

**PM-10 PAVING UNPAVED ROAD PROJECT APPLICATION**

**CMAQ Funding Available for Federal Fiscal Year 2015, 206 and 2017**

**General Instructions:**

This excel form is to be used to request federal Congestion Mitigation and Air Quality (CMAQ) funding available through the Maricopa Association of Governments (MAG) for Paving Unpaved Road Projects to be included in the FY2014-2018 MAG Transportation Improvement Program. Funding is available for Federal Fiscal Year (FFY) 2015, 2016 and 2017.

This application form includes: Part A - Contact and Project Description, Part B - Segment Description and Proposed Improvements, Part C - Total Project Budget and Schedule, Part D - Checklist and Signature Page, and Transmittal Instructions and Schedule. Each part is a separate tab of this excel file. Please complete Parts A - D. Alternative application forms are available upon request.

**Deadlines and Transmittal Instructions:**

Two copies of a printed, complete and signed application must be received in the MAG offices by **10:00 p.m. Wednesday, September 19, 2012**. And the application is to be submitted electronically. Detailed transmittal instructions are located in a separate tab in this excel sheet. Late applications will not be accepted.

If member agencies need additional information or have questions, they should contact Teri Kenned or Stephen Tate (602) 254-6300 or contact them by e-mail at the following addresses:

<mailto:state@mag.maricopa.gov>

<mailto:tkennedy@azmag.gov>

**All information is required, unless noted by the word - Optional.**

**PART A - CONTACT AND PROJECT DESCRIPTION**

**Contact Information**

|                     |   |
|---------------------|---|
| 1. Agency Name      | Maricopa County                               |
| 2. Name:            | Eric Mayer                                    |
| 3. Phone:           | 602-506-8367                                  |
| 4. E-Mail:          | EricMayer@mail.maricopa.gov                   |
| 5. Mailing Address: | 2901 West Durango Street<br>Phoenix, AZ 85009 |

**Project Description**

|   |   |
|---|---|
| 6. Please provide the Project Title.  | Laveen Area PM-10 Paving  |
| 7. Please provide a general description of the project.   | Maricopa County Department of Transportation has identified four road segments in the Laveen Area to be considered for improvements under its Low Volume Road Program in which MCDOT plans to suppress the dust generated by paving frequently traveled dirt roads to improve air quality and other significant concerns. |
| 8. Please attach a map showing the location(s) of the roadway(s), alley(s) or shoulder(s) to be paved.  | Please attach map with transmittal  |
| 9. Please enter the number of <b>segments</b> to be included in the project (See definition of segments below).   | 4   |
| 10. Please review the PM-10 Monitor Locations to verify that the proposed project is in the nonattainment area. Enter 'Yes' or 'No'.<br><a href="#">Link to PM-10 Monitor Locations Map</a> | Yes   |

**Site Visit Information**

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11. It is required that the member agency proposing a project to be funded with federal funds has completed a site visit of the project within 60 days prior to the application due date. This is to help ensure familiarity with the project as it relates to eligibility, readiness, environmental issues, right of way/ownership issues, and utility conflicts.

|   |   |
|---|---|
| a. Name of Person who completed site visit  | Juan Castaneda                          |
| b. Date site visit completed                | 9/13/2012                               |
| c. Pictures of the site visit are required. | Please attach pictures with transmittal |

**SEGMENTS: Each project will include one or more segments of roadway, alley or shoulder to be improved. A segment is defined as either:**

- a. A length of roadway, alley or shoulder to be improved with fixed starting and ending limit that has a relatively uniform cross section, or
- b. Discontinuous shoulder improvements along a continuous length of roadway with a fixed starting and ending limit that has a relatively uniform cross section.

The segment may curve or change direction, but must be continuous and have a relatively uniform cross section. **PART B MUST BE SUBMITTED FOR EACH SEGMENT OF THE PROJECT. If a MAG member agency is paving 'Various Locations', these must be defined and noted as separate Segments.**

## PART B - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS

This part of the form identifies the current characteristics and proposed improvements for each segment of the project. A separate Part B must be completed for each segment. e.g. If in field #9 of Part A, it was indicated that 5 segments were included in the project, 5 Part B's must be completed in the application. The additional Part Bs are separate tabs in this excel file noted as: Part\_B2, Part\_B3, etc.

The purpose of Part B is to provide sufficient information to evaluate the cost estimate for the project and to provide assurance that the project will be capable of meeting the ADOT administered federal design review and clearance process. This process requires environmental, ROW and utilities clearances and a bid ready design prior to FHWA approval to encumber federal funding for construction.

| Section 1 - Segment Description   | Segment 1   |
|---|---|
| 1. Segment Location - Include segment beginning and ending limits   | 31st Avenue from Olney Avenue to McNeil Street  |
| 2. Length and Curb Miles  |   |
| a. Length (Miles) of the segment  | 0.11  |
| b. Curb Miles: Miles of shoulders or curbs to be paved by direction (e.g. if discontinuous shoulder sections on both sides of the roadway are to be paved, enter the combined distance of shoulders to be paved).   | 0   |
| 3. Please provide a map/graphic/photo that clearly shows the segment alignment and features that cross into or abut the alignment such as: washes, canals, railroad crossings, and other crossing features that may affect the project.   | <b>Please attach map with transmittal</b>   |
| 4. Please provide a simple diagram of a typical cross section, including widths, of the segment that shows the current right of way limits, sidewalks and shoulders (if any) and the lanes of travel  |   |
| 5. Will the requested paving project pave a road, alley or shoulder within 4 miles of a PM-10 monitor? Which  | Yes   |
| <a href="#">Link to PM1- Monitors Map on the MAG Website</a>  |   |
| 6. Please describe the current surface condition of the shoulder, alley or road segment to be paved. Also is the surface graveled or use dust suppressants?   | The roadway grade is fairly flat with loose gravelly material throughout the project, especially on the side edges of the road.   |
| 7. Please describe traffic on the segment (e.g weekday percent truck, etc.).  | Local   |
| 8. Current Average Traffic (ADT)  | 50  |
| 9. Please describe methodology used to calculate ADT  | Standard tube count.  |
| 10. Federal law requires that all federally funded projects comply with a federal environmental clearance. For projects that have a minimum ground disturbance, environmental surveys are required and an environmental document will need to be prepared, which typically requires 12 months to complete. In the box to the right, please describe any known cultural, historical and biological resources, hazardous materials or other environmental issues that could affect work on the segment. | The area has vegetation that would be impacted by roadway improvements including creosote, small trees and various small cacti if the roadway is widened.<br>MCDOT Environmental Group will review the project data, determine and prepare any Environmental Clearance, Impact Statement or Nationwide Permit as required. Regrading and realigning the roadway will necessitate additional investigation by Maricopa County Environmental Department. Additional action items such as archaeological and environmental clearance will be required. |
| 11. Current ROW: (Choose All that Apply and select Yes or No)   |   |
| Agency owns all ROW Needed  | No  |
| ROW to be acquired  | Yes   |
| Owners will donate ROW  |   |
| Condemnation may be required  |   |

**PART B - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS**

12. Please describe any right of way issues associated with the segment.

The existing right-of-way for 31st Avenue is 20-feet wide from McNeil Street to Olney Avenue west of the survey centerline. The required right-of-way for a rural local road is 50-feet. An additional 30-foot right-of-way east of the survey centerline will be required for this segment affecting three properties. As right-of-way will be required to proceed with this project, the existing roadway alignment will have to be shift to the center of future right-of-way.

