

Maricopa - Bowlin Road, White Parker Road to Anthony Boulevard Project Description Sheet		
Instructions	1. Please enter values for all cells with a green fill pattern 2. All cells are required. If the information is not applicable enter "None" or 0.	
1. Project Sponsorship	Project Sponsor Name	Maricopa
	Other Participating Agencies	
2. Project Location	Identify the Project Location (50 Char Limit)	Bowlin Road, White Parker Road to Anthony Boulevard
	Attach a map depicting the project.	(Attach a map depicting the project location)
	Attach a vicinity map of the project	(Attach a vicinity map showing the project location relative to the area)
3. Project Work Description	Provide a short work description (50 char limit)	Increase capacity with 2 west east through lanes.
	Overview - please describe the work to be performed, its benefits and costs	Pave two 12' lanes with 2' shoulders (Total 28' Wide) using 5" of asphaltic concrete over 10" of aggregate base course for one mile, estimated cost is \$1.2 million. The Bowlin Road segment includes an elevated crossing at the Santa Cruz Wash which will consist of 3) 36" concrete pipe culverts with headwalls and riprap to prevent erosion. The crossing will also require mass grading to re-position the banks and reduce the vertical curvature of the roadway. A feasibility report for the Santa Cruz Wash Crossing at Bowlin Road performed by Ritoch Powel and Associates on July 2017 estimates the cost of scope for alternative #1 at \$128,340. The total project cost is then \$1.33 million. The Bowlin Road project will provide 2 benefits for City of Maricopa residents. It will provide a more direct link between residential areas, health centers, education centers, emergency centers and commercial centers by reducing the route 4.6 miles. In addition, the project will relieve traffic congestion from Honeycutt Road, which is one mile north of Bowlin Road. Honeycutt Road is currently the only paved arterial roadway providing east west movement east of White Parker Road.
4. Proximity to the Nearest Employment and Commercial Center	Employment Center	The nearest employment centers are within 2 miles.
	Name of Nearest Employment Center	Walmart, Banner Health, Central Arizona College, Legacy School, City of Maricopa, Wells Commercial Center, and the Ethanol Plant within a 2 mile radius of the project area.
	Approximate Number of Employees at the center	2200
	Distance to the project	< 2 miles
	Commercial Center	The Wells Commercial Subdivision - Walmart; Banner Health; McDonalds; Big 5; Pap Johns; Maricopa Smiles Dentistry; Great Clips; Cricket; Orbitel; H&R Block; State Farm; iSmile Nails & Spa
	Name of Nearest Commercial Center	The Wells Subdivision- Currently 277,015 SF of Buildings; Build Out 585,701 SF of Buildings
	Approximate Square Footage of the Commercial Center	585,701
	Distance to the project	< 2 miles
5. Regional Connectivity	Does the Project Improve Connectivity	No
	If answer above was yes, briefly discuss how the project improves regional/multijurisdictional connectivity.	

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6. Agency Plans	IS the project Included in Agency Plans	Yes This segment of Bowlin Road is identified in the City of Maricopa Area Transportation Plan and Master Transportation Plan.
	If the check box above is checked, briefly discuss jurisdiction General/Transportation Pan and the role of the project in the plan.	
7. Community Involvement	Is the project a community request	Yes This segment of Bowlin has been presented to the public and open for comment as part a network improvement plan on multiple occasions. While congestion on Honeycutt Road, an east west arterial road one mile to the north has created more complaints from the public, the segment of Bowlin Road and the focus of this grant application has received less inquiry. However, citizen inquiry has requested information regarding improvement of this roadway.
	If the check box above is checked, briefly describe the nature of the community request.	

