



CITY OF MARTINEZ

CITY COUNCIL AGENDA

June 4, 2014

TO: Mayor and City Council
FROM: Tim Tucker, City Engineer
SUBJECT: Downtown PDA Pavement Restoration Project
DATE: May 29, 2014

RECOMMENDATION:

Adopt a resolution authorizing the City Manager to execute an agreement in an amount not to exceed \$100,000 for consultant services with HEI for the design of the Downtown PDA Pavement Restoration Project (C1047).

BACKGROUND:

Council authorized staff to submit a One Bay Area Grant (OBAG) application through Contra Costa Transit Authority (CCTA) to Metropolitan Transportation Commission (MTC). The Grant was limited to streets within the Federal Highway System. In addition the OBAG program requires that Countywide, at least 70% of the OBAG funds be spent on projects that are “in, connected directly to, or provide proximate access” to designated Priority Development Areas (PDA). MTC has since set aside \$1,023,000 for Martinez to complete the project.

This project is intended to rehabilitate and perform preventative pavement maintenance to Escobar Street and Green Street that are entirely within the Downtown PDA. The Project will also rehabilitate Brown Street that is located 1500 feet (1/3rd mile) south of the PDA. Brown Street provides “proximate access” to the PDA. It is within the required one-half mile distance to the Downtown PDA. Brown Street is also an important east-west “Major Collector” street.

To complete the project within the strict timelines it is necessary to hire a firm with experience in complying with state and federal requirements. Caltrans is the local agency that oversees the distribution of the OBAG funds. Although the Engineering Division has recently developed a list of qualified engineering consultants to perform work for the City through a Request for Qualification process none of the firms have the experience necessary to quickly and efficiently navigate the Caltrans process. HEI has this experience and has done several similar projects. HEI recently successfully completed the design of the Marina Vista Bicycle and Pedestrian Improvement project for the City. Although the Marina Vista Project is a smaller project they were able to coordinate the design approval through Caltrans, Association of Bay Area Government (ABAG), MTC and Union Pacific. For these reasons staff is requesting Council authorize the City Manager execute a standard design services contract for the Downtown PDA Pavement Restoration Project.

FISCAL IMPACT:

Council has previously allocated funds for this project as part of the FY 2014/15 Capital Improvement Program under account C1047.

Funding:

OBAG	\$1,023,000
Measure J match	\$ 256,000
TOTAL	\$1,279,000

Budget:

Construction	\$1,079,000
Design	\$ 120,000
Construction Mgmt	\$ 80,000
TOTAL	\$1,279,000

ACTION:

Adopt a resolution authorizing the City Manager to execute an agreement in an amount not to exceed \$100,000 for consultant services with HEI for the design of the Downtown PDA Pavement Restoration Project (C1047).

Attachment:
Resolution
Scope of Work

APPROVED BY: 
Interim City Manager

RESOLUTION NO. -14

AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT IN AN
AMOUNT NOT TO EXCEED \$100,000 FOR CONSULTANT SERVICES
WITH HEI FOR THE DESIGN OF THE DOWNTOWN PDA PAVEMENT
RESTORATION PROJECT (C1047)

WHEREAS, the City Council of the City of Martinez approved the application to the Metropolitan Transportation Commission (MTC); and

WHEREAS, MTC has set aside funds for the completion of the Downtown PDA Pavement Restoration Project; and

WHEREAS, the City is need of a engineering design firm that has extensive knowledge and experience in processing design plans, specification and estimates along with the required forms, submittals and technical memorandums for Federally funded projects administered by Caltrans; and

WHEREAS, staff advertised for Statement of Qualification from Engineering firms for recent Public Works Projects; and

WHEREAS, none of the firms selected are highly qualified to navigate the Caltrans plan approval process; and

WHEREAS, HEI has previously successfully completed the design of a project requiring significant coordination with multiple agencies; and

WHEREAS, HEI has previously successfully completed the design of similar pavement restoration project; and

WHEREAS, HEI is highly qualified not only to complete the plans and specification for the project but also to navigate the Caltrans plan approval process

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Martinez, that the City Manager is authorized to execute a standard agreement for consultant services with HEI for the design of the Downtown PDA Pavement Restoration Project.

