



Statement of Qualifications

Copper Administration Building

January 13, 2015





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Michael Gillette
Gila County
745 N Rose Mofford Way
Globe, AZ 85501

Re: Gila County Copper Administration Building

Dear Members of the Selection Committee:

EPS Group, Inc. was founded to provide professional transportation planning, design and construction management services throughout the State of Arizona. We are a locally owned corporation where an entrepreneurial spirit of quality, service, communication and customer satisfaction flourishes. **Our resources to complete your project have never been better** (100% increase in registrants over the past 5 years). We have completed significant project research, preliminary engineering, and value engineering in preparation for providing these consultant services. **The key personnel identified herein are committed, ready and available to meet the County's quality expectations under a rapid start-up and an accelerated schedule.** We believe that we are exactly the right firm to assist Gila County on this project based on the following:

- We have extensive experience in providing site engineering and design services throughout the State.
- We comprehensively know and understand the County's latest design standards and project development procedures.
- Our team members have excellent/proven experience on all Key Bid Items.
- Our resources are available and ready to begin work.
- We have a demonstrated ability to provide innovative, money-saving solutions for the County's engineering needs.

Our Primary Contact will be Elijah Williams (email: elijah.williams@epsgroupinc.com). His address and phone number are listed below.

We believe this SOQ well represents the strong interest EPS has in performing this work. We look forward to working with Gila County on this contract.

Respectfully submitted,

A handwritten signature in black ink that reads 'Elijah E Williams'.

Elijah E Williams, PE
President, EPS Group, Inc.
Phone: 480-503-2250 email: elijah.williams@epsgroupinc.com



TIME REQUIRED TO PROVIDE DELIVERABLES

SCHEDULE

EPS Group Inc. has been providing professional transportation planning, design, project management and construction management services to public clients throughout the State of Arizona since 2003. We have excellent financial resources and have been profitable every year since our establishment. We are a locally owned corporation comprised of fifteen partners/owners. **We understand that our performance on your project directly impacts our future success with Gila County.**

We all know the Arizona economy has been significantly impacted since 2006 with many engineering firms shrinking in size and capacity. EPS, however, has increased its registrants (40) by 100% and its total staff size (over 90) by 200% over the past five years! **We have never been better positioned to complete your Copper Administration Building Site project under an accelerated schedule.**

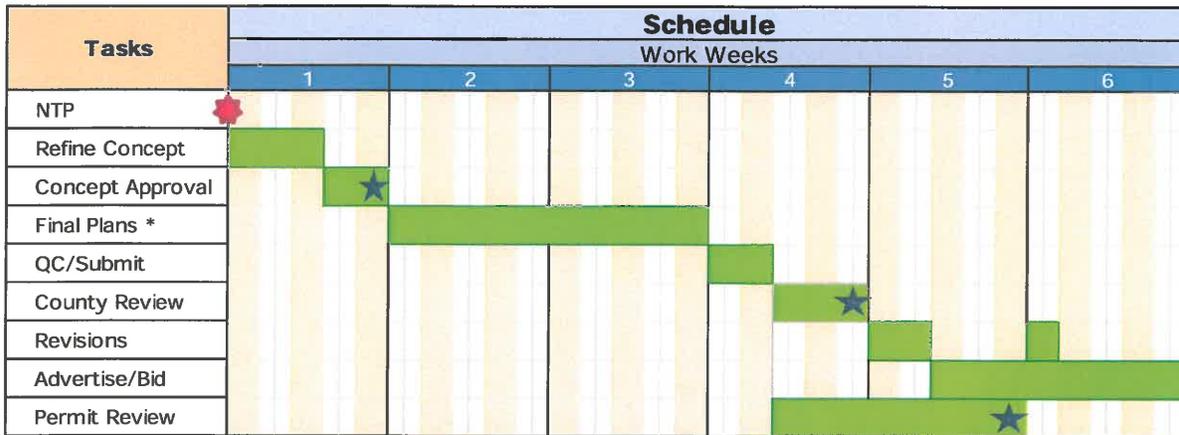
In fact, **EPS Group is one of the ten largest consulting engineering firms (based on Arizona staff size) and is the largest locally-owned Arizona-based design consultant. EPS is also a certified small business concern.**

As a locally-owned small business (LOSBS), EPS is not encumbered by large corporation policies, layers of authority and out of state management. The firm is known for its responsive and flexible/nimble nature, adaptability to changed conditions and proven performance for meeting our client's critical project deadlines.

Planning, Implementing & Adhering to an Accelerated Schedule

Planning the Schedule: This is a high priority project for the County. It requires a rapid scoping/negotiation phase to minimize time lost prior to the Notice to Proceed (NTP). EPS has excellent experience in **accelerated project scoping/negotiations** and pledges to again use its **proven skills** in this area to achieve the desired outcome. Upon notice of selection, EPS will **meet with Globe staff the following day** to negotiate the contract scope and will **submit its scope and fee the next day**. Two things will directly contribute to this rapid response. First - EPS is using no subconsultants (except for Bid Item No. 3 which we recommend be eliminated - see Understanding and Approach Section) simplifying the preparation of the project scope and fee proposal. EPS will come to the negotiation meeting with a draft scope of work to be discussed, refined and approved by the end of the meeting. The second EPS attribute that contributes to rapid response is the corporate culture associated with being a locally-owned small business without remote corporate administration and oversight.

Site Plan Verification, Refinement and Approval: A project schedule is shown below. The first two tasks are relevant to this item. One significant lesson learned in our recent US 191 Segment V Design-Build Contract was to completely verify the supplied materials. On that project, relying on supplied data from ADOT later caused rework and delays in preparing the plans, specifications and contract documents. EPS will immediately begin development (at risk) of our project database using the topography, site plan, etc. received from Gila County so that our work can begin immediately upon NTP. In our first three days of the schedule EPS will develop a refined site plan verifying and refining all data in the project site plan including site layout, traffic circulation, and certain preliminary concepts associated with bid items 1C, 2, and 4. This information will be conveyed to the County by 8 am of day four with a pre-scheduled concept review/approval meeting during the morning of day five.