Maricopa - Bowlin Road, White Parker Road to Anthony Boulevard Roadway Segment Sheet		
Instructions	1. This sheet is required for all roadway segment and bridge projects. Please omit if the project is exclusively an intersection project. 2. Items for #4 and #14 may be omitted for non bridge projects, all other green colored cells are required 3. A Excel work sheet for each distinct roadway section or segment is required. To add a new worksheet to this Excel workbook file, do the following: > Right Click on the Roadway tab at the bottom of the screen > Select the "Move or Copy" option > Select the "Roadway" sheet > Check the "Create Copy" box > Click the "Okay" button	
1. Roadway Location	Roadway Name	Bowlin Road
	Starting Limit	The western limit starts just east (0.15 miles) of the White Parker Road Intersection.
	Ending Limit	The ending point is just west of Anthony Boulevard (0.1 miles).
	Length (to nearest 10th of a mile)	1.00
Current Roadway Characteristics		
2. Federal Functional Classification	Please select the federal functional classification of the roadway	None
	Link to Functional Classification Maps	
3. Current Typical Cross Section	Attach a cross section diagram that details a typical cross section of the roadway to be improved.	(Attach cross section diagram that depicts the lane configuration, shoulders, the median, bicycle lanes, sidewalks, access control features such as barriers and adjoining features such as canals. Widths of features should be included and type of paving should be indicated)
	Attach a photo(s) of the current roadway	(Attach phot(s) of the roadway)
	Number of Through Lanes (Both directions)	2
4. Bridge Condition (Required only for bridge projects)	Bridge Sufficiency Rating (from ADOT NBI Table)	
	Is Structurally Deficient?	No
	Is Functionally Obsolete?	No
	Link to ADOT NBI Table	
5. Pavement Condition	Pavement Type	Unpaved
	Pavement Rating	
	Name or Description of Rating System Used - e.g. PCI, PSR, etc..	
	Rating system scale - please describe the scale used in the rating system - e.g. it ranges from 1 to 100 with 100 being the best condition.	
	Date of Rating	
	Rating	

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6. Traffic	Traffic Count (Mid Block Only)	Data below taken from Honeycutt Road as a comparable Roadway. The proposed project is unimproved.
	Please describe how the count was collected	Field Data Sevices was contracted by the City of Maricopa for Citywide traffic counts.
	Date of Count	9/19/2017
	AADT	9219
	K-Factor - Percent of traffic in the peak hour	8%
	D-Factor - Percent of design hour volume flowing in the peak hour direction	59%
	Number of lanes in the Peak Hour Direction	2
	Posted Speed Limit (mph)	45
Peak Hour Speed (mph)	37	
7. Safety	Name and limits of roadway where crashes occurred. If the project builds a new roadway, please use a comparable roadway for crash data submitted and expaln why it was selected.	Honeycutt Road is being used as a comparable roadway. It is the only east west coridore that is paved east of White and Parker Road and is one mile to the north of the proposed project. Honeycutt Road has 9219 vehicles recorded as average daily traffic and the proposed project to improve Bowlin Road would act as relief. There were 18 crashes on Honeycutt Road in a four year time period from 2012 to 2016.
	Number of fatality crashes	1
	Number of incapacitating crashes	0
	Number of non incapacitating crashes	3
	Number of possible injury crashes	5
Number of property damage only crashes	0	
8. Multimodal	Does the roadway have a transit Route?	No
	Does the roadway have a striped bicycle lanes?	No
Proposed Roadway Characteristics and Improvements		
9. Proposed Functional Classification	Please select the federal functional classification of the roadway	None
	Link to Functional Classification Maps	
10. Proposed Typical Cross Section	Attach a cross section diagram that details a typical cross section of the roadway to be improved.	(Attach cross section diagram that depicts the lane configuration, shoulders, the median, bicycle lanes, sidewalks, access control features such as barriers and adjoining features such as canals. Widths of features should be included and type of paving should be indicated)
	Number of Through Lanes on the improved roadway (Both directions)	2
11. Access Control Improvements	Please describe access control issues and proposed improvements	The proposed roadway includes paved shoulders allowing access to adjacent properties. No access control to adjacent properties are proposed at this time.