## PART B - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS

13. Current Utilities in or abutting the alignment: (Choose All that Apply and Select Yes or No)

|                            |     |
|----------------------------|-----|
| Canals & Drainage          | Yes |
| Power Lines & Cables       | Yes |
| Pipelines, Sewer and Water | No  |
| Private Structures         | No  |
| Other                      |     |
| None                       |     |

14. Please describe any utility conflicts that will need to be addressed.

A Blue Stake inquiry indicates that the following utilities may be in the area:

- City of Phoenix – Water
- Cox Communication – Cable and Fiber Optic
- Qwest – Fiber Optic and Coax
- Salt River Project – Electric and Irrigation.
- Southwest Gas – Natural Gas

Field observations for this segment have overhead power lines and down guys immediately to the east side of the roadway for the length of the segment. There are four existing power poles that are at the edge of the eastern right-of-way line. In order to construct the minimum roadway width of 20-feet it will be necessary to relocate these poles. Telecommunication risers should also be relocated outside of the 6-foot clear zone.

### Section 2 - Proposed Improvements

#REF!

1. What is the type of paving project? (Choose all that Apply and Select Yes or No)

|                    |           |
|--------------------|-----------|
| Rural Road         | Yes       |
| Urban Road         | No        |
| Subdivision Street | No        |
| Alley              | No        |
| Shoulders          | No        |
| Other              | Describe: |

2. Please describe the work to be performed on the segment:

Improvements include placing two 10-foot lanes with AC pavement and thickened edge on the existing graded roadway to limit dust. The cross section will be a two way crowned section to match existing conditions. Dirt driveways shall be graded within right-of-way to match proposed edge of pavement. Additional right-of-way will be necessary for 31st Avenue improvements. The construction centerline alignment should be located in the center of future right-of-way.

Dust proofing measures will include grading, watering and compaction and a 2-inch AC pavement section. Match existing cross section and profile as close as possible to eliminate the need for imported material.

3. Please provide a simple diagram of a typical cross section, including widths, of the segment that shows the proposed improvement(s) and the after construction right of way limits, sidewalks and shoulders (if any), and the lanes of travel.

4. (Optional for shoulder and alley paving, required for road paving) Please describe vertical alignment changes.

5. (Optional for shoulder and alley paving, required for road paving) Please describe horizontal alignment changes.

6. (Optional for shoulder and alley paving, required for road paving) Design speed of the after construction segment.

**PART B - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS**

|   |   |
|---|---|
| 7. Please describe the type of paving for the segment.  | 2-inch AC pavement  |
| 8. Non paving improvements to be included: (Choose All that Apply and Select Yes or No)<br>Sidewalks<br>Fencing<br>Lighting<br>Curb & Gutter<br>Bicycle path or lane<br>Other | No<br>No<br>No<br>No<br>No<br>Describe:   |
| 9. Please describe the non paving improvements to be included in the segment.   | <p>The existing SRP power poles are located on the east right-of-way edge. With new right-of-way limits and revisions to the horizontal alignment will result in the relocation of all the existing power poles which will add an extra expense to the project and will require close coordination with SRP.</p> <p>Similar to SRP electric, additional utility relocation and close coordination might be necessary with new right-of-way limits and revisions to the horizontal alignment.</p> <p>The existing roadway is lower than the surrounding property forming a ditch on each side of the roadway. Constructing roadway drainage ditches will expand the roadway footprint. A more detailed drainage analysis will need to be prepared to ensure historic drainage patterns are maintained.</p> |
| 10. For roadway paving, please enter the number of unpaved access points (e.g. driveways, cross roads) to be paved by the project.  | 0   |

**PART C - TOTAL PROJECT SCHEDULE AND BUDGET INCLUDING ALL SEGMENTS**

Please provide a cost and programming estimate for the total project (e.g. the cost to complete all planned segment improvements). The design for the project should be programmed at least 1 year, preferably 2 years, prior to construction. Utilities and right of way should be programmed at least 1 year prior to construction, but may occur in the same year as construction depending on utility and right of way concerns that are identified in the segment description(s) in Part B(s).

**Section 1 - Total Project Budget**

|  |                 | (OPTIONAL) |  |
|--|-----------------|------------|--|
| 1. Please attach a detailed cost estimate            |                 |            |  |
| Cost Estimate for the Project Including ALL Segments | Cost            | (Optional) | Additional Notes   |
| 2. PE and Final Design                               | \$ 85,000       |            |  |
| 3. Right of way                                      | \$ 80,000       |            |  |
| 4. Utilities   | \$ 40,000       |            |  |
| 5. Construction                                      | \$ 700,000      |            |  |
| 6. Contingency                                       | \$ 140,000      |            |  |
| 7. Total Cost w/o ADOT Review Fee                    | \$ 1,045,000.00 |            |  |
| 8. ADOT Review Fee                                   | \$ 20,900.00    |            | Required ADOT review fee. The fee is calculated as \$20,000 or 2% of project cost, whichever ever is higher. |
| 9. Total Cost with ADOT Review Fee                   | \$ 1,065,900.00 |            | Summation of Cost Cells  |

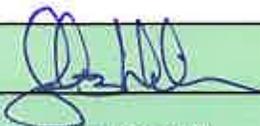
**Agency Programming**

10. Please describe the programming of the project in the agency's own CIP/TIP.

| Requested MAG Programming      | Year (Choose One) | Local Funding Source | Local Cost | CMAQ COST | Total Cost |
|--------------------------------|-------------------|----------------------|------------|-----------|------------|
| 11. Design                     | 2015              | HURF                 | 85,000     | 0         | 85,000     |
| 12. Right of way and Utilities | 2014              | HURF                 | 120,000    | 0         | 120,000    |
| 13. Construction               | 2016              | HURF                 | 47,880     | 792,120   | 840,000    |
|                                |                   |                      | 252,880    | 792,120   | 1,045,000  |

## PART D - SIGNATURE AND CHECKLIST

As the jurisdiction's manager/administrator or designated representative, I certify that the information contained in this application is accurate and complete and that the local funds for this project will be included in the sponsoring MAG member agency's local current CIP/TIP or budget document if the project is selected for federal funding.

Signature: 

Name: John B. Hauskins, P.E.

Title: Director, Maricopa County Department of Transportation

Date: 9/19/2012

### Checklist - OPTIONAL

This check list is optional, but is included to facilitate applicant review and verification that all required fields in the form have been completed.

| PART A - Contact, Project Description and Site Visit Fields  | Complete?                |
|--|--------------------------|
| Contact Information, fields 1 – 5 are complete   | <input type="checkbox"/> |
| Project Description, fields 6, 7, 9 and 10 are complete  | <input type="checkbox"/> |
| Project Description, field 8 – project map is provided in the printed application. Please attach a PDF file in the electronic submittal.               | <input type="checkbox"/> |
| Site Visit Information, fields 11a and 11b   | <input type="checkbox"/> |
| Site Visit Information, fields 11c Pictures attached.  | <input type="checkbox"/> |
| PART B - Segment Description and Proposed Improvements Fields  | Complete?                |
| The number of complete Part B Segments match the number of segments listed in Part A, Field 9.   | <input type="checkbox"/> |
| <b>Segment Description, Section 1</b>  |                          |
| Fields 1 - 2 are complete  | <input type="checkbox"/> |
| Field 3 – segment alignment map is provided in the printed application. Please attach PDF file in the electronic submittal.                            | <input type="checkbox"/> |
| Field 4 attach PDF file in the electronic submittal.   | <input type="checkbox"/> |
| Fields 5 – 14 are complete   | <input type="checkbox"/> |
| <b>Proposed Improvements, Section 2</b>  |                          |
| Fields 1 – 2 are complete  | <input type="checkbox"/> |
| Field 3 attach PDF file in the electronic submittal.   | <input type="checkbox"/> |
| Fields 4 – 6 <b>REQUIRED</b> for Road and Street Segments and are complete.  | <input type="checkbox"/> |
| Fields 4 – 6 <b>OPTIONAL</b> for shoulder and alley segments, please check box if complete.  | <input type="checkbox"/> |
| Fields 7 – 10 are complete   | <input type="checkbox"/> |
| PART C - Total Project Schedule and Budget Including All Segment Fields  | Complete?                |
| <b>Section 1 - Total Project Budget</b>  |                          |
| Fields 1- is <b>OPTIONAL</b> . Please attach a PDF file in the electronic submittal if a detailed cost estimate is provided with printed application   | <input type="checkbox"/> |
| Fields 2 – 6 are complete  | <input type="checkbox"/> |
| Field 7 is <b>REQUIRED</b> for non certified agencies, please check box if included and provided in the printed application.                           | <input type="checkbox"/> |
| Field 8 is <b>OPTIONAL</b> , please check box if included and provided in the printed application. Please attach PDF file in the electronic submittal. | <input type="checkbox"/> |
| Field 9 - total cost field is complete   | <input type="checkbox"/> |
| Field 10 - Agency CIP programming is completed   | <input type="checkbox"/> |
| Fields 11 – 13 Years are complete  | <input type="checkbox"/> |
| Fields 11 – 13 Local Funding Sources are complete  | <input type="checkbox"/> |
| Fields 11 – 13 Local Costs are complete  | <input type="checkbox"/> |
| Fields 11 – 13 Total Costs are complete  | <input type="checkbox"/> |
| Field 13 Federal Costs are complete  | <input type="checkbox"/> |
| <b>Section 2 - Project Schedule is OPTIONAL</b>  |                          |
| Fields 1 - 14 are <b>OPTIONAL</b>  | <input type="checkbox"/> |
| PART D - Signature Page Fields   | Complete?                |
| Form is signed   | <input type="checkbox"/> |
| Name, title and date fields are completed.   | <input type="checkbox"/> |

