



Proposal

RFP #18-011



**Engineering Design Services for
Storm Drain in Baseline Road from
Cactus Basin West to Tamarind Avenue**

HUITT-ZOLLARS

October 5, 2017

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City of Rialto
Public Works Department
335 W. Rialto Avenue
Rialto, CA 92376
Attn: Robert G. Eisenbeisz, Public Works Director/City Engineer

RE: RFP#18-011 Request for Engineering Design Services for the Proposed Storm Drain Improvements in Baseline Road from Cactus Basin West to Tamarind Avenue

Mr. Eisenbeisz:

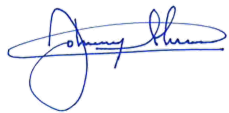
Huitt-Zollars looks forward to providing civil engineering services for the City of Rialto Storm Drain Improvements in Baseline Road. Huitt-Zollars has reviewed the City's Request for Proposal dated July 20, 2017 and provided our project understanding, scope of work, qualifications, schedule, references, and fee for your project.

Our Project Manager is **Remi Candaele, PE**, who brings extensive knowledge in drainage analysis and design. He recently completed a Study for the Santa Ana River Reach 3 for Riverside County Flood Control District and is currently working on a Drainage Study for the Pine Avenue Extension in Chino California, which involves coordination with USACE, Caltrans, and SBCFD. Our mutual success will also rely on in-house experience of other professionals showcased within the staff qualifications of our proposal. We have included local sub-consultants with City of Rialto experience: **BUTSKO** will assist with dry utilities, **C-Below** for sub-surface investigations, **Converse Consultants** for geotechnical engineering, and **Tom Dodson** for environmental support.

We have organized our proposal as requested in the RFP and recommend a scope with an innovative approach that strives for cost-saving solutions. All contents in the proposal shall remain valid for 120 days from the date of this letter. **Johnny Murad, PE, Vice President**, will serve as the Principal in Charge. He is authorized to contractually bind Huitt-Zollars. If you have any questions, or need any additional information, please contact Johnny Murad at 909-941-7799, x 11411 or by e-mail at jmurad@huitt-zollars.com.

We appreciate the opportunity to provide the City of Rialto with supporting civil engineering services for this great project.

Sincerely,
HUITT-ZOLLARS, INC.



Johnny Murad, PE
Vice-President/Office Manager



Remi Candaele, MS, PE, QSD
Project Manager

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Section A Project Understanding

A.1 Without reciting the information regarding the Project verbatim as contained in this RFP, convey an understanding of the intent of the Project and an understanding of the City's expectations upon implementation of the Project.

The City of Rialto needs a qualified civil engineering firm to provide professional services for the preparation of construction documents of a storm drain line on Baseline Road. The facility is expected to start at Tamarind Avenue and run under the north side of Baseline Road for approximately 2.5 miles to outlet at the westerly Cactus Basin 3.

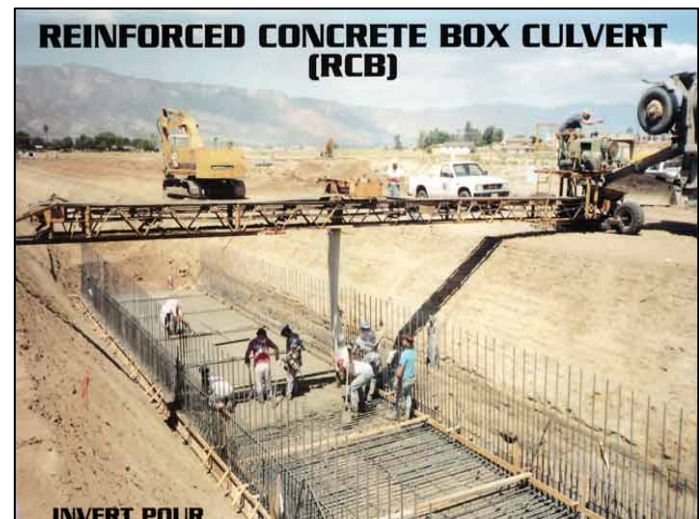
The scope of services shall ultimately deliver.

1. Design Topography
2. Construction Plans
3. Specifications
4. Geotechnical Report
5. Legal Descriptions
6. Environmental Support Documents
7. Construction Estimates
8. Construction Administration Services

The RFP instructs the selected consultant to identify the most cost-effective method for design and construction of these improvements. This requires a good understanding of the Cactus Drainage Area and close attention to value engineering that begins with the planning phase. This close attention would be best given by a strong project manager that finds support in a team experienced with:

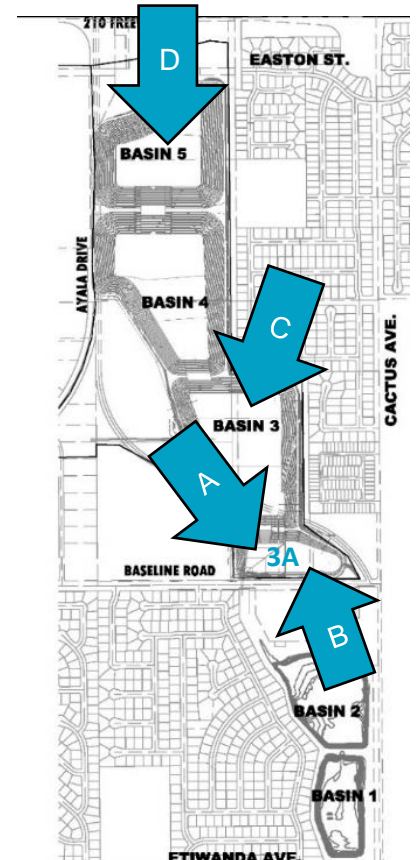
- Research and reliability of existing records
- Resolution of utility conflicts
- Hydrology and basin modeling
- Details of hydraulic calculations
- Sizing storm drain elements
- The analysis of alignment alternatives
- Requirements of easement and right of way acquisition
- Construction cost estimating
- Construction of large Reinforce Concrete Box (RCB) culverts
- San Bernardino County Flood Control District
- Department of Water Resources, Division of Safety of Dams

It is further understood that the project improvements will be designed and approved as one phase. However, if construction funding falls short, plans may need to be bifurcated into a second phase.



To deliver on the City's goal of finding the most cost-effective solutions, our team has reviewed the master plan and the existing Renaissance Specific Plan, with special attention to the drainage study that is tributary to the Cactus Basin System. The Cactus Basin System will ultimately capture the tributary area north of Baseline Road and direct it to a network of five detention basins that will limit the downstream runoff below 1,250 cfs. Basins 1 and 2 are constructed south of Baseline Road and are not considered functional peak flow attenuation facilities. The remaining three Basins, 3 through 5, are located north of Baseline Road. Basin 3A is immediately adjacent to Baseline Road, Basin 3 is located just north of the spillway, Basin 4 sits just upstream, north of Basin 3, and Basin 5 sits south of the 210 freeway.

“To deliver the City's goal of finding the most cost-effective solutions, our team has reviewed the master plan and the existing Renaissance Specific Plan, with special attention to the drainage study that is tributary to the Cactus Basin System.”



The tributary area north of the 210 freeway (~3,600 acres) is intercepted by the Cactus Channel and routed into Basin 5.



Cactus Channel North of 210 FWY



Cactus Channel Under 210 FWY

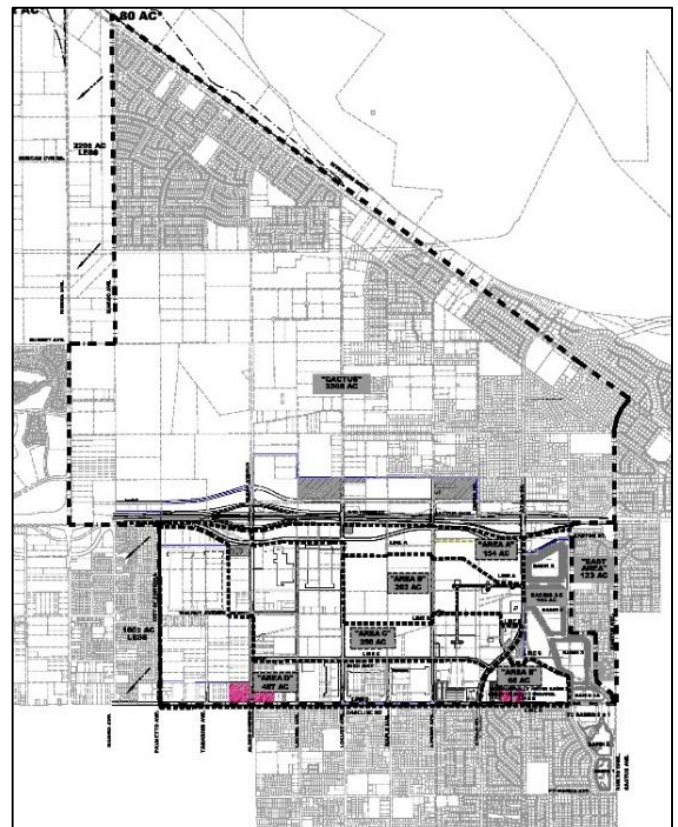


Cactus Channel Leads to Basin 5

In the original plan, the tributary area “Baseline Airport” (~1350 acres) between the 210 Freeway and Baseline Road would convey runoff into Basin 3 via the storm drain line in Baseline Road. That plan estimated a Q100 of 2,593 cfs and called for two-120” diameter RCP pipes.

Construction has progressed, the original county drainage model for that tributary area has evolved. Presently, “Baseline Airport” consists of five subareas each with its own storm drain line. It is important to note that subdividing and re-routing of the areas has reduced the original demand at Baseline Road “Designation D.”

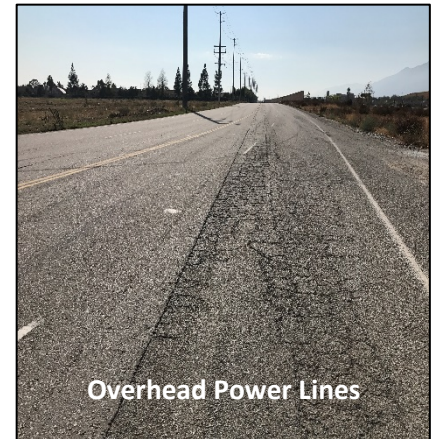
The desired “Project Improvements” described in this scope is essentially a drainage study of Area D and its associated Storm Drain “Line D” Improvements. The area is estimated to service 487 acres and to convey 970 (958 per RFP) cfs during a Q100 year event. This is approximately one third of the originally estimated flow of 2,593 cfs. Yet the RFP calls for a 9’x7’ RCB, which is equivalent to a 108” diameter pipe. While the original area and flow were reduced by two thirds, the pipe size has only been cut by half. An observation worth noting is that a smaller pipe would reduce the conflicts. HZ will investigate and model the existing facilities in detail perhaps realizing a significant cost savings for the City.



Designation	Area (AC)	Q Peak (cfs)
A	154	364
B	203	525
C	356	713
D	487	970
E	68	216
TOTAL	1268	2788

A.2 Identify “key” or “critical” issues that may be encountered on the Project based on the firm’s prior experiences; and provide steps to be taken to ensure the issues do not affect the successful delivery of the Project.

Our research shows that crossing utilities would be an issue. We have included **BUTSKO UTILITY DESIGN** a consultant with work history in the area to help us stay ahead of dry utility coordination with third party purveyors. We have also included **C-Below** for sub-surface investigations to help us get ahead of utility conflicts that might impact the construction cost and schedule. HZ will optimize the final storm drain alignment, pipe size, and transition structures by preparing a drainage study that accounts for impact to existing utilities, reports needing dedications, current construction, appraises the details of constructing box culverts, and incorporates approved projects into the drainage analysis. **To structure an appropriate proposal, Huitt-Zollars has initiated some of the work required for this design.**



We have evaluated possible utility relocations and have determined that the construction of the RCB along Baseline Road will run parallel to the existing sewer line. We anticipate that the proposed storm drain box has adequate space to fit adjacent to the sewer line. Our design will look carefully at the proposed separation and depth to ensure the parallel utilities are properly protected during construction.

We also inventoried of existing utilities at each street intersection. **The following table summarizes the observable utilities with the possibility of conflicting at each street intersections along Baseline Road.**

Intersecting Street	Description	Sewer	Water	Gas	Joint Trench
Glenwood Avenue	T-Intersection South				
Fitzgerald Avenue	T-Intersection North	X			
Camphor Avenue	T-Intersection South				
Cedar Avenue	Controlled Inter.	X	X	X	X
Smoke Tree Avenue	T-Intersection South				
Linden Avenue	Uncontrolled Inter	X	X	X	X
Maple Avenue	Controlled Inter.	X	X	X	X
Locust Avenue	Controlled Inter.	X	X	X	X
Laurel Avenue	Uncontrolled Inter.	X	X	X	X
Alder Avenue	Controlled Inter.	X	X	X	X
Tamarind Avenue	Uncontrolled Inter.	RCB Not Expected To Cross			

City of Rialto Standard Utility	Cover	Depth
Gas	30"	Add Diameter (4")
Domestic Water	36"	Add Diameter (8-12")
Joint Dry Utility Trench	36"	~52"
Sewer	72"	Add Diameter (8-12")

We have assessed existing utility depths and locations to evaluate potential conflicts.



We would expect a 9'x7' RCB culvert to have an impact on existing utilities even as the size reduces in the upstream reach. Working with a box this large will require an experienced team that provides attention to the right details during design. The trench requirements to install a precast box this large is likely to expose utilities. **Neglecting exposure(s) of pressurized pipe like gas and water will increase construction cost!** If not captured during design these will need to be properly supported and constrained to avoid failure during or after construction.

The north side of Baseline Road will present additional challenges at Locust Avenue:

1. **Possible petroleum line** - Dealing with petroleum rights may be difficult, it is usually best to avoid relocation.
2. **Existing domestic water line** - Water valves show a second water line on the north side of the road. The line on the south completes the water loop for Fontana residents. The line on the north services the Renaissance Specific Plan.
3. **Possible electric utilities** - The northern parkway is Edison's preferred location
4. **Vault** - Limiting space between sewer



The shape of tributary Area D will increase the length of large pipe over a significant portion of Baseline Road. This is especially critical if we consider that the sewer lines in the area drain southerly and carry across the street intersections. We believe that a detailed drainage study of Area D will prove that a reduction in size that starts with the 9'x7' RCB culvert is possible. Our scope includes the preliminary drainage analysis that helped us arrive at this conclusion. HZ will evolve the study, via fundamental civil engineering principles that began with our site walk, to further reduce the size of the pipe.

We also recognized the industrial growth occurring in the area. Each industrial facility has a unique way to mitigate storm water runoff. This is not unusual as it is a water quality requirement. The newer facilities seem to have adapted construction of a linear basin adjacent to the street. The bottom of these basins sit below the street level. In such cases, smaller storm events are retained but as the storm increases the basin spills into the adjacent street. The older facilities presented a situation that requires further investigation. These facilities direct flow on-site and provide catch basins to capture the runoff. In these cases we did not observe outlets to the public streets. We believe these facilities are removing runoff from larger storm events. In all cases, a portion of the storm event is removed from the runoff that would have reached Baseline Road. Our staff will work with the City to investigate and properly model each facility into a drainage study. A detail that when modeled will help reduce the size of the storm drain line on Baseline Road. While this project is primarily a drainage study, we cannot ignore how water quality requirements could impact the potential runoff. Our staff has the experience to produce an accurate model.