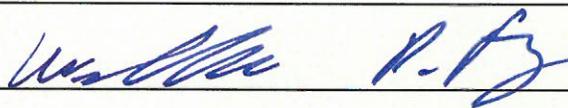
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12. Alignment Improvements	Describe horizontal alignment issues and proposed improvements	No known alignment issue. The proposed improvements will include a crown at the center of the section line with roadside retention ditches for runoff.
	Describe vertical alignment and proposed improvements	A portion of this property is currently in the flood plain and the vertical control shall be established by preliminary engineering made available through the design of the Conditional Letter of Map Revision design for the Santa Cruz Wash Channelization project.
13. Drainage Improvements	Describe drainage issues and proposed improvements	The wash crossing is along the Fuqua Road alignment which is designed to pass the Santa Cruz wash when it is ultimately improved. In addition, roadway runoff shall be retained in retention ditches beside the roadway.
14. Bridge improvements (Required for bridge projects only)	Describe Bridge issues and proposed Improvements	The roadway is a lightly used dirt road which crosses the Santa Cruz wash. The wash bottom is 15' below the road grade which creates wash banks with slopes greater than 3 to 1. This does not stop drivers from passing through it. The proposed project will regrade the banks to reduce the vertical curve while elevating the road grade from the wash bottom by four feet through the use of concrete culverts and concrete backfill.
15. Pavement Improvements	Proposed Pavement Type	Asphaltic Concrete
	Describe the current condition of the pavement and proposed improvements	This roadway is currently unimproved and unsafe due to a large wash crossing. However drivers still use this road as it is a more direct route to 2 housing communities. The proposed project will pave 5 inches of asphaltic concrete over 10 inches of aggregate base course. The width of the roadway will be 28' to accommodate 2 through lanes with 2' shoulders.
16. Traffic Improvements	Describe traffic issues and proposed Improvements	The only improved east west corridor to the east of White and Parker Road in Maricopa is Honeycutt Road, it is paved with a clear span bridge crossing the Santa Cruz wash. Honeycutt Road is an arterial roadway with 2 through lanes and 9219 ADT vehicles passing. A lot of the vehicles traveling west along Honeycutt Road during peak traffic times are destined for employment and education centers south of Honeycutt Road. The proposed improvement purposes to give those drivers a more direct path to destination centers relieving Honeycutt Road.
17. Safety Improvements	Describe safety issues and proposed Improvements	This roadway crosses the Santa Cruz Wash at the Fuqua Road alignment. Drivers will descend a sloped bank steeper than 3 to 1 for 15 feet, pass through the wash bottom and ascend on the other side. The project proposes to grade the crossing in effort to reduce the vertical curve while elevating the roadway as passes through the wash by four feet with the use of concrete culverts and asphalt paving. The proposed elevated crossing will have concrete parapet walls.
18. Multimodal Improvements	Describe multimodal issues and proposed Improvements	There are no multimodal facilities proposed with the phase of improvements.
Environmental, Right-of-way and Other Considerations		
19. Environmental	Please describe environmental impacts or challenges of the project - .e.g. endanger species, cultural assets, hazardous materials sites, 4Fs, Title VI populations, wet lands that would be affected by the project.	No known cultural, historical, biological or hazardous materials that affect this segment.
20. Right-of-way	Please describe right-of-way issues - e.g. whether right-of-way will be required, how much right-of-way will be required, if right-of-way is needed are actors such as the State Lands Department be involved, etc.	The proposed roadway is within a section line easement allowing 33' North and South of centerline. No ROW acquisition will be required for this project.
21. Development Activity	Please describe planned and ongoing development activity that could impact the proposed project	The Development timeline for this roadway and area are dependent on Channelization of the Santa Cruz wash which is not expected to happen within the next ten years.
22. Utilities	Please describe utilities that could impact the proposed project	There overhead power lines, a sewer line and an irrigation channel within a 66' easement.