## TRANSMITTAL INSTRUCTIONS and SCHEDULE

The due date and time for project applications to be submitted to MAG is **Wednesday, September 19, 2012 by 10:00 p.m.**

### Member agencies are to:

#### 1) Transmit the application and all attachments electronically, and

To transmit the application electronically, please save the excel file, and then send the application and all attachments to Teri Kennedy, Transportation Programming Manager. Please send graphic attachments in PDF form. Click cell below to send e-mail.

[mailto: MAG Staff](mailto:MAG Staff)

#### 2) Submit two printed, signed, and complete applications to MAG.

To submit two printed, signed, and complete applications to MAG, the applicant can mail **(at MAG offices by Wednesday September 19, 2012 at 10:00)** or drop off application to:

Maricopa Association of Governments  
ATTN: Teri Kennedy,  
302 N. 1st Avenue, Suite #300,  
Phoenix, AZ 85003.

Or, the applicant can scan a printed and signed application and transmit it via e-mail or fax to: [tkennedy@azmag.gov](mailto:tkennedy@azmag.gov) or 602.254.6300 by Wednesday, September 19th @ 10:00 a.m. If the applicant is transmitting a scanned, printed, and signed application via e-mail or fax, the applicant will mail or drop off the original printed application by Wednesday, September 26, 2012.

### Application Workshops and Open Working Group Meeting Schedule\*

|   |  |
|---|--|
| Monday, August 13, 2012 from 9:00-11:00 AM    | Workshop on MAG Transportation Programming and Federal Fund Project Applications |
| Monday, August 27, 2012 from 1:00-3:30 PM     | Open Working Group - Federal Fund Project Applications                           |
| Monday, September 10, 2012 from 8:30-11:00 AM | Open Working Group - Federal Fund Project Applications                           |

\* All meetings will be held on the 2nd Floor of the MAG Offices at 302 North 1st Ave, Suite 300, Phoenix, Arizona 85003

**PM-10 Paving Application from Maricopa County for 'Laveen Area PM-10 Paving'**

## Instructions for the Submittal of GIS Data for CMAQ Funding Applications

It is preferred that, when possible, member agencies submit GIS data representing the locations of projects defined in their CMAG Applications. For member agencies unable to meet this requirement, MAG staff is available to assist in this area.

### Submission Requirements

GIS Data – For each geometry type (point, line, polygon), please provide a single GIS shapefile or feature class for your jurisdiction. Example: if you are submitting Project Applications that are for both linear features (bike lanes) and point features (crossings), you would submit a total of two shapefiles or geodatabase feature classes along with your Project Application.

File Formats – Agencies that are able to submit GIS data along with CMAQ Applications shall provide the data in one of three formats that are compatible with ESRI products: (1) shapefile, (2) Personal Geodatabase, or (3) File Geodatabase.

Spatial Reference – The preferred spatial reference system of submitted GIS data is State Plane Arizona Central NAD 83 HARN.

Attributes – All GIS data submitted shall, at a minimum, have the following attributes:

- PROJECT\_TITLE – the name of the project; this should be the same as the Project Title in the Project Application
- LOCATION – (optional) a description of the location of the project. Linear features should be described by their start and end locations. Polygon features should be described using streets, water courses, canals, city boundaries, or other landmarks as a means of describing the location of the project.

<Provide screenshot showing graphic link between survey response in Excel and the attribute table.>

## PART B2 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS

This part of the form identifies the current characteristics and proposed improvements for each segment of the project. A separate Part B must be completed for each segment. e.g. If in field #9 of Part A, it was indicated that 5 segments were included in the project, 5 Part B's must be completed in the application. The additional Part Bs are separate tabs in this excel file noted as: Part\_B2, Part\_B3, etc.

The purpose of Part B is to provide sufficient information to evaluate the cost estimate for the project and to provide assurance that the project will be capable of meeting the ADOT administered federal design review and clearance process. This process requires environmental, ROW and utilities clearances and a bid ready design prior to FHWA approval to encumber federal funding for construction.

| Section 1 - Segment Description   | Segment 2  |
|---|--|
| 1. Segment Location - Include segment beginning and ending limits   | Olney Avenue from Beginning of Maintenance to 31st Avenue  |
| 2. Length and Curb Miles  |  |
| a. Length (Miles) of the segment  | 0.25   |
| b. Curb Miles: Miles of shoulders or curbs to be paved by direction (e.g. if discontinuous shoulder sections on both sides of the roadway are to be paved, enter the combined distance of shoulders to be paved).   | 0  |
| 3. Please provide a map/graphic/photo that clearly shows the segment alignment and features that cross into or abut the alignment such as: washes, canals, railroad crossings, and other crossing features that may affect the project.   | <b>Please attach map with transmittal</b>  |
| 4. Please provide a simple diagram of a typical cross section, including widths, of the segment that shows the current right of way limits, sidewalks and shoulders (if any) and the lanes of travel  |  |
| 5. Proximity of the segment to nearest PM-10 air quality monitor: (Indicate miles)  | 4.4  |
| <a href="#">Link to PM1- Monitors Map</a>   |  |
| 6. Please describe the current surface condition of the shoulder, alley or road segment to be paved:  | The roadway grade is fairly flat covered with gravelly material throughout the project length.   |
| 7. Please describe traffic on the segment (e.g weekday percent truck, etc.).  | Local  |
| 8. Current Average Traffic (ADT)  | 178  |
| 9. Please describe methodology used to calculate ADT  | Standard tube count.   |
| 10. Federal law requires that all federally funded projects comply with a federal environmental clearance. For projects that have a minimum ground disturbance, environmental surveys are required and an environmental document will need to be prepared, which typically requires 12 months to complete. In the box to the right, please describe any known cultural, historical and biological resources, hazardous materials or other environmental issues that could affect work on the segment. | Special environmental considerations will be necessary for full grown trees along the south side of Olney Avenue. Trees are very dense and most tree trunks are greater than 12-inches in diameter and at least 30-feet or taller particularly near the west end of the roadway segment. Additional clearing and grubbing will be required on new horizontal alignment including removal of large trees and other native vegetation on each side of the existing roadway alignment.<br>MCDOT Environmental Group will review the project data, determine and prepare any Environmental Clearance, Impact Statement or Nationwide Permit as required. |
| 11. Current ROW: (Choose All that Apply and select Yes or No)   |  |
| Agency owns all ROW Needed  | Yes  |
| ROW to be acquired  | No   |
| Owners will donate ROW  | No   |
| Condemnation may be required  | No   |

