

City Council Staff Report

DATE:

September 21, 2016

CONSENT CALENDAR

SUBJECT:

AUTHORIZE A PURCHASE ORDER IN THE AMOUNT OF \$45,060 WITH HARRIS & ASSOCIATES FOR ENGINEERING DESIGN SERVICES FOR THE CALLE SANTA CRUZ AND SONORA ROAD STORM DRAIN IMPROVEMENTS PROJECT, CITY PROJECT NO. 16-

12

FROM:

David H. Ready, City Manager

BY:

Engineering Services Department

SUMMARY:

Approval of this item will authorize a purchase order in the amount of \$45,060 with Harris & Associates for civil engineering design services associated with the Calle Santa Cruz and Sonora Road Storm Drain Improvements Project, City Project No. 16-12.

RECOMMENDATION:

- 1. Authorize a Purchase Order in the amount of \$45,060 with the City's "on-call" civil engineering firm, Harris & Associates, pursuant to Agreement No. 6444, for engineering design services relative to the Calle Santa Cruz and Sonora Road Storm Drain Improvements Project, City Project No. 16-12;
- 2. Authorize the City Manager to execute all necessary documents.

BACKGROUND:

On November 6, 2013, the City Council approved Agreement No. 6444 with Harris & Associates for on-call civil engineering design services on an as needed basis.

On August 2, 2016, staff requested a proposal from Harris & Associates for the preparation of contract documents (plans and specifications) for future storm drain improvements at two roadway segment locations; 1). Calle Santa Cruz, and 2). Sonora Road. Each of these roadway segments undertake a source of constant storm drain nuisance problems and require improvements to address water runoff impediments. Aerial photography's of each study location are included in Figures 1 and 2 on the subsequent page.

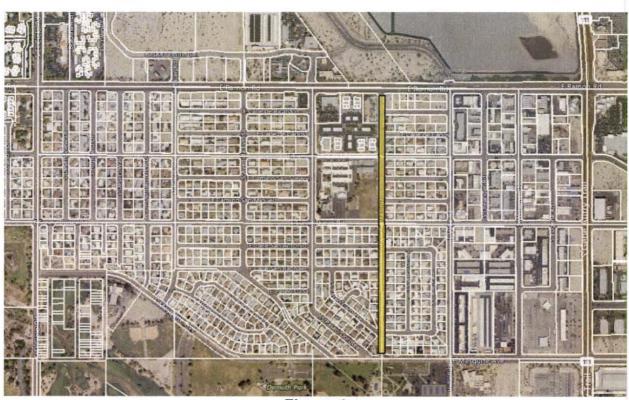


Figure 1
Calle Santa Cruz, between Ramon Road and Mesquite Avenue



Location 2
Sonora Road, between Tract 50078 and Bel Air Greens Gold Course

A brief scope of work outline for the Calle Santa Cruz and Sonora Road Storm Drain Improvements Project, City Project No. 16-12 (the "Project") is identified below.

Calle Santa Cruz Strom Drain: The Calle Santa Cruz storm drain improvement will eliminate the "down and under" drain system at the intersection of Ramon Road and Calle Santa Cruz, by extending the 24" storm drain pipe from the existing catch basin at the northwest corner of Mesquite Avenue and Calle Santa Cruz to the north and connecting at the southwest corner of Ramon Road and Calle Santa Cruz. Approximately 2,500 linear feet of a new 24" storm drain pipe will be installed.





Photo 1:Calle Santa Cruz at Mesquite (looking north); existing upstream SD terminus

Sonora Road Strom Drain: The Sonora Road storm drain improvement will intercept the existing surface outlet storm drain from Tract 5078 and convey the subsurface drainage into a new underground 24" storm drain pipe along Sonora Road east to the Tahquitz Creek Golf Course, ending in a drywell system. Approximately 700 linear feet of a new 24" storm drain pipe will be installed.





