implementation of Governor Napolitano's Growth and Infrastructure Initiative, requiring developers and other relevant entities to evaluate impacts of development on the state system early in the planning process.

**If you have not yet contacted the District Engineer relevant to your request (see map on next page), that should be your first step.**

This handbook provides the instructions you will need to complete the process. The requirements, application, and reports are housed online for your convenience at:

**[www.azdot.gov/Highways/Privately\\_Funded\\_Tl.asp](http://www.azdot.gov/Highways/Privately_Funded_Tl.asp)**

We look forward to partnering with you in building a greater Arizona.

Sincerely,

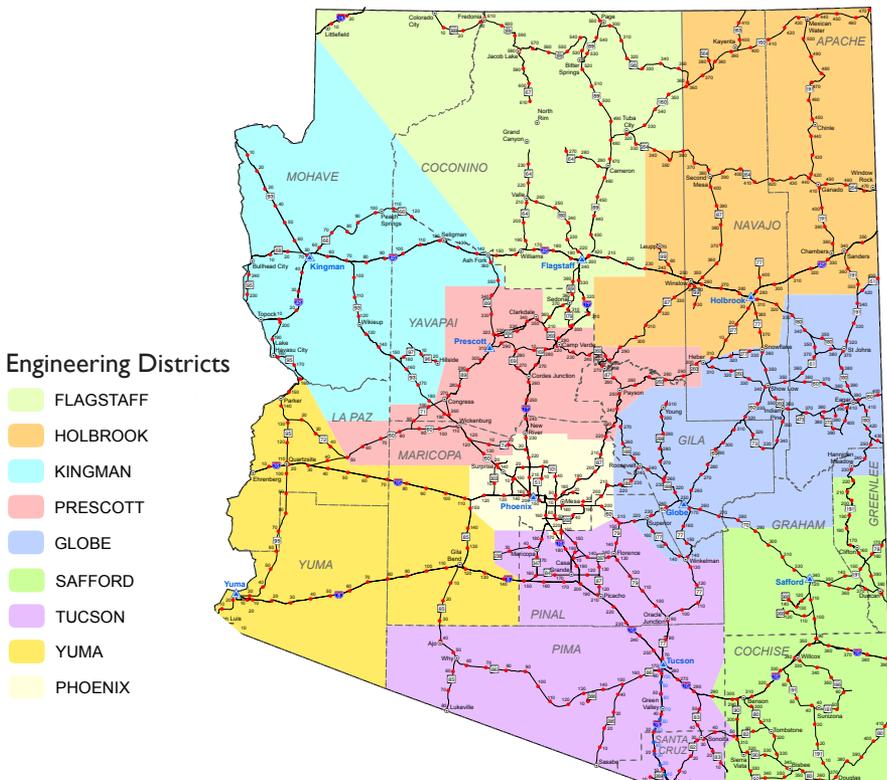
Sam Elters  
State Engineer  
Arizona Department of Transportation

**ADOT District Map and  
Contact Information**



## ADOT DISTRICT MAP

An applicant's first point of contact should be at the District level. Find the area of your proposed project on the map below. The District contact will initiate the Privately Funded Interchange Development Process with the applicant.



### Engineering Districts

- FLAGSTAFF
- HOLBROOK
- KINGMAN
- PRESCOTT
- GLOBE
- SAFFORD
- TUCSON
- YUMA
- PHOENIX

[www.azdot.gov/highways/localgov/de.asp](http://www.azdot.gov/highways/localgov/de.asp)

**Flagstaff District**  
1801 South Milton Road  
Flagstaff, Arizona 86001  
(928) 774-1491

**Kingman District**  
3660 E. Andy Devine  
Kingman, Arizona 86401  
(928) 681-6010

**Safford District**  
2082 U.S. Highway 70  
Safford, Arizona 85546  
(928) 432-4900

**Globe District**  
PO Box 2717  
Globe, Arizona 85502-2717  
(928) 402-5600

**Phoenix Maintenance District**  
2140 W. Hilton Avenue  
Phoenix, Arizona 85009-3740  
(602) 712-6664

**Tucson District**  
1221 South 2nd Avenue  
Tucson, Arizona 85713-1602  
(520) 388-4200

**Holbrook District**  
2407 E. Navajo Blvd  
Holbrook, Arizona 86025  
(928) 524-5400

**Phoenix Construction District**  
4550 N. Black Canyon Highway  
Phoenix, Arizona 85017  
(602) 712-8965

**Yuma District**  
2243 E. Gila Ridge Road  
Yuma, Arizona 85365  
(928) 317-2100

**Prescott District**  
1109 Commerce Drive  
Prescott, Arizona 86305  
(928) 777-5861

**Privately Funded  
Traffic Interchange  
Development Process**



## PRIVATELY FUNDED INTERCHANGE DEVELOPMENT PROCESS

### Background

ADOT recognizes that state highways are important to meeting the mobility needs of the public and that it is important to the quality of life and economic health of the State of Arizona for the state highway system to provide safe and efficient interregional and interstate movement of people and goods. To that end, ADOT must manage the location, design, operations, and maintenance of interchanges on the state highway system.

