



Town of Moraga	Agenda Item
Ordinances, Resolutions and Requests for Action	10. C.

3

4

## TOWN OF MORAGA

## STAFF REPORT

To: Honorable Mayor and Councilmembers  
From: Shawn Knapp, Public Works Director/Town Engineer  
Sharon Chan, Assistant Engineer  
Subject: Consider Resolution \_\_\_ - 2021 Awarding a Professional Services Agreement for Engineering Design Services to Harris and Associates, Inc. (Concord, CA) in a Total Amount Not to Exceed \$924,048 for Phase 1 (\$602,014) and Phase 2 (\$201,506) and 15% Contingency (\$120,528) for the 2022-23 Pavement Reconstruction Project (CIP 22-401); Authorizing the Town Manager to Appropriation \$538,000 from Fund 213 – Measure K for the 2022-23 Pavement Reconstruction Project; and Authorizing the Town Manager to Execute the Agreement (CEQA Status: Categorically Exempt)

### Request

Staff is requesting that Council adopt Resolution \_\_\_ - 2021 (Attachment A) awarding a Professional Services Agreement for engineering design services to Harris and Associates, Inc. (Concord) in a total amount not to exceed \$924,048.00 for Phase 1 and Phase 2 of 2022-23 Pavement Reconstruction Project (CIP 22-401, authorizing the Town Manager to appropriate \$538,000 from Fund 213 – Measure K for the 2022-23 Pavement Reconstruction Project and authorizing the Town Manager to execute the agreement.

### Background

A Town Council Goal for 2021 is to implement the 2021 Pavement Management Program, including the design for the 2022-2024 “Worst First” Pavement Reconstruction project and the Annual Pavement Repair Project.

The Town is responsible for the maintenance and repair of 58.59 centerline miles of paved streets; this includes 13.8 miles of arterial, 15.8 miles of collector, 26.3 miles of residential streets, and 2.6 miles of bike paths or service roads. The network is defined as a complete inventory of all streets and other pavement facilities in which the Town has jurisdiction and maintenance responsibilities. To facilitate the management of streets, they are subdivided into management sections identified as a street segment, which is homogeneous in geometry, function, and general condition.

1  
2 A typical street has a lifecycle of 25 to 30 years and deteriorates by 35% - 40% in its first  
3 10 to 12 years. Agencies often focus on streets after they have reached that level, but  
4 that is not always the wisest approach. Getting the best bang for your (often limited) buck  
5 depends on choosing the right roads to treat at the right stage of life: A “best value first”  
6 approach instead of “Worst First.” For example, rehabilitating one street could cost the  
7 same as applying preventive treatment to four or more streets, which might offer a better  
8 long-term value.

9  
10 StreetSaver is designed with a more cost-effective “Best-First” and “Balanced” approach.  
11 The Town has followed this balanced approach to achieve significant improvements in  
12 network PCI. The reasoning behind this philosophy is that it is better to maintain streets  
13 with lower-cost, preventative maintenance treatments, such as slurry seals, chip seals,  
14 and crack sealing, and extend their life cycle before the street condition deteriorates to a  
15 state where it requires more costly rehabilitation and reconstruction.

16  
17 Generally, paved streets spend about three-quarters of their lifecycle in “Fair” to “Good”  
18 condition, where the street shows little sign of deterioration and has a high service level.  
19 After this time, the street condition begins to deteriorate at a rapid rate and, if not  
20 maintained properly, soon reaches a condition where it will require costly overlays and  
21 reconstructions.

22  
23 Cost-wise the Town is able to rehabilitate up to 16 streets in Good condition range  
24 compared to only repairing one street in Very Poor condition. The following table  
25 illustrates the significant cost increase for pavement rehabilitation when the streets  
26 deteriorate into the next Pavement Condition Category.