Photo 2:Existing storm drain outlet in Sonora Road

On August 31, 2016, in accordance with their on-call agreement, Harris & Associates submitted a proposal for the preparation of contract documents at a cost not to exceed of \$45,060. The scope of services provided by Harris & Associates for the Project is itemized by the following phases:

- Phase 1: Orientation/Data Collection/Base Sheets
- Phase 2: Design Development (Preliminary Engineering)
- Phase 3: Construction Documents (Final Plans, Specifications and Estimate)
- Phase 4: Bidding and Construction Assistance

A copy of Harris & Associates proposal is included as **Attachment 1**. Staff is recommending the City Council authorize a purchase order to Harris & Associates in the amount of \$45,060 to commence with the design plans necessary to mitigate the nuisance of water overspills onto Calle Santa Cruz and Sonora Road.

ENVIRONMENTAL IMPACT:

Section 21084 of the California Public Resources Code requires Guidelines for Implementation of the California Environmental Quality Act ("CEQA"). The Guidelines are required to include a list of classes of projects which have been determined not to have a significant effect on the environment and which are exempt from the provisions of CEQA. In response to that mandate, the Secretary for Resources identified classes of projects that do not have a significant effect on the environment, and are declared to be categorically exempt from the requirement for the preparation of environmental documents. In accordance with Section 15301 "Existing Facilities," Class 1 projects consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing facilities of both investor and publicly-owned utilities used to provide electric power, natural gas, sewerage, or other public utility services; therefore, the Calle Santa Cruz and Sonora Road Storm Drain Improvement Project, City Project No. 16-12, is considered categorically exempt from CEQA, and a Notice of Exemption will be prepared and filed with the Riverside County Clerk.

FISCAL IMPACT:

Sufficient funds are budgeted and available in the Drainage Fund (Fund 135) to facilitate approval of a Purchase Order in the amount of \$45,060 to Harris & Associates for the Calle Santa Cruz and Sonora Road Storm Drain Improvements Project, City Project No. 16-12, in Account No. 135-4371-55000.

SUBMITTED

Marcus L. Fuller, MPA, P.E., P.L.S. Assistant City Manager/City Engineer David H. Ready, Esq., Ph.D City Manager

Attachment:

1. Harris & Associates Proposal

Attachment 1



August 31, 2016

Marcus Fuller, MPA, PE, PLS Assistant City Manager/City Engineer City of Palm Springs 3200 E. Tahquitz Canyon Way Palm Springs, CA 92262

Subject: Calle Santa Cruz and Sonora Rd Storm Drain Design Proposal

Dear Mr. Fuller,

Harris & Associates looks forward to the opportunity to provide professional engineering design services to the City of Palm Springs for the Calle Santa Cruz and Sonora Road Storm Drain Projects. The Calle Santa Cruz storm drain project is located between Ramon Road and Mesquite Avenue & the Sonora Road project is located between the Bel Air Greens golf course and approximately 700 feet west to an existing storm drain outlet. The highlights of the proposed improvements are as follows:

BACKGROUND

Calle Santa Cruz Storm Drain: The Calle Santa Cruz project will eliminate the "down and under" drain system at the intersection of Ramon Road and Calle Santa Cruz, by extending the existing storm drain in Calle Santa Cruz at Mesquite Avenue (see Photo 1 below; current upstream terminus) with a new 24-inch RCP up to Ramon Road, total approximate length = 2,500 linear feet (see overview aerial exhibit below).





Photo 1:Calle Santa Cruz at Mesquite (looking north); existing upstream SD terminus

Sonora Road Storm Drain: The Sonora Road project will intercept existing surface outlet storm drain (see Photo 2 on next page) from Tract 50078 and convey the subsurface drainage into a

new underground 24-inch RCP storm drain in Sonora Road east to the Bel Air Greens golf course, ending in a drywell system that will spill out into the golf course in higher flows; approximate length = 700 linear feet (see overview aerial exhibit below).





Photo 2:Existing storm drain outlet in Sonora Road

PROJECT TEAM

The Harris Team will be led by Project Manager Elizabeth Reyes, PE, QSD who has over 15 years of applicable design experience and has successfully completed many similar storm drain design projects. Randall Berry, PE will serve as the Principal-in-Charge and QA/QC Manager, has specialized in storm drain design and will bring his strengths to the team as Harris' Engineering Design Manager, which he has developed during his 30-year career. Additional experienced Harris production staff will also assist as needed. Charles Harris, PLS of MSA Consulting, Inc., will serve as Harris' survey sub-consultant. Nick Loera of C-Below will serve as Harris' potholing sub-consultant and has also been providing potholing and utility detection service to Harris for the past several years.

