

83rd Ave; Streets & Drainage Project



FINAL DESIGN; ROADWAY & DRAINAGE IMPROVEMENTS

CIP Project No. EN00313

Solicitation No. P09-0068

Project Manager; Richard Costa

PROJECT BUDGET



FY 10

Pre-Design, Design, Project Administration, Pre-Construction Services, and Contingencies: \$2,172,000

FY 11

Land Acquisition, Project Administration, Utility Relocations, and Contingencies: \$418,000

FY 12

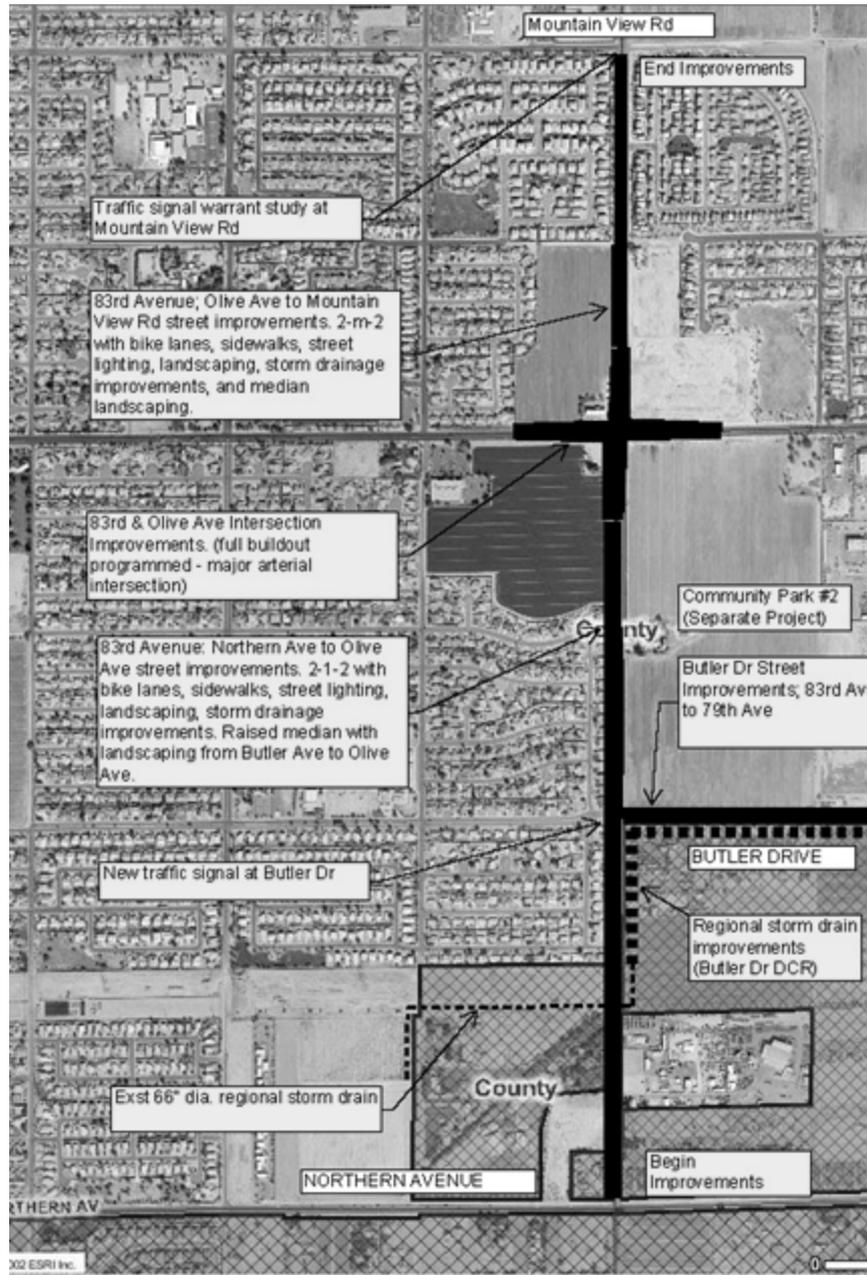
Construction, Construction Administration, Post Design Services, Public Relations, Inspection Services, Quality Assurance, and Contingencies: \$18,875,000