This handbook provides the instructions you will need to complete the Privately Funded Interchange Development Process. The requirements, application, and reports are housed online for your convenience at:

[www.azdot.gov/Highways/Privately\\_Funded\\_TI.asp](http://www.azdot.gov/Highways/Privately_Funded_TI.asp)

### Policy

It is ADOT's policy that all requests for new interchanges and major improvements to existing interchanges on the state highway system be reviewed and evaluated in a fair and consistent manner, and that sufficient information is available for the Department to make an informed decision. ADOT may deny any request that may cause a negative impact on the state and/or interstate highway system or regional traffic.

Since each request for a new interchange or interchange modification on transportation facilities owned by ADOT has its own unique circumstances, ADOT will take into account these circumstances in judging the relative merits of each request. To that end, ADOT recognizes that there must be flexibility to ensure a level of analysis appropriate to the circumstances surrounding each proposal.

A private entity wishing to construct new interchanges or make major improvements to existing interchanges on the interstate or state highway system shall make its formal request by issuing a **"Letter of Intent"** to the Director of ADOT. Upon receipt of this letter, the review process outlined will commence. ADOT will assign a Project Manager to oversee all activities associated with each request. All information shall flow through that Project Manager.

### Connections to the State Highway System

Interchange connections to the state highway system are intended to improve the operations and safety of the system, serve regional travel purposes, and provide access to regional destinations. Therefore, interchange connections from state highways must be to regionally significant roadways or regionally significant publicly owned facilities, or result in a significant improvement in the operations and safety of the state highway system.

A regionally significant roadway is a roadway that is classified as a principal arterial or higher classification in the most recently adopted Metropolitan Planning Organization (MPO) transportation plan in urban areas. Or, the roadway shall have been identified as regionally significant within an adopted Regional Transportation Plan, National Environmental Policy Act (NEPA) environmental study, feasibility study, corridor plan, or access management plan for which ADOT staff has participated and approved.

The proposed improvements must be compatible with the approved access management plan for the affected corridor and provide an acceptable level of service for the design year in accordance with *ADOT Roadway Design Guidelines*. The proposed improvements consist of the following two categories:

**Type 1 Improvements:** Proposals for new interchanges and modifications to existing interchanges on the state highway system with a functional classification of interstate or freeway.

**Type 2 Improvements:** Proposals for new interchanges not on the interstate system or freeway system and major modifications or reconfigurations to existing interchanges.

## **Project Development and Report Requirements**

The project development, design, and public/agency involvement process will require the following reports to be submitted for approval prior to design of improvements:

1. Design Concept Report  
[www.azdot.gov/Highways/RdwyEng/RoadwayPredesign/](http://www.azdot.gov/Highways/RdwyEng/RoadwayPredesign/)
2. Traffic Report/Impact Analysis  
[www.azdot.gov/highways/traffic/PGP.asp](http://www.azdot.gov/highways/traffic/PGP.asp)
3. Environmental Documentation and Report  
[www.azdot.gov/highways/EEG/EEG\\_common/documents/privately\\_funded\\_projects.asp](http://www.azdot.gov/highways/EEG/EEG_common/documents/privately_funded_projects.asp)
4. Geotechnical Report  
[www.azdot.gov/highways/EEG/EEG\\_common/documents/privately\\_funded\\_projects.asp](http://www.azdot.gov/highways/EEG/EEG_common/documents/privately_funded_projects.asp)
5. Bridge Foundation Report  
[www.azdot.gov/Highways/bridge/Guidelines/index.asp](http://www.azdot.gov/Highways/bridge/Guidelines/index.asp)
6. Drainage Report  
[www.azdot.gov/Highways/RdwyEng/DrainageDesign/ftp.asp](http://www.azdot.gov/Highways/RdwyEng/DrainageDesign/ftp.asp)
7. Bridge Selection Report  
[www.azdot.gov/Highways/bridge/Guidelines/index.asp](http://www.azdot.gov/Highways/bridge/Guidelines/index.asp)
8. Change of Access Report (if applicable, see FHWA DG25)
9. Proposed Development/Design/Construction Schedules
10. Public Involvement Plan/Report  
[www.azdot.gov/CCPartnerships/PrivateInterchanges/index.asp](http://www.azdot.gov/CCPartnerships/PrivateInterchanges/index.asp)
11. Right-of-Way Requirements  
[www.azdot.gov/highways/row/PrvFundTI.asp](http://www.azdot.gov/highways/row/PrvFundTI.asp)
12. Utility and Railroad Requirements  
[www.azdot.gov/highways/utilities/index.asp](http://www.azdot.gov/highways/utilities/index.asp)

All reports shall conform to the respective ADOT technical areas' report requirements. The requesting party is responsible for obtaining and conforming to the respective technical manuals.

### **Pre-Application Meeting**

The designated ADOT Project Manager will arrange and host a pre-application project scoping meeting, or a series of pre-application meetings, with the applicant, appropriate ADOT representatives, and relevant local, state, or federal agencies to determine the scope and anticipated process and schedule for any proposed interchange project.