* Excludes Bid Item No. 3 ★ Meeting with County and/or City staff to discuss and resolve comments.

In the Understanding and Approach section, you will see that we have developed preliminary concepts/understanding of all of the bid items, a key advance step in developing a refined conceptual site plan within three working days. The rest of the project schedule is outlined herein and is performed in an accelerated effort.

Bid Item	Description	Time After NTP to Complete Design
No. 1	Overall Site Design	3.5 Weeks
No. 2	Stairs	3.5 Weeks
No.3	ADA Access	6.5 Weeks
No.4	Lower Stairs	3.5 Weeks

Implementing the Schedule: Key to implementing an accelerated schedule is appropriately staffing the project team. We have carefully organized our design efforts into three separate design squads. Greg Froehlich, PE will lead the Bid Item 1A design squad. This is the largest design effort. Greg has excellent similar directly related experience (see Qualifications and Experience Section). For example, he has served as the Project Engineer on the design of numerous Park and Ride facilities including three for the City of Phoenix (Deer Valley, Dreamy Draw, and Metrocenter) and one for the City of Mesa (Superstition Springs).

Jon Lassuy, PE will lead the design squad for Bid Item 1B (CMU wall) and Bid Item 1C (upper sidewalk, shotcrete, road repair). He likewise has excellent similar experience. For example, on the Southern Avenue Stapley Drive intersection project, he prepared CMU wall plans, sidewalk plans and roadway plans. On the Agua Fria Truck Route, he prepared similar slope stabilization and wall plans.

Finally, bid items 2, 3, and 4 will be lead by a third design squad headed by Tom Snyder, RLA. Tom has excellent experience in pedestrian ways, stairs and ADA ramps.

Using **separate design squads** for each of these bid items/packages **will allow** each to be focused on their individual project elements, **optimizing their ability to implement our accelerated schedule.**





Adhering to the Schedule: We spoke with Jerry Barnes, City of Globe. They will be reviewing the plans for permitting. He stated the review process is typically 2-3 weeks but that a quicker review could likely be arranged. We have shown 1.5 weeks for permit review in our proposed schedule with a review meeting at the period's end. Any revisions would be reflected in a Addendum to be issued on day two of the final bidding week. It should be noted that **EPS is currently designing a waterline project for the City of Globe** and has an excellent relationship with Jerry Barnes and the City Manager, Brent Billingsley. **These relationships will facilitate arranging an expedited plan review and achieving plan approval.**

Adhering to the Schedule will not only take a dedicated effort from EPS, but a collaborative effort with Gila County and the City of Globe. To achieve that collaboration, the EPS schedule includes planning the day when the over-the-shoulder reviews with County staff and with the City of Globe staff. All are busy these days. Pre-planning/scheduling over-the-shoulder review meetings (three are shown on the schedule) will allow agency staff to know the exact day and time for these over-the-shoulder reviews. This of course requires complete adherence to the project schedule by the design team.

Our senior management team members including Darrell Truitt (Project Principal), Elijah Williams (Project Manager), Greg Froehlich (Design Squad Leader), Jon Lassuy (Design Squad Leader), and Tom Snyder (Design Squad Leader) have the significant and broad range of directly related project experience required to successfully guide the project through completion.

Our Project Manager, Elijah Williams, will be responsible for developing and maintaining the project schedule. He will provide weekly schedule updates, progress reports, and a listing of key issues that require resolution. These may occur more frequently when needed. Mr. Williams will proactively interface with the project team to monitor their respective progress and schedule adherence.

EPS has powerful tools for developing and managing a project schedule. Each project is subdivided into manageable elements. This project will receive two weekly reviews by the Project Manager to ensure that the schedule and budget are being met, and that client requirements and needs are being satisfied. Should any schedule slippage occur, **Mr. Truitt and Mr. Williams will develop proactive steps to accelerate project work and provide additional resources if required.**

The project will also undergo EPS's thorough Quality Control prior to submittal of the Final Plans. Thorough Quality Control is standard for all EPS projects and is particularly more critical to the project's success when developed under an accelerated schedule. The goal of the quality control is to produce accurate, error-free plans, minimize agency review time, and avoid project rework, eliminating the associated schedule impacts.



Proven Accelerated Schedule Performance

US 70 Salt Creek Emergency Repair: Sometime in the Fall of 2006, Salt Creek experienced a major drainage event that crushed most of the 3-15' diameter corrugated plate pipes intended to pass its flow under US 70. The resulting erosion of the 60' of roadway fill nearly caused the collapse of US 70 at approximately MP 280.5 within the San Carlos Apache Nation. Upon discovery of this damage, EPS was contacted (January, 2007) to **perform a very accelerated hydrologic analysis, hydraulic calculations, and an investigation of alternative repairs that could be constructed before the summer monsoon season was to begin.** Recognizing the urgency of the project, **EPS immediately began work and completed 70% of the effort without a clearly defined scope or signed task order.**

The Director of the Arizona Department of Transportation declared the project an emergency one month after work began, resulting in a change in project development philosophy. **EPS quickly responded to this dynamic and delivered the required work product on schedule.** Work was performed in consultation with the contractor selected by ADOT based on qualifications (similar to a CM@Risk project delivery method). Project elements included survey, BIA right-of-way definition/ acquisition, tribal coordination, environmental documentation and permitting, soil nail walls; inlet and outlet headwalls; slip lining the existing damaged pipes with 13' plate pipes; upstream and downstream regrading; the delineation of contractor access roadways; innovative traffic control; erosion control plans; and associated structural calculations and details.

Reference: Javier Gurrola: 602-712-6927; Mark Guarena: 928-402-8507

US 70 Salt Creek Emergency Repair





Cubs Spring Training Stadium: EPS Group completed the design of the 120-acre City of Mesa and Chicago Cubs new Spring Training Facility that opened to record crowds in 2014. The facility design included **site demolitions, mass grading, site utilities, parking lot and roadway design**, high capacity roundabout design and analysis, curbs, paving, signing and striping, horizontal control, building utility connection plans, and site drainage. The demolition plans included the transformation of all of the old Riverview Golf Course into a clean site for the facility's proposed land uses. **EPS Group was an invaluable team member in the success of the Construction Manager At-Risk (CMAR) delivery format. EPS Group maintained the fast-track project schedule in this CMAR environment (completing the demolitions, mass grading, and infrastructure utilities pre-package in 8 weeks!)** greatly benefiting the bidding and budgeting processes for the City and the Cubs organization. References: Ross Renner: 480-540-3569

Cubs Spring Training Facility and Riverview Park - February 2014



US 191 – Segment V: EPS served as the prime civil engineering consultant for the US 191 Segment V **Design-Build** project south of Safford, AZ. The project added two new north-bound lanes parallel to the existing US 191 roadway over a four-mile segment.