PROJECT DESCRIPTION

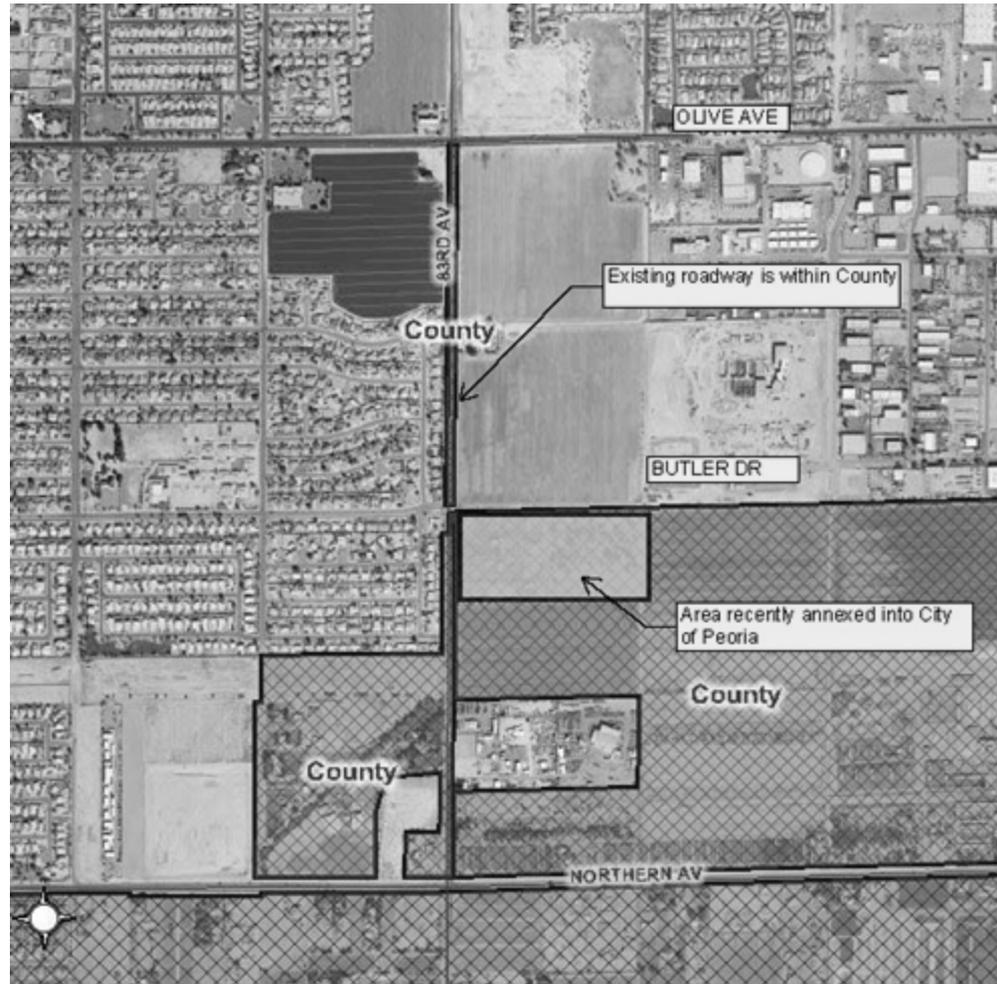


- The City is seeking a qualified consultant to provide engineering consulting services for preparing final design documents and design study reports and/or analysis to improve 83rd Avenue from Northern Avenue to Mountain View Road and Butler Drive from 83rd Avenue to 79th Avenue. Paving, pavement milling & overlay, curbs, gutters, sidewalks, sidewalk ramps, landscaping, storm drain improvements, traffic signals, access management, noise study, signing & striping, utility services and utility coordination will be included with this project. In addition, preparation of legal descriptions and exhibits for Right of way and/or easement(s) acquisition will also be required.
- Same consultant may be selected to provide construction management and post design services under a separate project phase for this project.