We also realize that this project will also need to comply with water quality requirements. We will provide:

1. SWPPP per NPDES CGP Requirements
2. A WQMP per MS4 Permit Guidelines

As an additional hydraulic observation, the elevation of the dam spillway at Cactus Basin 3 will be above the soffit of "Line D" at the anticipated outlet point. As the water surface elevation in Basin 3 rises it will cause a backup into Line D. If there is still a desire to accept inflow from catch basins along Baseline Road, the analysis will need to account for a backflow prevention device at the outlet. Modeling the system in XPSWMM/TUFLOW with a 100-year level of protection on a joint probability analysis between the basins and the system design should give an indication as to what storm frequency will be allowed to enter the system before the backflow device is activated.



Our geotechnical consultant will provide the required analysis to justify the street section thickness. We will coordinate with the City to make sure quality and durability are not compromised. To eliminate possible construction change orders and avoid impacts to the schedule we are proposing subsurface utility engineering “Level A”. Our team will research records, provide a design survey that captures surface features, we will have Dig-Alert mark utilities prior to the survey so that these are captured in the topography, we will provide a GPR in crossing street if necessary, our survey crew will dip all manholes and we will pothole utilities where necessary. At Huitt-Zollars we are experienced and familiar with the construction of precast and cast in place pipe. This project might demand a combination of both, we will make sure that the most appropriate method is specified where necessary.

At Huitt-Zollars we understand that “Quality Is Not An Act, It Is a Habit.”

Quality is the backbone of why we are chosen for projects. It improves client relationships and builds trust. It is for this reason that we have created an ISO 9001 compliant Quality Management System. It ensures that the highest level of quality goes into everything we do. Quality Control is the independent continuous check of our work. It occurs at every level. The process generates review comments and revisions until all requirements are fulfilled. It is this level of attention to detail during the design process that helps us keep contractor’s request for information minimal. Quality Assurance is done outside the task, it will be the responsibility of the Quality Control Manager to check the checker and verify that the process is being followed.



The proposed alignment will require an easement thru Parcel 0264-213-18-0000 to reach the designated outlet into Cactus Basin 3 and an easement from San Bernardino County Flood Control District (SBCFCD). Our survey department is qualified to identify procurement of right of way and easements for the proposed construction. Our registered engineers will address traffic requirements that are part of the project. The Cactus Basins are operated by the SBCFCD, and our team has the work history and the experience to coordinate with their staff. Mr. Quazi with **Converse Consultants** will lead the Geotechnical requirements, **Tom Dodson and Associates** will assist the City with all environmental supporting data and/or studies and landscape services will be handled in-house by Chris Scott. If the City desires to hire an engineering consulting team that can perform all aspects of the project requirements on schedule and within budget, we are that specialized team with the experience to deliver.

Section B Scope of Work

B.1 Provide a detailed scope of work identifying all tasks and sub-tasks required to successfully implement Phase 1 – Conceptual Design Drawings & Preliminary Cost Estimates and Phase 2 – Final Construction Drawings & Specifications. The outline of tasks and sub-tasks must be thorough and complete, and will be used as the scope of work included in the selected firm’s contract.

We are proposing a highly specialized design team with the experience to deliver projects with similar requirements. A team with a bench strength that is unmatched in the industry. We believe this commitment is best delivered with a strong project manager who is able to speak for the firm and is supported by a multi-discipline team of technical experts. At Huitt-Zollars our Project Manager will be assisted by the principal and supported by key personnel. The staff we are committing to your project is no different. It is organized so that there is redundant leadership in critical aspects of the design. That way project details are not missed and quality control becomes an on-going task from inception to delivery.

Staff	Responsibility	Experience (Years)	Percent Availability
Johnny Murad, PE	Principal-In-Charge	25	15%
Remi Candaele, PE	Project Manager	13	80%
Miguel Hernandez, PE	Deputy PM-Quality	21	25%
Manuel Gonzales, PE	Storm Drain Design	14	30%
Michael Phillips, PE	Hydrology/Hydraulics	6	70%
David White, PE	Utility Design	25	30%
Jeff Lenherr, PLS	Survey	30	20%

“We have assembled the right team for this project!” A set of people with unique skills and experience that together have the ability to deliver your project on time, on budget, and with a high level of quality. Huitt-Zollars will provide the civil engineering, survey and landscape architecture. Our principal and project manager have a long standing working relationship with our selected consultants: Converse Consulting, Dodson and Associates, BUTSKO, and C-Below. Our office is fully integrated and connected, we will meet with our consultants to review work and update project status regularly and always prior to meeting with the City. We cannot wait to put our talented staff members to work for you.

It is with the same focus to detail that we have reviewed the RFP, walked the project site, and developed our proposed approach. It is this meticulous level of work that helps Huitt-Zollars generate a scope that is complete and without room for surprises. Within our proposal we have described design pitfalls, anticipate risk that are specific to this project and make recommendations that will save construction cost.

We have designed many projects that have complex technical considerations unique to our clients’ purpose. We will keep the owner’s needs first and foremost, every aspect of the design process has to take your needs into account. To make sure it happens, we organize an interactive process, document all requests, and use visualization tools. We will fully engage you in a comprehensive dialogue that helps clarify and fully understand all project goals and requirements. Through our services we will deliver an innovative and resourceful design that respects your needs.

ADVANCED DESIGN™

Huitt-Zollars’ philosophy is centered on our concept of **ADVANCED DESIGN**. It is an approach to our level of service that explores design from all sides, meets challenges from new angles, and helps to uncover perspectives that are often overlooked. Our design process will be interactive and responsive, engaging all the stakeholders relevant to the success of the project while solving the challenges and costs. We believe that quality comes from an integrated design process. We continually perform QA/QC checks during the design process to get it right the first time.

The most effective method for our design to arrive at cost saving solutions for construction of these project improvements should anticipate the following services:

Civil Engineering

- Project Management
- Research
- Hydrology
- Hydraulics
- Storm Drain Design
- Storm Water Quality
- Sewer Relocation
- Domestic Water Relocation
- Pavement Surfacing
- Traffic Engineering
- QA/QC
- Estimating
- Value Engineering
- Bid & Construction Support
- Dry Utility Coordination
- Sub-Surface Investigation

Surveying

- Design Topography
- Monument Preservation
- Legal Descriptions
- Easements
- Rights-of-Way
- Real Estate Appraisals

Other

- Landscape Architecture
- Geotechnical Engineering
- Environmental Support

Task 1: Project Management

1.1 Kick-Off Meeting: After receiving the City's Notice To Proceed, our Project Manager, Remi Candaele will work with the City to set a date for a kick-off meeting. Prior to meeting, Huitt-Zollars (HZ) will organize the meeting agenda and prepare a Project Work Plan (PWP). The PWP will incorporate the project scope, design elements, design team, responsibilities, project deliverables, quality control procedure, budget, schedule, applicable standards, constraints, CADD requirements, specification requirements, and summarize milestones. HZ will provide drafts of the agenda and the PWP to the city for their review and comment. Once accepted the meeting date with the City's engineering staff will be confirmed. During the meeting we will establish clear lines of communications, discuss the PWP, and exchange background data. HZ will document the meeting discussion, after the meeting HZ will refine the PWP and provide the Meeting Minutes for the City's review.

Schedules and Milestone: HZ will refine the schedule and milestone submitted with the proposal after the kick-off meeting. It is understood that the deliverable shall be made in a timely manner and allow adequate time for City review and revision. Schedule and budget control are critical to the success of the project, each directly impacts the other. After the kick-off meeting the accepted schedule will remain on record, thereafter written confirmation shall be necessary for any anticipated changes. If necessary, HZ will provide timely written notice if the change is thought to have an impact on the contract value.

1.2 Status Meetings (10): HZ and the City will establish a monthly meeting to review project progress. The frequency of the meetings will be adjusted as the City sees appropriate but the goal shall be that these meetings average once per month. HZ will organize and provide the City with an agenda four days prior to the meeting for their review and comment. HZ will address agenda comments prior to the meeting and document the meeting discussion. Our PM will provide Meeting Minutes for the City's review.

1.3 Environmental Support: The City anticipates the issuance of a Negative Declaration for the Storm Drain in Baseline Road. The preparation of the CEQA process will be handled by the City's Development Services Department. HZ has included Tom Dodson and Associates to assist with the preparation of the special studies necessary for the project.

To assist the City with the environmental requirements we anticipate:

An IS/MND will be prepared by use of the approved checklist format from the City or Appendix G of the CEQA Guidelines. Our consultant will prepare a description of the project including the location (project map), a brief description of the environmental setting, an identification of environmental effects using the above referenced checklist format, a brief substantiation of the checklist entries, and a list of references. A site visit by an Environmental Scientist will be conducted and record database searches for biological, cultural paleontological resources and hazardous material will be conducted.

We anticipate receiving copies of any previously prepared technical reports, plans, and other project information from the City, including electronic versions. After receipt of one set of integrated comments on the Administrative Draft IS/MND from the City, we will revise it IS/MND accordingly.

We will prepare the following notices as required by CEQA:

- Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration
- Notice of Completion (NOC) (State Clearinghouse Cover)
- Notice of Determination (NOD)

One copy of each of these notices will be filed with the County Clerk and the State Clearinghouse, as appropriate. An electronic copy of each notice will be provided to the City. It has been assumed that the City will pay the CDFW fee when the NOD is posted.

The City will consider any comments received on the MND when making a decision on the project. There is no requirement to prepare formal responses to comments; however, the city should have information in the administrative record explaining why the comment does not affect the findings in the MND. For costing purposes we have assumed that 10 comment letters containing 2 comments each will be received (or a total of 20 comments).

In practice, a response to comments document, is included in the Final IS/MND. The Final IS/MND will include any changes to the Draft and the Mitigation Monitoring and Reporting Program, prepared in accordance with the CEQA Guidelines Section 15097. The MMRP will be prepared in a table format.

An Administrative Final IS/MND and MMRP will be prepared. After review by the City, the Final IS/MND and MMRP will be provided. Our consultant will send the Final IS/MND and MMRP to agencies, organizations, and individuals that commented on the project, and also notify them of the date and time of the public hearing for consideration of the project, as required by CEQA.

In support of the IS/MND, the following technical study will be prepared:

Air Quality/Greenhouse Gases. As part of the environmental analysis for the proposed project, an air quality and greenhouse gas analysis will be prepared to satisfy CEQA requirements.

Construction Impacts. The focus of the construction analysis will be on the pollutants of greatest concern. PM2.5 emissions are produced from excavation, grading demolition, vehicle travel, paved and unpaved surfaces. The use of diesel powered construction equipment produces ozone precursor emissions and combustion related particulate emissions. Emission calculation tools will be used to quantify emissions from construction and compared to SCAQMD thresholds to determine significance.

Operational Impacts. At a local level, the project will be screened to determine if the project worsens air quality for carbon monoxide (CO). Because this is a storm drain construction project it is not expected to impact air quality.

Greenhouse Gas/Climate Change. Qualitative GHG analysis will be performed to determine emission levels from the construction and operational aspects of the proposed project. The analysis will discuss project implementation measures that can be employed to reduce the GHG emissions and potential climate change impacts from projects. Utilizing the analysis identified above, an Air Quality Technical Memo will be prepared in accordance with provisions of CEQA requirements.

1.4 Geotechnical Engineering: Our consultant will determine the existing pavement thickness (aggregate base and asphalt), obtain sub-surface soils classification and conditions, evaluate pertinent soil properties, provide geotechnical parameters for RCP design, evaluate temporary trench slope stability, and provide trench backfill recommendations.

The sub-surface exploration will include drilling one boring every 500 feet for a total of 22 borings. Each boring will be drilled to a depth of 15 feet below existing ground or to refusal, whichever is shallower. Access will be made available by the City of Rialto Public Work Department without cost. If needed City's crew will put "No Parking" cones around the boring locations to provide enough space for a drill rig and support truck. This will be done at least 24 hours before the drilling date. Drilling will be conducted on weekdays between 8am and 4pm. Traffic control will be executed with sign and cones in accordance with the WATCH manual, a flagmen should not be required.

The borings will be drilled with a truck mounted rig (CME 75 or equivalent) equipped with an 8-inch diameter hollow stem augers for soils sampling. Soils will be continuously logged and classified by the geologist/engineer in the field by visual examination in accordance with the Unified Soil Classification System.

About 5 undisturbed ring samples of the subsurface material will be obtained from each boring using Modified California Sampler (2.4-inch inside diameter and 3 inch outside diameter) lined with thin-walled sample rings. The sampler will be driven into the bottom of the borehole with successive drops of a 140-pound hammer falling 30 inches. The number of successive drops of the driving weight required for each 6 inches of penetration will be shown on the boring log. The soil will be retained in brass rings and carefully sealed in waterproof plastic containers for shipment to the laboratory for testing.

Laboratory testing includes:

- In-place moisture and density
- Sand Equivalent
- Corrosivity
- Sieve Analysis
- Laboratory maximum density
- Direct Shear

Geotechnical Report will include:

- Project Description
- Present Condition of the Street along the north side (westerly bound) lanes
- Logs of the exploratory borings
- Depth of groundwater and bedrock, if encountered
- Existing pavement structural section at the boring locations
- Discussion on the laboratory test results including soils corrosivity
- Local Geology and faulting
- Seismic parameters based on 2016 California Building Code
- Liquefaction potential along the SD alignment
- Allowable at-rest, active, passive, and seismic lateral earth pressures
- RCP pipe bedding recommendation in accordance with SBCFCD/Rialto
- Stability of temporary trench excavation
- Shoring design and construction recommendations
- Suitability of excavated materials for use as bedding and backfill
- Pipe subgrade preparation recommendation
- Trench backfill recommendation
- New asphalt concrete pavement replacement section based on TI
- Pavement subgrade preparation recommendation

Task 2: Data Collection

2.1 Data Collection: Our team will be responsible for conducting research and incorporating found information into the design. Research shall include records from the City of Rialto, adjacent Cities (where applicable), Caltrans, dry utilities, and County. Record information shall include studies, atlas sheets, improvement plans, reports and base maps. HZ has a copy of the hydrology report prepared for the Renaissance Specific Plan. Our Project Manager shall arrange a meeting with City's maintenance staff to discuss the study and the project. HZ will review record data from available sources for storm drain lines equal to or greater than 18 inches in diameter, including Caltrans and privately owned storm drains, in order to model a complete design.

The information gathered shall include:

- Drainage Master Plans that include the delineated drainage area
- Drainage studies and project reports that include the delineated drainage area
- Record drawings and other plans for existing storm drains in the drainage area
- Utility information both above and below ground
- Specific Plans showing ultimate roadway improvements and designs

The City of Rialto and the City of Fontana share jurisdiction of Baseline Road from Maple west with Rialto controlling the north side and Fontana controlling the south side. HZ will coordinate with Fontana during research and approvals as necessary.

Existing City Maps and Data: HZ will review all existing reports, atlas maps, GIS maps, general plans, land use, topographic maps, facilities drawings, CAD drawings, as-built drawings and other data products for the storm drain system. The City has parcel level maps in GIS format that will provide for a land base for this project. Also available are street names, zoning, water and sewers. The established control will be consistent with the work performed during the field survey (Section 2.3).

Prior to Kicking off Field Survey. HZ team will review record information to confirm the limits of the design topography against possible utility relocations. We will also contact Dig-Alert to determine the presence of facilities along the proposed alignment so that such facilities are picked up by our survey crew.

2.2 Field Reconnaissance: There are numerous storm drains that have been recently constructed or existing systems that have not been identified in record studies. As we write this proposal the construction activity in the area continues to evolve. HZ shall work with City to field verify all existing 18-inch diameter and above storm drain facilities, including Caltrans and private systems, for which no recorded documentation is available. Per the RFP instruction HZ has limited this task to 20 hours.