Key elements included a close working relationship with the

ADOT PM, General Engineering Consultant, ADOT Sections and Groups, the Safford District, and the prime contractor. **This project well illustrates EPS's ability to build consensus among a variety of stakeholders under an accelerated schedule and an alternative delivery method.**

Reference: Paul David: 928-651-5800





QUALIFICATIONS AND EXPERIENCE WITH SIMILAR WORK

FIRM QUALIFICATIONS AND EXPERIENCE

EPS is exactly the right firm for your Copper Administration Building project. As a locally-owned small business you will benefit from our streamlined local management during the scoping/negotiation of the contract. As one of the largest design firms in Arizona you will benefit by our depth of resources and accelerated project schedule. We have outlined below several directly related projects illustrating our excellent firm qualifications/experience. We then describe our proposed project team and our team members' more specific qualifications and experience.

Cobre Valley Regional Medical Center:

This is the first of four site design/parking lot project examples recently completed by EPS Group. **It is a directly related site/parking lot design permitted through the City of Globe.** The project is a new patient tower on an existing 10 acre site within the City of Globe. The project includes a new 50 bed patient tower, new approach drive, **the addition of 80+ parking spaces**, a central plant and generator enclosures. The entire existing facility resides in an AE flood zone. In order for the project to function properly, the project team had to process a floodproofing certificate through the City of Globe.



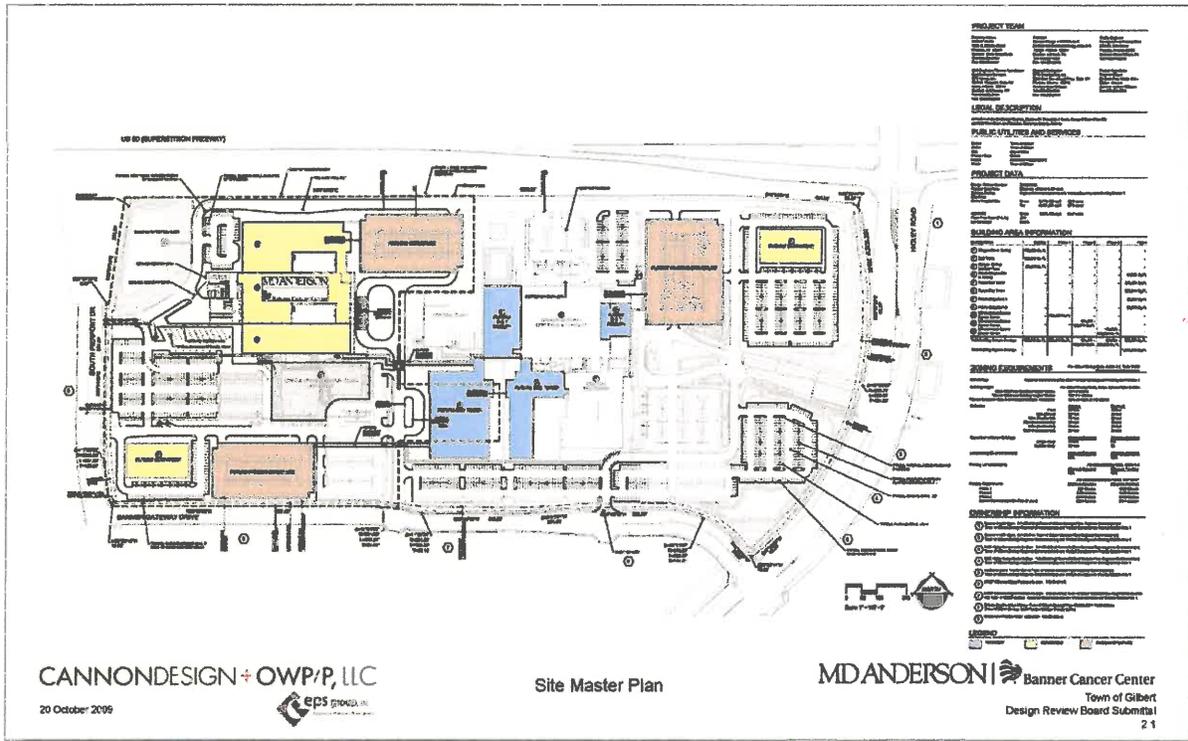
Rivulon Buildings 1 & 2: EPS Group prepared site civil engineering plans for the Class A Office complexes at the Rivulon business park known as Rivulon Buildings 1 & 2 covering approximately 22 acres. This first project phase included site grading and drainage. The site grading mass-excavated the entire project area for interim and permanent conditions **including detailed specifications and design for the parking areas.**





Banner Gateway Medical Center: EPS Group prepared site civil engineering plans for Banner Gateway Medical center covering approximately 60 Acres including site grading and drainage. The site grading mass-excavated the entire project area for interim and permanent conditions **including detailed specifications and design for the parking areas.**

Banner MD Anderson Cancer Center (Phase 1): A more recent phase within the Banner Gateway Medical Center is the Banner MD Anderson Cancer Center prepared by EPS Group. This first phase of the facility covered approximately 9 Acres and included detailed **specifications and design for the parking areas.**



Stairs, ADA Ramps and Retaining Walls: EPS has a successful and long history working within several different sector types providing site design, and more specifically designing ADA Ramps, stairs and retaining walls. For example on the **Hawes and Medina Park** in Mesa we designed the **stairs, ADA ramps** and seating within the amphitheater; for **White Fence Estates** we designed the terraces, **retaining walls, decorative stairs and ADA ramps** into the neighborhood amenity park; for **Cortona** we designed the amphitheater equipped with stairs, **ADA ramps** and concrete seating. Furthermore, our Design Squad Leader for Bid Items 2, 3 and 4, **Tom Snyder, designed (personal experience) The University of Arizona Highland Quadrangle Open Space and Pima Community College Northwest Campus in Tucson, Arizona** that included a multitude of **stairs, ADA ramps and retaining walls**, including the signature Angel Stairs at the Pima CC NW Campus. Our previous experience intimately working within these types of developments are critical aspects in understanding and providing a well-designed and integrated, holistic project.