ADOT staff from the following Sections should participate in the pre-application meeting with the applicant: District, Statewide Project Management and/or Valley Project Management Group, Traffic Engineering Group, Transportation Planning Division, Environmental Planning, Right of Way, Roadway Engineering Group, Bridge Group, Materials Group, Utilities and Railroad, Contracts and Specifications, Communication and Community Partnerships, MPO staff, Federal Highway Administration (FHWA), and other parties as deemed appropriate by the District Engineer.

FHWA shall be invited to participate when an access request affects the interstate system.

The purpose of the pre-application meeting(s) is to:

- Determine whether the proposed interchange is consistent with ADOT requirements regarding connections to the state highway system and discuss the requirements of all ADOT sections with regard to the applicant's proposal.
- Evaluate the general feasibility of a proposed project, including early identification of any anticipated operational, environmental, air quality conformity, access management, public concern, and other technical and/or controversial issues. ADOT staff will determine if any recently adopted and/or approved corridor plans, access control plans, or other related studies which ADOT staff deems relevant to the potential application can contribute to the analysis required for the application.
- Review the proposed project for consistency with the Regional Transportation Plan and the applicable corridor vision, goals and strategies in the Statewide Long Range Transportation Plan.
- Identify the improvement type (Improvement Type 1 or 2), and the appropriate scope of studies required. The scope of studies will be determined in accordance with the Project Development Process Manual.
- Discuss right-of-way requirements, including survey and right-of-way plan preparation, disposition of the ownership of land for the fee interest to be donated, and the timing of the submittal to the Arizona State Transportation Board for the final resolution, approval, and acceptance into the state highway system.

- Discuss an initial determination of the level of environmental analysis required. ADOT staff will provide an initial assessment of whether the proposal should be classified as a Categorical Exclusion, Environmental Assessment (EA), or Environmental Impact Statement in accordance with NEPA, (if the project has a federal nexus), or an Environmental Determination. A state-level EA may be required for activities that do not have a federal connection. In addition, any other permits that may be required will be discussed. This initial assessment is subject to revision and modification if additional environmental issues arise at a later stage.
- Discuss public and agency involvement requirements. The applicant shall be required to conduct and document an agency and public involvement program appropriate to the type of project proposed. At the initial meeting, ADOT staff will review the public and agency involvement requirements with the applicant and in recognition of unique community/ environmental concerns or sensitivities.
- Identify access permitting requirements. ADOT staff will outline access permitting procedures and circumstances when modifications to existing access permits are necessary.
- Discuss the cost of application processing. The applicant is responsible for all costs associated with the preparation and processing of the application. An initial estimate of ADOT costs associated with the application review and its processing will be prepared by ADOT and provided to the applicant following this step in the process.
- Discuss FHWA consultation and involvement. The FHWA representative shall be consulted to determine if the proposal requires federal involvement and if so, the necessary level of detail and the most appropriate time to submit a formal request for a determination of engineering and operations acceptability.
- Review the project development process with regard to utility coordination processes, submittal content and “Clearance”. Review the utility design requirements and resources involved with the identification, coordination, relocation, and clearance of utilities by the TI design team.

### **Joint Project Agreements Requirements**

The private entity is responsible for all costs associated with the evaluation of proposals for new interchanges or modifications to the existing interchanges, development, and construction administration. There will be multiple Joint Project Agreements (JPAs) required to cover development, design, construction, right-of-way, and maintenance as applicable.

The requirements, application, and reports are housed online for your convenience at: [www.azdot.gov/Highways/Privately\\_Funded\\_TI.asp](http://www.azdot.gov/Highways/Privately_Funded_TI.asp)

ADOT will develop an initial JPA with the applicant and any other relevant agencies, addressing responsibility for the following:

1. Anticipated improvement type - Type 1, 2
2. Anticipated administrative and application costs
3. Anticipated level of pre-design documents
4. Anticipated schedule
5. Environmental analysis and documentation
6. Consistency with Regional and Statewide Transportation Plans
7. Access permitting requirements
8. Other necessary issues identified in the pre-application scoping meeting
9. Funding transfer to ADOT

All ADOT Sections listed under “Pre-Application Meeting” shall participate in the draft/review of the applicable JPAs to ensure that all requirements are stated.

### **Subsequent Joint Project Agreements**

Additional JPAs shall address a funding plan that identifies all sources of funding necessary to construct the proposed improvement, including the costs and responsibility for design, right-of-way requirements, construction, construction administration, quality control, environmental mitigation, operations, and long-term maintenance. This funding plan must clearly identify the costs associated with each of the elements identified below, which are the responsibility of the applicant unless otherwise agreed upon with ADOT. The applicant is responsible for all costs associated with development, design, construction, and construction administration including departmental costs for plan reviews, right-of-way administration, and construction management.

