**Project Understanding**

The purpose of this project is to develop a cost range estimate that will bring the private section of Shelby Drive up to public road standards. The critical parts of the design include: curb and gutter, sidewalk, drainage and dimensions of the roadway features. Designing a privately owned road to public standards would require the City of Sedona to acquire the property and connect all adjacent public utilities. It would also include the compliance of local agencies and business owners. Currently the private portion of Shelby Drive is located east off of Highway 89-A in Sedona Arizona in the AAA industrial business district and shows signs of erosion and has poor drainage. The City of Sedona owns the connecting road Sunset Drive and the section of Shelby Drive just west beyond the nearby Lift Station.

The local business owners, who own this private section of Shelby Drive yet receive a lot of public business, contribute to the civic responsibility of maintaining this road. The infrequently maintained road receives daily public traffic from heavy commercial vehicles, passenger vehicles, and pedestrians all on one lane within the AAA industrial area. With all of this traffic it is apparent that the easements and the pavement itself are constantly being worn down, the road has potential of flooding, vehicles are suffering and all require regular maintenance. Also, no sidewalks or crosswalks could make this private portion of Shelby Drive unsafe for pedestrians passing through. These issues have sparked the interest of the City of Sedona and if not addressed could allow this portion of Shelby Drive to worsen at a higher rate. In a case where this road should become impassable due to a major accident or flood there would not be adequate public access to businesses and their would be a delay for local business, which lead to financial hardship.

During a re-design these issues can be addressed and analyzed in order to keep a well maintained road functioning along with the businesses in the area. There are parking issues, which decrease the width of the travel way, as well as gravel driveways, which also make access to nearby businesses more difficult and dangerous. The City of Sedona would like to change this road from private to public and assume ownership in order to assure this road will continue functioning properly throughout its lifetime. Improvements to aesthetics, function, safety and maintenance of this road would be a great solution for everyone involved in this project.

The stakeholders for this project are the property owners along Shelby Drive, the local utility agencies, the general public and the City of Sedona. Shelby Drive is in the Yavapai County Flood Control District, but requires City Council’s approval along with willing land owners in order to begin construction.

Few main issues that may arise while converting this private section to public standards include utilities (sewer, communications, gas, power, and water), easements, right-of-ways, sidewalks and drainage on and under the road. When designing the project we will have to meet the appropriate design requirements of the following organizations:

* Army Corps of Engineers
* City of Sedona Department of Public Works
* Arizona Department of Transportation
* Arizona Department of Environmental Quality
* Yavapai Association of Governments
* Maricopa Association of Governments

The following Codes and Standards must be in compliance

* City of Sedona Land Development Codes
* Americans with Disabilities Act Standards
* ADEQ SWPPP (City of Sedona is an MS4 permit holder)
* City of Sedona City Code
* City of Sedona Land Development Code
* City of Sedona Storm Drain Master Plan
* ADEQ regulations for sewer and utilities

Before the actual design of the roadway can begin a project cost estimate of the technical work will be done by KW Engineering. Analyzing and surveying the site must be done to determine elevations, slopes, widths, as well as the review of existing maps, this will all help to determine easements and right-of-ways. Traffic counts are another crucial aspect of the design of this project. During the project KW Engineering and the City of Sedona’s Department of Public Works will collaborate on any information known to help design and estimate the work needed to bring this private section of Shelby Dr to city standards.

In order for the project to be a success the client expressed that the actual design of the project should be under the budget of $300,000 and meets the scheduled design deadline of one year for the completion of all professional services and design aspects, upon a successful bid of the project. Other factors of success include a general understanding of the project and an overall completeness of the design. This would include a full plan with specifications, workplan and cost estimate. If the design is lacking important details it could cost the client more money, due to excessive change orders or too wide a range bids.