SCOPE OF SERVICES

The following presents an outline of our proposed scope of services. It is our intent that this outline provides enough detail so our approach is clearly defined. We welcome the opportunity to discuss additions, deletions or revisions.

PHASE I: ORIENTATION / DATA COLLECTION / BASE SHEETS

A. <u>Data Collection / Review / Kick-Off Meeting</u>

Meet with City staff and hold "kick-off" meeting. Define approach, goals, criteria, procedures, and schedules and collect all city record information. We will prepare and

transmit the meeting agenda to City staff a minimum of 24 hours prior to the scheduled meeting time. Direction from City staff would be obtained and the project schedule reviewed. City to provide existing data and information relevant to the proposed project, and sample preferred format storm drain plans and specification on disk, if available. Meeting minutes will be prepared and distributed to attendees within one week of this meeting. This meeting will ensure that all parties understand all aspects of the project before any work begins.

B. <u>Utility Coordination</u>

We will mail initial utility notifications to all utility companies that have facilities within the project limits making them aware of the upcoming construction activities and requesting copies of their maps, plans, and/or sketches of their existing and/or proposed facilities within the project limits. In addition to the written utility notifications, we will contact the utility companies by telephone to ensure that written notifications were received and being acted upon.

We will send out copies of progress submittals to all affected utility companies and notify them of the anticipated project construction schedule and request any utility potholing and/or relocations necessary for the construction of the proposed improvements. We have not included the design of utility relocations. However, we will coordinate directly with affected utility companies for the relocation of their facilities on behalf of the City.

As with all of our design projects, we will maintain a utility log to track who and when notifications were sent to and document the responses to the notices. We will copy City staff on all utility correspondence.

Procurement of a Riverside County Flood Control & Water Conservation District (RCFC&WCD) Flood Encroachment Permit is not anticipated for this project.

C. Ground Survey / Topographic Base Sheets

Perform topographic ground survey (via survey sub-consultant MSA Consulting). Scope of work includes:

1) Survey Control

- a) Perform boundary survey to locate existing centerline monumentation to establish horizontal control and basis of bearings.
- b) Tie-in NAVD88 benchmark to establish vertical control.

2) Field/Topo Survey

- a) Perform cross section survey on 100 foot intervals from lip of gutter to lip of gutter on Calle Santa Cruz from Mesquite Avenue to Ramon Road and on Sonora Road from storm drain outlet east to golf course. Cross section survey will include lip of gutter, pavement crown, utility covers.
- b) Open and dip storm drain manholes and catch basin (if accessible) within the project limits for measurement of pipe invert depths.
- c) Prepare manhole and catch basin diagrams including invert elevations, approximate pipe sizes (if discernable) and direction of flow).

3) Base Mapping

- a) Research record maps.
- b) Generate centerline, right-of-way lines and property lines based on record maps and found centerline monumentation.
- c) Prepare topographic base sheets in AutoCAD drawing format from collected survey data at 1"=20' scale.

PHASE II - DESIGN DEVELOPMENT (PRELIMINARY ENGINEERING)

A. <u>Field Review</u>

Perform a comprehensive field review to confirm the completeness/accuracy of the plans, existing project conditions, conditions that will affect design, etc.

B. Develop Project Elements to 60% level

Develop conceptual designs, and trench sections, related cost estimates, details and back up calculations to 60% level. Maximizing economy and constructability are essential to the process. As requested by the City, hydrology or hydraulic analyses of the mainline storm drain or street capacity is not included in this scope of work.

C. Concept Meeting

Meet with City staff to present preliminary designs and reach concurrence with City staff on the final design elements. Meeting minutes will be prepared and distributed to attendees.

PHASE III - CONSTRUCTION DOCUMENTS

Based on the results of Phase II, the final construction documents would be prepared. The completed plans and specifications will conform to the City requirements. All deliverables will be computer-generated.

A. Construction Plans

Construction drawings will be developed to the 90% and 100% levels for City review. The plans will be prepared using the City's standard title block in AutoCAD format, showing construction elements that conform to the City-approved design concepts. All construction elements would be clearly defined. It is assumed the City's Contractor will prepare the Traffic Control Plans, as necessary.