OVERVIEW OF PROJECT IMPROVEMENTS



CURRENT JURISDICTIONAL BOUNDARIES (CITY/COUNTY)



BACKGROUND



- The 83rd Avenue corridor is classified as a major arterial and Butler Drive is classified as a minor collector roadway in accordance with the City's Street Classification map.

BACKGROUND



- 83rd Avenue from Northern to Mountain View, by virtue of this project, is scoped to include 2 lanes in each direction, a raised landscaped median from Mountain View Road to Butler Dr, two-way left turn lane from Northern Avenue to Butler Drive, bike lanes, street lighting, 8' wide sidewalks, and landscaping (Peoria Standard Detail PE-010-3).
- The intent with this project to utilize as much of the existing R/W and street improvements along 83rd Avenue as possible. The ultimate cross-section for 83rd Avenue, by roadway classification, is for three lanes in each direction with raised median.

BACKGROUND



- The intersection of 83rd Avenue and Olive Avenue will be widened to include three through lanes in each direction, raised medians, dual left turn lanes, and separate right turn lanes.
- This project does not include any further roadway capacity improvements to the Northern Ave intersection with exception to what is required to improve the north leg. Pending early design, additional intersection improvements may be required and added to the project.
- Traffic signal modifications will be required at the Olive Avenue intersection, Northern Avenue intersection, and new traffic signals will be constructed at the Butler Drive and the Mountain View Road intersections, if warranted. Signal interconnect conduits will be extended with this project as required.

BACKGROUND



- The Butler Drive improvements will include, at a minimum, the north half of the roadway (PE-010-5, 70' R/W), including constructing one lane in each direction, bike lanes, tapers at the intersection of 83rd Avenue, regional and roadway storm drain facilities between 83rd Ave and 79th Ave, street lighting, utility coordination, and sidewalks.
- The City intends to offset Butler Dr to the north of the monument line to match up with the current Butler Drive alignment west of 83rd Avenue and to avoid existing overhead 69kv power lines.
- Drainage improvements include regional storm drainage improvements from Las Palmeritas to Butler Dr, and from 83rd Ave east to 79th Ave. (Butler Dr Drainage DCR) as well as roadway pavement drainage improvements along 83rd Ave from Northern Ave to Hatcher Rd.



BACKGROUND

- Utility improvements include undergrounding 12kv overhead power & telecommunication lines and installing sewer & water service laterals for future development.
- A noise study will be required with the final design and construction being contingent on the results.

BACKGROUND



PREVIOUS STUDIES INCLUDE:

- Design Concept Report (DCR) for the Butler Drive Storm Drain between 83rd Avenue & 79th Avenue (2005)
- Transportation Needs Study (TNS) which provided the City with conceptual future roadway improvements for 83rd Avenue from Northern Avenue to Mountain View Road (83rd Avenue Bypass – Cotton Crossing) (2007)
- CIP Prioritization Review/Analysis Year 2007 Update
- MCDOT 83rd Avenue Roadway Design Plans (2002)
- Electronic downloads available
http://www.peoriaaz.gov/buildingpeoria/BP_ENG_83rd_Northern_Mtn_View.asp

MCDOT 83RD AVE ROADWAY DESIGN PLANS (2002)



- Maricopa County completed roadway plans for 83rd Ave from Northern to Olive Avenues in 2002.
- Project was shelved for future consideration.
- Consideration will be made to salvage/ supplement the existing design and data collection, to meet current City of Peoria design standards and the new scope of work included with this project.

COMMUNITY PARK #2



- City of Peoria Community Services Capital Improvement Project.
- Design/Build project. D/B team has been selected.
- Conceptual designs have been prepared and are under review by the City.
- Project is currently programmed to be designed and constructed in multiple phases.
- First phase schedule for completion in the spring/summer 2012. Remaining phases are unfunded.
- Coordination efforts will be required for 83rd Ave improvements including access management, driveways, traffic studies, utility services, drainage, landscaping, street lighting, etc.

CITY OF PEORIA COMMUNITY PARK #2 (FULL BUILD-OUT).