**PART B2 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS**

|  |  |
|--|--|
| <p>12. Please describe any right of way issues associated with the segment.</p>  | <p>The existing right-of-way for Olney Avenue is 60-feet wide from the Beginning of Maintenance to 31st Avenue. The north half is 20-foot wide and the south half is 40-feet wide. MCDOT required right-of-way for a rural local road is 50-feet. No additional right-of-way will be necessary for this segment.</p>   |
| <p>13. Current Utilities in or abutting the alignment: (Choose All that Apply and Select Yes or No)</p> <p>Canals &amp; Drainage<br/>Power Lines &amp; Cables<br/>Pipelines, Sewer and Water<br/>Private Structures<br/>Other<br/>None</p>               | <p>No<br/>Yes<br/>Yes<br/>No<br/>Describe:<br/>Yes</p>   |
| <p>14. Please describe any utility conflicts that will need to be addressed.</p>   | <p>A Blue Stake inquiry indicates that the following utilities may be in the area:<br/>-City of Phoenix – Water<br/>-Cox Communication – Cable and Fiber Optic<br/>-Qwest – Fiber Optic and Coax<br/>-Salt River Project – Electric and Irrigation.<br/>-Southwest Gas – Natural Gas<br/>Field observations for this segment has overhead power lines and down guys immediately to the north side of the roadway for the length of the segment. Near the west end of this segment, an exposed cast iron pipe labeled Pacific Estates was found less than 1-foot north of power poles. There is an existing power pole at the right of way line that is an obstruction near the mailbox turnout.</p>              |
| <p><b>Section 2 - Proposed Improvements</b></p>  | <p><b>Segment 2</b></p>  |
| <p>1. What is the type of paving project? (Choose all that Apply and Select Yes or No)</p> <p>Rural Road<br/>Urban Road<br/>Subdivision Street<br/>Alley<br/>Shoulders<br/>Other</p>   | <p>Yes<br/>No<br/>No<br/>No<br/>No<br/>Describe:</p>   |
| <p>2. Please describe the work to be performed on the segment:</p>   | <p>Improvements include placing two 10-foot lanes with AC pavement and thickened edge on the existing graded roadway to limit dust. The cross section will be a two way crowned section to match existing conditions. Dirt driveways shall be graded within right-of-way to match proposed edge of pavement. No additional right-of-way will be necessary for Olney Avenue; however, the roadway centerline should be shifted to the center of the right-of-way per MCDOT preferences.<br/>Dust proofing measures will include grading, watering and compaction and a 2-inch AC pavement section. Match existing cross section and profile as close as possible to eliminate the need for imported material.</p> |
| <p>3. Please provide a simple diagram of a typical cross section, including widths, of the segment that shows the proposed improvement(s) and the after construction right of way limits, sidewalks and shoulders (if any), and the lanes of travel.</p> |  |
| <p>4. (Optional for shoulder and alley paving, required for road paving) Please describe vertical alignment changes.</p>   |  |

**PART B2 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS**

|  |  |
|--|--|
| <p>5. (Optional for shoulder and alley paving, required for road paving) Please describe horizontal alignment changes.</p>   |  |
| <p>6. (Optional for shoulder and alley paving, required for road paving) Design speed of the after construction segment.</p>   |  |
| <p>7. Please describe the type of paving for the segment.</p>  | <p>2-inch AC pavement with thickened edge</p>  |
| <p>8. Non paving improvements to be included: (Choose All that Apply and Select Yes or No)</p> <p>Sidewalks</p> <p>Fencing</p> <p>Lighting</p> <p>Curb &amp; Gutter</p> <p>Bicycle path or lane</p> <p>Other</p> | <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>Describe:</p>   |
| <p>9. Please describe the non paving improvements to be included in the segment.</p>   | <p>All utilities located on the south side of the roadway shall be relocated outside of the new horizontal alignment. All power poles on the north appear to be outside of the right-of-way. It will be necessary to relocate the existing private irrigation ditch immediately south of the existing roadway.</p> |
| <p>10. For roadway paving, please enter the number of unpaved access points (e.g. driveways, cross roads) to be paved by the project.</p>  | <p align="right">0</p>   |

## PART B3 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS

This part of the form identifies the current characteristics and proposed improvements for each segment of the project. A separate Part B must be completed for each segment. e.g. If in field #9 of Part A, it was indicated that 5 segments were included in the project, 5 Part B's must be completed in the application. The additional Part Bs are separate tabs in this excel file noted as: Part\_B2, Part\_B3, etc.

The purpose of Part B is to provide sufficient information to evaluate the cost estimate for the project and to provide assurance that the project will be capable of meeting the ADOT administered federal design review and clearance process. This process requires environmental, ROW and utilities clearances and a bid ready design prior to FHWA approval to encumber federal funding for construction.

| Section 1 - Segment Description   | Segment 3  |
|---|--|
| 1. Segment Location - Include segment beginning and ending limits   | 44th Avenue from End of Maintenance to Calle Poco  |
| 2. Length and Curb Miles  |  |
| a. Length (Miles) of the segment  | 0.125 (660')   |
| b. Curb Miles: Miles of shoulders or curbs to be paved by direction (e.g. if discontinuous shoulder sections on both sides of the roadway are to be paved, enter the combined distance of shoulders to be paved).   | 0  |
| 3. Please provide a map/graphic/photo that clearly shows the segment alignment and features that cross into or abut the alignment such as: washes, canals, railroad crossings, and other crossing features that may affect the project.   | <b>Please attach map with transmittal</b>  |
| 4. Please provide a simple diagram of a typical cross section, including widths, of the segment that shows the current right of way limits, sidewalks and shoulders (if any), and the lanes of travel.  |  |
| 5. Proximity of the segment to nearest PM-10 air quality monitor: (Indicate miles)  | 6.2  |
| <a href="#">Link to PM1- Monitors Map</a>   |  |
| 6. Please describe the current surface condition of the shoulder, alley or road segment to be paved:  | The current traveled roadway is well compacted with loose heaped material at the edges.  |
| 7. Please describe traffic on the segment (e.g weekday percent truck, etc.).  | Local  |
| 8. Current Average Traffic (ADT)  | 42   |
| 9. Please describe methodology used to calculate ADT  | Standard tube count.   |
| 10. Federal law requires that all federally funded projects comply with a federal environmental clearance. For projects that have a minimum ground disturbance, environmental surveys are required and an environmental document will need to be prepared, which typically requires 12 months to complete. In the box to the right, please describe any known cultural, historical and biological resources, hazardous materials or other environmental issues that could affect work on the segment. | Field observations did not show environmental impacts within the roadway right-of-way however the widening of the roadway prism into the shoulder will facilitate an Environmental Assessment prior to construction.<br>MCDOT Environmental Group will review the project data, determine and prepare any Environmental Clearance or Impact Statement as required. |
| 11. Current ROW: (Choose All that Apply and select Yes or No)   |  |
| Agency owns all ROW Needed  | No   |
| ROW to be acquired  | Yes  |
| Owners will donate ROW  |  |
| Condemnation may be required  |  |