2.3 Field Survey. Will be adequate to establish surface profiles over the proposed drainage structures, insure adequate depth of the system and to insure minimum grade on the storm drain. HZ survey will establish control and provide a design topography. Said topography shall extended from right-of-way to right-of-way at 100 foot intervals, capture all surface features, utilities, medians, manholes, power poles, guy wire ties, street light, signal poles, sidewalk, and ADA ramps. The survey crew shall provide field notes for each sewer manhole on Baseline Road (From Tamarind Avenue to Cactus Basins) and the up/downstream manhole. Field notes shall include direction of flow, invert, and manhole street level elevation. Field notes will also be provided for any other manholes on Baseline Road within the project area. HZ will request Dig-Alert to mark all existing utilities so that these are picked up by the design survey.

- The City maintains geographical data in California State Plane Coordinates, NAD83-Zone 6. Elevations are NAVD 88. We believe it should be Zone 5, the zone will be discussed and clarified prior to executing the work. Plan elevations must be consistent with adjacent storm drains and the Cactus Basin elevations. The design topography will be consistent with the required controlled prior to commencing the design. HZ will review record information and recommend a benchmark. The benchmark will be discussed with the City of Rialto and determined prior to executing the work.

Task 3: Hydrologic & Hydraulic Analysis (80%, 95%, and 100% Submittal)

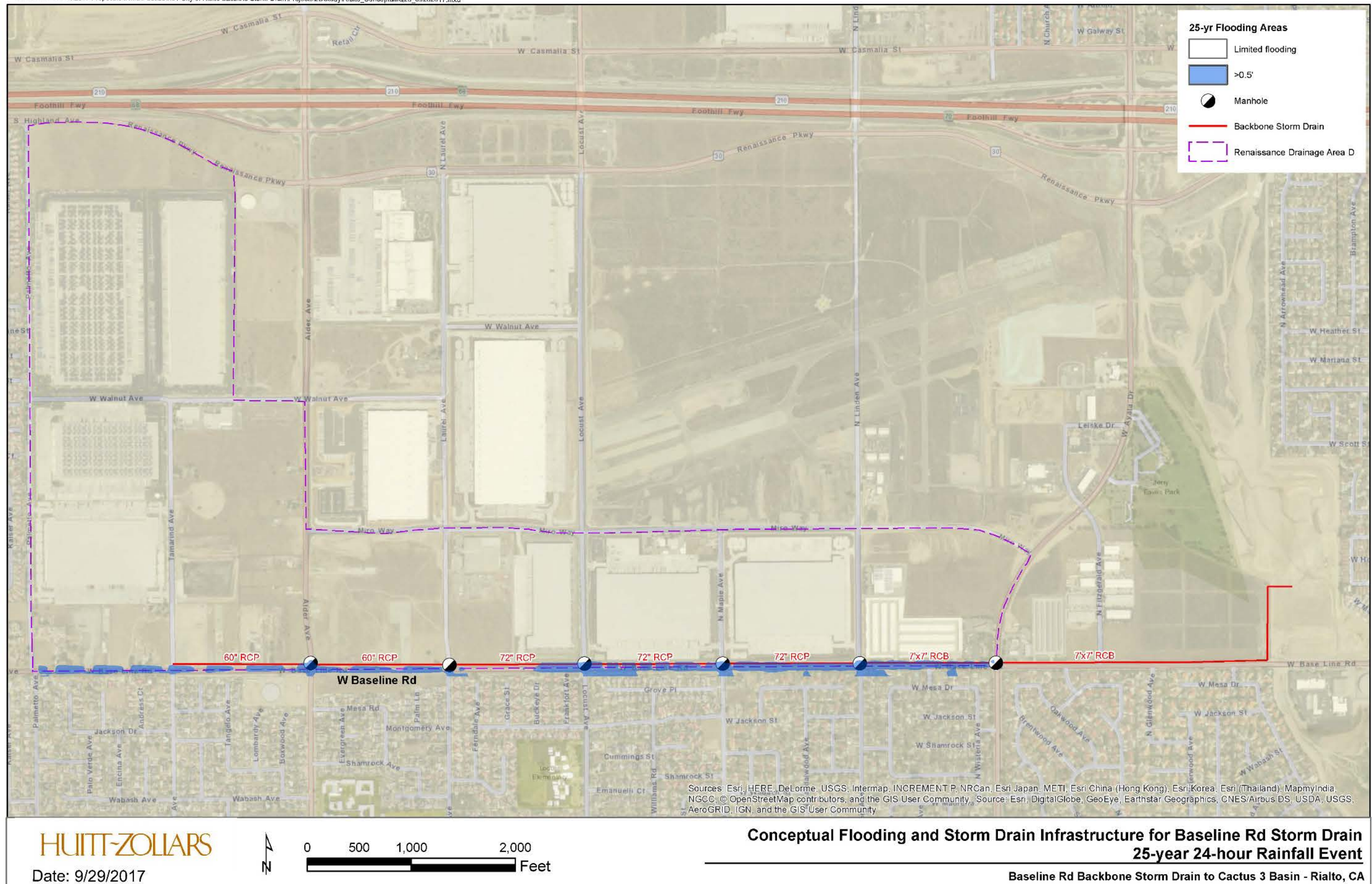
3.1 Hydrology: All applicable record data from the research phase shall be incorporated into the hydrology study. For drainage areas above 100 acres, we recommend that the unit hydrograph method be utilized. The study would arrive at more accurate and favorable runoff volumes for evaluation. If the City prefers a model that uses the modified rational method to arrive at runoff flows with the potential of generating high peak discharges and unrealistic flood volumes. HZ would also be able to generate that model. For purposes of this scope we are prepared to deliver one model. Design frequencies and all other work will be in conformance with the latest edition of the San Bernardino County Hydrology Manual standards and procedures. HZ will utilize the subarea drainage boundaries from the previous studies to the maximum extent possible. Further refinement may be needed where new storm drains have been constructed or development has changed the drainage boundaries. Upon completion of the subarea boundary delineation, HZ shall submit a hard copy to the City for review. HZ shall provide the City with a copy of the input data, digital GIS data showing node numbers, drainage boundaries and the output computer files. The hydrology maps should be in AutoCAD (current applicable version) and provided to the City at a scale of 1"=200'.

HZ will use 2005 USGS maps and existing record information to model the hydrology. We have ran a conservative model that assumes Area D, as provided in the Renaissance Specific Plan is 95% impervious, ignores local water quality basins, assumes Cactus basin is full, and constrains street depth to 4 inches. Our model (included on Page 14) calculates a runoff in Area D of approximately 650 cfs and estimates the need for a smaller RCP at the downstream reach. Our team will work with the City of Rialto to evolve this model. We would review record information (plans, hydrology, hydraulic, and water quality reports) and incorporate each development into the overall model in XPSWMM/TUFLOW. The proposed model would allow us to analyze different levels of protection. Per the RFP the City is interested in protecting against a 100-year storm and would like to understand the level of protection the system would offer when the Cactus Basin is full and outlet gate is closed. HZ would be able to run calculations once the model is formulated. The elevation of the spillway and the volume of water will make it difficult to protect against a 100-year storm.

The City of Rialto criteria recommends that the road be protected during a 25-year event. To truly understand the level of protection, the model would need to capture the expected water surface elevation at any given time. It is our assumption that the basin system H/H model will be made available by the County of San Bernardino Flood Control District and City of Rialto.

3.2 Hydraulic Analysis: The hydrology output will be used to design the storm drain system on Baseline Road (Line D). HZ will use the study to arrive at normal depth calculations to identify any deficiencies, areas of pressurized flow, and system constraints. We will model the system with a 100 year level of protection on a joint probability analysis against the basin to achieve an indication as to what storm frequency will be allowed to enter the system before the backflow device is activated. The alignment(s) will also be evaluated for right of way needs. The design of Line D will be optimized to improve the results where possible. HZ will formulate recommended facilities to address the flows along Baseline Road that are identified by the hydrology study. These facilities will also be evaluated for utility conflicts. Per the RFP, the Cactus Basin system is assumed to be appropriately sized for an estimated 958 cfs discharge from Line D and that the system will be complete to the proposed County design grades for the basin floor. Our results will be submitted to Brandon Cruz, with the Division of Safety of Dams, for concurrence and approval of an environmental permit.

3.3 System Alternative Analysis: HZ understands that the City would like to avoid the need for a storm drain easement through private property, but that the County is opposed to the storm drain entering the Cactus Basin system within the dam limits. This is a critical item that calls for a team with the experience to deal with the permitting issues that may be involved if the structural integrity of the dam is compromised. The knowledge to ask the right questions will allow HZ to move efficiently through issues that might delay a less experienced team. The easement required across the private property that will allow discharge at a point north of the dam structure for Basin #3 needs to be coordinated with the County. HZ will coordinate with SBCFC and review alignment alternatives against cost.



While the land along the westerly road of Basin 3 is currently vacant, there have been proposed developments in the past. The status of any planned future development could complicate the coordination for a required easement. The County has already taken an easement to daylight the road grade back to existing elevation adjacent to the Cactus Basin. That condition creates a flowline that sits below both properties. If the elevation of the road surrounding the basin directs all overflow to the spillway, away from the vacant property that flow path is not a requirement. Both properties would benefit from raising that area so that the land is more level with the road. Hence the proposed alignment would hug that edge condition against an existing easement and create a level condition that might be of benefit to the future development plan. For the County, leveling the area would improve the structural integrity of dam. Our design includes coordination and consideration for development alternatives that might impact the potential for a direct inlet from the development of this vacant land. Our survey topography will include a sliver 100 feet in width along the easterly edge of the vacant property. The design will extend to Tamarind Avenue, but it is understood that the actual construction documents may have lesser limits based on estimated costs. Ultimately, the storm drain will extend to Tamarind Avenue but the current budget will limit construction to an approximately \$2 to \$2.5 million dollars.

Consideration of the future westerly extensions of this drainage system to Tamarind Avenue and the impact on utilities/development and availability of space within the right of way for that extension is included in the scope for this design. Rights of way or easements required will be identified and noted in order for the City to secure them as the alignment develops and funds become available for additional construction.

Per our initial research we do not foresee the need for right of way and we strongly believe that the project may be built with two easements. Acquisition of right of way requirements would need to include Environmental Site Assessments Phase I and Appraisals. The tasks are included as budgetary options but we do not believe these are necessary.

Per the RFP the preferred alignment would be on the north side of Baseline Road. After all existing utility information has been incorporated into the design and the hydrology study has progressed to a point that the mainline size(s) are understood. HZ will review the possible alignments and take inventory of the pros and cons. The alignments will be presented to City staff for review and final selection. The selected alignment would be expected to be the least costly and disruptive alignment that adequately conveys the runoff and provides the greatest possible interception of street flow.



Task 4: Financial Analysis (80%, 95%, and 100% Submittal)

4.1 Cost Estimates: HZ will generate quantity takeoffs and an opinion of probable construction cost for all the proposed project improvements. Cost estimates shall include construction, engineering, inspection and administration costs as well as any significant right-of-way costs and a construction contingency. The Consultant shall tie the unit prices to a cost index (i.e. Engineering News Record's Construction Cost Index) so it is in a format that can be easily updated or revised. Bid prices from recent City projects will be reviewed to arrive at unit prices. The cost estimates will account for the entire system as designed. HZ will also provide an estimate for the portion of the system that can be developed within the current budgeted amount.

Task 5: Plans, Reports and Specifications (80%, 95%, and 100% Submittal)

5.1 Design Plans: HZ will prepare plans for the recommended drainage facilities with sizes, grades, hydraulic grade lines, interception points and inlet/outlet structures in conformance with County Flood Control conditions, City standards, and Geotechnical Recommendations. The conceptual plans will specifically consider the entire alignment for Line D from Cactus Basin outlet to Tamarind Avenue. Conceptual plans will include concepts of the required right of way or easement, alignment, and utility conflicts with sufficient detail to confirm that the alignment is feasible.

County of San Bernardino Review: HZ will prepare plans and reports for County review and approval. We anticipate that the County will require plans for the connection to Cactus Basin 3 and H/H reports.

State Department of Water Resources, Division of Safety of Dams Review: HZ has the experience necessary to coordinate with Brandon Cruz at DSOD. HZ will submit plans to DSOD for clearance/approval. The division will reject plans if they feel that the Dam stability is compromised and/or if the basin freeboard is impacted. Our team understands how the criteria applies to the design.

City of Fontana Review: HZ will coordinate with the City of Fontana to the extent necessary by the design.

We estimate a total of 24 sheets; 1 title sheet, 2 detail sheets, 4 landscape sheets and details, 11 plan and profile sheets, and 6 double stacked striping plans.

Traffic control plans for during construction activities will be deferred to the contractor and are hereby excluded from the scope and fee.

5.2 Utility Relocations: HZ will investigate any claims of prior rights that may impact affected utility companies and the storm drain improvements. Our team will work with the City to prepare plans for the relocation of conflicting sewer and water lines. During our site walk we noted a PETROLEUM marker on Locust Avenue, in cases where prior rights make relocation of third party utilities difficult, every effort will be made to avoid additional costs for relocation if an alternate storm drain alignment exist. Water and sewer relocation plans will be included with each submittal.

We anticipate that the water line located on the north side of Baseline Road that starts at Locust Avenue will be impacted. Our research shows potential crossings of sewer at seven street intersections.

We have included BUTSKO and C-Below as consultants to our team. HZ will take the lead on all research, we will use our experience to work around and possibly avoid third party coordination that might delay the construction schedule. However the size of the RCB and the visual inspection of Baseline Road leads us to believe that the presence of dry utilities will impact the design at six intersections. We believe we will be able to work around the dry utilities and are including an option that is budgetary for coordination of third party relocation shall it be necessary. If a third party utility requires relocation BUSTKO would assist with the coordination. The budget assumes coordination will be necessary at six intersections. It will be refined when more information is known.

We are anticipating a need of up to twenty five standard size (12"x12"x5' deep) potholes. These would be performed by our consultant C-Below. Each pothole would be sand filled and surface cold patched at completion. Fee for potholes outside of this standard will need to be adjusted accordingly. C-Below assumes that basic traffic control cones per the WATCH MANUAL will be sufficient and does not anticipate that a traffic control plan and permit will be required. HZ will coordinate and provide a pothole exhibit with required information to tie pothole locations.

We anticipate nine additional sheets; three for double stacked water line plans and six for sewer line. HZ has made every effort to define the design survey limits from record drawings in our possession. Our scope includes dipping one manhole and verifying its rim elevation in the north-south direction. We have assumed that record information will be available to design vertical relocations of sewer that may require additional length.

5.3 Water Quality Reports: The first water quality report, a Storm Water Pollution Prevention Plan (SWPPP) is required to address water quality via BMPs during construction. The project is required to submit a Notice of Intent (NOI), the SWPPP report will need to be prepared and uploaded to the SMARTS system during design so that a WDID number is issued. HZ will File the Notice of Intent, perform the risk assessment, certification statement, obtain a WDID#, and include an erosion control exhibit. Our team will assist the City with the SMARTS system. The contractor will assume responsibility of his construction site, maintenance responsibilities, and record keeping through his filing of the Notice of Termination (NOT) all QSP services. A digital file of the erosion control exhibit will be made available to the contractor's use/updating during construction.

A second water quality report, the Water Quality Management Plan (WQMP) will address water quality post-construction. The WQMP will include BMPs like:

- Catch Basin Stenciling
- Catch Basin Trash Baskets
- Street Sweeping
- Bio-Filtration Maintenance

5.4 Specifications: HZ will utilize the City of Rialto standard bid specifications and edit them to fit the project requirements and prepare a bid sheet showing the anticipated project quantities. Specifications will be in electronic format and print copies are not required.

Deliverables: Upon completion of all tasks, HZ will deliver plans, reports, and specifications. Our first submittal will be at 80% complete, HZ will review and address all City comments upon receipt. If clarification are necessary our project manager will coordinate with the City of Rialto to ensure each comment is addressed appropriately prior to re-submitting.