COMMUNITY PARK 2 PREFERRED ALTERNATIVE

PARKING RATIOS:

NUMBER OF SPACES REQUIRED: 1004 SPACES
 NUMBER OF SPACES PROVIDED: 1008 SPACES



CONSULTANT TASKS



- Data Collection
- Drainage Report & Design
- Geotechnical Report (Pavement Design Recommendations)
- Traffic Signal Warrant Analysis & Intersection Operations Analysis.
- Utility Coordination
- Paving, Grading, & Storm Drainage Plans
- Signage & Striping Plans
- Noise Study & Noise Wall Plans
- Street Lighting & Traffic Signal Plans



CONSULTANT TASKS

- Landscape & Irrigation Plans
- Construction Specifications & Cost Estimate
- Coordination With CM@R During Pre-Construction Phase
- Prepare Legal Descriptions (R/W, TCE's, and Annexation)
- Assist City With R/W Annexation Process With County
- Public Involvement
- Meetings (Design, Pre-Construction, Utility Coordination, Stakeholder, Public)
- Post Design Services (RFI's, Construction Management & As-builts)

ABBREVIATED DESIGN CONCEPT REPORT



- Consultant will be required to prepare an abbreviated version of a design concept report for this project.
- Focus of the report will be evaluating existing and future traffic projections, existing and future land uses, alternative roadway and intersection geometrics, roadway capacities, phasing, right of way, utility relocates, and value engineering analysis.
- Special consideration will be made for a cost/benefit analysis to complete the ultimate 6-lane improvements for 83rd Ave (or portions of) versus the 4-lane configuration currently programmed with this project.

INTERSECTION OPERATIONS & TRAFFIC SIGNAL WARRANT ANALYSIS



- Consultant will be required to complete an intersection operations analysis for 83rd Ave/Olive Ave and the 83rd Ave/Northern Ave intersections.
- Operations analysis to include evaluating intersection geometry, storage lengths, capacity, level of service, signal timing, ADA compliance, and provide recommendations to the City.
- Provide traffic signal warrant analysis for the 83rd Ave/Butler Dr and the 83rd Ave/Mountain View Rd intersections.
- Pending the results and available funding, additional intersection improvements and/or traffic signal plans may be added to this project accordingly.

DRAINAGE REPORT & DESIGN



- Consultant to prepare a drainage report based upon recommendations provided by the Butler Dr Drainage DCR.
- Include provisions in drainage design for 83rd Avenue widening and Butler Drive street improvements.
- Include provisions for regional drainage subbasin areas not included in the Butler Dr DCR Drainage DCR.



UTILITY COORDINATION

- Consultant will be required to act on behalf of the City of Peoria for all utility coordination efforts on this project including adhering to all SUE (Subsurface Utility Engineering) adopted practices, prior rights identification, cost estimating, coordination with utility companies including City utilities, identifying all critical path items, maintaining project schedules, and obtaining license agreements and utility agreements needed to complete the work.

PUBLIC INVOLVEMENT

- Consultant is responsible to administer public meetings, distribute notification letters, provide displays & handouts, provide oral presentation, and answer technical questions.
- A separate public meeting will be required to present noise analysis results to the impacted residences.
- Consultant, with City assistance, will be required to meet with individual property owners to discuss the proposed frontage improvements, obtain project buy-in on any design/construction related issues and obtain the required temporary construction easements needed to complete the work.
- Consultant will also need to provide the City with a public relations program during construction including 24hr hotline, door hangers, newsletters, etc.

83RD AVE AT MTN VIEW ROAD



83RD AVE LOOKING SOUTH (N END OF PROJECT AT HATCHER RD ALIGN)



83RD AVE & OLIVE INTERSECTION



83RD AVE & OLIVE INTERSECTION



83RD AVE SOUTH OF OLIVE



83RD AVE SOUTH OF OLIVE



COMMUNITY PARK #2



83RD AVE SOUTH OF OLIVE



83RD AVE SOUTH OF OLIVE



83RD AVE SOUTH OF OLIVE



83RD AVE SOUTH OF OLIVE



NORTHERN AVE INTERSECTION



QUESTIONS?