



December 16, 2015

Ross Renner
City of Maricopa
39700 W. Civic Center Plaza
Maricopa, AZ 85138

RE: Edison Road Final Design
Contract Modification Request – Reduced Improvements in Santa Cruz LLC Parcel

Dear Ross,

The original project scope of work for Edison Road included an urban section comprised of two lanes in each direction, a center raised median, curb and gutter, and sidewalks throughout the project. This typical section is proposed to be revised to include one lane in each direction and a center raised median, eliminating the outside lane, bike lane, curb and gutter, and sidewalk through the Santa Cruz LLC (Smith Family) parcel. In addition, landscaping (except for decomposed granite in the median), water, sewer, dry utilities, and lighting will also be eliminated through this parcel. The series of pipes immediately south of SR 238 used to pass the floodplain under Edison Road is expected to remain in place as originally designed.

Per the original project scope, the plans are currently 90% complete. Given these proposed changes to the project, EPS Group is submitting the attached scope of work to accommodate these desired revisions.

Task 1 - Reduced Improvements in Santa Cruz LLC Parcel

The removal of the outside lane, bike lane, curb and gutter, and sidewalk on both sides of Edison Road has an impact to the following plan sheets associated with the Santa Cruz LLC property:

- Typical Sections –The Edison Road typical sections will need to be revised and the scupper details will be removed from the typical section sheet.
- Roadway Plan and Profile Sheets:
 - The Edison Road plan and profile sheets from SR 238 to the parcel boundary will require sidewalk, curb and gutter, scuppers, valley gutter, and sidewalk ramps to be removed. All notes, quantities, dimensions, and curve data associated with these items will need to be removed. New edge of pavement will be drawn and dimensioned and a thickened edge note and

- quantity will be added. The outside edge of pavement profiles will be revised to the new elevations and the curb will be removed from the profile.
 - The SR 238 plan sheet that intersects Edison Road may have some minor revisions for the design of the radius returns and connections to Edison Road.
 - All median breaks in the Edison Road median within the Santa Cruz parcel shall be removed.
- Retention Basins Details - All of the retention basin details north of the Estrella Gin Industrial Park boundary will have to be redesigned and redrawn. These basins are anticipated to be more frequent and more linear shaped than those shown on the previous plans since they will be collecting roadway swale runoff instead of from scuppers. These retention basins are intended to be temporary and will be removed when the roadway is widened to its ultimate width in the future.
- Signing and Striping Sheets – The signing and striping for Edison Road through the Santa Cruz parcel will need to be redone based upon the requested changes. This will require redesigning and redrawing the stripes with dimensions and revised notes. Signs will need to be relocated to accommodate the reduced section. In addition, the striping and signing within the Estrella Gin parcel will be revised at the Santa Cruz LLC parcel approach to drop the outside lane. The SR 238 signing and striping sheet is anticipated to have minor changes associated with revised radius return connections to Edison Road.
- Storm Water Pollution Prevention Plan (SWPPP) Sheets - The SWPPP sheets for Edison Road and SR 238 will need to be revised to accommodate the changed typical section and the elimination of the sewer line.
- Sewer and Water Plans – The limits of utility lines for water and sewer will need to be modified. This will require coordination with Global Water and ADEQ. Based on the proposed roadway limits the profiles of stubs will be modified. The construction notes and quantities will be updated. Water and dry utility duct bank will extend to the Santa Cruz property. Sewer stubs will be provided for the Estrella Gin parcel only.
- Traffic Control Plans (ADOT R/W) – will be revised for the elimination of the sewer line extension on SR 238.
- Lighting and landscape plans – will be removed for the area within the Santa Cruz Parcel. Revisions will be made (as necessary) to accommodate new irrigation and or power services. The table of contents will be changed and the sheet numbering will be revised.
- Traffic Signal – Provide a signal for the Fire Station. Signal shall be actuated to be controlled by the Fire Department.

The following items associated with the Roadway Plans and the Water & Sewer Plans will be revised:

- Quantities & Cost Estimate
- Earthwork Modeling/Calculations
- Revised Cross Section Sheets

The revised typical section through the Santa Cruz parcel significantly impacts the previous roadway drainage design. Drainage swale ditch details will be added to attenuate roadway drainage to linear retention basins within the right-of-way.

- Drainage Report – Swale ditch capacity calculations and retention basin sizing and locations will be evaluated. The report will be revised and rewritten for all roadway drainage (on-site) along Edison Road in the Santa Cruz parcel.
- Drainage Swale Ditch – The roadway plan sheets and typical sections will be revised to show drainage swale ditches.

Due to the number of changes required to the plans we have recommended resubmitting the 90% plans for review. This will require an additional comment response period.

Additional coordination with ADOT, affected utilities, the City, CMAR, Smith Family, Pinal County Flood Control, etc. is anticipated with this revised scope of work. Part of this effort will include up to 4 additional meetings. Coordination with ED3 on light power locations will be provided. EPS will show dry utility duct banks on the plans.

Task 2 – Accelerated Water/Sewer Plans for Public Works Building

EPS prepared a phase 1 plan set for the construction of water and sewer plans associated with the Public Works Building.

Task3 – ADEQ Engineer of Record Services

Following design, EPS Group will provide ADEQ Engineer of Record services for the installation of water and sewer facilities for the remainder of the improvements planned for the Estrella Gin property.