Our second submittal shall be considered 95% complete and the third and final submittal shall be considered 100% complete and ready for bidding. The selected alignment and size of facility shall be adequate for the hydrology/hydraulics of the proposed Line D master planned drain. Any necessary right of way or easements shall be adequately sized, described and obtained to allow for the construction to proceed. Any and all utilities shall be cleared from the necessary right of way allowing for the construction to proceed without conflict.

5.5 Legal Descriptions: Huitt-Zollars will prepare legal descriptions Exhibit 'A' and Exhibit 'B' for the anticipated drainage easements as well as provide necessary contact with the affected property owners in order to secure the required easements. It is assumed that there will be two easement documents required. Easements do not require appraisal the two parties may mutually agree to a value. If an appraisal is needed our team would need to include a consultant to assist with the process. The process is described below and added as an optional budgetary item.

Appraisal Budget: Right-of-way acquisition requires an appraisal and Environmental Site Assessment, an easement does not have this requirement. We are assuming our design will require two 15-20 foot wide easements for the connection of the RCB into Cactus Basin 3 and permission for construction. The easement and encroachment permit required from San Bernardino County Flood Control at the connection should not be difficult to secure because the connection is planned. The second easement and permission for construction of the RCB across Parcel 0264-213-18-0000 will be more sensitive to how it is handled. The RFP mentions the City has reviewed plans for possible development of this property. With this in mind, the existing owner is likely to enter into a value negotiation for the rights to an easement. In such a case an appraisal with highest and best use analysis would be performed on the property. The appraisal would additionally evaluate potential severance damages, special benefits and cost to cure. It will be important that this be resolved early in the project to prevent the potential for contradicting arguments made by the owner(s) and/or his/her representatives. HZ will acquire preliminary title reports with supporting documents for the affected parcel.

If necessary our team would distribute appraisal assignments, coordinate meetings, provide notice of intent to appraise, obtain appraisal, obtain appraisal review, and establish just compensation. The negotiation period and appraisal process is our critical path, it is our goal to help the city resolve it early. We have included a typical budget for appraisal of one parcel and we will recommend a consultant if this task is necessary.

Environmental Site Assessment (ESA) Phase 1: If the negotiation for an easement should become a condemnation for right-of-way rights, our geotechnical consultant would provide ESA Phase 1 for one site per the recommended budget.

Task 6: Develop GIS Database After 80% Submittal

6.1 GIS Input: HZ will integrate the proposed storm drain into the City's GIS database. This will be done for the entire system so that further projections or data manipulation will not be required.

Task 7: Construction Administration Services

7.1 Bid Support: HZ will be present at the mandatory bid conference and will provide timely bid support. Our team will respond to all requests for information or clarification during the bidding period. This will include all written response to RFI's and all questions that arise from the bidders during the bid period. The City shall be copied on all responses and may be contacted for clarification on specific requests from the bidders. HZ will work with the City in evaluating and recommending for award of construction contracts.

7.2 Construction Support: HZ will provide on-going technical and administrative support to the City from award of construction contracts through construction closeout. This includes attending a construction kickoff meeting and up to eight additional construction meetings. Utilizing the contractors redlined as-built plans, HZ will prepare a set of record plans for the City's records. The contractor shall assume full responsibility for executing construction tasks. HZ will promptly respond to requests for information, reviews, and coordination to keep task on schedule and on budget.

Section C Staff Qualifications

C.1 List the name and qualifications of the Project Manager that will be assigned to the Project.



Remi Candaele, MS, PE, QSD, will serve as Project Manager and is uniquely qualified based on the following achievements:

- 15,000-LF of storm drain infrastructure, flood control basins, and water quality BMPs designed and constructed for La Pata Avenue Gap Closure and Del Rio Extension project in Orange County;
- 2-dimensional flood modeling expertise that resulted in optimized (smaller) storm drain infrastructure for projects in Ventura County and San Bernardino County;
- Unique understanding of all San Bernardino County Flood Control facilities by performing geomorphic assessment and conceptual retrofit design of all flood control and park facilities through the development of the Watershed Action Plan;
- Recognized team leader in the industry, as the recipient of the 2016 Younger Civil Engineer award of the Western U.S. by ASCE.

C.2 Identify the total number of projects the Project Manager (assigned as a “Project Manager”) has successfully completed which involved approval of storm drain plans involving various stakeholders including San Bernardino County Flood Control District. Provide date completed, a description of the project, location, lead agency (include contact information).

Remi brings qualifying experience from the following completed projects:



Catawba Storm Drain Extension | City of Fontana, San Bernardino County

Client Information

Esmeralda Gomez | Project Manager
City of Fontana | 8353 Sierra Avenue | Fontana, CA 92335
909.350.6552 | ejgomez@fontana.org

Project Dates

2015-2017

The City of Fontana determined that there was a need to construct the master planned storm drain system to accommodate new industrial developments coming to the area. The City project required detailed hydrologic (AES) and hydraulic (WSPG) analyses of the tributary storm drainage area to verify and determine the appropriate pipe size for this storm drain extension. The tributary area consisted of approximately 172 acres of land that was partially developed with various commercial, industrial and residential uses.

Plans, specifications, estimates, and construction support were provided for the storm drain extension that required approximately 470 feet of an 8'x4' reinforced concrete box, 2200 feet of 66-inch reinforced concrete pipe (RCP), 560 feet of 42inchRCP, and 200 feet of 30" RCP as well as installation of catch basins and inlets and laterals for collection of the tributary street flows. The project also required the removal and relocation of approximately 1000 feet of an existing 8-inch sewer main to allow the sewer main to continue to service land area to the east. Huitt-Zollars performed surveying services during both design and construction phases.



Haven Avenue Storm Drain – City of Ontario

Client Information

Naiim Khoury | Engineering Department
City of Ontario | 303 E. "B" Street | Ontario, CA 91764
909.395.2152 | nkhoury@ontarioca.gov

Project Dates

2017

Huitt-Zollars developed a 2D XPSTORM flood model to model onsite flood propagation and optimize the location and sizing of the proposed storm drain infrastructure, identified in the 2012 Master Plan of Drainage for the City of Ontario. The model parameters were selected consistent with the SBC Hydrology Manual. The results supported the development of public and private storm drain plans submitted for a tract within the New Model Colony.



La Pata Avenue Gap Closure and Del Rio Extension – Orange County, San Clemente, and San Juan Capistrano

Client Information

Fiona Man | Resources and Development Management
County of Orange, OC Public Works
300 N. Flower Street | Santa Ana, CA 92702
714.647.3953 | fiona.man@ocpw.ocgov.com

Project Dates

2017

Huitt-Zollars prepared PS&E and right-of-way documents for the County's 3.7-mile-long, \$72 million La Pata Avenue Gap Closure and Widening project. Challenges were also associated with constructing deep drainage culverts, storm drainage systems and water quality basins, two cast in place bridge overcrossing and five 30-foot diameter steel multi-plate tunnel undercrossings.

The project includes construction/extension of 22 cross culverts beneath the future roadway and a substantial roadway storm drain infrastructure comprised of more than 15,000 linear feet of reinforced concrete pipe; ranging in size from 18 to 108 inches in diameter. The roadway storm drain infrastructure segregates roadway runoff from offsite drainage areas in order to facilitate treatment of roadway impervious surfaces. To meet Orange County criteria and NPDES requirements, a total of six combined basins (to address water quality, hydromodification, and detention) were included in the project to address pollutants of concern and meet LID requirements. Flood control requirements are met by providing additional peak flow detention storage (over ten acre-feet) in these basins.

HZ prepared a request for CLOMR/LOMR to update the limits of SFHA Zone A as Prima Deshecha crosses the roadway. The crossing was assessed based on HEC-RAS and WSPG hydraulic models. Although the culvert is expected to create a backwater condition during the 100-year event, the floodplain impact is minimal due to the incised nature and relatively steep profile of the existing channel. HZ prepared also a Location Hydraulic Study for Caltrans approval that concluded in low risk to life, natural and floodplain values for the crossing of Prima Deshecha Canada.



Arroyo Simi 2D Floodplain Mapping – Simi Valley, California

Client Information

Gene Strojek | Vice President
Landsea Holding Corporation
7525 Irvine Center Drive Suite 200 | Irvine, CA 92618
949.345.8080 | gstrojek@landsea.us

Project Dates

2016-2017

Huitt-Zollars was tasked to develop a 2D TUFLOW hydraulic model, along with a Technical Data Support Notebook, to support a CLOMR/LOMR over the southwest quadrant of the City. The model extents covered an area of 1.7 square miles and resulted in significant reduction of the flood hazard areas for more than 500 private parcels.

HZ coordinated with VCWPD to identify historical stage in the Arroyo Simi and historical records for several drainage features that were used to calibrate the 2D Model. Model inputs included the generation of unsteady flow hydrographs for each drainage feature using the latest NOAA Atlas 14 precipitation statistics and a full update of VCRat Rational Method model for the entire Arroyo Simi Watershed. Updates to the VCRat hydrologic model included using a newly calibrated rainfall-runoff relationships for the Arroyo Simi Watershed that better models runoff from pervious lands, as well as volumetric adjustment based on the hydrologic cycle embedded in the HSPF model for the Calleguas Creek Watershed. A 1D RAS model was developed for the Arroyo Simi and interfaced with the 2D Grid. All storm drains defined in the Citywide Storm Drain Inventory were incorporated as 1D features that connect with the 2D grid through overtopping manholes and street inlets.

The modeling efforts demonstrated that most flood control channels are adequately sized to convey the 1% AEP peak discharges and that the implementation of backbone storm drain lines along Los Angeles Avenue, Madera Road, and Simi Village Drive are no longer necessary.

The 2D TUFLOW model was developed and approved in close coordination with the City, VCWPD, BMT, and FEMA. A 3D animation was created to support education and community outreach efforts.

Currently, Remi is working for the City of Chino on the Pine Avenue Extension project whose proposed alignment runs through Prado Basin. The project includes extensive coordination with San Bernardino County Flood Control and the L.A. District of the ACOE to demonstrate that the storm drain and flood control channel improvements will not result in backwater effects in the basin.

C.3 Identify the total number of projects the Project Manager is currently engaged in which involve park or recreational design projects.

Remi is currently engaged in discussing the following with landscape architects:

- **Del Amo Neighborhood Park in Los Angeles County** - stakeholders are State Coastal Conservancy and Los Angeles County
- **Santiago Creek Arizona Crossing at Santiago Oaks Regional Park** – stakeholder is Orange County Parks
- **Oxnard Village Lot B & C Parks in Ventura County** – stakeholder is the City of Oxnard

C.4 Identify how many years the Project Manager has been currently employed with the Consultant's firm. Identify how many years the Project Manager has been previously employed with other firms, and identify the number and name of the other firms.

2015-Present	Huitt-Zollars
2008-2015	Michael Baker International (formerly RBF Consulting)
2006-2008	Center for Research in Water Resources
2005	Suez Environment

C.5 Identify how the Project Manager can or will have sufficient time to devote to the Project, given current and future time commitments, if the Consultant is selected.

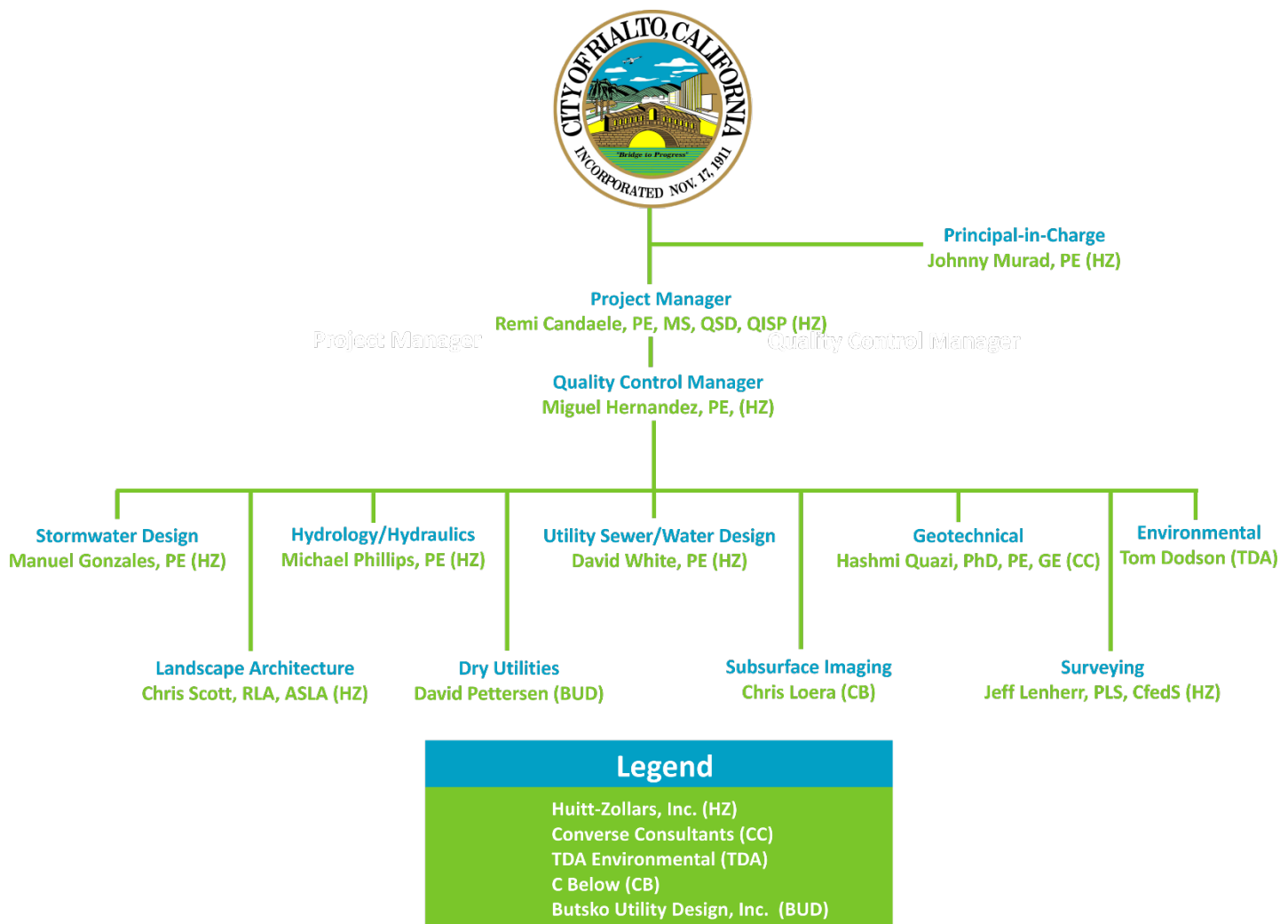
Remi Candaele anticipates completion of three support services for project assignments by the end of October 2017 and will be able to dedicate time and energy to this project. The three assignments include:

- **Pine Avenue Extension (City of Chino)** – 2D flood modeling; design of creek and culvert improvements
- **Riverside National Cemetery Phase 5 Extension** – design of storm drain and water quality infrastructure
- **Del Amo Neighborhood Park in Los Angeles County** – design of storm drain and water quality infrastructure

Organization Chart

Our organization chart adds a quality control manager so that there is redundancy in our reviews. This will also allow our Project Manager to be fully dedicated and available to the City's needs.

All team member companies have built their reputation of having working principals. The principals and professionals you see in the following resumes will be the same professionals you will see throughout the life of the project. Keeping the continuity of information and decisions made, through our professionals, is critical to the success of any project. The Huitt-Zollars' design team will be further supported by the current staff of over 500 professionals, committing our depth of resources to respond to this project.