ADOT will develop JPAs with the applicant and any other relevant agencies that address but are not limited to the following:

1. Designation of ownership, maintenance, and operation of all physical features and related facilities including but not limited to the following:
  - a. The interchange structure including associated signing, lighting, culverts, etc.
  - b. Right-of-way and access control limits associated with the interchange
  - c. Ramps associated with the interchange
  - d. Other related facilities such as signals, traffic control devices, pedestrian facilities, park-and-ride facilities, environmental mitigation, landscaping, enhancements, etc.
2. The costs associated with the development and construction of the interchange to standards prescribed by ADOT, including but not limited to the following categories:

- a. Completion of all environmental studies and permits
  - b. Costs for any environmental mitigation (including long-term monitoring) identified in the environmental document and applicable permits, and public/agency involvement throughout design and construction
  - c. Access permit fees
  - d. Preliminary design
  - e. Final design
  - f. Purchase of any required right-of-way, including purchase or dedication of control of access rights and any required easements
  - g. Utility relocation and railroad mitigation costs
  - h. Actual construction costs
  - i. Costs for all landscaping including mitigation measures identified in the environmental document
  - j. Costs for lighting
  - k. Traffic signals, signing, and pavement markings
  - l. Temporary traffic control
  - m. Additional improvements to the corridor/future capacity improvements
  - n. ADOT staff costs for design reviews, construction management/administration construction inspection and monitoring, quality control, and material acceptance testing
3. Maintenance of Special Features - Enhancements, special design components and special aesthetics not in accordance with ADOT standards shall require maintenance by the developer and/or local government. The maintenance responsibilities of the liable entity must be outlined in a JPA. Examples include but are not limited to, decorative fencing, architectural light poles and fixtures, multiple colored painting of structures, and landscaping densities.

## **Bidding Requirements**

All projects shall be bid in accordance with the Arizona Revised Statutes 28-6923. Traditional Design-Bid-Build or Alternative Contracting Procedures may be implemented as directed by the Department. Projects that receive joint funding shall be advertised, awarded, and administered in accordance with Department policy, procedures, and applicable State laws.

Arizona Revised Statute 28-6923 requires that a private entity:

- I. Before advertising for bids, submits to ADOT a bond that is issued by a surety insurer authorized to do business in the State of Arizona and that is in an amount equal to 125% of the anticipated construction cost of the project, plus construction management and contractor costs.

2. Solicits sealed bids from at least four contractors who are pre-qualified by ADOT to perform a contract of the anticipated dollar amount for construction.
3. Awards the contract to the best bidder taking into account price and other criteria as provided in the bid documents.
4. Obtains bonds from the selected contractor that provide the same coverage as performance and payment bonds issued under title 34, chapter 2, article 2.
5. Uses ADOT construction standards.
6. Pays all costs of ADOT reviews of the contract and inspections of the project.

For the purposes of this section, a project is funded completely with private monies if all of the following apply:

1. The contractor is paid entirely with monies from private entities.
2. The private entities hire a competent construction manager and contractor who do not have an affiliation with each other.
3. The private entities either pay all costs of design or reimburse ADOT for all costs of design.

**ADOT Contract Information  
and Requirements  
by Section**



## COMMUNICATION AND COMMUNITY PARTNERSHIPS (CCP) REQUIREMENTS

### Contact Information:

**Matt Burdick, Division Director**  
mburdick@azdot.gov  
(602) 712-8025

The CCP requirements for Privately Funded Interchange Development are located online at:

[www.azdot.gov/CCPartnerships/PrivateInterchanges/index.asp](http://www.azdot.gov/CCPartnerships/PrivateInterchanges/index.asp)

ADOT requires a public involvement process to be conducted as part of the local conceptual planning project submittal, general plan amendment, or initial development approval process that is required by a city, town, or county. Documentation of this public involvement process will be required to occur prior to ADOT approving a Privately Funded Traffic Interchange. CCP will provide further direction and guidance regarding the public involvement process, requirements, and personnel contacts at the initial pre-application meeting. Some of the requirements for the public involvement process are outlined below.

### Developer Requirements

The developer is required to provide information about the project by first class letter or postcard to individuals and agencies of potential impact.

#### ***Project notification shall be provided to the following parties:***

- Property owners and homeowners associations (HOAs) within a certain range of miles (to be determined at the pre-application meeting)
- Adjacent property owners/tenants/HOAs
- School districts
- Public agencies (Flood Control District, municipalities, utilities, etc.)

#### ***Project notification shall include the following information:***

- Project request and description
- Location and project specifics
- Ownership
- Site plan
- City and applicant contact names and phone numbers
- Scheduled public meeting time(s), date(s), and location(s)

The developer is required to post a “Project Under Consideration” sign on the site 10 calendar days prior to the public meeting. The following information should be included on the sign:

- Project request and description
- Location and project specifics
- Ownership

- Public meeting time(s), date(s), and location(s)
- City and applicant contact names and phone numbers

### **Public Meetings**

The developer is required to hold at least one public meeting related to the project. The developer must provide meeting date, time, and location to the ADOT Project Manager **at least** 14 calendar days prior to the meeting. The developer should coordinate the public meeting with the city/town/county in which the proposed interchange is located. If the city/town/county has specific public meeting requirements or guidelines they should supplement these requirements.