**PART B3 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS**

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|--|--|
| <p>12. Please describe any right of way issues associated with the segment.</p>  | <p>Between the intersections of Carver Road and Calle Poco, there is 50 feet of right-of-way. South of Calle Poco, 44th Avenue appears to be within a 50-foot private easement. New right-of-way south of Calle Poco will be required.</p>   |
| <p>13. Current Utilities in or abutting the alignment: (Choose All that Apply and Select Yes or No)</p> <p>Canals &amp; Drainage<br/>Power Lines &amp; Cables<br/>Pipelines, Sewer and Water<br/>Private Structures<br/>Other<br/>None</p>               | <p><input type="checkbox"/> Yes<br/><input type="checkbox"/> Yes<br/><input type="checkbox"/> Describe:<br/><input type="checkbox"/></p>   |
| <p>14. Please describe any utility conflicts that will need to be addressed.</p>   | <p>There are no apparent utilities that parallel 44th Avenue. North of the intersection of Calle Poco, there is a power pole located on the west side at the right-of-way line. At the intersection of Calle Poco, there is a power pole and buried telephone riser box located in the north east quadrant. In the northwest quadrant there is a fire hydrant. On the west side of the intersection is a water value box. South of Calle Poco, there is a power pole located on the west private easement line.</p>  |
| <p><b>Section 2 - Proposed Improvements</b></p>  | <p><b>Segment 3</b></p>  |
| <p>1. What is the type of paving project? (Choose all that Apply and Select Yes or No)</p> <p>Rural Road<br/>Urban Road<br/>Subdivision Street<br/>Alley<br/>Shoulders<br/>Other</p>   | <p><input type="checkbox"/> Yes<br/><input type="checkbox"/> No<br/><input type="checkbox"/> No<br/><input type="checkbox"/> No<br/><input type="checkbox"/> No<br/><input type="checkbox"/> Describe:</p>   |
| <p>2. Please describe the work to be performed on the segment:</p>   | <p>Improvements include placing 20-foot, crowned section AC pavement with thickened edge on the existing graded roadway to limit dust. Reconstruct the roadway cut ditches and residential driveways as necessary. Individual lot irrigation berms are to be maintained or reconstructed. The majority of the project has fences and walls along the edge of the right-of-way, they are beyond the clear zone. An existing irrigation box is located at the southwest corner of Calle Poco and 44th Avenue within the clear zone. There are several homeowner improvements within the proposed right of way south of Calle Poco including large trees that provide privacy and landscape planters that would need to be removed. Dust proofing measures will include grading, watering and compaction and a 2-inch AC pavement section. Match existing cross section as close as possible to eliminate the need for imported material.</p> |
| <p>3. Please provide a simple diagram of a typical cross section, including widths, of the segment that shows the proposed improvement(s) and the after construction right of way limits, sidewalks and shoulders (if any), and the lanes of travel.</p> |  |
| <p>4. (Optional for shoulder and alley paving, required for road paving) Please describe vertical alignment changes.</p>   | <p></p>  |
| <p>5. (Optional for shoulder and alley paving, required for road paving) Please describe horizontal alignment changes.</p>   | <p></p>  |

**PART B3 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS**

|   |  |
|---|--|
| <p>6. (Optional for shoulder and alley paving, required for road paving) Design speed of the after construction segment.</p>  |  |
| <p>7. Please describe the type of paving for the segment.</p>   | <p>2 inch thick asphaltic concrete (AC) pavement</p>               |
| <p>8. Non paving improvements to be included: (Choose All that Apply and Select Yes or No)</p> <ul style="list-style-type: none"> <li>Sidewalks</li> <li>Fencing</li> <li>Lighting</li> <li>Curb &amp; Gutter</li> <li>Bicycle path or lane</li> <li>Other</li> </ul> | <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>Describe:</p> |
| <p>9. Please describe the non paving improvements to be included in the segment.</p>  | <p>N/A</p>   |
| <p>10. For roadway paving, please enter the number of unpaved access points (e.g. driveways, cross roads) to be paved by the project.</p>   | <p>0</p>   |

## PART B4 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS

This part of the form identifies the current characteristics and proposed improvements for each segment of the project. A separate Part B must be completed for each segment. e.g. If in field #9 of Part A, it was indicated that 5 segments were included in the project, 5 Part B's must be completed in the application. The additional Part Bs are separate tabs in this excel file noted as: Part\_B2, Part\_B3, etc.

The purpose of Part B is to provide sufficient information to evaluate the cost estimate for the project and to provide assurance that the project will be capable of meeting the ADOT administered federal design review and clearance process. This process requires environmental, ROW and utilities clearances and a bid ready design prior to FHWA approval to encumber federal funding for construction.

| Section 1 - Segment Description   | Segment 4   |
|---|---|
| 1. Segment Location - Include segment beginning and ending limits   | 45th Avenue from Estrella Drive to Gumina Avenue  |
| 2. Length and Curb Miles  |   |
| a. Length (Miles) of the segment  | 0.25  |
| b. Curb Miles: Miles of shoulders or curbs to be paved by direction (e.g. if discontinuous shoulder sections on both sides of the roadway are to be paved, enter the combined distance of shoulders to be paved).   | 0   |
| 3. Please provide a map/graphic/photo that clearly shows the segment alignment and features that cross into or abut the alignment such as: washes, canals, railroad crossings, and other crossing features that may affect the project.   | Please attach map with transmittal  |
| 4. Please provide a simple diagram of a typical cross section, including widths, of the segment that shows the current right of way limits, sidewalks and shoulders (if any), and the lanes of travel.  |   |
| 5. Proximity of the segment to nearest PM-10 air quality monitor: (Indicate miles)  | 6.5   |
| <a href="#">Link to PM1- Monitors Map</a>   |   |
| 6. Please describe the current surface condition of the shoulder, alley or road segment to be paved:  | The roadway grade is fairly flat with silty soil throughout the project length.   |
| 7. Please describe traffic on the segment (e.g weekday percent truck, etc.).  | Local   |
| 8. Current Average Traffic (ADT)  | 84  |
| 9. Please describe methodology used to calculate ADT  | Standard tube count.  |
| 10. Federal law requires that all federally funded projects comply with a federal environmental clearance. For projects that have a minimum ground disturbance, environmental surveys are required and an environmental document will need to be prepared, which typically requires 12 months to complete. In the box to the right, please describe any known cultural, historical and biological resources, hazardous materials or other environmental issues that could affect work on the segment. | Although most vegetation on the west side of the roadway is inside private property, environmental considerations should be given as some large creosote bushes and large trees could cause sight obstruction.<br>If roadway is realigned to center of future right-of-way, additional clearing and grubbing will be necessary including removal or relocation of irrigation canal, fence relocation and removal of native vegetation. MCDOT Environmental Group will review the project data, determine and prepare any Environmental Clearance or Impact Statement as required. |
| 11. Current ROW: (Choose All that Apply and select Yes or No)   |   |
| Agency owns all ROW Needed  | No  |
| ROW to be acquired  | Yes   |
| Owners will donate ROW  |   |
| Condemnation may be required  |   |