27  
28 **General Pavement Rehabilitation Costs Per Pavement Condition Category**

Pavement Condition Index (PCI)	Pavement Condition Category	Recommended Treatment	Treatment Cost (\$ / Square Yard)	Ratio Streets Completed
Greater Than 70	Excellent/Good	Surface Seal	\$7 – \$8	12-16 streets
50 to 70	Fair	Rubberize Cape/Surface Seal	\$16.50 - \$26	4 to 8 streets
25 to 50	Poor	Mill and Overlay	\$49 - \$59	2 to 3 streets
Below 25	Very Poor	Reconstruction (FDR)	\$86 – 125	1 street

30  
31 While the “Best-First” and “Balanced” pavement strategies have serviced the Town’s  
32 street network well these past years, it has left a very limited number of residents who  
33 reside on the remaining Very Poor (3.2%) and Poor (10.4%) streets. These residents  
34 have been watching significant amounts of neighboring streets be repaired and are likely  
35 questioning when their street will be repaired. Without Council direction in April 2021 to  
36 change to a “Worst-First” approach in 2022 and 2023, many of the Poor and Very Poor  
37 streets would not be repaved in the foreseeable future. The April 22, 2020 staff report on  
38 Pavement Management which further outlines this strategy, is included as (Attachment  
39 B).

40

1    **Discussion**

2    **Request for Proposals and Qualifications (RFP/Q)**

3    Following the direction provided by Town Council, staff proceeded to develop the Request  
4    for Proposal/Qualification (RFP/Q) (Attachment C) to include the following scope:

- 5    1. Research and Data Review – The consultant shall gather and review any available  
6    information, reports, data, as-built, and record drawings from the Town and various  
7    related utilities. Information gathered will be used as the basis of the Pavement  
8    Design Report.
- 9    2. Site Investigation and Surveys – The consultant will perform all necessary field  
10   investigations to assess the existing conditions at the various street segments.  
11   The information gathered will be used as the basis of the Pavement Design Report  
12   and Plans, Specification, and Estimate.
- 13   3. Pavement Design Report (Report) – The Consultant shall prepare a  
14   comprehensive Report for pavement rehabilitation options for both phases to  
15   identify which street segments will be included in each of the two phases. The  
16   consultant will perform all necessary field investigations and surveys to assess the  
17   existing condition of each street segment to gather the necessary information to  
18   support the basis of the Report. In addition, the Report shall provide concurrence  
19   regarding the streets to be addressed, priorities, probably cost estimates, and  
20   other information to support the preparation of the plans, specification, and  
21   estimate package for each phase and ultimately construction of cost-effective, high  
22   quality streets and associated infrastructure.
- 23   4. Utility and Public Coordination (Coordination) – The consultant shall coordinate  
24   with various utility companies to relocate and incorporate changes into the project  
25   construction documents. The consultant shall also collaborate with the community  
26   and local stakeholders to ensure comments are addressed in the project  
27   documents.
- 28   5. Plans, Specification, and Estimate (PS&E) – The PS&E packages shall include  
29   street segments appropriately identified in the Report. The 2022 Pavement  
30   Reconstruction Project (Phase 1 PS&E bid package) is due to the Town for  
31   construction advertisement by April 2022; and the 2023 Pavement Reconstruction  
32   Project (Phase 2 PS&E bid package) is due to the Town for advertisement by  
33   February 2023.
- 34   6. Construction Support – The consultant shall assist the Town during the bid  
35   process, which includes drafting addenda, answering technical questions from  
36   contractors, attending meetings, preparing confirmed and as-built construction  
37   documents, and providing assistance to technical issues during construction.

38   Pursuant to the Town's Purchasing Policy and Moraga Municipal Code section 3.04.060,  
39   the RFP/Q for engineering design services for the 2022-23 Pavement Reconstruction  
40   Project was advertised on July 20, 2021. The Town received proposals from five firms

1 for consideration by the August 19, 2021 deadline. Town engineering staff carefully and  
2 independently reviewed each firm's qualifications and technical proposals. Each firm was  
3 ranked based on the following pre-selected criteria included in the RFP/Q:

- 4 • Completeness of Response (Pass/Fail)
- 5 • Qualification and Specific Experience of Key Team Members (25 Points)
- 6 • Project Understanding and Approach (25 Points)
- 7 • Experience with Similar Types of Projects (25 Points)
- 8 • Schedule and Capacity to Provide Qualified Personnel (10 Points)
- 9 • References/Satisfaction of Previous Clients (15 Points)

10  
11 Staff developed a short list of the top four written technical proposals using the above  
12 RFP evaluation criteria. On October 12, 2021, the four firms were invited to an oral  
13 presentation and interview with Town staff. The ranking of the four firms follows, with the  
14 top three firms scoring relatively close to one another.