Resumes

Remi Candaele, PE, MS, QSD, QISP | Project Manager

Remi Candaele brings extensive experience in numerous aspects of surface water management. His expertise include hydrology, hydromodification, and water quality modeling, Best Management Practice (BMP) design and performance, engineering economics, harvest-and-use, statistical analyses and comprehensive watershed strategic plans. Remi successfully developed stormwater implementation framework and conducted compliance inspections for multiple Phase I and II MS4 agencies. He is also recognized for his technical expertise, responsiveness, leadership, and strategic initiatives. Candaele has prepared numerous publications and conference proceedings covering his wide range technical knowledge. He served also as the technical leader of a national strategic initiative and led the development of the iWATR® tool, an integrated application for watershed restoration, harvest-and-reuse and/or water quality improvement.

Relevant Project Experience

Storm Drainage Master Plan, Buena Park, Buena Park, CA

As Lead Engineer, Candaele supervised the identification of 15 potential LID offset mitigation opportunities in the portion of San Gabriel River-Coyote Creek Watershed using the iWATR process. A programmatic framework was developed for the management of the water quality in urban runoff from future re-development within the City. Engineering services were also provided to prepare a citywide drainage master plan including field investigations, video surveys, storm drain mapping, hydrodynamic modeling, regulatory compliance analysis, BMP retrofit recommendations, geodatabase update, and master plan report preparation.

Runoff Management Plan, Rancho Mission Viejo, LLC, Rancho Mission Viejo, CA

Candaele served as Lead Water Quality Engineer for this 18-month review process of the extensive study for drainage, runoff mitigation, sedimentation, and water quality for the 23,000-acre Ranch Plan. The study used state-of-the-art modeling tools and assessment techniques for the San Juan Creek watershed. It focused on water quality regulations and BMPs, specific California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) requirements, water balance for the conservation of biological habitats, and state-of-the-art modeling practices. He also served as Co-lead Engineer for the comprehensive plan for Planning Area 2 that describes how to address water quality on the 500-acre site including source control activities, LID principles, BMP plans and details, water balance, maintenance and responsibilities, and consistency with the storm drain and flood control infrastructures.

Southgate Neighborhood Storm Drainage & Green Street Improvements, Palo Alto, CA

Candaele provided engineering service for this project. Services included identification and evaluation of optimal best management practice (BMP) locations; development of final plans, specifications, and cost estimates for green street elements; and public involvement participation.

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Key Skills

Project Management
Hydrology
Hydromodification
Water Quality Modeling
BMP Design & Performance
Engineering Economics
Watershed Strategic Plans
Statistical Analyses

Education

2008 Master of Science Civil Engineering, Environmental Water Resources, University of Texas at Austin
2006 Ingenieur, Generalist, École Centrale de Lille, France

Registration

Professional Civil Engineer
2011 / California No. 77517
Qualified SWPPP Practitioner (QSP)
2011 / California No. 20873
Qualified Industrial SWPPP Developer (QISP)
2016 / California No. 00554

Awards

2016 Young Civil Engineer in the Private Sector, Western U.S., American Society of Engineers
2017 Young Civil Engineer, Orange County, American Society of Engineers

Miguel Hernandez, PE, PLS, QSD | Deputy Project Manager/Quality Control

Miguel Hernandez has more than 20 years of experience in Public Works and is proficient with the design of streets, highways, sewer, water, storm drain, grading, hydrology and hydraulics. His experience combined with his ability to communicate will make him a valuable asset to a project. As a Project Manager he will be helpful in coordinating all design inclinations and finding the appropriate balance. When critical deadlines need to be met his proven ability to work under pressure will be invaluable.

Relevant Project Experience

Farragut Avenue Improvements, Moreno Valley, CA

Hernandez was the Project Manager for improvements that included sidewalk, curb, gutters, driveways, drainage, access ramps, utility adjustments, short property walls, missing street lights, pavement repairs, and accommodation of upgraded water line (built in advance by BSMWC) in order to enhance safety and accessibility for commuters and pedestrians on Farragut Avenue from Sherman Avenue to Ellsworth Street.

Steel Water Main Replacement, Moreno Valley, CA

Hernandez was the Project Manager for the replacement of an aging four-inch diameter steel water main. This project includes professional engineering services for the preparation of water line construction contract documents, complementing street improvement plans for Farragut Avenue.

Jeffrey Road/Portola Parkway Street Improvements, Irvine, CA

Hernandez was the Project Manager for the civil design and survey of a new alignment of 1.5 miles of Jeffrey Road and 1.0 mile of Portola Parkway. Work included roadway rehabilitation, electrical conduits, cable/telephone improvements, right-of-way engineering, potholing, and grading. Work also included preparation of infrastructure plans, including storm drain design, 72-inches to 10-inches in diameter over 10,000 feet of pipe, hydrology and hydraulic calculations, sewer plans, dry utilities, specifications, and construction cost estimates. Jeffrey Road and Portola Parkway were designed for a six-lane highway with raised medians, new curb and gutter to replace open ditch channels, pedestrian undercrossing.

Cerritos Avenue Gap Closure, Anaheim, CA

Hernandez was the Project Manager for this project located on Cerritos Avenue from Euclid Street to approximately 600 feet east of Euclid Street. The project constructed a five foot wide ADA compliant sidewalk and new storm drain laterals with catch basins. The work also included the construction of block walls and fences. The new sidewalk eliminates the need for pedestrians to walk along the side of the road. Cerritos is designated as a four lane secondary arterial by the County's Master Plan of Arterial Highways (MPAH) with average daily traffic of 9,400 vehicles per day. The project will provide a safer and better access for the school children and pedestrians in general. The services included right of way acquisition.

HUITT-ZOLIARS

Key Skills

Project Management
Street Improvements
Utility Improvements
Water Quality

Education

1996 Bachelor of Science,
Civil Engineering, Cal Poly San
Luis Obispo

Registration

Professional Engineer
1999 / California No. 61378

Professional Land Surveyor
2010 / California No. 8735

Qualified SWPPP Developer
California No. 22312

Johnny Murad, PE, QSD/P Principal-in-Charge

Johnny Murad brings more than 20 years of experience in civil engineering consulting and project management. He has assisted numerous public works clients in feasibility studies, preliminary construction cost estimates, earthwork estimates, plan check and permit fee estimates, conceptual project planning, final design, and construction administration. His ability to work with latest technology provides him with tools to carry out complex projects with ease and efficiency. His experience gives him a good understanding of project costing techniques and calculations, which can help keep the project cost at a minimum without losing efficiency and, thereby, help his clients stay within their planned project budget.

Relevant Project Experience**City of Rialto, Tract No. 16304, Rialto, CA**

Murad provided plan-checking services for the City of Rialto. Services included plan checking of public sewer, water, storm drain, and street improvement plans. He also checked hydrology/hydraulic calculations for the storm drain system and coordinated design of the project in accordance with City of Rialto standards.

Catawba Storm Drain Extension, Fontana, CA

Murad served as Project Manager and Design Engineer for the development of a detailed drainage study for the master planned Catawba Storm Drain facility. The project required a detailed analysis of the tributary storm drainage area to verify and determine the appropriate pipe size for this storm drain extension. The tributary area consisted of approximately 172 acres of land that was partially developed with various commercial, industrial, and residential uses. A hydrologic and hydraulic analysis was prepared and the pipe sizes for the storm drain system was verified. The storm drain extension required approximately 470 feet of an 8'x4' reinforced concrete box, 2,200 feet of 66-inch reinforced concrete pipe (RCP), 560 feet of 42-inch RCP, and 200 feet of 30' RCP as well as installation of catch basins and inlets and laterals for collection of the tributary street flows. The project also required the removal and relocation of approximately 1,000 feet of an existing 8-inch sewer main to continue to service land area to the east.

Ross, Walnut, and Magnolia Storm Drain & Road Widening Project, Chino, CA

Murad is serving as Project Manager and Design Engineer for the development of preliminary and final storm drain plans for the extension of a storm drain main in Ross Avenue, Walnut Avenue and Magnolia Avenue from Riverside Drive to the south side of Interstate 60 Freeway. The storm drain main will range from 36-inches to 66-inches in diameter. A preliminary and final drainage study to support the storm drain design will also be provided along with processing of the plan and report through the City of Chino for review and approval.

Eucalyptus Avenue Storm Drain Main Extension, Moreno Valley, CA

Murad served as Project Manager for the preparation and processing of a 66-inch storm drain main (RCFC&WCD Line F-16) in Eucalyptus Avenue, from Redlands Boulevard to approximately 2000 feet west. The project included coordination between the city of Moreno Valley and the Riverside County Flood Control and Water Conservation District.

HUITT-ZOLLARS**Key Skills**

Water Main Design
Storm Drain Design
Sewer Design
Project Management

Education

1999 Bachelor of Science,
Civil Engineering, California
State Polytechnic University.
Pomona

Registration

Professional Civil Engineer
2005 / California No. 67512

Qualified SWPPP Practitioner
and Developer (QSD/P)

David White, PE, QSD | Utility/Sewer/Water Design

David White has over 25 years of civil engineering experience, this includes over 6 years at Huitt-Zollars. His responsibility as a lead utility designer for the City of Rialto Baseline Road Storm Drain Project will focus on utility relocations. He will be instrumental in keeping the storm drain design honest so that utility relocations that may be avoided are given priority. He will lead the effort in coordinating the design for sewer and water relocations. He will also have a role in interacting with the dry utility consultant, BUTSKO. His experience will be critical to anticipating issues, keeping the project design on schedule, and the level of quality high. He is proficient with AutoCAD, WSPG, and sewer/water modeling he will be personally involved in the day to day design of the project. He will interact with other leads in the project and insure that his workflow is directed to the project manager.

Relevant Project Experience**Ross, Walnut, and Magnolia Storm Drain & Road Widening Project, Chino, CA**

White is providing design and plan production support for this project requiring development of storm drain improvement plans for the extension of approximately 4,000 linear feet of storm drain along Ross, Walnut, and Magnolia and widening of approximately 600 feet of roadways along Magnolia Avenue.

Francis Street Storm Drain & Street Rehabilitation, Ontario, CA

White served as Project Engineer for a \$6.5 million, 1.5-mile regional storm drain and street improvement project. The project included storm drain alignment studies, evaluation of existing storm drain capacities and combining them with new facilities, confluence analysis with the West Cucamonga Creek Channel, utility relocations, right-of-way engineering, street widening, signing and striping, traffic control plans, and other related design issues.

Holt Boulevard and Grove Avenue Storm Drain & Grade Separation Widening, Ontario, CA

White served as Design Engineer for widening Grove Avenue from four to six lanes under an existing railroad overpass. He also provided design for intersection and street widening improvements on Holt Boulevard. His responsibilities included street and storm drain design and cost estimating.

Chino Ranch, Chino, CA

As Project Manager, White was responsible for preparation of on-site and off-site improvement plans for a two-phase, 23-acre, 33-building, light industrial park. He prepared design for street, sewer, water, storm drain, traffic signal, signing and striping, street light, and precise grading plans.

Piemonte, Ontario, CA

White served as Project Engineer for preparation of the infrastructure plans for this 100-acre, multi-use land development projects. Design included 6,900 feet of new streets, 8,100 feet of new water mains, 4,500 feet of new sewer mains, 5,100 feet of storm drain, and 12,500 feet of new reclaimed water mains – 5,900 feet of which was installed within existing high traffic streets.

HUITT-ZOLLARS**Key Skills**

Project Management
Plan Preparation of Street,
Sewer, Water, and Storm Drain
Improvements

Education

1991 Bachelor of Science,
Civil Engineering, California
State Polytechnic University,
Pomona

Registration

Professional Civil Engineer:
1994 / California No. 52921

Manuel Gonzales, PE | Storm Drain Design

Manny Gonzales has more than 20 years of experience in civil engineering design and 15 years of project management and supervision experience. His work has involved the private and public sectors of the industry, including public works, residential, commercial, and industrial developments. His experience includes design, preparation, management and coordination of plans for water, sewer, street, street rehabilitation, grading and storm drain improvement plans.

Relevant Project Experience

Rancho Tierra, Street, Sewer, Water, & Storm Drain Improvements, Victorville, CA

Gonzales was the Project Manager responsible for overseeing the management of this project. Project entailed preparation of plans for street, sewer, water, and storm drain improvements. This project involved coordination with several utility companies and federal agencies, including the Los Angeles Department of Water and Power and the Department of Fish & Wildlife. The project site is extremely mountainous and required a very creative and technically efficient design.

Terra Bella, Street, Sewer, Water, & Storm Drain Improvements, Menifee, CA

Gonzales was the Project Principal responsible for overseeing the management of this project. Project included preparation of improvement plans for street, sewer, water, and storm drain systems. This project involved design of three water quality basin/ponds and the preparation of a SWPPP and Water Quality Management Plan.

Goodman Commerce Center, City of Eastvale, CA

Gonzales was responsible for design and management of a 200-acre mix-used master plan that included two one-million square foot industrial buildings, 24 acre business park, 45 acre commercial center, and 40-acre medical center. Significant infrastructure was designed, including three miles of roadway, one mile of sewer, one mile of flood control storm drain, and one mile of water improvements. The street improvements included one mile of street rehabilitation consisting of repaving, curb, sidewalk, ADA ramps, and curb and gutter.

Project Manager, Boulder Springs, Riverside County, CA

Gonzales was responsible for design and management of a 60-lot subdivision that included preparation of improvement plans for street, sewer, water, storm drain, rough grading, precise grading, fence and wall plans, structural wall calculations, and Final Tract Map.

Project Manager, Fontana 99, City Of Fontana, CA

Gonzales was responsible for design and management of a 49-lot subdivision that included preparation of improvement plans for street, sewer, storm drain, rough grading, precise grading, fence and wall plans and Final Tract Map. This project involved the design of a combined water quality basin and detention basin with an innovative Dry Well chamber for maximum water filtration and infiltration.

HUITT-ZOLLARS

Key Skills

Project Management
Plan Preparation of Street,
Sewer, Water, and Storm Drain
Improvements

Education

1995 Bachelor of Science,
Civil Engineering, University of
California, Irvine

Registration

Professional Civil Engineer:
2003 / California No. 65195

Qualified Storm Water
Pollution Prevention Plan
Developer
2011/ No. 21126

Michael Phillips, PE | Hydrology/Hydraulics

Michael Phillips has experience in many aspects of surface water management. He has performed studies, calculations and produced reports on topics such as hydrology, hydraulics, hydromodification, water quality management and BMP design. He is also familiar with many surface water management software such as HEC-HMS, HEC-RAS, FlowMaster, AES, WSPGW, HY-8 and SMS TUFLOW.

Relevant Project Experience**The Westerly, 2D Flood Study for FEMA Flood Map Revision, Simi Valley, CA**

Worked to develop a technical study notebook in support of a FEMA Conditional Letter of Map Revision (CLOMR) in order to remove the project site from the flood plain. To support the technical study document Phillips worked to develop and refine a 2D flood model using the SMS TUFLOW modeling program. Worked with the City and local flood control agency to best understand the watershed surrounding the project so that the hydrology and flooding characteristics of the project watershed was accurately depicted in the model. The results of the technical study and flooding model showed the site was no longer in the flood plain. The content of the overall technical study was reviewed by FEMA and approved. The approval by FEMA was the first approval of such a model on the west coast.

Haven Avenue Storm Drain, 2D Modeling, Ontario, CA

Developed a 2D XPSTORM flood model to determine onsite flood propagation and optimize the location and sizing of the proposed storm drain infrastructure, identified in the 2012 Master Plan of Drainage for the City of Ontario. The model parameters were selected consistent with the SBC Hydrology Manual. The results supported the development of public and private storm drain plans submitted for a tract within the New Model Colony.