Southern & Stapley Intersection: EPS Group was selected as the prime consultant by the City of Mesa to prepare final design plans for the Southern Avenue and Stapley Drive intersection. Balancing the intersection traffic needs with the potential impacts to numerous SRP 69kV and 12kV power lines, SRP irrigation facilities, and residential and commercial property impacts was particularly challenging. This federally funded design project included consideration of an adjacent SRP well site, a SRP power substation, **extensive pedestrian traffic**, and older business and residential areas. The proposed intersection widening to 9 lanes in all directions would have resulted in the acquisition of numerous homes and businesses. **EPS's unique intersection design approach** narrowed the medians and utilized reverse curves to avoid several homes and businesses **saving \$2 Million R/W costs**.

Directly related project features included:

- **Roadway reconstruction (Bid Item No. 1C)**
- **ADA compliant sidewalk (Bid Item No. 1C)**
- **CMU wall (Bid Item No. 1B)**

References: Steve Ketchum: 480-644-2513; Bob Draper: 480-644-3822



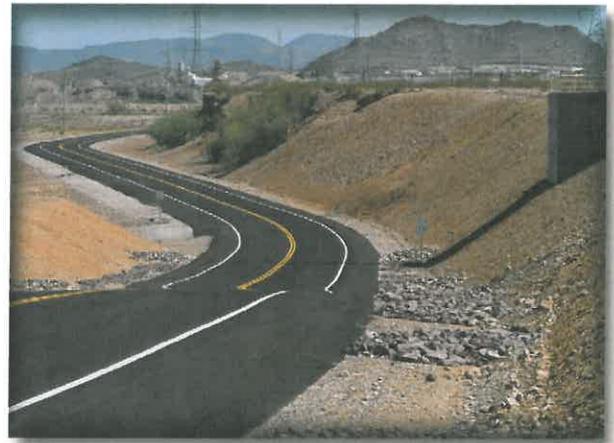
Agua Fria Truck Route Study and Final Design:

Rose Garden Lane and Beardsley Road served as the primary truck route for gravel and concrete trucks leaving mining operations in the Agua Fria River bed. These routes take the trucks through residential neighborhoods creating safety, noise, and pollution issues for several communities. EPS Group was selected by the City of Peoria to complete a 1.5 mile alignment study and final design of the proposed extension of 112th Ave along the Agua Fria River to relieve the concerns created by the local gravel operations. This politically driven project has an alignment that passes through ASLD property, private lands, and lies principally within the Agua Fria River bed. Close coordination with an adjacent elementary school, FCDMC, FEMA, the Corps of Engineers, and a local environmental advocacy group was critical to the project's success. In addition, the truck route crosses Deer Valley Road (currently under design by MCDOT) and under SRP and APS power transmission lines. The construction was completed in January 2014. The initial construction cost estimate was \$9.8M and the final construction cost was \$9.5M.

Directly related project features included:

- **Roadway reconstruction (Bid Item No. 1C)**
- **Slope stabilization** along the Agua Fria Riverbank **(Bid Item No. 1C)**
- **CMU wall design (Bid Item No. 1B)**

References: Adina Lund: 623-773-7249; Dan Nissen: 623-773-7212





Hawes and Medina Park: EPS was asked by the City of Mesa to develop concepts and complete final construction documents for a new City Park and Sports Complex. The project also required the design and construction of 1.0 mile of adjacent arterial and residential streets. This 10-acre desert environmental park included two playgrounds, exercise stations, and a jogging/walking path. Features included grade changes and undulating terrain that provide challenging opportunities and creative interest for play, exercising, observation, strolling and multi-use activities; a circuit of passive and active spaces through the placement of play-pods, fitness pods, centrally located open space for gathering and seating, observation areas, free-play equipment at the main play area along well-lit paths and trails.



Directly related project features included:

- **Roadway reconstruction (Bid Item No. 1C)**
- **ADA ramps (Bid Item No. 3)**
- **Stairs (Bid Items No. 2 and 4)**