* * * * *

I HEREBY CERTIFY that the foregoing is a true and correct copy of a resolution duly adopted by the City Council of the City of Martinez at a Regular Meeting of said Council held on the 4th day of June, 2014, by the following vote:

AYES:

NOES:

ABSENT:

RICHARD G. HERNANDEZ, CITY CLERK
CITY OF MARTINEZ

Project Understanding

The City of Martinez requires professional engineering assistance to prepare bid-ready plans, specifications, and estimates for this 3 street downtown rehabilitation project.

Pavement rehabilitation treatment may consist of a combination of pavement repair (digouts) and rehabilitation methods including microsurfacing/slurry seal with Fiberseal technology, full depth reclamation and grind and inlay. HEI will also evaluate the condition of sidewalk, curbs, curb ramps, and drainage facilities for reconstruction on the project streets. The project streets will include only the following streets:

	Street	Anticipated Treatment
1	Escobar Street (Berrellessa to Pine)	Slurry/Fiberseal
2	Green Street (Berrellessa to Court)	Rehabilitation/Fiberseal
3	Brown Street (Berrellessa to Pacheco)	Rehabilitation/Reconstruction

HEI will prepare bid documents implementing the preferred pavement rehabilitation and maintenance strategies identified within the budget. In addition to the pavement rehabilitation, the project will upgrade approximately 60 curb ramps to current standards.

The project is partially funded by a \$1,023,000 OBAG grant, which required authorization from the Caltrans Office of Local Assistance. Robert Kroepfl is the District Local Assistance Engineer assigned to Martinez.

Project Approach

HEI has recent experience providing engineering services for pavement rehabilitation projects for dozens of successful projects around the Bay Area including several federal aid pavement rehabilitation projects.

In order to maintain and manage the project, the lines of communication must be well established. All project communications shall be directed through HEI's project manager so that project progress can be monitored at all times.

The first phase of work will be to conduct field reconnaissance and evaluate streets for the proper application of mill and fill, slurry, microsurfacing, and crack seal. Coring, R-value testing and the resultant pavement analysis of Brown Street will aid in determining the pavement's current condition and determine the most cost effective and life extending pavement treatment. The second phase of work will be preparation of the detailed design and cost estimates of the selected pavement rehabilitation/maintenance treatments.

HEI will use recent bid results from nearby agencies as well as Caltrans cost data in order to provide accurate cost data for each estimate prepared for the 35%, 65%, 95%, and final bid documents submittals to make certain the project construction costs are within budget.

The team members presented in this proposal are highly experienced with pavement rehabilitation projects and are committed to have the project designed by late summer 2014, ready to bid if the Caltrans Local Assistance process is complete.

The pavement rehabilitation strategies considered will include: Grinding and AC Inlay, use of paving mats or pavement reinforcement fabric, full depth reclamation, cold-in-place recycling, seal coats and cape seals. If full depth reclamation is considered as a preferred alternative for rehabilitation, we highly recommend that utility locating services be added to this contract to ensure that potential utility conflicts with the mixing operation are identified well in advance of the construction operations.

Local Assistance Approach

HEI is familiar with the Local Assistance process and procedures, and is ready to take over the project to obtain the E-76 authorization. HEI knows the requirements and expectations of Caltrans Local Assistance, since we have been through the processes on well over a dozen projects since founding the firm in 2001. In order to receive Authorization for Construction (E-76), several documents will need to be submitted and approved by Caltrans. HEI will work collaboratively with City staff to assist with the preparation of these documents. Below is a detailed discussion of the anticipated submittals that are required for submission to Caltrans:

NEPA Support Documents

It is our understanding that the consultant will initiate the NEPA process with Caltrans, requiring the preparation of the Preliminary Environmental Study (PES) and Field Review Form. In anticipation of the additional Caltrans / NEPA requirements, HEI would prepare the Technical Memoranda to support Caltrans' completion of the NEPA document. Technical Memoranda would be prepared for the following subjects:

- a. Traffic Impact
- b. Noise
- c. Air Quality
- d. Hazardous Waste/Materials
- e. Water Quality Resources
- f. Coastal Zone
- g. Biological Resources
- h. Wetlands
- i. Invasive Plants
- j. Section 4(f)
- k. Section 6(f)
- l. Visual Resources (Tree Impacts)
- m. Relocation Impacts
- n. Land Use and Community Impacts
- o. Cultural Resources
- p. Permits

Project Engineer's Certification of Utility Facilities

All utilities need to be mapped on the plans. All "High Risk" utilities need to be positively identified (potholed) if there is excavation over 1' in depth in their vicinity. Any utility companies requiring to relocate or adjust facilities need to be properly noticed using the appropriately modified Caltrans form, which cite the proper legal code sections.

Right of Way Certification

Caltrans will not review the R/W certification form until the Utility Certification has been signed off. Since no right of way acquisition is required for this project, we anticipate that a Certification No. 1 will be possible and accepted with the first application to Caltrans.

Special Provision Boilerplate for Local Assistance Projects

This boilerplate will need to be edited and merged with the Towns format for the project specific special provisions. The Town may already have an approved sample specification that meets the Federal requirements.

PS&E Checklist

This form helps the DLAE review the special provisions for compliance with the Federal requirements for the project.

Request for Authorization & Finance Letter

HEI will prepare the draft Request for Authorization & Finance Letter forms to print on City letterhead and forward to the Office of Local Assistance.

Contract Award Checklist

HEI will prepare the draft Contract Award Checklist and Detail Estimate for the City to include in the award package to forward to the Office of Local Assistance.

Detail Work Scope

TASK 1 – PROJECT MANAGEMENT

Harrison Engineering Inc. shall provide project management services to assure delivery of the project on schedule, within budget, and according to the established project goals.

Project management shall also include active coordination with the City.

- Consultant will meet with the City to review the project scope of work, schedule and submittals for the project. This initial pre-project meeting will also address project coordination and responsibilities and define key project issues and goals.
- Additional meetings will be on an as needed basis to clarify items or review submittals.
- Supervise, coordinate, and monitor project design for conformance with standards and policies.
- Maintain project files.
- Prepare monthly invoices.
- Prepare correspondence and memos. If requested, HEI will provide reports of progress to the City Project Manager on a monthly basis.

TASK 2 –UTILITY COORDINATION

HEI will gather and assemble all available data from the City, including record drawings, reports, available utility maps, utility plans, survey monument data, assessor's maps, right of way maps, etc.

HEI will identify surface utility conflicts. It is anticipated that all utility adjustments costs will be covered by franchise agreement or as described in the Streets and Highways Code Section 670-695. HEI will prepare utility relocation letters for printing on City letterhead.

This task will also provide as a notice to utility companies of the potential rehabilitation streets to determine if there are any utility improvements planned for these streets.

TASK 3– FIELD RECONNAISSANCE

This task will include meeting with the City to determine the street priority list and review pavement data already assembled by the City and field review. Measurements will be taken in field in place of providing budget for a full field survey. We do not anticipate significant grade changes that would warrant a full field survey.

HEI staff will field review the project area and make notations and measurements for the following features:

- Pavement delineation
- Pavement width
- Assess curb and gutter and sidewalk condition and perform field measurements for curb ramps
- Utility and drainage surface features
- Assess drainage facilities
- Signal Detector Loops, hand-holes and pull-boxes
- Dig-out locations
- Striping

TASK 4 - CALTRANS LOCAL ASSISTANCE COORDINATION

HEI will assist the City in coordinating with Caltrans to obtain the funding authorization for the construction phase of the project. This work includes filling out the PES and FR forms, identified Technical Memoranda, PS&E Certification, Right of Way Certification, and Utility Certification.