Maricopa - Bowlin Road, White Parker Road to Anthony Boulevar Safety Counter Measures Sheet	
Instructions	1. This sheet only required for all projects. 2. Please enter a 'Yes' or 'No' to each safety feature that is included in the project.
1. "Stop Ahead" pavement markings	No
2. "Vehicles Entering When Flashing" (VEWF) system (advance post mounted signs on major and loops on minor)	No
3. 12 inch signal heads all faces all directions	No
4. Actuated advance warning dilemma zone protection system	No
5. 3-inch yellow retroreflective sheeting to signal backplates	No
6. Advance street name signs	No
7. All red clearance interval new or existing signals	No
8. All-way stop control (with flashing beacons)	No
9. All-way stop control (without flashing beacons)	No
10. Centerline rumble strips	No
11. Composite shoulders (5 feet minimum) on rural two lane roads	No
12. Three-lane roadways with center turn lane	No
13. Flashing lights and sound signals at Railroad grade crossings	No
14. Gates with signs at railroad at grade crossings	No
15. Improve 2 lane roadway to 4 lane divided roadway	No
16. Improvements that include reducing 11 feet lanes to 9 feet	No
17. Install a traffic signal (engineering study demonstrates meeting MUTCD Warrant 7)	No
18. Install dynamic signal warning flashers	No
19. Install dynamic speed feedback sign at high speed crash curve sites with identified speeding problems	No
20. Install intersection conflict warning systems (ICWS) for four-lane at two-lane intersections	No
21. Install intersection conflict warning systems (ICWS) for two-lane at two-lane intersections	No
22. Install shoulder rumble strips	No
23. Install wide edgelines (6 in min)	Yes
24. Intersection conflict warning system (ICWS) with a combination of overhead and advanced post mounted signs (various messages) and flashers	No
25. Intersection conflict warning system (ICWS) with overhead signs (various messages) and flashers at the intersection on minor; loop on major	No
26. Intersection conflict warning system (ICWS) with post mounted signs (various messages) and flashers in advance of the intersection on major; loop on minor	No
27. Modern roundabout where a signalized intersection exists	No
28. Modify zero or negative left-turn lane offset to create positive offset	No
29. New left-turn lanes with positive offset	No
30. Pavement friction (Microsurfacing, Open Graded Friction Course, High Friction Surfacing)	No
31. Pedestrian hybrid beacon (PHB or HAWK)	No
32. Positive offset left-turn lanes on both major road approaches	No
33. Protected only left-turn signal equipment	No
34. Protected-permissive left-turn signal equipment	No
35. Raised median	No
36. Right-turn lane geometry with increased line of sight	No
37. Roundabout at a high-speed 3 or 4 leg rural intersection	No
38. Rural two lane roads with TWLTL (two-way left turn lanes)	No
39. Safety edge treatment on rural highways	Yes
40. Single- or multi-lane roundabout at a two-way stop-controlled intersection	No
41. Single- or multi-lane roundabout at existing signalized intersection	No
42. Two-way stop control at uncontrolled neighborhood intersections	No
43. Urban two lane road with TWLTL (two-way left turn lane)	No
44. Wet-reflective pavement markings	No

Maricopa - Bowlin Road, White Parker Road to Anthony Boulevard Budget and Signature							
Instructions							
1. This sheet is required for all projects 2. All work phases regardless of funding source must be included in the proposed programming. 3. The signature part of this page must be signed with the printed application sent to MAG							
1. Project Budget	Preliminary Engineering and Final Design	266,501	A portion of this cost has already been paid by the City of Maricopa. The amount in the drainage report is the cost of a study to build a bridge crossing the Santa Cruz Wash.				
	Right of way	-	The right of way is 66 feet along the section line which is the Bowlin Road alignment. 33' south of the section line and 33' north of the sectionline.				
	Utilities	-	Optional: Notes				
	Construction	1,429,682	This cost is based on recent project awards.				
	Total Cost w/o ADOT Review Fee	1,696,183					
	ADOT Review Fee	50,885	Assumes the ADOT design fee is 3 percent of project cost or \$30,0000, which ever is the higher amount.				
	Total Cost	1,747,068					
2. Agency CIP	Please describe the agency programming in its CIP This segment of Bowlin Road is programmed in an out year, within the 10 year plan. If the project is awarded it will added to the five year plan.						
3. Proposed Programming	Work Phase	Year to be Programmed/1	Funding Source	Federal Amount/2	Local Amount	Total	Local Share/3
	PE/Design	2019	None	-	266,501	266,501	100%
	Construction	2021	STP-MAG	1348190	81,492	1,429,682	6%
	ADOT Review Fee	2020	None	-	50,885	50,885	100%
	None	None	None	-	-	-	0%
	None	None	None	-	-	-	0%
	Total			1,348,190	398,878	1,747,068	
	Notes:	1. Federal funds are available only for 2018 and 2020		2. In 2018, \$350,000 is available; In 2020, \$1,270,000 is available.		3. The minimum local share is 5.7%	