- 15 1. Wood Rodgers
- 16 2. Harris and Associates
- 17 3. HDR/ WRECO
- 18 4. Wilsey Ham

19  
20 The next step in the evaluation process was the consideration of costs. Town staff  
21 reviewed proposed costs beginning with the highest ranked company, Wood Rodgers,  
22 whose proposed cost for the project far exceeded the budgeted amount for design  
23 services. Negotiations with Wood Rodgers were unsuccessful in lowering their proposal  
24 costs to match the allocated budget. Town staff then began cost negotiations with Harris  
25 and Associates (Harris), the second ranked firm, and was successful in reaching an  
26 agreed cost to provide the necessary services for the design of the Project.

27  
28 *Harris and Associates Proposal*

29 Harris is a full-service consulting engineering firm located in Concord, CA, specializing in  
30 providing a wide range of technical civil engineering services related to the Project. Harris  
31 has successfully performed on past projects with the Town, including construction  
32 management for the Canyon Road Bridge Project; the 2013 Pavement Repair, and 2015  
33 Pavement Reconstruction; and the civil engineering design for the 2018 Joint Town of  
34 Moraga/City of Orinda Annual Pavement Rehabilitation projects. Harris understands the  
35 Town has limited staffing and funding resources and needs a consultant who can provide  
36 a complete civil engineering design for pavement rehabilitation, control costs, and  
37 expedite delivery.

38  
39 Harris has assembled a team with a vast amount of experience completing pavement  
40 design projects for various agencies. The Harris's Team consists of the following  
41 subconsultants: LCC Engineering & Surveying, Inc. (Topographic Surveying); Miller  
42 Pacific Engineering Group (Pavement Testing and Analysis); and Subtronic (Utility  
43 Locating and Potholing). Harris, in their Proposal, listed almost 90 civil engineering  
44 projects where they teamed up with 1, 2, or all 3 of the above listed subconsultants.

45  
46 Harris's key staff include Kourish Iranpour, PE, QSD, Project Manager with 33 years of  
47 civil engineering experience and Zaheer Shaikh, PE, PMP, Engineer in Responsible  
48 Charge, with 17 years of civil engineering experience. Both Mr. Iranpour and Mr. Shaikh

1 have worked on numerous pavement rehabilitation projects as documented in their  
2 Proposal.

3  
4 In Harris' proposal, the technical project scope (Attachment D) provides the needed  
5 services to develop an innovative design to address the pavement issues in the Town on  
6 streets with a PCI of under 50 within the limited budget. The proposal is complete and  
7 acceptable. Harris' total negotiated cost proposal (Attachment E) is \$803,520 for Phase  
8 1 (\$602,014) and Phase 2 (\$201,506). The cost proposal was analyzed by staff,  
9 compared against ten present and recent engineering design service contracts.  
10 Furthermore, the Harris average hourly rates for key consultant positions (Firm Principal,  
11 Program Manager, Project Engineer, Design Engineer) were equal to the average rate of  
12 ten other contracts combined, thus deeming the cost proposal to be competitive.

13  
14 **Project Funding**

15 Funding for the design services for the 2022-23 Pavement Reconstruction Project is  
16 included in the approved FY 2021/22 budget in the total amount of \$940,000 with  
17 \$240,000 in FY 2021/22, \$610,000 in FY 2022/23 and \$60,000 in FY 2023/24. By  
18 awarding the contract, the budget will be amended to advance all funding in upcoming  
19 fiscal years (FY 2022/23 and FY 2023/24) to the current FY 2021/22. Since construction  
20 is not expected to occur in the current fiscal year, approved funding for all construction  
21 related activities in FY2021/22 will be transferred to design. The FY 2021/22 Project  
22 funding shortfall of \$538,000 is recommended to be funded with the available Measure K  
23 fund balance. The \$8 million total project cost is not projected to change.