Reference: Lance Webb: 480-644-2399; Bob Draper: 480-988-7705

TEAM QUALIFICATIONS AND EXPERIENCE



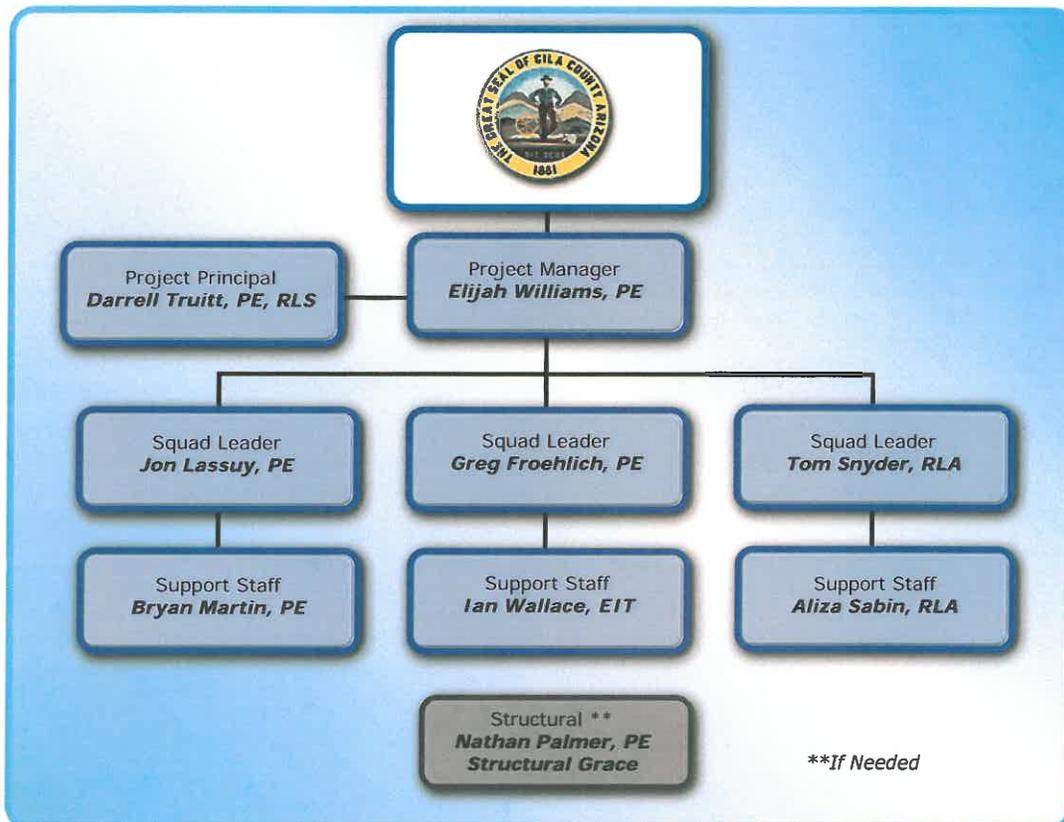
Elijah Williams, PE, Project Manager (AZ-#37898) - Although a smaller project, the Copper Administration Building involves a variety of project features/design skills that need to be completed under an accelerated schedule. Mr. Williams possesses the ideal education, experience and proven accelerated schedule performance to guide your project successfully to completion.

Mr. Williams is the President of EPS Group and holds a BSCE and an MBA from Arizona State University. Few engineering project managers can bring this level of management education to their projects. In addition, he has excellent project management experience on directly related projects throughout the State.

Mr. Williams' experience (17 years) and qualifications are significant and include his role as the Project Manager (PM) for the US 70 Salt Creek Emergency Repair; Project Principal for the US 191 Design-Build; and PM for the Agua Fria Truck Route, Southern Avenue/Stapley Drive Intersection, and Hawes and Medina Park projects (all as previously described herein). Mr. Williams' depth of general engineering, planning and design experience will be a valuable asset in understanding the project's dynamics.

Mr. Williams prides himself on responding to client's phone calls and emails within hours – not days. As a Project Manager he is fully engaged in the concept and design innovations that have become typical in EPS designed projects. For Mr. Williams, the first answer is rarely, if ever, the final answer. He consistently challenges the thinking of those around him to develop the highest quality, most constructable and cost effective designs possible.

Elijah has the project management, schedule control, budget control, and quality control capabilities that will lead to your project's success.





Darrell Truitt, PE, RLS, Project Principal (AZ-#10520, AZ-#16207) - Mr. Truitt has 43 years of experience as a project engineer, project manager and principal-in-charge of a wide variety of planning, design and construction management contracts and is a founding member of EPS. He holds a Bachelor of Science and an MSCE degree in Civil Engineering from Arizona State University. Mr. Truitt and Mr. Williams have developed a strong working relationship that spans the past 16 years including **all projects listed for Elijah**.



Jon Lassuy, PE, (AZ-#49457) Project Engineer/Squad Leader - Bid Item No. 1B (CMU wall) and Bid Item No. 1C (roadway design, ADA sidewalk and shotcrete) - Mr. Lassuy has a BS in Civil Engineering from Arizona State University. Mr. Lassuy has outstanding experience (10 years) in the preparation of roadway, SWPPP, and water/wastewater designs for a variety of municipal arterial **roadway projects** for the City of Mesa (Stapley Drive/Southern Ave - **ADA sidewalk and CMU wall**), Gilbert (Gilbert Rd/Guadalupe Rd Intersection), and Peoria (Agua Fria Truck Route - **slope stabilization and CMU wall**).



Greg Froehlich, PE, (AZ-#37285) Project Engineer/Squad Leader - Bid Item No. 1A (site design/parking lot design) - Mr. Froehlich has 17 years of design experience on a variety of projects across the State. He holds a BS in Civil Engineering from Arizona State University. Mr. Froehlich's extensive experience and understanding of roadway as well as commuter park-and-ride facilities will prove invaluable. His experience includes: roadway design, **parking lot design**, storm drain design and hydrology, signing and striping and cost estimating. Mr. Froehlich has served as Project Engineer on the design of numerous park and ride facilities including three (3) park-and-ride facilities for the City of Phoenix (Deer Valley, Dreamy Draw, and Metrocenter) and one for the City of Mesa at Power Road and US 60. Municipal roadway projects include: Cottonwood Lane Reconstruction (City of Casa Grande), Riggs Road (Town of Queen Creek), Gilbert Rd/Guadalupe Rd Intersection (Town of Gilbert), and 83rd Avenue and Agua Fria Truck Route (City of Peoria).