### **Public Involvement Program Report**

The developer is required to submit a Public Involvement Program Report to the ADOT Project Manager with the application. Public involvement program templates to be completed are located at:

[www.azdot.gov/CCPartnerships/PrivateInterchanges/index.asp](http://www.azdot.gov/CCPartnerships/PrivateInterchanges/index.asp)

### **Document your project notification efforts as follows:**

- Provide copy of names, phone numbers and addresses of contacted parties (e.g., neighbors/property owners, school district representatives, HOAs).
- Provide the dates contacted, and the number of times contacted.
- Indicate how they were contacted (e.g., letter, phone call). If certified mail was used, provide receipts of delivery.
- Provide originals of all comments, letters, and correspondence received.
- Provide copies of letters or other means used to contact neighbors, school district, and HOAs.
- Provide a map showing where notified neighbors are located.
- Provide affidavit(s) of mailing(s).

### **Verify the “Project Under Consideration” sign posting as follows:**

- Provide affidavit of posting.
- Include pictures of the sign that are date and time stamped.

### **Document the public meeting(s) as follows:**

- List dates, times, and locations of public meeting(s) held.
- List dates, times, and locations of any follow-up with interested parties.
- Provide the sign-in sheets, list of people who attended the meeting(s), comment sheets, and written summary of the comments, issues, and concerns provided at the public meeting(s).
- List the method by which the applicant has addressed, or intends to address, the issues, concerns, and problems identified during the process.



## STATEWIDE/VALLEY PROJECT MANAGEMENT REQUIREMENTS

### Contact Information:

**Statewide Project Management requirements for Privately Funded Interchange Development are located online at:**

[www.azdot.gov/highways/SWProjMgmt/index.asp](http://www.azdot.gov/highways/SWProjMgmt/index.asp)

**Valley Project Management requirements for Privately Funded Interchange Development are located online at:**

[www.azdot.gov/Highways/VPM/Index.asp](http://www.azdot.gov/Highways/VPM/Index.asp)

ADOT has two departments responsible for quality project management services and management support during project design and development, including determining and maintaining project scopes, schedules, and budgets from scoping through construction and into maintenance; team building with ADOT and non-ADOT stakeholders; developing and administering consultant contracts; and sustaining communication throughout all project phases with all interested parties.

These departments will provide further direction and guidance regarding the process, requirements, and personnel contacts at the initial pre-application meeting.

**Statewide Project Management** - provides the services in support of the ADOT Construction Program and Local Governments' Federal-Aid Transportation Programs on projects outside Maricopa County.

**Valley Project Management** - provides support for the planning and programming of the Maricopa Association of Governments (MAG) Regional Freeway System and other Phoenix area projects.

## **RIGHT OF WAY GROUP REQUIREMENTS**

### **Contact Information:**

**Paula Gibson**  
**Deputy Chief Right of Way Agent**  
**Arizona Department of Transportation**  
**205 South 17th Avenue, Mail Drop 612E**  
**Phoenix, Arizona 85007-3217**  
**pgibson@azdot.gov**  
**Tel: 602-712-8758, Fax: 602-712-3257**

**The Right of Way Group requirements for Privately Funded Interchange Development are located online at:**

**[www.azdot.gov/highways/row/PrvFundTI.asp](http://www.azdot.gov/highways/row/PrvFundTI.asp)**

The purpose of the Right of Way Group is to function as the acquiring agency of ADOT in acquiring all real property and real property rights required for the construction and maintenance of all federal and state highways, and other highway-related purposes.

The ADOT Right of Way Group will provide further direction and guidance regarding right-of-way requirements and personnel contacts at the initial pre-application meeting. All right-of-way tasks and deliverable products associated with this project will be developed according to the instructions and policies contained herein, and, according to the standards and policies governing the ADOT Right of Way Group.

*The following provides background information on items that are to be submitted to the ADOT Right of Way Group:*

- The Developer and all other owner(s) shall waive the right to receive just compensation and donate the real property for the referenced project in fee title, or easement, depending on design requirements with regards only to drainage and slopes as approved by the ADOT District, to the State of Arizona, by and through its Department of Transportation (“Right of Way Property”) and the Developer or other owner(s) will execute Warranty Deeds (“Deeds”) or Drainage/Slope Easements (“Easements”) for the Right of Way Property to ADOT.
- The Developer will deliver the Deeds and/or Easements to the Right of Way Group for review, along with the Title Insurance Policy reflecting the Developer and all other owner(s), as the party in possession of the real property being donated, including copies of all documents referenced in said Title Insurance Policy.