Signature: To be signed with printed hard copy that is sent to MAG

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.

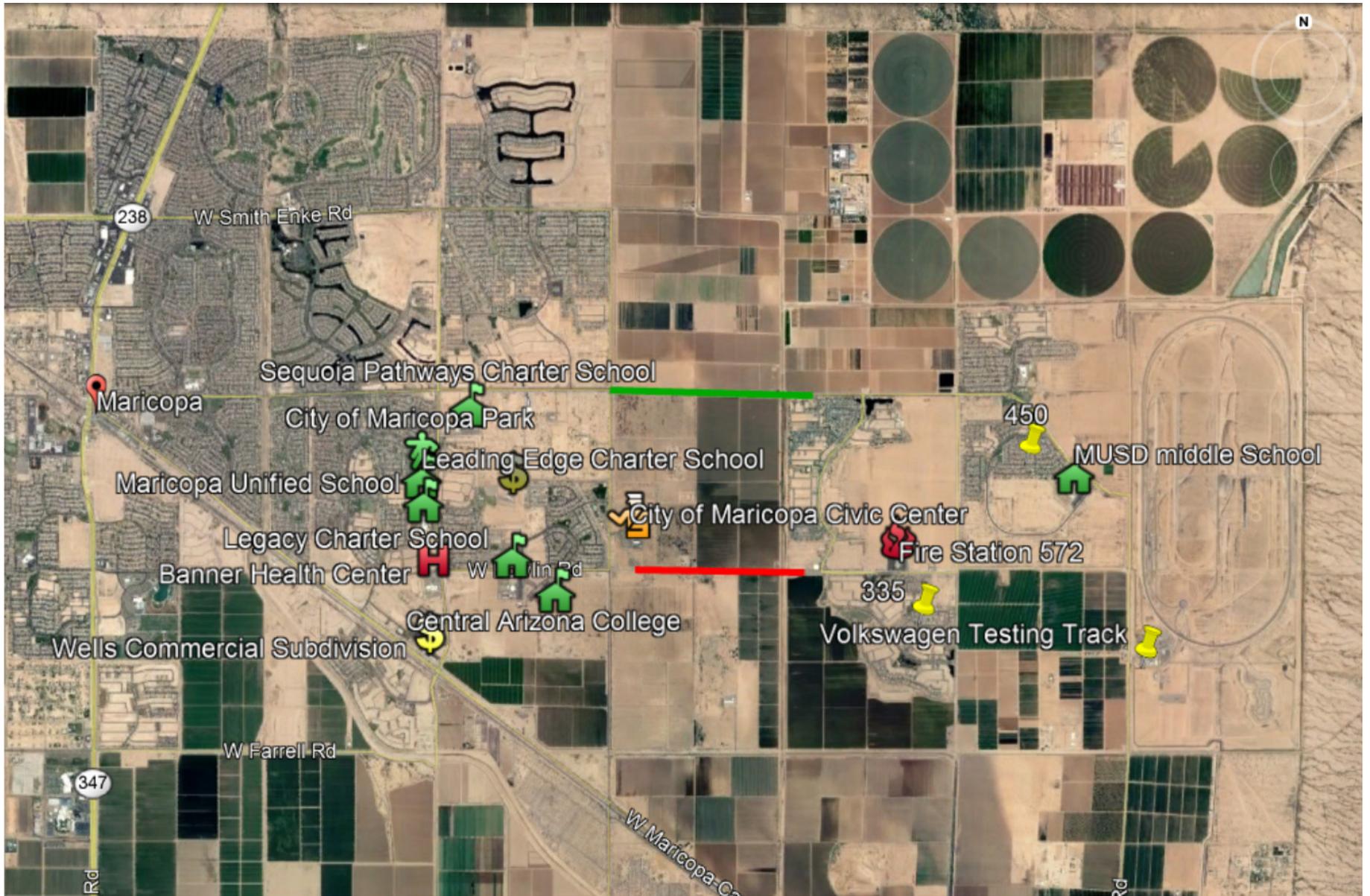
Signature: 