**PART B4 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS**

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|--|--|
| <p>12. Please describe any right of way issues associated with the segment.</p>  | <p>The existing right-of-way for 45th Avenue from Estrella Drive to the Gumina Avenue the roadway is 30-feet wide.<br/>The required right-of-way for a rural minor collector is 60-feet. While it may not be necessary to acquire 30-feet, additional right-of-way will be necessary to proceed with this project in order to relocate the irrigation ditch.</p>   |
| <p>13. Current Utilities in or abutting the alignment: (Choose All that Apply and Select Yes or No)</p> <p>Canals &amp; Drainage<br/>Power Lines &amp; Cables<br/>Pipelines, Sewer and Water<br/>Private Structures<br/>Other<br/>None</p> | <p>Yes<br/>Yes<br/>Yes<br/>Yes<br/>Describe:<br/></p>  |
| <p>14. Please describe any utility conflicts that will need to be addressed.</p>   | <p>A Blue Stake inquiry indicates that the following utilities may be in the area:<br/>-City of Phoenix – Water<br/>-Cox Communication – Cable and Fiber Optic<br/>-Qwest – Telephone and Fiber Optic<br/>-Gila River Telecom – Fiber Optic and Telephone<br/>-Salt River Project (SRP) – Electric and Irrigation -EI<br/>Paso – Natural Gas<br/>-Southwest Gas<br/>-Kinder Morgan - Petroleum<br/>Field observations for this segment has overhead power lines and down guys immediately to the west side of the roadway for the length of the segment. Telecommunication risers were also found adjacent to the power poles.<br/>Two fire hydrants were found at the northwest corner of Estrella Drive and 45th Avenue and at the southwest corner of Crivello Avenue and 45th Avenue. The fire hydrant at Estrella Drive appears to be inside the private property. Coordination with SRP irrigation will be necessary to follow up on existing irrigation ditch. Ditch shall be relocated or abandoned per horizontal realignment. It may be necessary to relocate power pole and telecommunication risers on the west side of the road dependent of the right-of-way acquisition and horizontal realignment.</p> |
| <p><b>Section 2 - Proposed Improvements</b></p>  | <p><b>Segment 4</b></p>  |
| <p>1. What is the type of paving project? (Choose all that Apply and Select Yes or No)</p> <p>Rural Road<br/>Urban Road<br/>Subdivision Street<br/>Alley<br/>Shoulders<br/>Other</p>   | <p>Yes<br/>No<br/>No<br/>No<br/>No<br/>Describe:</p>   |

## PART B4 - SEGMENT DESCRIPTION AND PROPOSED IMPROVEMENTS

|   |   |
|---|---|
| <p>2. Please describe the work to be performed on the segment:</p>  | <p>Improvements include placing two 10-foot lanes with AC pavement and thickened edge on the existing graded roadway to limit dust. The cross section will be a one way crowned section sloped from east to west throughout most of the project and transitions to a two way crowned section near 47th Avenue to match existing conditions. Dirt driveways shall be graded within right-of-way to match proposed edge of pavement. The construction centerline alignment will be located in the center of the available right-of-way. Dust proofing measures will include grading, watering and compaction and a 2-inch AC pavement section. Match existing cross section and profile as close as possible to eliminate the need for imported material.</p> |
| <p>3. Please provide a simple diagram of a typical cross section, including widths, of the segment that shows the proposed improvement(s) and the after construction right of way limits, sidewalks and shoulders (if any), and the lanes of travel.</p>              |   |
| <p>4. (Optional for shoulder and alley paving, required for road paving) Please describe vertical alignment changes.</p>  |   |
| <p>5. (Optional for shoulder and alley paving, required for road paving) Please describe horizontal alignment changes.</p>  |   |
| <p>6. (Optional for shoulder and alley paving, required for road paving) Design speed of the after construction segment.</p>  |   |
| <p>7. Please describe the type of paving for the segment.</p>   | <p>2-inch AC pavement</p>   |
| <p>8. Non paving improvements to be included: (Choose All that Apply and Select Yes or No)</p> <ul style="list-style-type: none"> <li>Sidewalks</li> <li>Fencing</li> <li>Lighting</li> <li>Curb &amp; Gutter</li> <li>Bicycle path or lane</li> <li>Other</li> </ul> | <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>Describe: Signage</p>  |
| <p>9. Please describe the non paving improvements to be included in the segment.</p>  | <p>The following signing improvements should be considered:</p> <ul style="list-style-type: none"> <li>-All the traffic signs will be removed and replaced in accordance with MCDOT's design guidelines.</li> <li>-Install new stop signs at Crivello Avenue / 45th Avenue and Gumina Avenue / 45th Avenue intersections for eastbound traffic.</li> <li>-25 mph speed limit signs will be installed.</li> </ul>  |
| <p>10. For roadway paving, please enter the number of unpaved access points (e.g. driveways, cross roads) to be paved by the project.</p>   | <p>0</p>  |



# 31st Avenue - Olney Avenue to McNeil Street

## Laveen Area



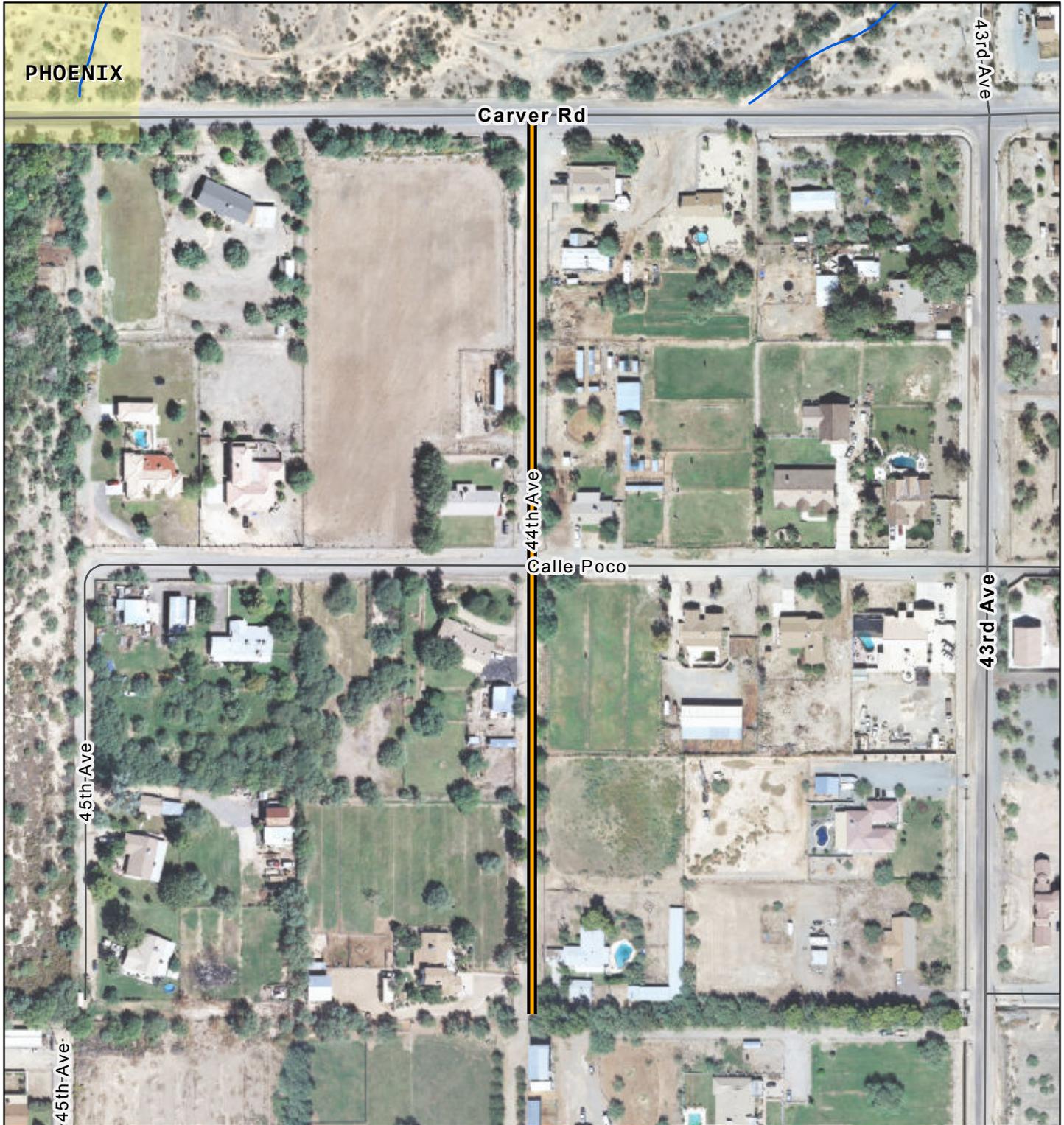
Maricopa County Public Works GIS Division September 2012