The Local Assistance forms and items that need to be completed, in order to complete the process for the E-76 Request for Construction Authorization include:

1. **PES and Field Review** Form. HEI will prepare the PES and Field Review forms and attend Field Review Meeting with Caltrans and City staff.
2. HEI will prepare an **Area of Potential Effects Map (APE)**.
3. HEI will complete the **Technical Memoranda** for the following topics:
 - a. Traffic Impact
 - b. Noise
 - c. Air Quality
 - d. Hazardous Waste/Materials
 - e. Water Quality Resources
 - f. Coastal Zone
 - g. Biological Resources
 - h. Wetlands

- i. Invasive Plants
- j. Section 4(f)
- k. Section 6(f)
- l. Visual Resources (Tree Impacts)
- m. Relocation Impacts
- n. Land Use and Community Impacts
- o. Cultural Resources
- p. Permits

Unless indicated by supplemental Tasks, most of these memoranda are limited to less than two pages in length each. Since the preferred option will be behind the existing curb, no parking impact study is anticipated for this project.

4. Special Provision ***Boilerplate for Local Assistance projects***. This boilerplate will need to be edited and merged with the City's format for the project specific special provisions. The City may already have an approved sample specification that meets the Federal requirements. This information will need to be incorporated by HEI.
5. ***PS&E Checklist***. This form helps the DLAE review the special provisions for compliance with the Federal requirements for the project. **HEI** will complete this form once the Final PS&E is completed.
6. ***Project Engineer's Certification of Utility Facilities***. Since there is no planned excavation, this project is exempt from the utility mapping and potholing requirements per Appendix LL of the Local Assistance Procedures Manual, which allow excavations up to 6-inches in depth. A note shall be added to the plans stating "Existing utility facilities have not been plotted on these plans."
7. ***Right of Way Certification***. Caltrans will not review the R/W certification form until the NEPA environmental document is completed and the Certification of Utility Facilities has been approved. **HEI** will prepare the Right of Way Certification using the "long" form as now required.
8. ***Request for Authorization and Finance Letter***. This task represents the final Local Assistance document prior to receiving Caltrans authorization to bid the project. HEI will prepare the Request for Authorization (E-76) document, which need to be printed on City Letterhead and signed by authorized City staff. The Finance Letter, which needs to accompany the E-76, is usually best prepared by City staff, which has all the budget and accounting information readily available.
9. ***Contract Award Checklist***. HEI will assist the City in preparation of the Award Checklist document and Detail Estimate to be included in the award package to Caltrans.

TASK 5 - LOCATION HYDRAULIC STUDY/FLOODPLAIN ENC. SUMMARY

A Location Hydraulic Study and Summary Floodplain Encroachment will be required by Caltrans because of the proposed improvements within the 100-year Flood Plain of Alhambra Creek. Based on our review of the FEMA Flood Insurance Rate Maps, most of the area is low lying and subject to flooding.

Raising the surface elevations may have an adverse effect on the floodplain. However, if the highest points of the proposed work are lower than the back of walk, top of curb or other features that may have already created a barrier, it can easily be shown that the project will have no effect on the floodplain. This can usually be accomplished without a significant amount of modeling, making preparation of the required studies fairly simple. It is our understanding that the City has similar studies that can be reviewed as examples in addition to our own prior experience.

Deliverables: Signed and Stamped Location Hydraulic Study and Summary Floodplain Encroachment, PDF and Hardcopy as required

TASK 6 – PAVEMENT CORES AND R-VALUE (CORNERSTONE)

Cornerstone will collect 7 pavement cores for laboratory testing of the proposed work on Brown Street. In addition, 2 R-value tests will be performed on representative samples. Cornerstone will prepare a short technical memorandum based on field observations and the coring data collected.

Deliverables: pdf of coring data and technical memorandum

TASK 7 – 35% PLANS AND ESTIMATE

The 35% Plans and Estimate will outline the areas of work and required digout locations. Estimates will be provided for viable alternatives that fit within the project budget. These documents are intended to be show only sufficient information to determine the limits of work and the anticipated costs with appropriate contingency.