Name: WILLIAM FAY

Title: PUBLIC WORKS DIRECTOR / CITY ENGINEER

Date: 9/26/2017

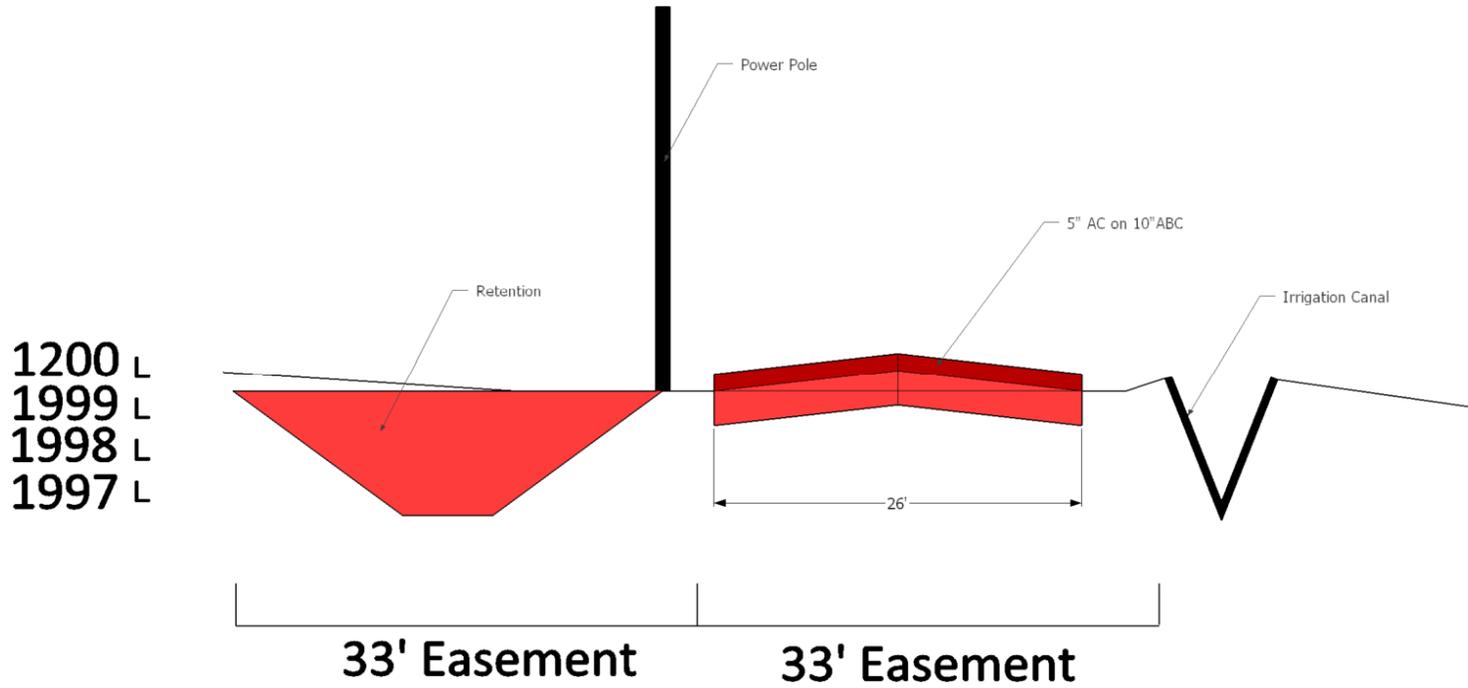
Proposed Project Identified in red. Comparable roadway identified in green.