- The property must be free and clear of all liens, encumbrances and judgments, including real estate taxes. Following construction, ADOT District approval on all constructed transportation facilities and the Right of Way Group's approval of all deeds and/or easements, including plans and surveys, ADOT will submit a Resolution of Establishment to the State Transportation Board for official action. Upon approval (by Resolution) from the State Transportation Board, the State will accept ownership, jurisdiction, and maintenance of the right-of-way and record all deeds, drainage/slope easements and said Resolution of Establishment simultaneously with the appropriate county recorder.
- The Developer shall prepare all necessary surveys, plans and documents required by the ADOT Right of Way Group. These can include the following: right-of-way surveys, right-of-way plans, existing right-of-way exhibits, supplemental surveys, legal descriptions, right-of-way staking plans and right-of-way monumentation surveys.
- All right-of-way surveys, right-of-way plans, and legal descriptions will be developed according to current ADOT Right of Way Group standards, policies and procedures. The Developer will deliver all the above documents to the Right of Way Group, at specified development stages, to ensure conformance with said standards, policies and procedures. Prior to commencement of any work in the preparation of any of the items listed herein, the Developer, or its Agents, will meet with the Right of Way Group to receive more detailed items and instructions regarding said standards, policies and procedures.

Until the above items are met and ADOT is satisfied with the requirements provided, all newly constructed transportation facilities will not be accepted nor established into the state highway system.



## ENVIRONMENTAL PLANNING GROUP (EPG) REQUIREMENTS

### Contact Information:

**Tammy Flaitz, Program Manager**  
tflaitz@azdot.gov  
(602) 712-8638

**The EPG requirements for Privately Funded Interchange Development are located online at:**

[www.azdot.gov/highways/EEG/EEG\\_common/documents/privately\\_funded\\_projects.asp](http://www.azdot.gov/highways/EEG/EEG_common/documents/privately_funded_projects.asp)

ADOT's Environmental Planning Group (EPG) provides environmental services for transportation activities through compliance with regulatory requirements, providing the highest level of professional technical support and education to our agency and customers, while building cooperative relationships with other government agencies and the public.

EPG will provide further direction and guidance regarding its process, requirements, and personnel contacts at the initial pre-application meeting. The Project Data Sheet is a form completed by the project applicant and reviewed by the appropriate EPG staff members (planner and technical specialists) early in the process in order to reach concurrence regarding the level of documentation required for the environmental analysis.

EPG has the following informational links on their webpage:

**Introduction** - EPG introduction and NEPA overview

### **Guidance for Conducting Environmental Compliance Analysis**

- Categorical Exclusions

- Environmental Assessments (EAs)

- Biology

- Section 404-401 Procedures Applications and Permits

- Section 4(f)

- Noise Policy

- Air Quality

- Hazardous Materials

- Environmental Justice

- Cultural Resources

- Public Meetings Guidance

- Contractor-Furnished Material Sources

- Geotechnical Clearance Process

**Consultant Information** - training information for outside consultants who are developing the environmental documents

## ENGINEERING TECHNICAL GROUP REQUIREMENTS

### Contact Information:

**John Carr, Engineering Technical Group Manager**  
jcarr@azdot.gov  
(602) 712-7275

**Barry Crockett, Section Manager, Contracts and Specifications**  
bcrockett@azdot.gov  
(602) 712-7221

The Engineering Technical Group will provide further direction and guidance regarding its process, requirements, and personnel contacts at the initial pre-application meeting. The Engineering Technical Group houses several Sections key to the ADOT Project Development Process.

**Engineering Survey** - sets standards for engineering surveys and photogrammetry and mapping services and documents. Any survey documents produced for the state highway system needs to follow their standards and final products submitted to them.

**Contact: Chong-Tai Chyan, (602) 712-7944**

**Computer Aided Design and Drafting (CADD) Management and Support** - serves as a central contact for the CADD Standards used in the development of CADD drawings. The CADD Standards are important because final drawings need to be submitted to ADOT for archiving and able to be retrieved from archiving for use by other designers in the future in formats consistent with ADOT's CADD software programs.

**Contact: Fred Daniels, (602)712-7169**

**Program and Project Management Section (PPMS)** - responsible for maintaining all project schedules for ADOT construction projects whether in scoping, design, or construction phase. They publish monthly project management reports, available on the ADOT internet site, to keep stakeholders apprised of the schedule status of all ADOT projects. Private developers must submit all schedules to PPMS through the ADOT Project Manager, in accordance with ADOT guidelines, and provide monthly updates.

**Contact: Hari Khanna, (602) 712-7334**

**Engineering Consultants Section (ECS)** - In the event ADOT contracts with a designer to do design work on a privately funded project, ECS would likely be involved in guiding them through their process.

**Contacts: Vivien Lattibeaudiere, (602) 712-7808**  
**Susan Tellez, (602) 712-7220**

## UTILITY AND RAILROAD ENGINEERING SECTION REQUIREMENTS

### Contact Information:

**Bruce Vana, Utility and Railroad Section Manager**  
bvana@azdot.gov  
(602) 712-8681

**Robert Travis, State Railroad Liaison**  
rtravis@azdot.gov  
(602) 712-6193

**Utility and Railroad Engineering Section is located online at:**

[www.azdot.gov/highways/utilities/index.asp](http://www.azdot.gov/highways/utilities/index.asp)

The Utility and Railroad Engineering Section will provide further direction and guidance regarding its process, requirements, and personnel contacts at the initial pre-application meeting. Utility coordination and design aspects of a highway construction project are covered within the two following documents, which shall be followed by any designer attempting to design a state highway or transportation-related facility:

**“Utility Coordination Guide For Design Consultants”** - is intended primarily to provide guidance for the design consultants responsible for utility coordination for highway projects involving ADOT facilities. Although it is not possible to cover all situations, an effort has been made to make the manual detailed enough to provide guidance for those not familiar with the utility coordination process.