Plan sheets anticipated for this submittal for 35% P&E City review includes:

<u>Description</u>	<u>No. of Sheets</u>
Layout/Striping Plans (40 Scale)	7 Sheets

TASK 8– 65% PLANS AND ESTIMATE

The 65% Plan submittal shall include title sheet, typical sections and layouts. Only minor notation will be shown. Base maps will be prepared incorporating data from the field reconnaissance including locations of curb and gutter, sidewalk, and curb ramp replacement and any drainage repair. Plans will reflect the recommended pavement treatments and limits. Existing striping will be notated for replacement. A detailed estimate with appropriate contingency will included with this submittal.

Plan sheets anticipated for this submittal for 65% P&E City review includes:

<u>Description</u>	<u>No. of Sheets</u>
Title Sheet	1
Typical Sections & Details	1
Layout/Striping Plans (40 Scale)	7
Total	9 Sheets

Deliverables: Electronic PDF Version of Submittal

TASK 9 – 95% PLANS, SPECIFICATIONS AND ESTIMATE

HEI will develop a detailed design for the street rehabilitation. Curb ramps will be shown schematically with reference to the appropriate Caltrans curb ramp case. The plans will contain all necessary details to convey the whole intent of the design with all necessary construction details. Specifications shall contain all necessary sections arranged in City format, covering all pay items. Estimates shall reflect actual work and quantities shown on the plans.

Plan sheets anticipated for this submittal for 95% PS&E City review includes:

<u>Description</u>	<u>No. of Sheets</u>
Title Sheet	1
Typical Sections	1
Layout/Striping Plans (40 Scale)	7
Construction Details	5
Total	14 Sheets

Deliverables: PDF Version of Submittal

TASK 10 – BID DOCUMENTS

The Bid Document submittal shall consist of print ready plans and special provision, which incorporates comments received on the 95% submittal.

HEI will perform a thorough review of the contract documents prior to bid advertisement to ensure the project is constructible and biddable. The primary goal of these reviews is to identify and resolve ahead of time any construction issues that may result in claims and change orders down the line.

HEI will deliver 22x34-inch bond original drawings and print ready specifications for both projects to the City for reproduction of bid sets.

Deliverables: Print Ready Plans and Specifications, Rehabilitation Plans printed on 22"x34" bond paper and a PDF Version of Submittal