- Our proposal includes the necessary construction observations to prepare and submit the required forms, documentation, as-built plans and the Engineer's Certificate of Completion that is required by ADEQ to obtain the necessary ADEQ Approvals of Construction.
- Our proposal also includes the preparation and filing of a Notice of Compliance along with supporting documents to ADEQ for the portions of the Maricopa Domestic Water Improvement District (MDWID) water line construction that are exempt from the normal ADEQ plan review requirements.
- It is our understanding that Global Water and MDWID will perform direct inspection of their own water and sewer construction and will address their concerns directly with the contractor and the City of Maricopa. We will provide any information submitted to ADEQ to Global Water and MDWID upon request.
- This fee is based upon the requirements listed in the ADEQ Water Quality Division – Engineering Review Section Form 222.
- This proposal includes 3 trips for construction observation of the water and sewer line installation to verify that it is being performed per the approved plans and specification. This is a visual observation only – not inspection. This does not include any backfill, compaction or pavement replacement verification.
- This proposal includes 4 trips for observation of water line pressure tests.
- This proposal includes 4 trips for observation of the sewer deflection test, pressure test, uniform slope test and the manhole vacuum test.

- The number of trips specified above is based on our understanding of the different waterline and sewer segments that we each need to be independently tested.
- Bacteriological sampling and testing data is needed for the AOC submittal and would need to be provided by others.
- Verification of water and sewer line completeness is to be done via as-built plans that are also needed for the AOC submittal. A set of detailed, surveyed as-built plans suitable for submittal to ADEQ would need to be provided to us by others.

The hours reflected for the scope items included are expected to be commensurate with the effort that will be expended for these tasks. We have provided a fee estimation breakdown.

Our anticipated schedule for finalizing the construction plans is as follows:

<u>Task</u>	<u>Duration</u>
Start Redesign	TBD
Complete 90% Plans Revisions	5 weeks
90% Plan Review/Utility Coordination	4 weeks
Finalize and Submit Sealed Plans	3 weeks

Please do not hesitate to contact us with any questions regarding the additional work items identified.

Sincerely,
EPS Group Inc.,



Elijah E. Williams, PE
Project Manager

Fee Estimation Worksheet

CONTRACT MODIFICATION:

REVISED ROADWAY TYPICAL SECTION (1-LANE IN EACH DIRECTION/RAISED MEDIAN) FOR SANTA CRUZ LLC PARCEL

Date: 12-16-15

PROJECT: City of Maricopa - Edison Road Industrial Park Design

Job No.: 13-137.3

	Labor Class Rate	\$220.00	\$165.00	\$135.00	\$95.00	\$85.00	\$60.00	\$120.00	\$90.00	\$75.00	\$140.00	\$135.00	\$98.00	
DESCRIPTION	Principal	Project Manager	Project Engineer	Design Technician	CAD Technician	Clerical	Landscape Architect	Senior Landscape Designer	Landscape Designer	Survey 2-man	Project Surveyor	Survey Tech	Task Cost	
Revised Roadway Plans														
Revise Typical Sections		1	2	6	10								\$1,855.00	
Revise Plan & Profile Sheets		6	19	40	40								\$10,755.00	
Design Drainage Swale Ditches/Basins		3	10	24	18								\$5,655.00	
Revise Signing & Striping Sheets		1	8	16	28								\$5,145.00	
Revise SWPPP			3		6								\$915.00	
Revised Sewer & Water Plans		2	12	24	18								\$5,760.00	
<i>Phase 1 Sewer & Water Plans for PW</i>		1	4	18	16								\$3,775.00	
Revised Drainage Report		4	20	16	2								\$5,050.00	
Revised Quantities & Cost Estimates		1	4	12	12								\$2,865.00	
Revised Earthwork			6	12									\$1,950.00	
Revised Cross Sections			2	4	6								\$1,160.00	
Remove Sheets/Setup Plan Sheets				3	8								\$965.00	
Revised Landscaping Plans							8	16	22				\$4,050.00	
Quality Control		6	10										\$2,340.00	
Revise ADOT Traffic Control Plans		1	8	10	8								\$2,875.00	
Fire Station Traffic Signal		2	25	43	43								\$11,445.00	
Resubmit 90% Submittal				8	12								\$1,780.00	
Project Coordination		28	46	8									\$11,590.00	
Respond to Resubmitted 90% Comments		4	8	11									\$2,785.00	
ADEQ EOR Services Following Design			50		35	12							\$10,445.00	
TOTAL HOURS	0	60	237	255	262	12	8	16	22	0	0	0	872	
SUBTOTAL FEES	\$0.00	\$9,900.00	\$31,995.00	\$24,225.00	\$22,270.00	\$720.00	\$960.00	\$1,440.00	\$1,650.00	\$0.00	\$0.00	\$0.00	\$93,160.00	

Contract Expenses	\$489.80
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Subconsultants	
Wright Engineering	\$630.00

TOTAL FIXED FEE	\$94,279.80
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Reimbursables
City of Maricopa
Edison Road - Santa Cruz Typical Section Reduction

90% Submittal

(79 Sheets) 16 each @ \$0.20/sheet (1/2 size)	\$252.80
(79 Sheets) 3 each @ \$1.00/sheet (full size)	\$237.00

Total Reimbursables	\$489.80
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Remibursables do not include reproduction of Plans & Bid Documents for bidding purposes.