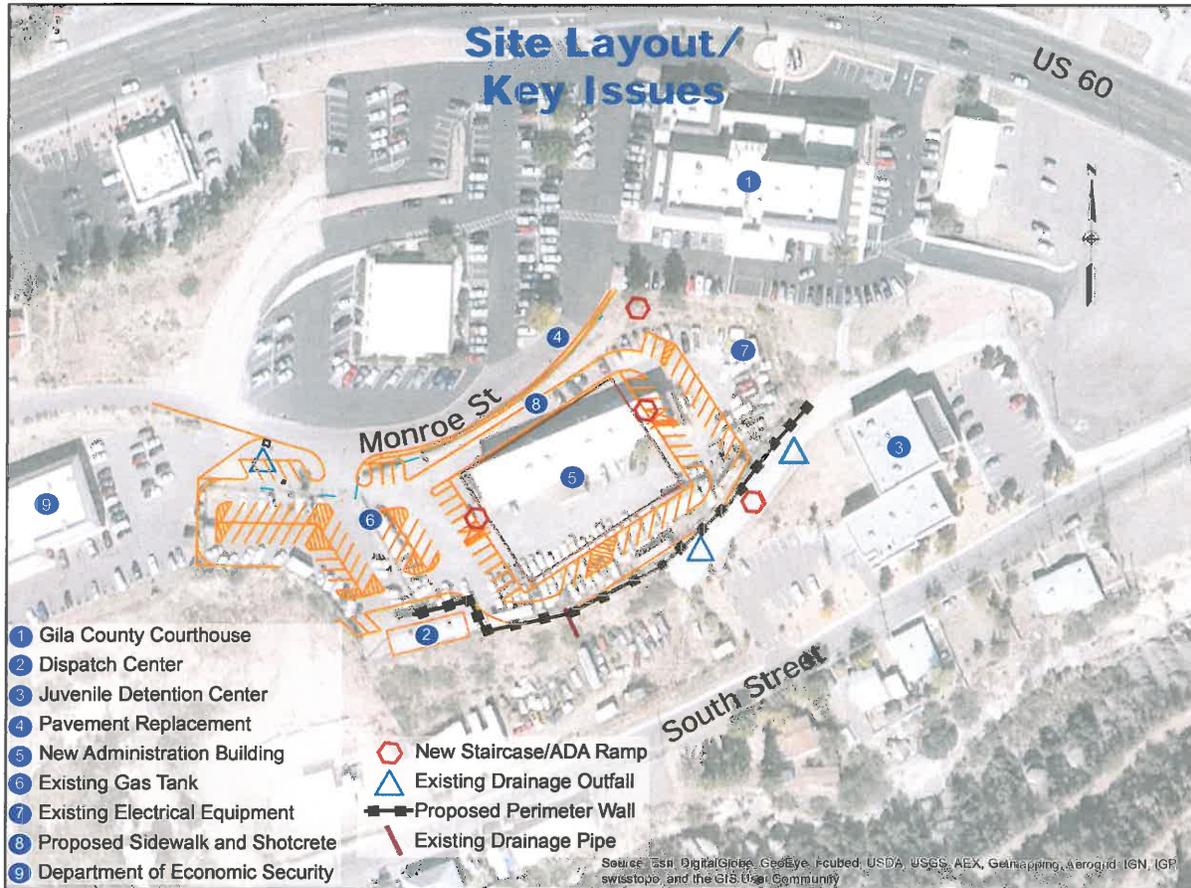


Thomas Snyder, RLA, ASLA (AZ #40702) Landscape Architect/Squad Leader - Bid Items No. 2, 3 and 4) - Mr. Snyder has a degree in Landscape Architecture from Arizona State University and is a licensed Landscape Architect in the State of Arizona. While practicing landscape architecture, Mr. Snyder has had the opportunity to be involved with the master planning, design, construction documentation and construction administration of several prestigious projects from large scale to site specific. His expertise is in planning public facilities, parks and sports fields, educational and medical/healthcare complexes, and streetscape design. Past projects include Hawes and Medina Park, White Fence Estates and Cortona all including stairs and ADA ramps. His work on the Pima Community College included the signature Angel Stairs and various ADA ramps and retaining walls. His experience brings an invaluable dimension to the design process.



UNDERSTANDING AND APPROACH

The proposed Copper Administrative Building project is located within the City of Globe, adjacent to the existing Gila County Courthouse and dispatch center. The site is generally bounded by Monroe Street to the north and several large existing slopes (5' to 20' in height) both to the north and south (see Site Layout/Key Issues Map). The purpose of the project is to improve the site for a newly acquired and installed modular building which will house County Probation and Finance/HR facilities and offices. Schedule will play a critical role in design, as Gila County has expressed a desire to open the facility by June 2015. The project will therefore be designed using a fast track approach.



Preliminary site design work has been completed by County Engineer, Mark Guerena, in association with the proposed parking lots and drainage facilities. Onsite features are anticipated to include new paving, curbing, ADA facilities, pavement markings, drainage features, and walls. Landscaping may be added later by County forces and lighting is expected to be provided by the exterior lighting of the modular building (consideration to one additional street light may be given as design progresses). Existing pavement adjacent to the dispatch center will be removed and replaced, and new concrete will be placed around the modular building. Water and sewer lines will be constructed and extended for the new building; however, this will be done as a separate construction project and is not part of this design. The recently constructed modular building was located based on survey markers placed by Gila County and is roughly coincident with the preliminary design. However, as-built survey will be required to ensure accurate final design as there are minor variances.

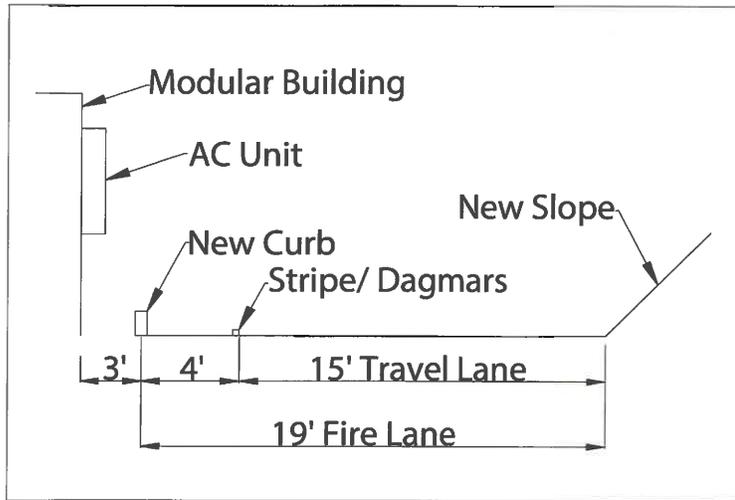




Offsite work along Monroe Street will include new curb and gutter, shotcrete or soil stabilization along an existing slope, and a new 4' sidewalk with safety rail. Work will also include the replacement of asphalt paving to repair an existing degraded section of roadway near the Courthouse.

Concrete and Paving

A concrete sidewalk will be installed around the majority of the building for public use. Sidewalk on the east, west, and south sides of the new building will be constructed per ADA standards, and will have a 6' minimum width. We do not recommend a sidewalk on the north side of the building for two reasons. First, there is limited space between the modular building and Monroe Street and fire access is tight. Second, there are air conditioning units that overhang into the expected path of pedestrians and would make a narrow sidewalk impassable. To resolve this, EPS recommends the installation of a curb 3' from the building face along with a painted stripe and dagmars or raised pavement markers 4' from the edge of the new curb. This approach would maintain the required fire lane width while providing a 4-foot striped buffer area (that could also include pedestrian markings) to aid in establishing a pedestrian link between the new modular building and the parking lot/courthouse.