The anticipated list of drawings is as follows:

Description	Scale	Number of Sheets
Title Sheet	N/A	1
Storm Drain Plan and Profile	1"=20'	8
Storm Drain Details	various	1
	Total Estimated She	et Count = 10

B. Construction Specifications

Prepare a complete set of project specifications in the City's preferred format, using the City provided "Boiler Plate" and the "Green Book". The Special Provisions and bid sheet will be prepared in a format consistent with current City projects.

C. Cost Estimate

Prepare itemized construction quantities and cost estimates (in Excel spread sheet format).

D. Construction Document Processing

Upon completion of the plans, specifications and cost estimate, submit 3 hard copy sets (including electronic copy of each to the City for review and comment at the 60%, 90% and 100% complete stages. Upon final acceptance and approval, provide the City with utility coordination logs, 24" x 36" plans (ink on double-matte mylar), specifications, and electronic files of specifications, estimate and plans in formats (PDF and WORD) compatible with the City's system.

PHASE IV – BIDDING AND CONSTRUCTION ASSISTANCE (Allowance – Time and Material Basis)

Harris will provide services through the bidding & construction phase as follows:

A. Respond to Questions During Bidding & Attend Pre-Bid Conference

This task will involve responding to Contractor questions during the bid. It is understood that the City will receive all the questions and issue the responses in order to properly control the flow of information.

The Project Manager will attend the pre-bid meeting to respond to Contractor questions.

B. Attend Pre-Construction Meetings

The Project Manager will attend the pre-construction meeting as requested by City staff.

C. Response to Request for Information and Request for Change Order

Harris will provide responses to requests for information and change order proposals submitted by the Contractor. Clarification drawings will be prepared and distributed, as required.

D. Shop Drawing Review

The shop drawings will be received by the City and transmitted to Harris for review. Shop drawing reviews will be completed within one week of receipt. It is currently anticipated that shop drawings will be required for pipe, AC-mix design, concrete, rock products, shoring, and traffic control plans.

E. As-Built Drawing Preparation (Allowance – Time and Material Basis)

Contractor and Resident Engineer redline drawings will be used for preparation of asbuilt drawing. Deliverables will include:

- 1 Set Revised Mylar Drawings from electronic revisions (not hand drafted)
- 1 Set Electronic Copy of the Revised Plans in AutoCAD Format

Assumptions & Exclusions: The project scope does not include traffic control plan preparation, geotechnical investigation, shoring design, environmental document preparation or outside agency permits, and coordination with private property owners that may have an impact on the operations of the affected properties. Also not included in the scope are the designs of bioswales and/or bio-retention systems to address permanent water quality elements should they be found to be required, advertising for bids and awarding of construction contracts and copying and distribution of plans and specifications to the bidders. We assume the City will provide geotechnical recommendations for shoring & bracing (as necessary), pavement replacement section (otherwise, assume existing AC thickness pus 1-inch) and trench bedding and backfill.

PROJECT SCHEDULE:

The Schedule of Performance for the project is as follows:

MILESTONE	Weeks Following NTP (end milestone by)
Notice to Proceed (NTP)	0
Project Kick-off Meeting	1
Data Collection / Utility Coordination	1
Ground Survey	3
Field Review	4
Prepare Preliminary (60%) Design Concepts	5
City Review Prelim Design & Meeting	6
Utility Potholing (if needed)	7
Develop 90% PS&E	9
City Review 90% PS&E	11
Develop 100% PS&E	13
City Review 100% PS&E	15
Submit Final Signed Mylars & Specifications	16

FEES

Harris proposes to provide the services in the previously detailed scope for the total Lump Sump fee presented below. A **Detailed Fee Chart** is included on a separate page for your information and use in evaluating this proposal. The fees should be considered as a negotiable offer. We would be happy to discuss the fees and their association to our proposed scope of work and make revisions where mutually agreeable.