-  Road Segment
-  River





# 44th Avenue - End of Maintenance to Carver Road Laveen Area



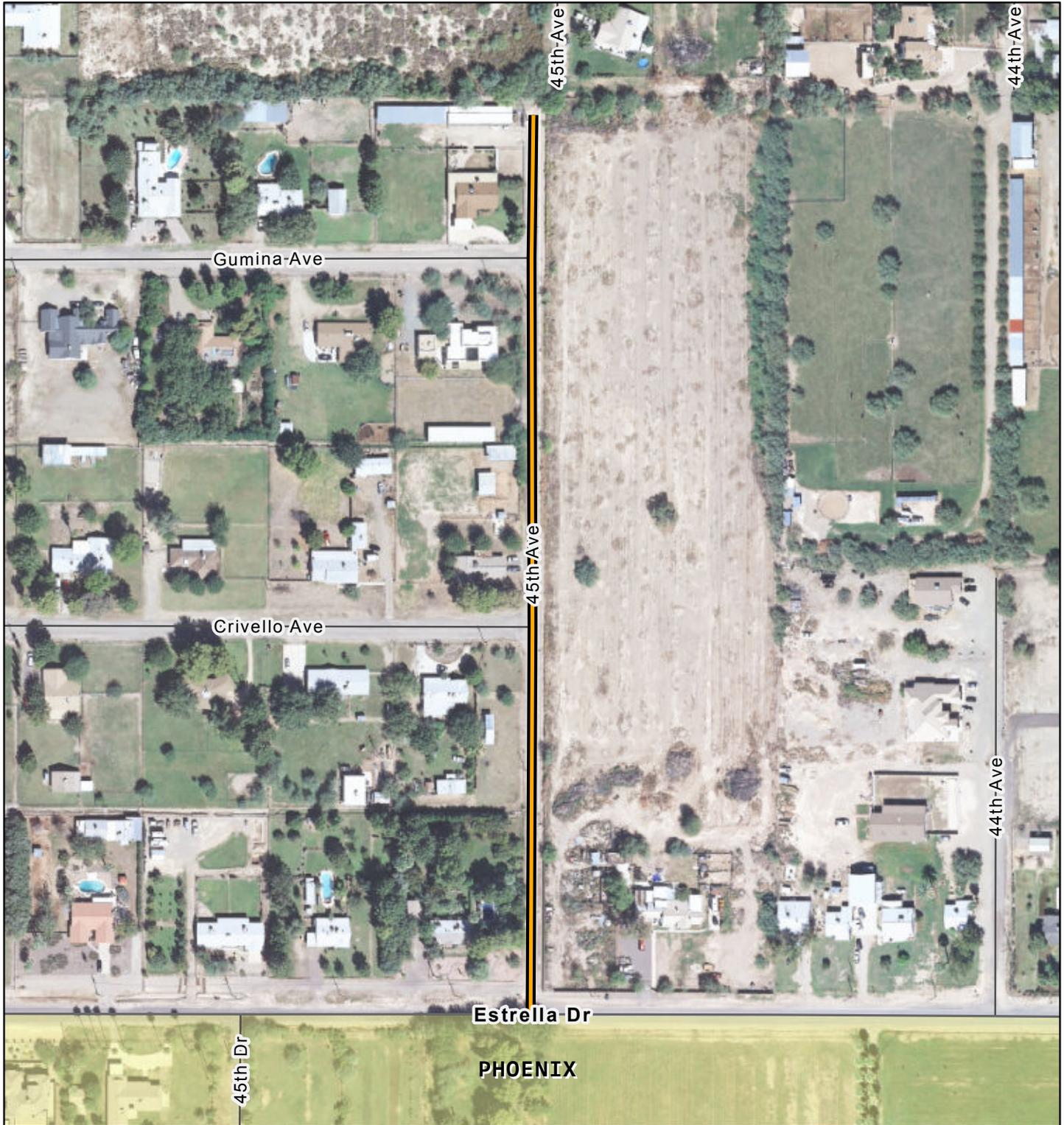
Maricopa County Public Works GIS Division September 2012

-  Road Segment
-  River





# 45th Avenue - Estrella Drive to End of Maintenance Laveen Area



Maricopa County Public Works GIS Division September 2012

-  Road Segment
-  River





# Olney Avenue - Beginning of Road to 31st Avenue

Laveen Area



Maricopa County Public Works GIS Division September 2012

31st Ave - Olney Ave to McNeil St Photos



Figure 1 - Looking southeast at the intersection of 31st Avenue and McNeil Street.

31st Ave - Olney Ave to McNeil St Photos



Figure 2 - Looking south onto 31st Avenue from the McNeil Street intersection.

31st Ave - Olney Ave to McNeil St Photos



Figure 3 - Looking southwest at the intersection of 31st Avenue and McNeil Street.

31st Ave - Olney Ave to McNeil St Photos



Figure 4 - Looking south onto 31st Avenue between McNeil Street and Olney Avenue.

31st Ave - Olney Ave to McNeil St Photos



Figure 5 - Looking north from the intersection of 31st Avenue and Olney Avenue.

44th Ave - EOM to Carver Rd Photos



Figure 1 - Looking south onto 44th Avenue at Carver Road.

44th Ave - EOM to Carver Rd Photos



Figure 2 - Looking south onto 44th Avenue from Carver Road.

44th Ave - EOM to Carver Rd Photos



Figure 3 - Looking south from the intersection of 44th Avenue and Calle Poco.

44th Ave - EOM to Carver Rd Photos



Figure 4 - Looking south onto 44th Avenue towards the End of Maintenance.

45th Ave - Estrella Dr to EOM Photo



Figure 1 - Looking southeast at the intersection of 45th Avenue and Gumina Avenue.

45th Ave - Estrella Dr to EOM Photo



Figure 2 - Looking northeast at the intersection of 45th Avenue and Estrella Drive.

45th Ave - Estrella Dr to EOM Photo



Figure 3 - Looking north at the intersection of 45th Avenue and Estrella Drive.

45th Ave - Estrella Dr to EOM Photo



Figure 4 - Looking north onto 45th Avenue.

45th Ave - Estrella Dr to EOM Photo



Figure 5 - Continuing north onto 45th Avenue, approaching Crivello Avenue.

45th Ave - Estrella Dr to EOM Photo



Figure 6 - Looking northwest at the intersection of 45th Avenue and Crivello Avenue.

45th Ave - Estrella Dr to EOM Photo



Figure 7 - Looking west at the T-intersection of 45th Avenue and Gumina Avenue.

45th Ave - Estrella Dr to EOM Photo



Figure 8 - Looking northeast from the T-intersection of 45th Avenue and Gumina Avenue.

45th Ave - Estrella Dr to EOM Photo



Figure 9 - Looking onto 45th Avenue from the T-intersection at Gumina Avenue.

45th Ave - Estrella Dr to EOM Photo



Figure 10 - Looking south from the T-intersection of 45th Avenue and Gumina Avenue.

45th Ave - Estrella Dr to EOM Photo



Figure 11 - Looking south onto 45th Avenue from the T-intersection of Gumina Avenue.

Olney Ave - BOR to 31st Ave Photo



Figure 1 - Looking west onto Olney Avenue from 31st Avenue.

Olney Ave - BOR to 31st Ave Photo



Figure 2 - Looking west onto Olney Avenue at 31st Drive.

Olney Ave - BOR to 31st Ave Photo



Figure 3 - Looking west onto Olney Avenue from 32nd Drive.