The project scope currently calls for a paving section comprised of 4" of concrete paving on 6" of aggregate base. However, EPS has recently designed the new tower expansion at the Cobre Valley Regional Medical Center within the City of Globe, and has several pavement

recommendations based on the geotechnical report performed for that nearby project. If a concrete section is utilized for paving, the concrete should be 6" in depth to accommodate traffic loading (particularly in the fire lane), with approximately 4" of aggregate base. A 4" concrete thickness simply isn't adequate to accommodate heavy traffic loading. While we understand that concrete pavement has life-





cycle cost benefits, we also understand the County's concerns with the project budget and its desire to stretch its dollars as far as possible. Given this knowledge and the high expected initial cost of concrete pavement, EPS recommends investigating the use of asphalt pavement for lower short term and overall costs. In the case of the hospital expansion project, the section used was 2" of asphalt on 5" of aggregate base (3" AC on 6" AB in the designated fire lane). These sections would reduce construction costs as both the depth of the pavement section and the associated structural excavation will be reduced. According to our Geotechnical Engineer, soil conditions at both sites are very similar thus supporting our planned approach.

ADA Facilities

Multiple site specific ADA facilities will be included in the design of the project. Due to the elevated nature of the modular structure (similar to that of a mobile home) a new ramp will be included on both sides to allow for access into the building (see Site Map). EPS has looked at several producers that manufacture modular ramps such as these specific to the site needs. These ramps are custom fit and will be suitable for this site. Other ADA considerations include sidewalk ramps, parking bays (2), and sidewalk slopes (< 5%).



Potential Staircases/ADA Facilities

New staircases and/or ADA walkways are desired to "link" the new modular building to both the adjacent courthouse and juvenile detention facility. The first of these will be located between the courthouse and the new modular building, and will include a ramp and staircase built directly into the existing slope, which is approximately 16' high.

One ADA accommodation option (as EPS Group mentioned during the field review) is to consider the sidewalk adjacent to Monroe Street as a possible ADA facility and eliminate the potential slope ramp. Based on contours and mapping provided by the County, it appears there is only one 100' section of Monroe Street that has a slope steeper (5.5%) than the 5% maximum slope required to meet ADA standards. This slope is located near the modular building access driveway. A new sidewalk could be designed to meet the 5% maximum slope requirement by utilizing an independent sidewalk profile for this short 100' stretch. This could be accomplished by either detaching the sidewalk from the roadway (may need a short retaining wall) or by increasing the height of the curb gradually. The maximum difference



in grade between the roadway and the sidewalk profile to meet ADA slopes is anticipated to be approximately 6" based on the slope differentials, therefore a 4" curb could be installed and transitioned to a maximum height of 10" at the proposed driveway. This approach would save money by eliminating the need to build a separate ramp down the 16' high slope. If our approach is not desired by Gila County, several design factors are required if a ramp was constructed in the slope. These factors include a total ramp length of approximately 400 feet with multiple landings and returns, as well as retaining walls. Our initial construction cost estimate to place the full ADA ramp in the slope is \$140,000 including grading, excavation, concrete, handrails, and retaining walls. Given the alternative available with the Monroe Street sidewalk, we do not recommend the construction of the ramp for both cost and schedule impacts.

The potential staircase between the courthouse and the new modular building would require approximately 32 steps and 3 landing areas (a landing is recommended for every 5-foot elevation change per Landscaping Architecture standards). Our initial construction cost estimate to place the staircase is \$20,000.

The second staircase, if feasible, will be constructed between the new modular building and the Juvenile Detention Facility located along South Street. In this location, the grade difference is approximately 15'-20' and would require up to 40 steps, up to 4 landing areas, and handrails on both sides of the stairs (see photo below). In addition, these proposed stairs would cross an existing concrete lined V-ditch and would be constructed along an existing shotcrete paved slope. This would require shotcrete removal and accommodation of drainage under the new stairway. A concrete sidewalk would be required at the bottom of the stairs to connect to the existing parking lot. The estimated cost for constructing the stairs is \$40,000.