Oxnard Village, Interior Drainage Study, Oxnard, CA

Staff Engineer in charge of the joint flood probability analysis for the Oxnard Village currently protected by the Santa Clara River levees. Exterior exceedance probability stages in the Santa Clara River were derived from historical streamflow records and a 1D HEC-RAS model. A total of 72 scenarios were run using a calibrated 2D TUFLOW flood model to derive interior ponding stages. Onsite storm drain improvements were designed based on the resulting coincident ponding curve to provide a 1% AEP level of protection.

Hydraulic Report for Pine Avenue Extension, Chino, CA

Performed multiple hydrology and hydraulic analyses to demonstrate that the proposed alignment of the Pine Avenue extension would not result in negative impacts on flooding and natural habitat, and that all bridges and culverts are designed to meet both Caltrans and the San Bernardino County hydraulic design criteria. Prepared a Location Hydraulic Report for submittal to Caltrans. Developed hydraulic models of both Chino Creek and Cypress Channel to evaluate the water surface elevation in the culverts and the impacts of the impoundments. Produced a memorandum for submittal to USACOE to demonstrate that the embankments and improved crossings will result in no adverse hydraulic impacts from the existing condition, and will allow water to backflow in the reservoir without impediment.

HUITT-ZOLLARS**Key Skills**

Hydrology
Hydromodification
Water Quality Modeling
BMP Design & Performance

Education

2014 Bachelor of Science,
Civil Engineering, California
State Polytechnical University -
Pomona

Registration

Professional Civil Engineer:
2017 / California No. 87909

Chris Scott, RLA, ASLA, CNU-A | Landscape Architecture

Chris Scott is the Team Leader for Planning and Landscape Architecture for Huitt-Zollars. He has more than 22 years of experience with master planning, design, construction and administration for regional, community, neighborhood and specialty parks, which include athletics, aquatic, cultural and environmental parks. Details of his experience include master planning parks, hike and bike trail systems, streetscapes and right-of-way beautification from a few acres to several hundred acres. Site specific design includes restroom and concession facilities, parking facilities, public gathering pavilions, picnic pavilions, overlooks, amphitheaters, entry monumentation, community and recreational aquatic centers, splash parks, age appropriate playground facilities, athletic fields, hike and bike trails, soft surface trails, open space amenities, sport courts, screening walls, ponds and ornamental fountains. Scott has also managed, bid, administered and observed project construction for parks and recreation projects.

Relevant Project Experience

Irvine Regional Park 50% Design for Storm Water BMPs – Orange County, CA

Scott served as Sr. Landscape Architect for Drainage Improvement Studies and Plans of the Irvine Regional Park. Improvements include Infiltration BMPs and biofiltration BMPs to remove pollutants from the OC Zoo and from the adjacent SR-241. Multi-benefit basins include flow diversion and detention structures that mitigate existing flooding at the Zoo. HZ prepared hydrology studies, flood routing alternatives, and 50% Drainage Improvement Plans and Estimates in support of the Zoo GDP. Scott specifically prepared planting plans and detail sheets that include palettes of drought-tolerant plants consistent with the Parks' GDP.

The Landing – Oxnard, CA

Scott served as Sr. Landscape Architect for the preparation of construction plans, including planting plans, hardscape plans, irrigation plans monument signage, and directional signage for the main access roadway for a 14 acre neighborhood shopping center.

Dallas Love Field, Mockingbird Lane & Denton Drive Landscape, City of Dallas – Dallas, TX

Scott served as Project Manager for the preparation of conceptual designs, design development, construction documents, and construction administration/observation for the Dallas Love Field Airport entry at Mockingbird Lane and Denton Drive. The landscape project is designed with a high-efficiency irrigation system that is tied to the Dallas Love Field master irrigation system. Tasks included conceptual designs, demolition plans, grading and drainage plans, dimensional control plans, material plans, structural detailing, electrical plans planting plans, irrigation plans, irrigation and planting details.

HUITT-ZOLLARS

Key Skills

Master Planning Parks
Hike & Bike Trail Systems
Streetscapes
Right-of-Way Beautification
Parking facilities
Pavilions
Open Space Amenities
Aquatic Centers

Education

1992 Bachelor of Landscape
Architecture, Texas Tech
University

Registration

Registered Landscape Architect
2007 / California No. 5316

Registered Landscape Architect
1999 / Texas No. 1976

Registered Landscape Architect
2006 / New Mexico No. 398

Registered Landscape Architect
2007 / Washington No. 1065

Registered Landscape Architect
2011 / Colorado No. 904

Jeff Lenherr, PLS, CfedS | Surveying

Jeff Lenherr is a Licensed Land Surveyor in California and Washington State. He is also one of a select few Land Surveyors in the United States to hold a Certified Federal Surveyor Certificate. He owned and operated his own Land Surveying Company for 15 years prior to joining Huitt-Zollars in September 2014. He has the experience to take a project from start to finish with minimal oversight, resulting in lower costs and on-time deliveries. He has extensive experience in map preparation and review, geodetic control, right-of-way mapping, topographic mapping, lot line adjustments, subdivisions, legal description preparation, construction staking, Global Positioning Systems, and field procedures.

Relevant Project Experience**Orange County Parks Wagon Wheel Creek Topographic Mapping On-Call, Orange County, CA**

Lenherr is the Project Manager for this on-call project which consists of topographic mapping of the creek channel, slopes, areas of erosion and trees for approximately 9,500'. The final delivery was topographic mapping overlaid on and aerial photograph. Large areas of erosion existed on this project.

Mapping and Topographic Surveys – Various Locations

Lenherr has provided mapping on hundreds of projects ranging from existing roadways, large vacant parcels, commercial parcels, correction centers, small residential parcels, utility location, cross sectioning of major rivers and mapping of numerous rivers and creeks. He has performed the field work and office work to take many projects from start to finish.

Los Angeles County Sanitation – Puente Hills Landfill Creek Mapping

Lenherr served as the Project Manager for the topographic mapping of a concrete spillway in which the outfall was causing major erosion to the banks of the creek. The creek slope were vertical and ranged in height from 5 feet to 20 feet. The project consisted of mapping the creek bed, adjacent toes of slopes, top of slopes and 50 feet beyond the top of slope. The project was approximately 500' in length.

State Route 22, Garden Grove Freeway, CA – Orange County Transportation Authority

Lenherr is the Project Manager for this on-call project, which consists of boundary surveys, boundary analysis, determination of existing freeway right-of-way lines and adjacent property lines, preparation of appraisal maps and right-of-way mapping, legal descriptions for right-of-way acquisition and the preparation of Records of Survey for that portion of the Garden Grove Freeway from Lewis Street to Main Street (approximately 2 miles).

HUITT-ZOLLARS**Key Skills**

Certified Federal Surveyor
Map Preparation & Overview
Geodetic Control
Right-of-Way Mapping
Topographic mapping
Legal Description Preparation
Construction Staking

Registration

Professional Land Surveyor
2006 / California No. 9305
1999 / Washington No. 35977
Certified Federal Surveyor
2014 / No. 1615

David Pettersen | Dry Utilities

David Pettersen has 35 years of experience in the utility industry providing project management, planning, and gas and electric system design for a wide variety of utility projects.

Relevant Experience

Electric, Gas, and Telecommunications System Design – Various Locations

Pettersen manages design and engineering services for electric, gas, and telecommunications systems for the following:

Developers	Builders
Master Planned Communities	Commercial & Industrial Centers
Residential Subdivisions	Residential Developments
Electric Substations Site Design	Golf Courses
Cities	Municipal Improvement Projects
Redevelopment Agencies	Municipal- & Investor-Owned Utilities

California Building Industry Association

Pettersen provides technical expertise for the California Building Industry Association on a variety of utility related issues, including CPUC proceedings and legislative matters.

San Diego Gas & Electric Regulatory & Legislative Issues

Pettersen represented SDG&E on regulatory and legislative issues as a Project Principal and Project Management Supervisor.

San Diego Gas & Electric Regulatory & Legislative Issues

Pettersen chaired SDG&E's Rule Application Committee, which was responsible for interpreting SDG&E's extension rules, tariffs, and establishing company policy.

San Diego Gas & Electric Statewide

Pettersen represented SDG&E statewide in the California Public Utilities Commission's extension rule proceedings.

San Diego Gas & Electric Various Assignments

Pettersen managed special assignments including distribution system design training, staffing, cost of services studies, and tariff and regulatory applications while at SDG&E.



Key Skills

Project Management
Gas & Electric System Design
Telecommunications Systems

Education

University of Redlands -
California, Bachelor of Science
in Business and Management

University of Wisconsin,
Certificate in Substation Design
and Engineering

Mt. San Jacinto College -
California, Certificate in
Facilities Electrical Systems

SKM Power Tools for Windows
- Standard & Advanced Courses

T²G Technical Training Group -
Power System Engineering
Course

T²G Technical Training Group –
Arc Flash Hazard Analysis I & II
Course

Hashmi Quazi, PhD, PE, GE | Geotechnical Engineering

Dr. Quazi has over 29 years of experience providing geotechnical engineering services and has earned a reputation for providing quality work in an honest and ethical manner, on time and within budget. Dr. Quazi is also responsible for the operation and management of our offices in Redlands, Monrovia, Temecula, and Costa Mesa.

Relevant Experience**Riverside Various Public Works Projects, Riverside, CA**

Principal in Charge. Provides technical and budget oversight, resource allocation and contract management for the project which consists of providing on-call geotechnical services at various locations. These projects include arterial street maintenance of Magnolia Avenue, Trautwein & Cole Avenues intersection, Palmyrita Avenue, Brockton Street, Minor Street, Shelby and Garfield Street intersection. The projects also include storm drain maintenance of Victoria and Myers Storm Drain and Cole Avenue Storm Drain.

Ramona Ave. Storm Drain & Pavement Rehabilitation, Rancho Cucamonga, CA

Principal in Charge. Provided technical and budget oversight, resource allocation and contract management for the project which involved geotechnical observation and material testing during the construction phase. The project was located on Ramona Avenue in the City of Rancho Cucamonga, California from Foothill Boulevard to South of Pacific Electric Trail. The project included the installation of approximately 1,000 linear feet of 60-inch reinforced concrete pipeline, construction of three (3) manhole structures, installation of two (2) laterals and catch basins, as well as a junction structure. After the completion of the storm drain the street pavement was restored.

Foothill Boulevard Phase I, Fontana, CA

Principal in Charge. Provided technical oversight and budget control for the geotechnical observation and testing, and materials testing and inspection services for the project, which consisted of street, sewer, storm drain and traffic signal modifications on Foothill Boulevard between Ilex Avenue and Cherry Avenue in the city of Fontana, California.

County Line Channel Storm Drain Connection Project, Ontario, CA

Principal in Charge. Provided technical oversight and budget control for geotechnical observation, materials testing and inspection. The project consisted of 14 storm drain connections to the existing County Line Channel, along Bellgrave Avenue in Ontario, California. The improvements included pipes ranging in diameter from 24 to 54 inches, as well as associated inlet and outlet structures. Several locations will require repairs to existing pavement.

**Key Skills**

Geotechnical Engineering

Education

1987 Ph.D., Civil Engineering,
University of Arizona

1982 M.S., Civil Engineering,
Arizona State University

1978 B.S., Bangladesh
Engineering University

Registration

Professional Civil Engineer
California No. 46651

Professional Geotechnical
Engineer
California No. 2517

Chris Loera | Subsurface Imaging

Chris Loera plans, organizes, directs, and controls the activities of the Operations function of the division. Responsible for the performance of all Department functions including Research and Development, Material Management, Order Services, Engineering and Surveying.

Relevant Experience**KPFF- Rancho Los Amigos National Rehabilitation Center, Downey, CA**

Loera was the Chief Operating Officer / Project Manager that oversaw all operations of utility investigation of the entire campus. Services included utility locating via GPR and Electromagnetic locating, site surveying, CAD work, and Potholing

Port of Long Beach (On-Call), Long Beach, CA

Loera was the Chief Operating Officer / Project Manager that supervised all operations to ensure high quality control and accuracy. Services included vacuum potholing, traffic control, permanent or temporary restoration of potholes, utility location, and trenches.

Cole Avenue Storm Drain Utility Investigation, Riverside, CA

Loera was the Chief Operating Officer / Project Manager that supervised all operations to assure they were conducted and completed as directed by the City of Riverside. Services included utility locating via GPR, Electromagnetic locating, ram rod locating, potholing via vacuum excavation, and Surveying/CAD work, CCTV Pipe Inspection

Durfee Avenue Potholing, Pico Rivera, CA

Loera was the Chief Operating Officer / Project Manager that supervised all operations to ensure the highest quality control and accuracy. Services included vacuum excavation of 50 locations.

**Key Skills**

Project Management
Research & Development
Material Management
Order Services

Education

East L.A. Skills Center
Construction Inspection

Certifications

Ground Penetrating Radar
Technician- Level III
Utility Locator- Level III

Tom Dodson | Environmental

Tom Dodson has more than 40 years of experience in land use planning, and environmental and resource management, with special expertise in CEQA, NEPA, regulatory compliance, expert witness testimony and communication/facilitation for resolution of environmental issues. He prepares environmental documentation for a broad variety of projects and acts as a resource person in working with clients, governmental agencies, and decision-makers in finding solutions to complex problems. He negotiates with regulators at the federal, state and local level, and designs formal presentations to committees.

Relevant Experience**San Bernardino County Local Agency Formation Commission**

Beginning in 1989 Tom Dodson & Associates became the sole environmental consultant for the San Bernardino County Local Agency Formation Commission (SBCLAFCO). For the past 13 years, Tom Dodson has served as the individual overseeing and coordinating all environmental determinations for the SBCLAFCO. This has included review of all reorganizations, annexation, detachments, incorporations and other actions by the Commission. Over 400 CEQA determinations have been overseen by Tom Dodson on behalf of and in coordination with the SBCLAFCO staff.

Negotiation of Stream Alteration Agreements and Section 404 Permits

Since 1988 Dodson has been involved in more than 20 projects that required acquisition of Stream Alteration Agreements from the State Department of Fish and Wildlife and Section 404 Permits from the U.S. Army Corps of Engineers. This includes several permits in Big Bear Valley, along the Santa Ana River and its tributaries, and southern California in general.

Burlington Northern Santa Fe Projects

For the past 25 years, Dodson has conducted environmental assessments and provided regulatory consulting support for more than 20 projects with BNSF. This includes projects in San Diego, Orange, Los Angeles, and San Bernardino Counties and the Central Valley of California. Projects have ranged from track improvements to new facilities for maintenance of train equipment, to extensive double and triple tracking of existing rail corridors in the San Joaquin Valley and in Los Angeles. Detailed environmental documents (Categorical and Statutory Exemptions; Negative Declarations; and Program Environmental Impact Report) and regulatory consulting responsibilities (endangered species, regulatory permits for discharge of fill, and biological and cultural resources surveys

City of San Bernardino, Various CEQA/NEPA Documents

Over the past four years, TDA has prepared environmental documents to comply with both the California Environmental Quality Act and National Environmental Policy Act for a variety of City projects. These projects include: Orange Show Road Extension, involving two bridges, one over Twin Creek and the other over the Santa Ana River; the downtown movie theater sponsored by the City Economic Development Agency (EDA); installation of sewer lines along Cajon Boulevard for the City EDA; and most recently, several demolition projects, also initiated and carried out by the EDA. All of these documents have been successful in accomplishing full compliance with both CEQA and NEPA and other regulatory requirements, such as Corps of Engineers and endangered species permits.

**Key Skills**

Land Use Planning
Environmental & Resource Management
CEQA & NEPA Regulatory Compliance
Expert Witness Testimony

Education

1973 M.A., Geography,
University of California,
Berkeley

1968 B.A., Geography,
University of California
Berkeley

Affiliations

Association of Environmental Professionals

San Bernardino Area Chamber of Commerce

University of California at Berkeley Alumni Association

Section D Firm Qualifications

D.1 List the firm's complete name, type of firm (individual, partnership, corporation or other), telephone number, FAX number, contact person and E-mail address. If a corporation, indicate the state in which the corporation was organized.