Olney Ave - BOR to 31st Ave Photo

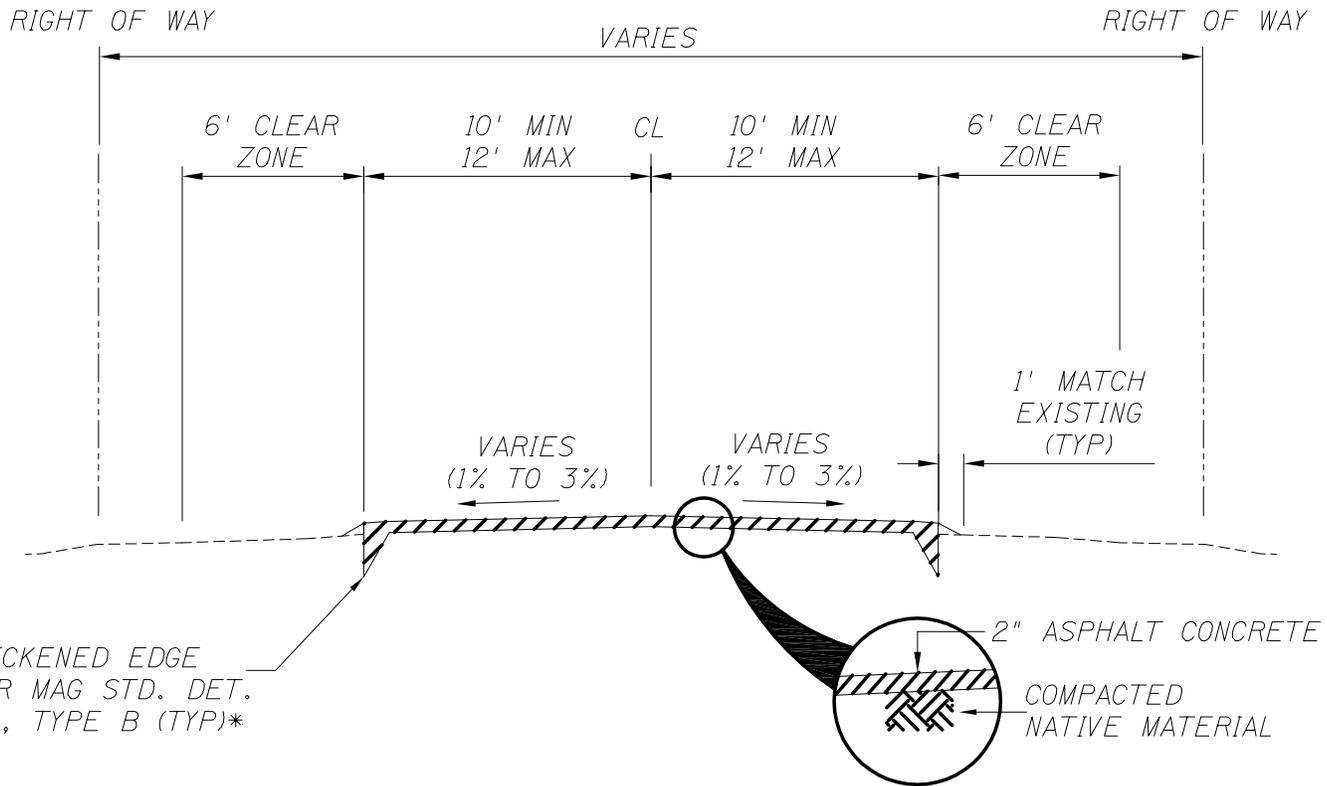


Figure 4 - Looking west onto Olney Avenue, approaching Beginning of Road.

Olney Ave - BOR to 31st Ave Photo



Figure 5 - Looking east onto Olney Avenue from Beginning of Road.



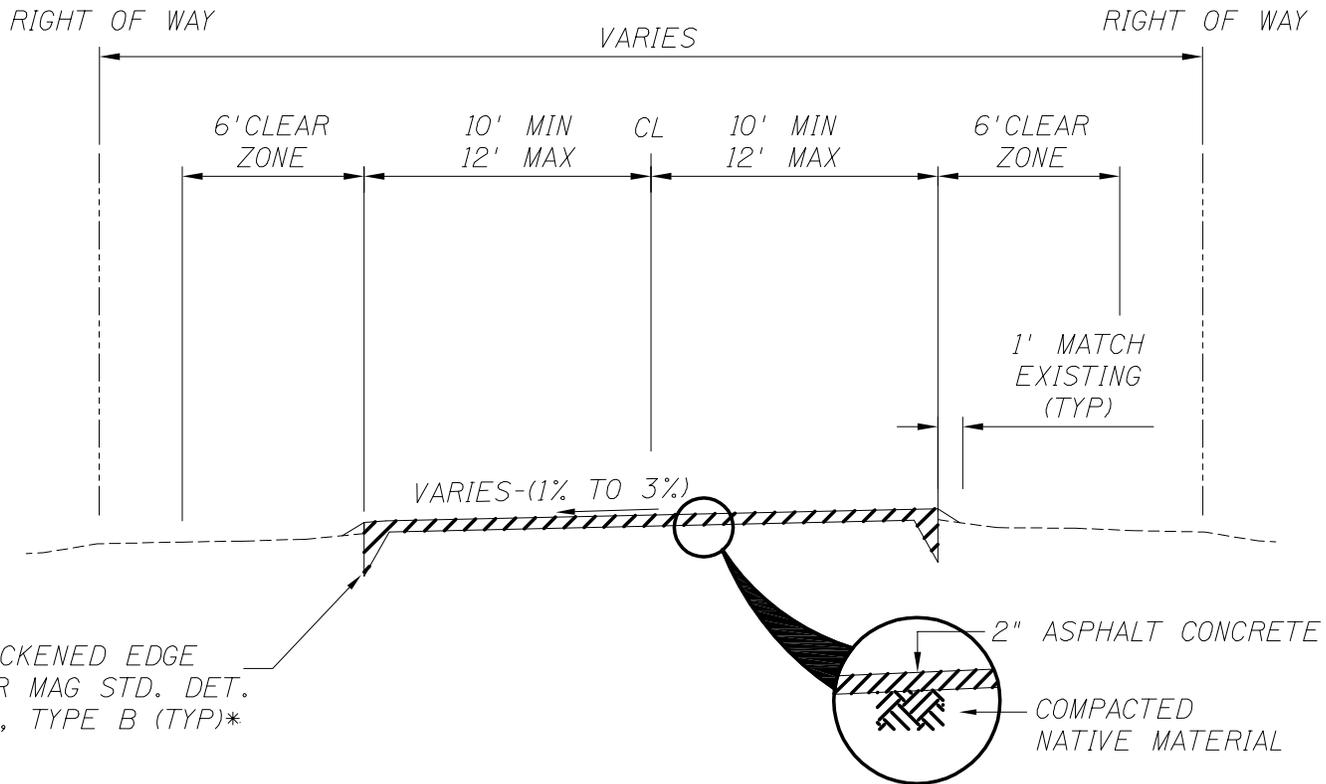
TYPICAL CROSS SECTION-CROWNED

\* UNLESS OTHERWISE DIRECTED BY THE ENGINEER

|                                    |                                  |
|------------------------------------|----------------------------------|
| <b>LOW VOLUME ROAD<br/>EXHIBIT</b> | <b>JOB NUMBER<br/>193141.401</b> |
|                                    | <b>JACOBS CARTER BURGESS</b>     |

101 N. FIRST AVE., #3100  
PHOENIX, AZ 85003  
TEL: 602.253.1200  
FAX: 602.253.1202

|                        |
|------------------------|
| <b>DATE: JAN. 2008</b> |
| <b>DRAWING:</b>        |



TYPICAL CROSS SECTION-ONE WAY

\* UNLESS OTHERWISE DIRECTED BY THE ENGINEER

|                             |                                |   |
|-----------------------------|--------------------------------|---|
| DATE: JAN. 2008<br>DRAWING: | <b>LOW VOLUME ROAD EXHIBIT</b> | <b>JOB NUMBER 193141.401</b>  |
|                             | <b>JACOBS CARTER BURGESS</b>   | 101 N. FIRST AVE., #3100<br>PHOENIX, AZ 85003<br>TEL: 602.253.1200<br>FAX: 602.253.1202 |