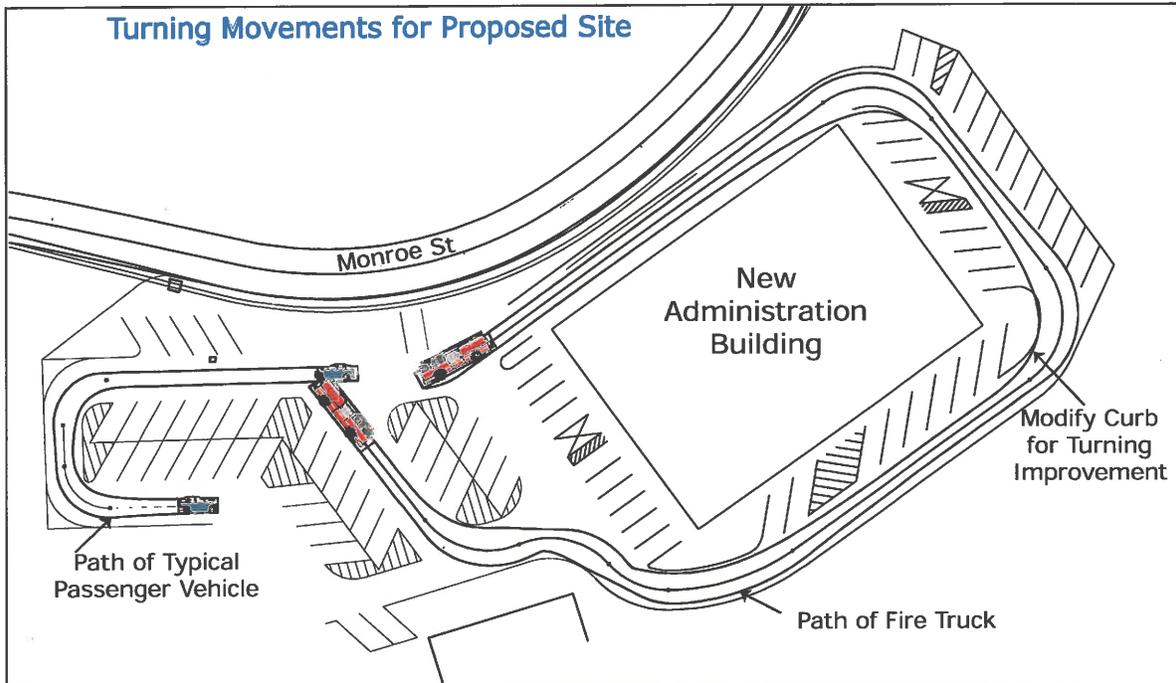




Pavement Markings

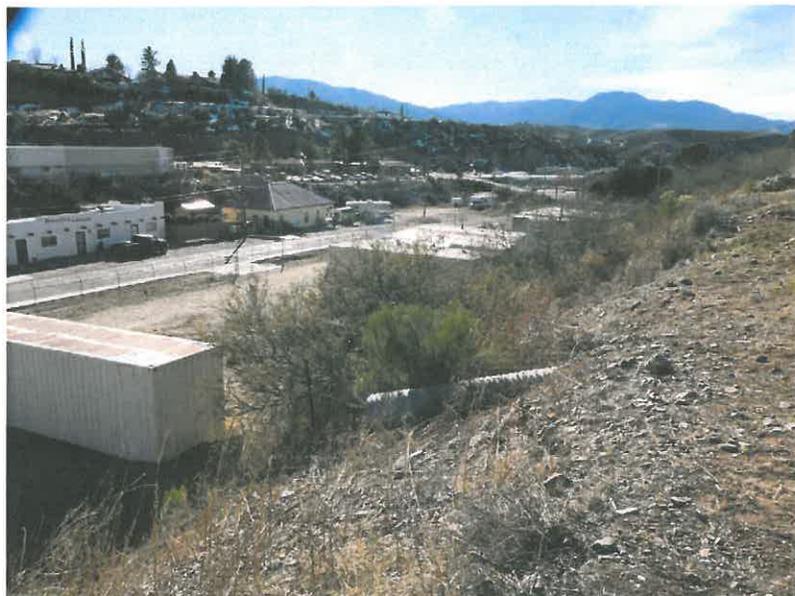
A preliminary layout has been provided by the County showing an initial approach to parking and circulation for both the new building and dispatch center, which will share a common driveway off of Monroe Street. To maximize the number of parking spaces, the current layout utilizes one-way traffic flow and parking, and minimal width drive aisles. The County has also received approval for a reduced fire lane width of 19' from the standard 20'.

EPS has evaluated the layout, and using AutoTurn has verified that the striping adjacent to the new administration building will accommodate fire truck turning movements with minor modifications to the proposed curb (See Below).



Drainage

The existing site generally drains to several locations. Runoff from the existing pavement adjacent to the dispatch center and portions of Monroe Street are captured by two catch basins located within the roadway. Other onsite flows and off-site runoff from the north drain south down existing slopes into a concrete lined channel or through an existing corrugated metal pipe. These flows combine south of the site, and continue west along South Street until they cross the roadway within an existing box culvert.





EPS recommends preserving grades within the existing paved area to maintain historical flow patterns to the catch basins. All parking lots will be graded to minimize the use of concrete valley gutters and reduce the number and size of drainage facilities. We have examined one approach that will allow for the elimination of the existing corrugated metal pipe without adding additional down-slope drainage protection. We have examined the parking lot grades and can route the runoff that currently arrives at the culvert to the east and toward the existing shotcrete lined slopes. This runoff would then be directed through the proposed site wall and down the shotcrete slope into the existing channel - similar to what occurs today in the southeast corner of the site.

The large existing catch basin/junction structure located in Monroe Street will be maintained in place due to the large pipe sizes (up to 96") and custom nature of the structure. The smaller catch basin will need to be evaluated as part of the design to ensure adequacy, particularly considering that the north side of the modular building is expected to drain in this direction. Our preliminary analysis indicates that while this basin may need to be shifted to the south to get it out from under the parking bays, its size should be adequate provided that some ponding within the parking area can be permitted to generate sufficient head to push the water through. If this ponding is not desirable, an 18" pipe may need to be substituted for the existing 12" connection to the junction structure and a larger grate incorporated with the catch basin relocation.

Perimeter Wall

A new wall will be constructed along the southern edge of the site. The wall will serve as both a perimeter wall for the site and as a screen wall between the new administration building and the existing dispatch center. The scope currently calls for a solid concrete masonry wall; however, in evaluating the site, it may be both cost effective and more aesthetic for the County to install a wrought iron fence in place of a solid block wall. A wrought iron fence would cost approximately 40% less to install, will remove the need for "knockouts" in the wall for drainage runoff, and could maintain the views accorded in looking to the south.

Utilities

There are several notable existing utility features on the site. A large gas tank located west of the new modular building and north of the dispatch center will be relocated to the County lot south of the project site by others. Numerous utility facilities recently installed north and east of the new building will remain in place and will be accounted for in the site design. Curbing is recommended in this area to prevent ad-hoc parking around these facilities. Consideration should be given to roll curb or wedge curb in a location(s) convenient for any maintenance access to these utility facilities.





Construction/Design Coordination

We understand that the County is currently completing the architectural design for the interior of the modular building. This is anticipated to be a complete interior redesign and the construction of proposed building improvements will be coincident with the site construction. While phasing/multiple bid packages is desired by the County to better afford local contractors with bid opportunities, this approach should also consider how this phasing may impact the building interior improvements. For example, building ADA ramp installation and/or building perimeter concrete construction may significantly impact the building contractor's ability to access the interior. Similarly, parking lot paving schedules may impact building construction. We will work with the County to consider phasing opportunities that best accommodate the joint construction schedules. We will also provide specifications within the individual bid packages that require contractor coordination and specific phasing schedules that facilitate all site construction activities.