HUITT-ZOLLARS

Company Name

Huitt-Zollars, Inc.

Type of Firm

Corporation

State of Incorporation

Texas

Contact Person

Johnny Murad, PE
Principal-in-Charge
(p) 909.941.7799
(f) 909.941.7789
jmurad@huitt-zollars.com



Mission Statement

“Our *commitment* is to understand the needs of our clients and to meet those needs by delivering professional services with the highest level of *quality* and *integrity*.”

D.2 List the name and title of the firm's principal officers with the authority to bind your company in a contractual agreement.

Johnny Murad, PE, Vice President, has the authority to bind our firm in a contractual agreement for this project. In addition, our following California principal officers also have the authority to bind our firm in contractual agreements:

- Marc Haslinger, PE, Vice President
- Kevin Carter, PE, Vice President
- Dan Ortega, RA, Vice President
- Jim Pope, RA, Vice President

- D.3 List the firm's specific and relevant experience with storm drain design projects. Specifically those projects that involved providing drains in developed rights of way and coordination with County level districts. Detailed project information, including dates project started and completed, local agency contact information, local agency Project Manager, and other appropriate supporting information shall be provided.

Catawba Storm Drain Extension | Fontana, California

CLIENT INFORMATION

Esmeralda Gomez
Project Manager
City of Fontana
8353 Sierra Avenue
Fontana, CA 92335
909.350.6552
ejgomez@fontana.org

PROJECT DATES

2015-2017

RELEVANCE

Storm Drain Extension, Hydrologic and Hydraulic Analysis 470 feet of an 8'x4' Reinforced Concrete Box, 2200 feet of 66-inch RCP, 560 feet of 42-inch RCP, and 200 feet of 30" RCP, Catch Basin, Inlet & Lateral Installation, Removal & Relocation of Sewer Main



The City determined that there was a need to put in place the master planned storm drain system to accommodate new industrial developments coming to the area. The project required a detailed analysis of the tributary storm drainage area to verify and determine the appropriate pipe size for this storm drain extension. The tributary area consisted of approximately 172 acres of land that was partially developed with various commercial, industrial and residential uses. A hydrologic and hydraulic analysis was prepared and the pipe sizes for the storm drain system were verified. The storm drain extension required approximately 470 feet of an 8'x4' reinforced concrete box, 2200 feet of 66-inch reinforced concrete pipe (RCP), 560 feet of 42-inch RCP, and 200 feet of 30" RCP as well as installation of catch basins and inlets and laterals for collection of the tributary street flows. The project also required the removal and relocation of approximately 1000 feet of an existing 8-inch sewer main to allow the sewer main to continue to service land area to the east.

CLIENT INFORMATION

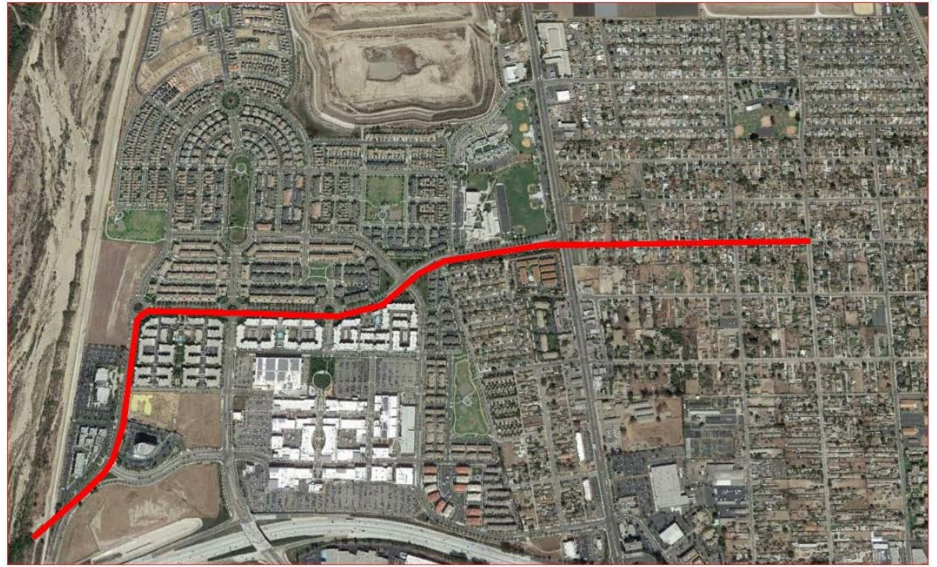
Tony Talamante
 Talamante Project Delivery
 (formerly with Shea Homes)
 310 Loire Valley Drive
 Simi Valley, CA 93065
 805.217.5453
 Tony.talamante@gmail.com

PROJECT DATES

2004-2007

RELEVANCE

Hydrologic Study of Regional
 Drainage Facility, Design of Capital
 Drain Facility, Regional Detention
 Basin Design



This project consisted of 8,500 linear feet or 10x10 box, partially in the City of Oxnard and unincorporated Ventura County Plans prepared and processed through VCWPD.

Cactus Avenue and Brodiaea Avenue Storm Drain Main Extension Project | City of Moreno Valley / Riverside County Flood Control & Water Conservation District

CLIENT INFORMATION

Vince Giron
 City Project Manager/Plan Review
 Associate Engineer • Engineering
 City of Moreno Valley
 14177 Frederick Street
 Moreno Valley, CA 92553
 951.413.3107
 vinceg@moval.org

PROJECT DATES

2006-2012

RELEVANCE

Hydrologic Study of Tributary
 Drainage Area, Mainline Storm Drain
 Design, Regional Detention Basin
 Design

As part of the planning process for a 200-acre industrial logistics park development, Huitt-Zollars prepared a regional drainage analysis and improvement plans for the Cactus Avenue and Brodiaea Avenue Storm Drain Main Extension Projects. The project tributary drainage area is bound by Alessandro Boulevard to the north, Frederick Street to the west, Heacock Street to the east, and Cactus Avenue to the south. We prepared the preliminary and final drainage analysis based on tributary drainage areas and sized the storm drain systems accordingly. The project also included two regional detention basins to help detain runoff from the area and reduce the impact on the downstream storm drain infrastructure. The drainage study and plans were coordinated through the City of Moreno Valley as well as the Riverside County Flood Control and Water Conservation District. Construction Administration was also provided through the duration of the project and record plans were prepared based on the contractor's redlined as-built plans.

Eucalyptus Avenue Storm Drain Main Extension | City of Moreno Valley, CA / Riverside County Flood Control & Water Conservation District

CLIENT INFORMATION

Vince Giron
City Project Manager/Plan Review
Associate Engineer • Engineering
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553
951.413.3107
vinceg@moval.org

PROJECT DATES

2011-2014

RELEVANCE

Extension of 72" Regional Storm
Drain Main

Huitt-Zollars prepared the preliminary and final drainage study and improvement plans for the Eucalyptus Avenue Storm Drain Main Extension in the City of Moreno Valley, CA. The storm drain extension was planned and designed for the development of an industrial warehouse development located north of Eucalyptus Avenue, west of Redlands Boulevard and south of the 60 Freeway. The project included extension of a 72" storm drain main from an existing drainage channel along Redlands Boulevard to Eucalyptus Avenue and westerly in Eucalyptus Avenue to the planned development. Coordination was required through City of Moreno Valley as well as Riverside County Flood Control & Water Conservation District for plan review and approval. Construction Administration was also provided through the duration of the project and record plans were prepared based on the contractor's redlined as-built plans.

Ross, Walnut and Magnolia Storm Drain Project | City Of Chino

CLIENT INFORMATION

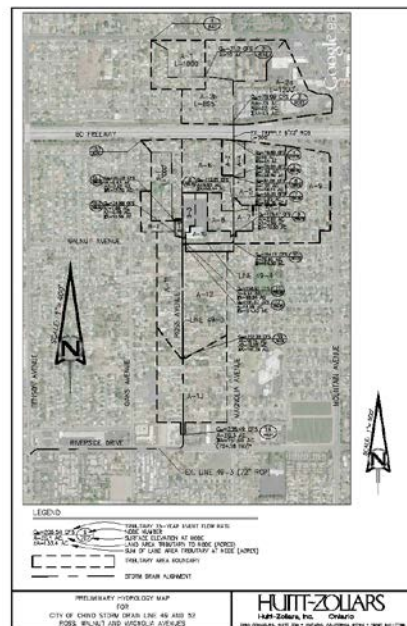
Lupe Camacho
City Project Manager/ CIP Engineer
City of Chino
Public Works/Engineering
13220 Central Avenue
Chino, CA 91710
909.334.3406
lcamacho@cityofchino.org

PROJECT DATES

2014-Present (construction pending)

RELEVANCE

Drainage Study & Design Plans for
Extending a Storm Drain Main



Huitt-Zollars prepared the preliminary and final drainage analysis and improvement plans for the extension of a 72" storm drain main along Ross Avenue, Walnut Avenue and Magnolia Avenue from Riverside Drive to the 60 Freeway in the City of Chino, CA. The tributary drainage area included approximately 140 acres of residential and commercial land as well as public roadways. Huitt-Zollars coordinated the design efforts with the existing infrastructure improvements to make sure conflicts with existing utilities are minimized. Coordination effort included electric, gas, telephone and cable utility providers.

CLIENT INFORMATION

Lupe Camacho
City Project Manager/ CIP Engineer
City of Chino
Public Works/Engineering
13220 Central Avenue
Chino, CA 91710
909.334.3406
lcamacho@cityofchino.org

PROJECT DATES

2015-2015

RELEVANCE

2D Hydraulic Modeling, Conveyance of Major Tributary, Coordination with SBC, USACE, Caltrans, and Cities of Chino and Chino Hills



The City of Chino proposed to extend Pine Avenue from SR-71 east to El Prado Road as an urban four-lane arterial and to widen Pine Avenue to a four-lane arterial from El Prado Road to Euclid Avenue (SR-83) in the Cities of Chino and Chino Hills. Huitt-Zollars served as the prime consultant for the environmental phase, the 60% and 95% PS&E design, and permitting of the project. Huitt-Zollars manages the coordination with multiple stakeholder agencies including San Bernardino County Flood Control District, U.S. Army Corps of Engineers Los Angeles District, Caltrans District 8, the City of Chino, and City of Chino Hills.

Because the proposed alignment runs through Prado Basin, an existing flood control basin, multiple hydrology and hydraulic analyses were performed to demonstrate that the proposed alignment would not result in negative impacts on flooding and natural habitat, and that all bridges and culverts were designed to meet both Caltrans and the San Bernardino County hydraulic design criteria. A Location Hydraulic Report was prepared for submittal to Caltrans. Hydraulic modeling of both Chino Creek and Cypress Channel were performed to evaluate the water surface elevation in the culverts and the impacts of the impoundments. A memorandum was submitted to USACE to demonstrate that the embankments and improved crossings resulted in no adverse hydraulic impacts from the existing condition, and allowed water to backflow in the reservoir without impediment.

Sediment Transport Study for the Santa Ana River Reach3 | Riverside County, California

CLIENT INFORMATION

Stuart McKibbin
Riverside County Flood Control and
Water Conservation District
1995 Market St, Riverside, CA 92501
951.955.8411
smckibbi@rivco.org

PROJECT DATES

2013-2015

RELEVANCE

HEC-6T, Scour Analyses, Hydraulic
Modeling, Hydrologic Regime,
Santa Ana River



Responsible for the development of a HEC-6T sediment transport model predicting the aggradation/degradation of a 7.4 mile reach of the Santa Ana River. The calibrated HEC-6T model was used to develop recommendations for repair, modification, and/or reconstruction of levee improvements, including groins. Development included the assessment of historical topography/morphology (1965 to 2011), sensitivity analyzes (transport functions, sediment gradation, variation in n-value, time step, rating curve, sediment inflow) to model observed variations in bed profile. All bridges and groins were included in the model.

Event-based bed-profile changes were evaluated using industry standard equations for general scour, contraction scour, bend scour, dunes and anti-dunes, local scour due to in-stream structures, and equilibrium slope analysis. Adjustment predictions of the bed profile were determined based on several approaches including a long-term HEC-6T simulation using a synthesized 70-year flow, flood event bed-profile behavior based on HEC-6T simulation based on December 21, 2010 flood hydrograph, groin tip scour, pier scour per HEC-18, and low-flow incision.

Results concluded that the lowest predicted elevation reaches the bottom elevation of the pier footing for the 60 Freeway and drops a one foot below the bottom elevation of the pier footing for Market Street. Recommendations were given to actively monitor the piers of both Market Street and the 60 Freeway.

D.4 Indicate the name of any sub-consultant firms that will be utilized to make up your team. Describe each sub-consultant's background and specific expertise that they bring to the Project.

We have included local sub-consultants with **City of Rialto experience**: **BUTSKO** will assist with dry utilities, **C-Below** for sub-surface investigations, **Converse Consultants** for geotechnical engineering, and **Tom Dodson** for environmental support.

Dry Utility Services



Butsko Utility Design, Inc. (Butsko) is the single source for dry utility - electrical, telephone, cable television, fiber optics and natural gas planning, management, design and engineering needs. Since 1994, Butsko has effectively contributed their skills to projects of all types, sizes and geographic regions including master planned communities, municipal improvements, commercial/industrial centers, residential subdivisions/developments, and electric substation site design.

Services Include:

Utility Due Diligence & Cost Estimating
Utility Planning & Management

Utility Environmental Reports
Utility Construction Coordination

Subsurface Imaging Services



C Below Subsurface Imaging (C Below) offers professional locating and mapping services throughout Southern California. They locate horizontal and vertical locations of underground utilities including water, gas power, waste, communications, and cable/TV. Many different methods are used to locate these utilities including GPR, CCTV, utility locators, electromagnetic locators, and potholing.

Services Include:

Locating
Mapping

Potholing
Rebar Locating

CCTV
3D Modeling

Utility Trenching

Geotechnical Services



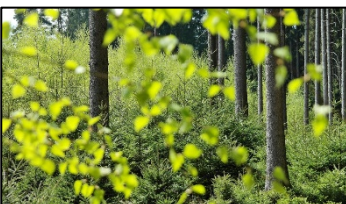
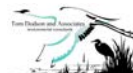
Converse Consultants (Converse) was established in 1946 to provide the construction industry with geotechnical engineering and geological services. Converse has extensive knowledge of the subsurface soils/geology within the City of Rialto and surrounding area. Converse provides professional services in the fields of geotechnical engineering, engineering geology, groundwater sciences, environmental sciences, and soils/materials testing and inspection.

Services Include:

Geotechnical Engineering & Geology Services
Special Inspections during Construction
Occupational & Environmental Health & Safety

QA/QC during Grading & Post Grading
Groundwater Resources
Environmental & Hazardous Materials

Environmental Services



Tom Dodson & Associates (TDA), incorporated in 1983, is a small environmental consulting and regulatory compliance firm. TDA has provided planning and environmental consulting services for various water, hazardous waste management, biological evaluations, and base reuse projects. TDA has also prepared the environmental compliance documents needed for such projects.

Services Include:

Biological Resources Evaluations
Environmental Compliance Documents

Revegetation & Habitat Restoration

Section E Project Schedule

E.1 Identify the time frame for previous projects the Consultant's firm has successfully completed. List the total months required, including the date the Notice to Proceed was issued, the date conceptual plans were approved by the local agency, and the date the final plans were approved by the local agency and County District approval (for construction bidding).