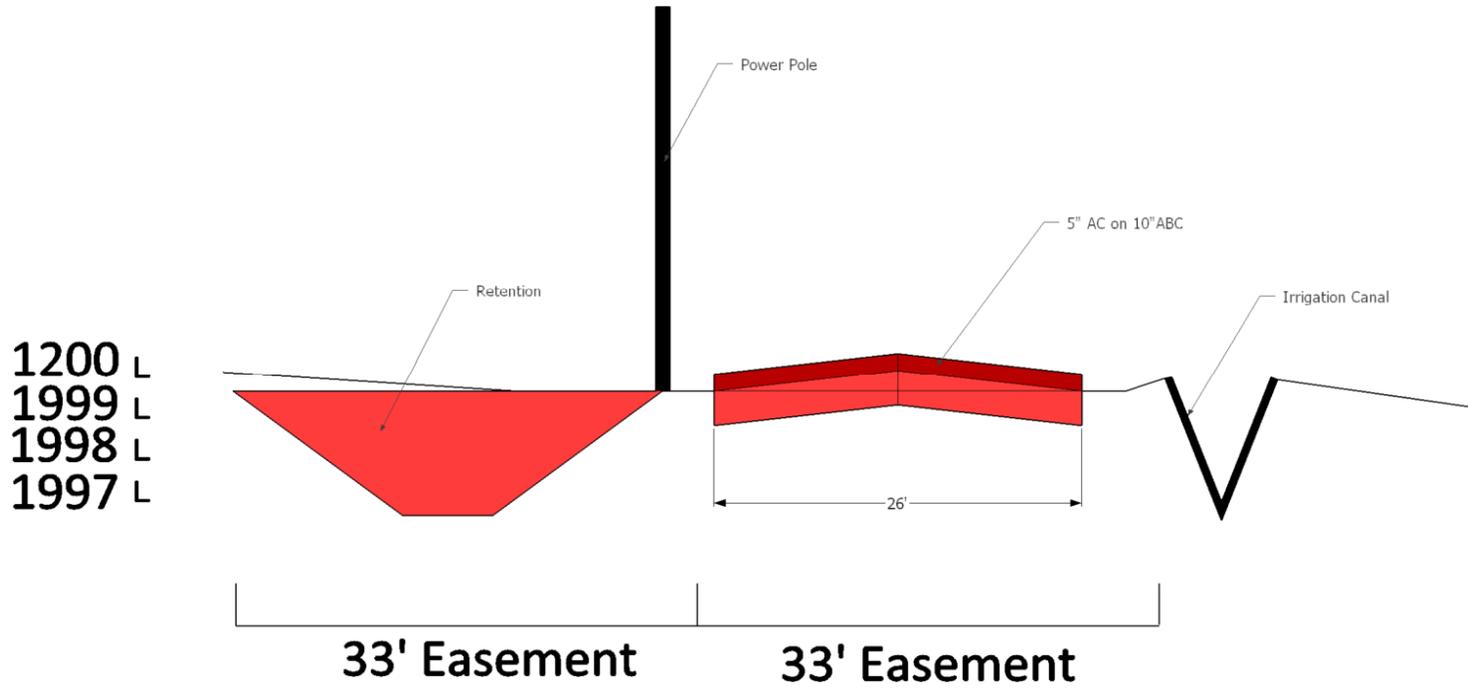
The project area is identified in red.



Proposed improvements identified in red.



Proposed improvements identified in red.



Looking West



Looking east over the Santa Cruz Wash