24  
25 **CEQA**

26  
27 Design work is categorically exempt from the California Environmental Quality Act  
28 (CEQA) per §15306. CEQA analysis for the construction of the Project will be conducted  
29 as part of the scope of services under the design contract.

30  
31 **Fiscal Impact**

32  
33 The Fiscal Year (FY) 2021/22 Capital Improvement Program Budget includes \$486,000  
34 for the 2022-23 Pavement Reconstruction Project. Additional funding for design work  
35 was also projected for fiscal years 2022/23 and 2023/24. As the design contract is being  
36 awarded in FY 2021/22, \$538,000 in funding from Fund 213 – Measure K will be  
37 appropriated to increase the FY 2021/22 project funding to \$974,000. The total projected  
38 project funding of \$8,060,000 remains unchanged. The Fund 213 – Measure K projected  
39 year end fund balance as of June 30, 2022, of \$1,760,210 will be reduced by \$538,000  
40 to \$1,222,210.

41  
42 **Alternatives**

43  
44 1. Adopt Resolution \_\_\_\_ - 2021; or

1       2. Adopt the Resolution \_\_\_\_ - 2021 with modifications; or  
2       3. Not adopt attached Resolution \_\_\_\_ - 2021 and provide direction to staff.

4       **Recommendations**

6       Adopt Resolution \_\_\_\_ - 2021 to:

- 7       • Award a Professional Services Agreement for Engineering Design Services to  
8           Harris and Associates, Inc. in a Total Amount Not to Exceed \$924,048 for the 2022-  
9           23 Pavement Reconstruction Project; and
- 10      • Authorize the Town Manager to Appropriate \$538,000 from Fund 213 – Measure  
11       K for the 2022-23 Pavement Reconstruction Project; and
- 12      • Authorize the Town Manager to Execute the Agreement.

14      **Report reviewed by:**    Cynthia Battenberg, Town Manager  
15                                    Denise Bazzano, Assistant Town Attorney

17      **Attachments:**

- 19      A. Consider Resolution \_\_\_\_ - 2021 Awarding a Professional Services Agreement for  
20           Engineering Design Services to Harris and Associates, Inc. (Concord) in a Total  
21           Amount Not to Exceed \$924,048 for Phase 1 (\$602,014) and Phase 2 (\$201,506)  
22           and 15% Contingency (\$120,528) for the 2022-23 Pavement Reconstruction  
23           Project (CIP 22-401); and Authorizing the Town Manager to Appropriate \$538,000  
24           from Fund 213 – Measure K for the 2022-23 Pavement Reconstruction Project;  
25           and Authorizing the Town Manager to Execute the Agreement (CEQA Status:  
26           Categorically Exempt)
- 27      B. [2020 Pavement Management Staff Report and Presentation Link](#)
- 28      C. [Request for Proposals and Qualifications \(RFP/Q\) for Engineering Design  
29           Services for the 2022 - 23 Pavement Reconstruction Project Link](#)
- 30      D. [Harris and Associates' Engineering Design Services 2022-23 Pavement  
31           Reconstruction Project Proposal Link](#)
- 32      E. Harris and Associates' 2022-23 Pavement Reconstruction on Project Cost  
33           Proposal

## **ATTACHMENT A**

Resolution \_\_\_\_ - 2021 Awarding a Professional Services Agreement for Engineering Design Services to Harris and Associates, Inc. (Concord) in a Total Amount Not to Exceed \$924,048 for Phase 1 (\$602,014) and Phase 2 (\$201,506) and 15% Contingency (\$120,528) for the 2022 - 23 Pavement Reconstruction Project (CIP 22-401); and Authorizing the Town Manager to Execute the Agreement

BEFORE THE TOWN COUNCIL OF THE TOWN OF MORAGA

In the Matter of:

Awarding a Professional Services )  
Agreement Engineering Design Services )  
to Harris and Associates, Inc. (Concord) )  
in a Total Amount Not to Exceed )  
\$924,048 for Phase 1 (\$602,014) and )  
Phase 2 (\$201,506) and 15% )  
Contingency (\$120,528) for the 2022-23 )  
Pavement Reconstruction Project (CIP )  
22-401); and Authorizing the Town )  
Manager to Appropriate \$538,000 from )  
Fund 213 – Measure K for the 2022-23 )  
Pavement Reconstruction Project and )  
Execute the Agreement (CEQA Status: )  
*Categorically Exempt*) )

Resolution No. \_\_\_ - 2021

**WHEREAS**, in accordance with the Town's Purchasing Policy and Moraga Municipal Code section 3.04.060, Town staff prepared a request for proposals and qualifications ("RFP/Q") for specialized professional services to select the most qualified and experienced consultant firm to provide engineering design, environmental documentation, permit and utility coordination, project bid documents, technical bid assistance and technical construction engineering services for the 2022 and 2023 Pavement Reconstruction Project (Project); and

**WHEREAS**, the Town has included the Project in the Fiscal Year 2021/2022 Budget; and

**WHEREAS**, the Town issued the RFP/Q on July 20, 2021, for engineering design services for the Project; and

**WHEREAS**, the Town received five (5) proposals by August 19, 2021 that were independently evaluated and scored addressing, among other things, technical qualifications, ability to provide the service in a timely manner; and

**WHEREAS**, Harris and Associates (Harris) was deemed the most qualified and experienced consultant that could complete the above described services within the project budget; and

**WHEREAS**, the design services that will be provided by Harris are categorically exempt from the California Environmental Quality Act ("CEQA") pursuant to 14 CCR § 15306, as a preliminary study and other resource evaluation activities which do not result

in a serious or major disturbance to an environmental resource and are used strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

**NOW, THEREFORE, BE IT RESOLVED** that the Town Council of the Town of Moraga hereby awards a Professional Services Agreement for Engineering Design Services to Harris and Associates (Concord) in a Total Amount Not to Exceed \$924,048 for Phase 1 (\$602,014) and Phase 2 (\$201,506) and 15% contingency (\$120,528) for the 2022 and 2023 Pavement Reconstruction Project (CIP 22-401); and

**BE IT FURTHER RESOLVED**, that the Town Manager is hereby authorized to appropriate \$538,000 from Fund 213 – Measure K for the 2022-23 Pavement Reconstruction Project; and

**BE IT FURTHER RESOLVED**, that the Town Manager is authorized to execute the Agreement, with minor revisions that may be approved by the Town Manager and the Town Attorney, and to execute any other necessary documents to effectuate the terms of the Agreement and amendments to the Agreement.

**PASSED AND ADOPTED** by the Town Council of the Town of Moraga at a regular meeting held on October 27, 2021 by the following vote:

**AYES:**

**NOES:**

**ABSTAIN:**

**ABSENT:**

\_\_\_\_\_  
Mike McCluer, Mayor

Attest:

\_\_\_\_\_  
Marty C. McInturf, Town Clerk

## **ATTACHMENT B**

[2020 Pavement Management  
Staff Report and Presentation Link](#)

## **ATTACHMENT C**

[Request for Proposal and Qualifications \(RFP/Q\) for  
Engineering and Design Services for the 2022 - 23  
Pavement Reconstruction Project Link](#)

## **ATTACHMENT D**

[Harris and Associates' Engineering Design 2022 - 23](#)  
[Pavement Reconstruction Project Proposal Link](#)