**“Guide For Accommodating Utilities on Highway Rights of Way”** - is intended to consolidate the policies and procedures adopted by ADOT for the accommodation of utilities on highway rights-of-way. All utility installations above or below ground, within state right-of-way, are regulated by ADOT through the establishment and enforcement of these policies contained within the manual.

For projects that involve a new highway or roadway crossing a railroad or widening of an existing railroad crossing, the design consultant should be made aware of a separate series of requirements by Burlington Northern Santa Fe and Union Pacific Railroad. For projects involving a new rail/highway grade separation structure the railroad will need to formally approve the horizontal and vertical distances from the track to the structure found in the Bridge Selection Report including the overall span length of the structure. Once approved these values cannot diminish.

If widening of an at-grade crossing is anticipated, a diagnostic meeting must be held involving members from the railroad, the road authority and the Corporation Commission to discuss and agree upon crossing safety features required by the project. At the railroad's discretion they will contract with either the developer or the road authority to perform any railroad-related work for the project. For any additional easement area required from the railroad, the railroad will contract with the road authority only.

If the town or city intends to turn back the completed facilities to ADOT they will acquire the necessary easement from the railroad which will later be transferred to ADOT. The process is similar for the many short-haul railroads in the state. Completion of a crossing agreement, to affect railroad work or additional crossing easement area, with the railroad must occur before access to railroad right-of-way will be granted to affect construction.

## TRAFFIC ENGINEERING GROUP REQUIREMENTS

### Contact Information:

**Mike Manthey, State Traffic Engineer**  
**mmanthey@azdot.gov**  
**(602) 712-8888**

**ADOT's Traffic Engineering Standards, which apply to Privately Funded Interchange Development, are located online at:**

**[www.azdot.gov/highways/traffic/Standards.asp](http://www.azdot.gov/highways/traffic/Standards.asp)**

The Traffic Engineering Group is responsible for formulating and administering a statewide traffic engineering program to provide for the safe and efficient operation of traffic. The Traffic Engineering Design Group is divided into six teams: the Highway Enhancements for Safety (HES) Team, four Engineering Design Teams, and the Traffic Operations Section. These teams will provide further direction and guidance regarding their process, requirements, and personnel contacts at the initial pre-application meeting.

**The HES Team** investigates and recommends improvements and countermeasures for traffic-related problems on the state highways including the following:

- Identifies and recommends countermeasures to reduce crashes frequency and/or severity at locations with perceived accident problems
- Provides expertise in traffic problem resolution
- Serves as the focal point of statewide Safety Management System

**The Engineering Design Teams in Traffic Design** produce the following products:

- Work zone traffic control plans, specifications, and estimates for construction projects statewide
- Pavement marking and signing plans, specifications, and estimates for construction projects statewide
- Project management and design leadership for freeway signing update projects statewide
- Signing work orders for interstate highways across Arizona
- Development of traffic engineering standard drawings, guidelines, and specifications for use by ADOT and other agencies
- Speed zoning, traffic signal, and other safety studies

**Traffic Operations Section** provides a variety of traffic operations services, including:

- Provides technical expertise and maintains electrical equipment on highways and freeways
- Develops and administers the design and implementation of new traffic signal coordination systems, and partner with local agencies in the planning, development, and implementation of signal progression systems
- Establishes guidelines for signal system prioritization, and disseminate current technology on traffic signal operations and coordination to the regional traffic offices
- Pays electrical costs for the operation of signals, lighting and related equipment
- Partners with the Construction Group, other agencies and contractors by providing a timely source of quality traffic products and communications equipment statewide
- Responsible for fabricating all freeway and highway signs
- Maintains all roadway striping and signing for all freeways as well as support to the four Regional Traffic groups on all highways
- Responsible for the research and development of traffic control device specifications and provides the technical expertise to develop and evaluate contracts for these devices
- Responds to emergency situations statewide on Section-related activities as well as responds to tort liability situations

They operate in accordance with the USDOT Manual on Uniform Traffic Control Devices (MUTCD), the Arizona Revised Statutes (A.R.S.), the National Electrical Manufacturers Association (NEMA), the International Municipal Signal Association (IMSA) and ADOT's own policies, guidelines and procedures (PGP).

The Traffic Operations Section performs duties as described at:

[www.dot.state.az.us/Highways/Traffic/9660.asp](http://www.dot.state.az.us/Highways/Traffic/9660.asp)

## ROADWAY ENGINEERING GROUP REQUIREMENTS

### Contact Information:

**Mary Viparina, Assistant State Engineer**  
mviparina@azdot.gov  
(602) 712-4282

**The Roadway Engineering requirements for Privately Funded Interchange Development are located online at:**

[www.azdot.gov/Highways/RdwyEng/index.asp](http://www.azdot.gov/Highways/RdwyEng/index.asp)

As an integral part of ADOT's Intermodal Transportation Division, the Roadway Engineering Group is an organization consisting of four functional Sections: Roadway Predesign, Drainage Design, Roadside Development, and Roadway Design. The Roadway Engineering Group will provide further direction and guidance regarding its process, requirements, and personnel contacts at the initial pre-application meeting.