In our experience, a project of this complexity with an aggressive design schedule would require nine months from kickoff to approval. That time frame would include six weeks, after kickoff, for third party utility information to become available and assumes that the information would confirm "No Dry Utility Conflicts." Our approach for the design of this Baseline Road Storm Drain Line D expects the presence of dry utilities, a water line, and sewer crossings that will impact the design vertical and horizontal alignment. After all record information is modeled into the design HZ will investigate possible alignments to arrive at the least costly alternative. We begin with the assumption that the City would prefer an RCB vertical alignment that runs below shallow utilities (dries and water lines) but above the sewer line. An alignment that avoids involving third party utility purveyors, keeps control of schedule, and minimizes the cost of excavation. The design would at minimum, need to relocate sewer lines that are less than 12-14' deep, if the RCB is not reduced in size. Horizontally we anticipate that a water line and Edison utilities near Locust Avenue will impact the alignment. Our current assumption is that only the water line will need to be relocated.

Anticipating the issues enables HZ to stay in control of the schedule. Dry utility plans are typically old, difficult to read, and the information is barely enough to determine only the presence of the utility, not the exact location or depth. This is why we began the research with a site walk during the proposal, we have anticipated the presence of conflicts and are proposing to stay ahead of them. We will call Dig-Alert to mark the project site early and prior to surveying. We have also begun to evaluate available record information to help us arrive at a proposal with a structure that makes sense.

We have verified that the expected 9'x7' RCB is more than sufficient to address the expected flows. We have a plan that would allow our team to consider reducing the size of the RCP if it becomes necessary to avoid conflicts.

We have the experience to foresee construction issues like exposure of pressurized systems. We expect to have more information by the time the City is ready to interview qualified consultants and/or award of the project. We will work with the City to make the design and construction cost efficient. The schedule we are proposing is a preliminary with minimal overlap to reduce risk and anticipates the approach outlined in our scope of services. The depth of our staff would allow us to make larger overlaps on tasks and shorten the time frame further. We will work with the City prior and during kickoff to evaluate the risk of a shorter schedule if it is more desirable.

Our due diligence during the proposal stage has allowed us to get ahead of schedule with research. We will continue to evaluate record information until we receive confirmation of award. If the project kickoff is scheduled shortly after City Council Award per the dates that follow we should be complete with design and ready for construction bids by October 2018, approximately eleven months after kickoff. The schedule allows 4 weeks for City reviews and inserts flexibilities that might not be necessary. Third party utility coordination and design if necessary would begin in April. After plans are approximately 60% complete and it has been determined that it is required. This is nine months prior to the start of construction more than enough time to proceed with confidence that it will be completed without impact to the construction schedule.

With the Huitt-Zollars team, the City will maintain control of the schedule, as planned, the easements would be the critical path only if an appraisal is necessary. Our plan is to submit:

- 80% plans on May 11
- 95% plans by July 13
- Final Construction Documents by September 15

- E.2 Provide a thorough project schedule identifying all tasks and sub-tasks identified in the detailed scope of work submitted with the Proposal, showing a schedule to deliver the Project in consideration of all reasonable and expected time frames necessary to coordinate the Project through Phase 1 – Conceptual Design Drawings & Preliminary Cost Estimates, and Phase 2 – Final Construction Drawings & Specifications. Firms shall assume that a Notice to Proceed is issued to the firm in November 2017.

TASK	DATE	
	Begin	End
1.1 Kickoff Meeting	27-Nov-17	
1.2 Status Meetings (Monthly)	12-Jan	15-Oct
1.3 Environmental Support	15-Jan	22-May
1.4 Geotechnical Engineering	27-Nov	5-Jan
2.1 Data Collection-Research	19-Aug	5-Jan
- Dig-Alert	28-Nov	
2.3 Construction Survey-Control	4-Dec	5-Jan
2.2 Field Reconnaissance	4-Dec	5-Jan
2.4 Monument Perpetuation	4-Dec	5-Jan
3.1 Hydrology	27-Nov	15-Sep
3.2 Hydraulics	27-Nov	15-Sep
3.3 System Alternatives	15-Jan	16-Feb
4.1 Financial Analysis	29-Jan	15-Sep
5.1 Design Plans * includes 80%, 95%, & 100% submittal	19-Feb	15-Sep
Storm Drain Plans	19-Feb	15-Sep
Landscape Plans	12-Mar	15-Sep
Traffic Striping Plans	19-Mar	15-Sep
5.2 Utility Relocations	12-Mar	31-Oct
Sewer Relocation Plans	12-Mar	15-Sep
Domestic Water Relocation Plans	12-Mar	15-Sep
Dry Utility Coordination/Design (If Necessary)	2-Apr	31-Oct
Sub-Surface Investigation - Potholes	2-Apr	11-May
5.3 Water Quality Reports	9-Apr	14-Sep
5.4 Specifications	15-Apr	14-Sep
5.5 Legal Descriptions (*Critical Path)	19-Feb	14-Sep
Appraisal (If Necessary)	19-Feb	31-Oct
6.1 GIS Input	16-Jul	27-Jul
7.1 Bid Support	1-Oct	15-Nov
7.2 Construction Support	7-Jan-19	15-Dec

APPENDIX

Attachment A Addenda Acknowledgment



ATTACHMENT "A"

NOTE: THIS FORM MUST BE COMPLETED AND INCLUDED INSIDE ENVELOPE #1, "WORK PROPOSAL"

**REQUESTS FOR PROPOSALS (RFP) # 18-011
CITY PROJECT NO. 170700**

**ENGINEERING DESIGN SERVICES FOR
STORM DRAIN IN BASELINE RD FROM CACTUS BASIN WEST TO TAMARIND AVE**

SIGNATURE AUTHORIZATION

PROPOSER: Huitt-Zollars, Inc.

- A. I hereby certify that I have the authority to submit this Proposal to the City of Rialto for the above listed individual or company. I certify that I have the authority to bind myself/this company in a contract should I be successful in my proposal.



SIGNATURE

- B. The following information relates to the legal contractor listed above, whether an individual or a company. Place check marks as appropriate:

1. If successful, the contract language should refer to me/my company as:

____ An individual;
____ A partnership, Partners' names: _____
____ A company;
X A corporation

2. My tax identification number is: 75-1500178

ADDENDA ACKNOWLEDGMENT:

Acknowledgment of Receipt of any Addenda issued by the City for this RFP is required by including the acknowledgment with your proposal. Failure to acknowledge the Addenda issued may result in your proposal being deemed non-responsive.

In the space provided below, please acknowledge receipt of each Addenda:

Addendum(s) # _____ is/are hereby acknowledged.

The "Small Business Concerns Information" sheet shall be included as part of Attachment "A".

Attachment "A" - Small Business Concerns Information

The Proposer shall furnish the following information. Additional sheets may be attached, if necessary.

- (1) Name: Huitt-Zollars, Inc.
- (2) Address: 2603 Main Street, Suite 400 Irvine, CA 92614
- (3) Phone No.: 949.988.5815 Fax No.: 949.988.5820
- (4) E-Mail: rcandaele@huitt-zollars.com
- (5) Type of Firm: (Check all that apply)
 Individual Partnership X Corporation
 Minority Business Enterprise (MBE) Women Business Enterprise (WBE)
 Small Disadvantaged Business (SDB) Veteran Owned Business
 Disabled Veteran Owned Business Other
- (6) Business License: X Yes No License Number: C1442141
- (7) Tax Identification Number: 75-1500178
- (8) Number of years as a firm practicing the requested services: 42
- (9) Three (3) projects of this type recently completed:
- Type of project: Catawba Storm Drain Main Extension
Contract Amount: \$129,750 Date Completed: 4/1/17
Owner: City of Fontana Phone: 909.350.7613
- Type of project: Cactus Avenue and Brodiaea Avenue Storm Drain Main Extension
Contract Amount: \$200,000 Date Completed: 2013
Owner: City of Moreno Valley Phone: 951.413.3107
- Type of project: Ross, Walnut and Magnolia Storm Drain Main Extension
Contract Amount: \$149,000 Date Completed: Design 2016 / Construction Pending
Owner: City of Chino Phone: 909.334.3406
- (10) Person who reviewed the RFP for your firm:
- Name: Remi Candaele Date of Review: 9/12/2017

APPENDIX

Attachment B Debarment and Suspension Certificate



ATTACHMENT "B"

NOTE: THIS FORM MUST BE COMPLETED AND INCLUDED INSIDE ENVELOPE #1, "WORK PROPOSAL"

**REQUESTS FOR PROPOSALS (RFP) # 18-011
ENGINEERING DESIGN SERVICES FOR
STORM DRAIN IN BASELINE RD FROM CACTUS BASIN WEST TO TAMARIND AVE**

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The Consultant, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, and manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;
- Does not have a proposed debarment pending; and
- Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining Proposer responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

Consultant Name: Huitt-Zollars, Inc.

9/12/2017

(Date)


(Signature)

LARRY O. ROGERS, VICE PRESIDENT
(Name & Title)

APPENDIX

Exceptions to Contract



EXCEPTIONS TO LANGUAGE IN THE CITY'S PROFESSIONAL SERVICES AGREEMENT

We have reviewed the Sample Contract and, in general, are in agreement with the vast majority of the terms and conditions contained in that document. However, we have identified four (4) issues where there are some significant deviations from established standards of our professional practice which we respectfully would like to bring to your attention and discuss prior to contract execution.

- 1.1 **Scope of Services.** In compliance with all terms and conditions of this Agreement, Consultant agrees to perform the professional services set forth in the Scope of Services described in Exhibit "A," which is attached hereto and is incorporated herein by reference (hereinafter referred to as the "Scope of Services"). As a material inducement to the City entering into this Agreement, Consultant represents and warrants that Consultant is a licensed provider of first class work and professional services in the State of California and that Consultant is experienced in performing the Scope of Services contemplated herein and, in light of such ~~status and~~ experience, Consultant ~~shall perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality.~~ covenants that it shall follow the highest professional standards in performing the Scope of Services required hereunder. For purposes of this Agreement, the phrase "highest professional standards" shall mean those standards of practice recognized as high quality among well qualified and experienced professionals performing similar work under similar circumstances.

REASONS FOR REQUESTING CHANGES --

~~A.~~ All that is expected or required of design professionals is that they render their services with the ordinary degree of skill and care that would be used by other reasonably competent practitioners of the same discipline under similar circumstances, taking into consideration the contemporary state of the art and geographic idiosyncrasies. This concept dates from English Common Law doctrine, which holds that the public has the right to expect that those providing services will do so in a reasonably careful and prudent manner, as tested or established by the actions of their own peers under like circumstances. Language requiring the Engineer "to perform to the highest standard of practice" raises the customary standard of practice and not only does this increase risk, but the professional liability insurance will not cover the Engineer for this increased exposure, since it represents an assumption of additional liability for which the Engineer would not otherwise be responsible under law.

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5. INSURANCE

5.1 Types of Insurance.

A. Errors and Omissions Insurance. Consultant shall obtain and maintain in full force and effect throughout the term of this Agreement, standard industry form professional liability (errors and omissions) insurance coverage in an amount of not less than one million dollars (\$1,000,000.00) per claim ~~occurrence~~ and two-million dollars (\$2,000,000.00) annual aggregate, in accordance with the provisions of this section.

REASON FOR REQUESTING CHANGE --

A. Professional liability Insurance is written on a "per Claim" basis, not "occurrence."

6. INDEMNIFICATION

To the fullest extent permitted by law, Consultant shall indemnify ~~(but not defend)~~ ~~(at Consultant's sole cost and expense)~~, protect and hold harmless City and its officers, council members, officials, employees, non-design agents and volunteers and all other public agencies whose approval of the Project is required, (individually "Indemnified Party"; collectively "Indemnified Parties") against any and all liabilities, claims, judgments, arbitration awards, settlements, costs, demands, orders, and penalties (collectively "Claims"), including but not limited to Claims arising from injuries or death of persons (Consultant's employees included) and damage to property, to the extent caused by which Claims arise out of, pertain to, or are related to the negligence, recklessness, or willful misconduct of Consultant, its agents, employees, or subcontractors, or arise from Consultant's negligent, reckless, or willful performance of or failure to perform any term, provision, covenant, or condition of this Agreement ("Indemnified Claims"), but Consultant's liability for Indemnified Claims shall be reduced to the extent such Claims arise from the negligence, recklessness, or willful misconduct of the City, its officers, council members, officials, employees, or agents.

~~Consultant shall reimburse the Indemnified Parties for any reasonable expenditures, including reasonable attorneys' fees, expert fees, litigation costs, and expenses that each Indemnified Party may incur by reason of Indemnified Claims. Upon request by an Indemnified Party, Consultant shall defend with legal counsel reasonably acceptable to the Indemnified Party all Claims against the Indemnified Party that may arise out of, pertain to, or relate to Indemnified Claims, whether or not Consultant is named as a party to the Claim proceeding. The determination whether a Claim "may arise out of, pertain to, or relate to Indemnified Claims" shall be based on the allegations made in the Claim and the facts known or subsequently discovered by the Parties. In the event a final judgment, arbitration award, order, settlement, or other final resolution expressly determines that Claims did not arise out of, pertain to, nor relate to the negligence, recklessness, or willful misconduct of Consultant to any extent, then City shall reimburse Consultant for the reasonable costs of defending the Indemnified Parties against such Claims, except City shall not reimburse Consultant for attorneys' fees, expert fees, litigation costs, and expenses that were incurred defending Consultant or any parties other than Indemnified Parties against such Claims.~~

Consultant's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until all actions against the Indemnified Parties for such matters indemnified hereunder are fully and finally barred by the applicable statute of limitations or, if an action is timely filed, until such action is final. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the City or Consultant. This provision is intended for the benefit of third party Indemnified Parties not otherwise a party to this Agreement.

-

-REASON FOR REQUESTING CHANGE --

Upfront defense costs under any professional Liability Policy only covers the insured. Upon a finding by a court of competent jurisdiction, that Engineer's willful misconduct, negligent performance, or failure to perform was a legal cause of claimant's damages, then the Engineer will pay for and against damages, losses and judgments arising, including reasonable attorneys' fees and expenses recoverable under applicable law, but only to the extent they are caused by the negligent acts or omissions of the Consultant, its employees and its consultants in the performance of professional services under this Agreement. In our opinion, it is also not in the best interest of the Client or the Consultant to create a contractual relationship with or a cause of action in favor of a third party against either the Client or the Consultant.

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8.8 Attorney Fees. In the event any dispute between the Parties with respect to this Agreement results in litigation or any non-judicial proceeding, the prevailing Party shall be entitled, in addition to such other relief as may be granted, to recover from the non-prevailing Party all reasonable costs and expenses, including but not limited to reasonable attorney fees, expert consultant fees, court costs and all fees, costs, and expenses incurred in any appeal or in collection of any judgment entered in such proceeding. To the extent authorized by law, in the event of a dismissal by the plaintiff or petitioner of the litigation or non-judicial proceeding within thirty (30) days of the date set for trial or hearing, the other Party shall be deemed to be the prevailing Party in such litigation or proceeding. In all other cases, "Prevailing party" shall be defined (1) as a claimant that is awarded net 51 percent of its affirmative claim, after any offsets for claims or counterclaims by the other party, and (2) as a defendant/respondent against whom a net award of 50 percent or less of a claimant's claim is granted. In claims for money damages, the total amount of recoverable attorney's fees and costs shall not exceed the net monetary award of the Prevailing Party.

REASON FOR REQUESTING CHANGE --

As written, the term Prevailing Party is undefined and ambiguous in its meaning. Without definition in the Contract, Courts can interpret it to mean anything they deem appropriate. It is even possible for either Party to recover less than 10 percent of its claim and be awarded 100 percent of all reasonable costs and expenses, including but not limited to reasonable attorney fees, expert consultant fees, court costs and all fees, costs, and expenses incurred in any appeal or in collection of any judgment entered in such proceeding.

Our commitment is to understand the needs of our clients and to meet those needs by delivering professional services with the highest level of quality and integrity.



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HUITT-ZOLLARS