TASK	FEE
PHASE I: Orientation / Data Collection / Base Sheets\$	20,900
PHASE II: Design Development (Preliminary Engineering)\$	5,460
PHASE III: Construction Documents\$	17,620
DESIGN SUBTOTAL LUMP SUM FEE = \$	43,980
PHASE IV: Bidding & Construction Assistance\$	1,080
GRAND TOTAL LUMP SUM FEE = \$	45,060

Optional Additional Scope & Fees:

- \$ 8,600 to add Geotechnical Investigation (4 total borings)
- \$ 4,800 to add Utility Potholing (3 total potholes)

The fees above include all printing costs (except for printing of multiple sets for bidding) and would be invoiced monthly, based on the percentage complete, except for assistance during bidding and construction which would be performed on an hourly basis and limited to the number of hours shown in the chart. Outside Agency fees, if any, are not included. We appreciate the opportunity to be of continued service to the City of Palm Springs and look forward to another successful project!

Sincerely,

HARRIS & ASSOCIATES

Randall G. Berry, PE

Director, Engineering Services

Randall Berry

CITY OF PALM SPRINGS Calle Santa Cruz and Sonora Road Storm Drain Project



Table of Tasks/Personnel/Time per Task

Harris & Associates Aug 31, 2016

TASKS	QA/QC MGR	PROJ. MGR	TECH./ DRFTR.	DIRECT COST & SUBS	MARK-UP ON SUBS 10%	TOTAL COST
\$ PER HOU	-	\$170	\$100	1-000	1078	TOTAL COOT
PHASE I: ORIENTATION/DATA COLLECTION/BASE SHEETS	7220	\$170	\$100	<u> </u>		
A. Data Collecton/Review/Kick+Off Meeting & Minutes		2	2	 		\$540.00
B. Utility Coordination		1	4	 		\$570.00
C. Ground Survey (MSA Consulting)		1 1	 	\$16,800.00	\$1,680.00	\$18,650.00
C1. Base Sheets (8 Plan & Profile Sheets)		2	8	\$10,000.00	\$1,000.00	\$1,140.00
Phase I Subtotal	0	6	14	\$16.800.00	\$1,680,00	\$20,900.00
Filase i Subtotal	1 0		14	\$10,000.00	φ1,060.00	\$20,300.00
PHASE II: DESIGN DEVELOPMENT	1	1			T	
A. Field Review		8	8			\$2,160.00
B. Develop Project Elements to 60% level		8	16			\$2,960.00
C. Concept Meeting & Minutes		2				\$340.00
Phase II Subtotal	0	18	24	\$0.00	\$0.00	\$5,460.00
PULACE #L COMPTRUCTION POOLINE NEC	-	ı .	1	1		
PHASE III: CONSTRUCTION DOCUMENTS						
A. Construction Plans to 90% level	-	ļ <u>.</u>	ļ <u>.</u>		.	\$270 BG
A1. Title Sheet (1 Total)		20	1 48		-	\$270.00
A2. Storm Drain Plan & Profile Sheet (8 Sheets at 20' Scale) A3. SD Detail Sheet (1 Sheet)			8			\$8,200.00
		4 16	<u> </u>		·	\$1,480.00
B. Construction Specifications		10	8			\$2,720.00 \$970.00
C. Cost Estimate D. Construction Document Processing of PS&E		<u>'</u>	<u> </u>			Φ970.00
QA/QC Review of PS&E	8		-			\$1,760.00
City Plan Check Review of PS&E (2 rounds) to 90% and 100% level		6	12			\$2,220.00
Phase III Subtotal	8	48	77	\$0.00	\$0.00	\$17,620.00
Friase iii Subtotai		1		ed Design		\$43,980.00
		110	I TO EXCE	eu Design	Jubiolai –	\$45,960.00
PHASE IV: BIDDING & CONSTRUCTION ASSISTANCE (T&M)						
A. Bid Clarifications / Meetings		2				\$340.00
B-E. Design Assistance During Const / Submittal Reviews / RFI's / "As-Builts"		2	4			\$740.00
Phase IV Subtotal	0	4	4	\$0.00	\$0.00	\$1,080.00
N	ot To Excee	ed Hourly T	&M Bid &	Const Pha	se Total =	\$1,080.00
GRAND TOTAL HOURS	J 8	76	119	1		
GRAND TOTAL COSTS	\$1,760.00			\$16,800.00	\$1,680.00	\$45,060.00