- **Roadway Predesign** provides guidance on project scoping documents.
- **Drainage** provides guidance and direction to consultants and outside entities involved with drainage design activities for ADOT, to enable compliance with applicable policy, criteria, and procedures.
- **Roadside Development** provides landscape architectural and environmental technical design direction and expertise for ADOT projects statewide, including the development of plans and specifications and review of consultant plans involving: aesthetic enhancements and design, environmental mitigation and ecological restoration, stormwater quality and erosion control, seeding and revegetation, native plant salvage and replanting, and landscape and irrigation design.
- **Roadway Design** provides reviews on plans specifications, and estimates for highway construction contracts' project scoping documents.

## **MATERIALS GROUP PAVEMENT DESIGN SECTION REQUIREMENTS**

### **Contact Information:**

**Mr. Paul Burch, P.E.**  
**Pavement Design Section Engineer**  
**Arizona Department of Transportation – Materials Group**  
**1221 N. 21<sup>st</sup> Avenue, Phoenix, Arizona 85009**  
**Tel: (602) 712-8085, Fax: (602) 712-8138**

**The Materials Preliminary Engineering and Design Manual is available for purchase from the ADOT Engineering Records Section. Additional information regarding Engineering Records can be found on their webpage:**

**[www.azdot.gov/Inside\\_ADOT/Misc/Engineering\\_Records.asp](http://www.azdot.gov/Inside_ADOT/Misc/Engineering_Records.asp)**

Pavement design activities required for Privately Funded Traffic Interchanges shall be performed in accordance with the ADOT Materials Preliminary Engineering and Design Manual. Specifically, the pavement design consultant is directed to chapters Two (Pavement Design), Four (Pavement Rehabilitation), and Five (Consultant and Local Government Projects).

It is imperative that the ADOT Materials Pavement Design Section be advised as early as practical that development has been initiated on a Privately Funded Traffic Interchange servicing the state highway system. The developer or its designated consultant shall ensure that the ADOT Pavement Design Section Engineer is provided with copies of any corridor study, project feasibility study, design concept report, or project assessment associated with or within the limits of the proposed Privately Funded Traffic Interchange Project.

Upon the developer's pavement design consultant making contact with the ADOT Pavement Design Section Engineer, an ADOT pavement designer will be assigned to the project to perform appropriate review of the pavement design consultant's work products.

The following items are to be submitted to the ADOT Pavement Design Section for review, comment, and ultimate approval:

1. Soil information, including soils classifications, soil profile for new alignments, and log of core samples
2. Geotechnical Report approved by ADOT Geotechnical Design Section
3. Pavement Design Summary

4. Initial Pavement Design Report
5. Preliminary pavement structure cost estimate
6. Final Pavement Design Report

The final version of the Geotechnical Report, Pavement Design Summary and Pavement Design Report must be signed and sealed by an Arizona Registered Professional Engineer.

For projects proposed within the Phoenix and Tucson metropolitan areas, the pavement design consultant is directed to review the Pavement Guidelines for Urban Freeways, in addition to following the requirements of the Materials Preliminary Engineering and Design Manual.

The pavement design consultant shall allow sufficient time for appropriate review of the design reports in accordance with the below time table:

- Soils information, Geotechnical Report - 10 working days
- Pavement Design Summary and Initial Pavement Design Report - 15 working days
- Final Pavement Design Report - 10 working days

## **BRIDGE GROUP REQUIREMENTS**

### **Contact Information:**

**Jean Nehme, Ph.D., P.E. State Bridge Engineer**  
**[jnehme@azdot.gov](mailto:jnehme@azdot.gov)**  
**(602) 712-7481**

**Bridge Design Guidelines for Privately Funded Interchange  
Development are located online at:**

**[www.azdot.gov/Highways/bridge/Guidelines/index.asp](http://www.azdot.gov/Highways/bridge/Guidelines/index.asp)**

The Bridge Group is responsible for the effective use of modern technology and resources for furnishing bridge design, bridge construction assistance, and bridge management necessary to provide and maintain safe and functional bridges and drainage facilities on Arizona highways. The Bridge Group will provide further direction and guidance regarding its process, requirements, and personnel contacts at the initial pre-application meeting.

The Bridge Group will provide reviews for each design submittal to ensure the appropriate use of the Standard Drawings including such design features as Concrete Box Culverts (CBCs), retaining walls, pipe headwalls, and tubular sign supports. Items involving special design shall be given oversight review. Such items might include light poles, sign supports, tubular signs, Freeway Management System (FMS) signs, retaining walls, CBCs, miscellaneous structural items, sound walls and Barrier Summary Sheets. The Bridge Group will also make sure there is consistency between the bridge plans, and the civil and traffic plans.