TASK 11 – BID AND CONSTRUCTION SUPPORT

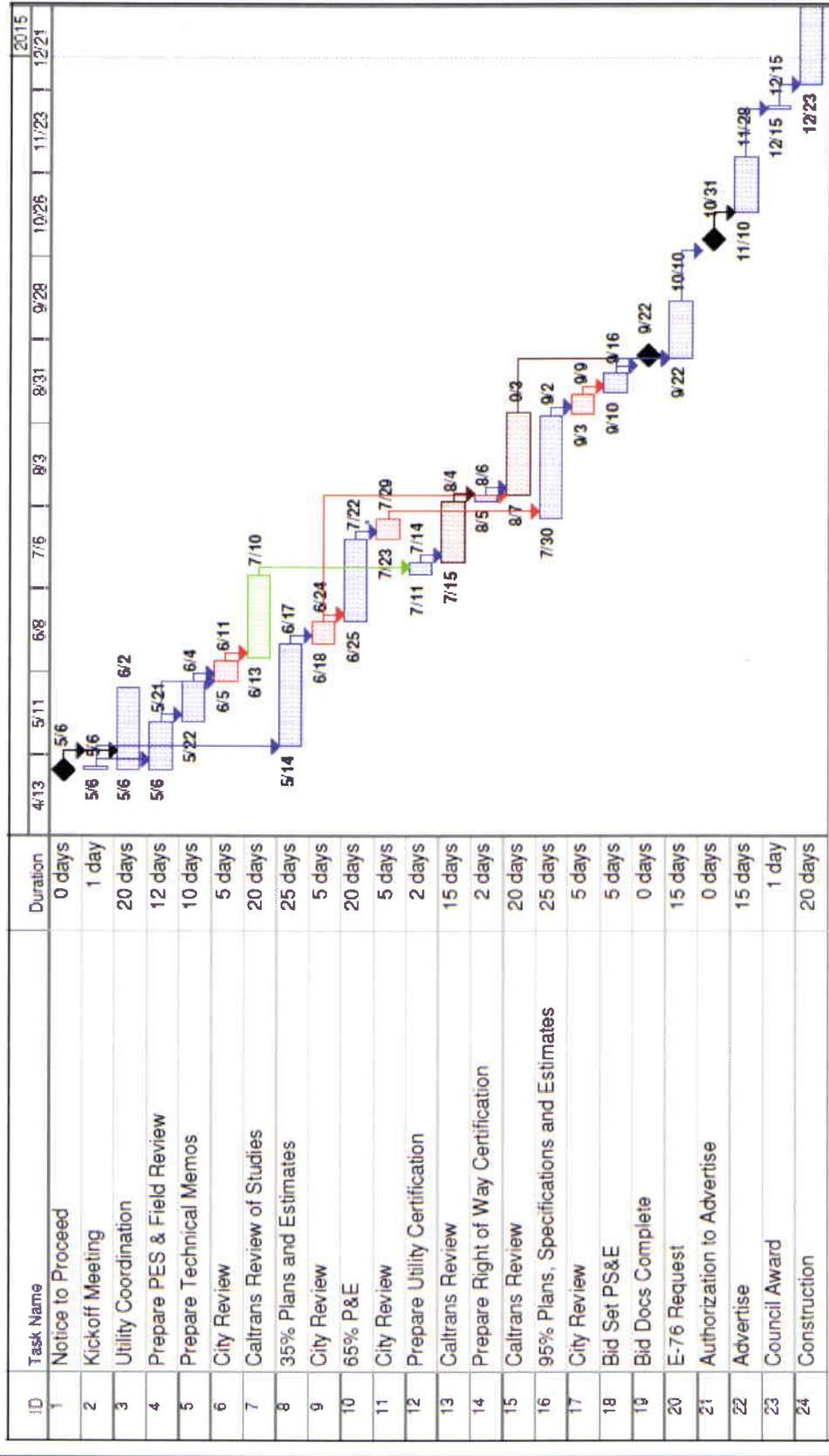
HEI will provide assistance during the bid period. This shall include assisting the City in responding to bidder inquiries, the preparation of addendums, as required, bid analysis for recommendation of award, and coordinate and attend the pre-construction meeting.

HEI will provide construction support as necessary to answer RFI's and prepare change orders in support of the project as requested by the City.

TASK 12 – REIMBURSABLE EXPENSES – Per rate schedule.

TASK 13 – SUBCONSULTANT MARKUP – 10% per rate schedule.

TASK 14 – CONTINGENCY – To be used as City's discretion for unanticipated services.



Schedule

TASK	ESTIMATED HOURS										ESTIMATED FEE										TOTAL for HEI	TASK TOTAL for Subconsultant	TEAM TOTAL		
	SPM		PM-1		SDE-II		ADM		HEI		TOTAL HOURS		SPM		PM-1		SDE-II		ADM					Reim.	
	40	12	8	16	4	4	60	24	52	74	20	60	183,000	7,320	1,896	444	69,000	276	9,936	3,040				7,188	11,140
1	Project Management, Meetings & Coordination																						9,936		
2	Utility Coordination																						3,040		
3	Data Collection-Field Reconnaissance																						7,188		
4	Caltrans Local Assistance Coordination																						11,140		
5	Location Hydraulic Study/Floodplain Enc. Summary																						2,508		
6	Pavement Cores & R-value (CEG)																						5,800		
7	35% P&E																						14,136		
8	65% P&E																						12,872		
9	95% PS&E																						12,424		
10	Bid Documents																						7,764		
11	Bid and Construction Support																						5,768		
12	Reimbursable Expenses																						844		
13	Subconsultant Markup (10%)																						580		
14	Contingency																						6,000		
Total																						94,200	5,800	\$ 100,000	