## **ATTACHMENT E**

Harris and Associates' 2022 - 23 Pavement  
Reconstruction Project Cost Proposal



**ASSUMPTIONS UPON WHICH LEVEL OF EFFORT ESTIMATE IS BASED:**

1. Hourly rates shown are averages. Actual rates for positions may vary slightly.
2. Hours and fee for individual tasks are a guide; the total hours and cost for the project takes precedence.
3. Hours and fee may be renegotiated if the project is delayed by factors beyond Harris' control.
4. Harris will identify and quantity all base failure areas. The base repair locations will not be shown on the plans, but will be available on request.
5. City will provide the following:
  - Deflection Testing Analysis Report
  - Access to any available drawings or information relevant to the project.
  - "Front-end" documents boiler plate
  - Printing of PS&E set for bid advertisement and construction.
6. The number of budgeted meetings is indicated.
7. City comments at each review stage will be presented to Harris promptly and on one consolidated set of marked-up documents.
8. Fee assumes design completion in year 2022.
9. Task 3.2 assumes 15 days of field work to locate utilities and 5 days of potholing. See assumption 13 below.
10. Task 3.3 assumes 8 days of field work to perform pavement testing.
11. Task 3.4 assumes utilizing 2020 Contra Costa County orthophotos and 8 days of supplemental topographic survey. See assumptions 14 and 15 below.
12. ADA Curb ramps will be per Caltrans standard details except where detailed design is required due to site constraints.
13. Utility Locating is performed only on FDR streets as identified in the Pavement Design Report.
14. Topographic surveys will be performed only for critical locations/areas where detailed information is required.
15. Allowance for Topographic Survey and utility locating will be used on as-needed basis
16. Utilities will design their relocations, if any are needed. Harris will prepare exhibits for the relocation work, if requested.
17. Property lines and rights-of-way will be shown on plans as provided on Assessor's Parcel Maps and GIS data. No boundary surveys will be performed.
18. Significant redesign required due to changes made by City after 60% submittal review is subject to additional fee for Harris
19. For streets where underground utility locating will not be performed, utilities will be shown based on available facility maps from utility owners.
20. City will provide the traffic index (TI) for design of pavement structural sections, where needed.
21. Traffic control will be based on Caltrans Standards and no traffic control plans will be prepared.
22. Bike lanes will be included in the design only if it can be accommodated within the paved section through striping.
23. Extensive design for bike lane planning and implementation is not included in the budget.
23. Detailed Environmental studies are not included. This project is anticipated to be categorically exempt.

ESTIMATED LEVEL OF EFFORT							HARRIS & ASSOCIATES			
CITY OF MORAGA										
2023 - PAVEMENT RECONSTRUCTION DESIGN PROJECTS - PHASE 2 (Revised)										
PHASE, TASK		HARRIS & ASSOCIATES					Subconsultants			TOTAL
		PROJECT DIR	QA/QC	PROJECT MGR	PROJECT ENGR	DESIGN ENGR	TOTAL HOURS	Subtronic Utility Loc.	Miller Pacific Geotech	
<b>1.0 PROJECT MANAGEMENT</b>										
1.1	Project Management Tasks			30	16	2	46			\$10,815
1.2	Kick-Off Meeting	2		2		2	8			\$1,775
1.3	Project Management Meetings (12 mtgs)	2		12	12		26			\$5,933
1.4	Progress Reports (12 reports)			12			12			\$3,150
1.5	Coordination/Communication with Town	1		30		8	39			\$9,382
1.6	Coordination/Communication with external agencies			10		8	18			\$3,843
1.7	Prepare/Update Project Schedules			12			12			\$3,150
1.8	Prepare Work Plan (including QA/QC Plan)	1	1	2			4			\$1,076
1.9	Public Outreach Meeting (2)	1		12	16		29			\$6,379
TASK SUBTOTAL		7	1	122	46	18	194			<b>\$45,502</b>
<b>2.0 RESEARCH AND DATA REVIEW (TASKS COVERED IN PHASE 1)</b>										
<b>3.0 SITE INVESTIGATION AND SURVEYS (TASKS COVERED IN PHASE 1)</b>										
<b>4.0 BASIS OF DESIGN MEMORANDUM (PAVEMENT DESIGN REPORT) (TASKS COVERED IN PHASE 1)</b>										
<b>5.0 PLANS, SPECIFICATIONS, AND ESTIMATES (PS&amp;E) - PHASE 2</b>										
5.1	Conceptual PS&E (30%)	1		30	60	80	171			\$31,369
5.2	Tabulation of Comments and Permitting Requirements			4	12		16			\$3,255
5.3	Quality Control Review		16	2			18			\$4,725
5.4	Town Review Workshop	1		2	2		5			\$1,181
5.5	PS&E (60%)	1		20	40	60	121			\$22,024
5.6	Tabulation of Comments			2	8		10			\$1,995
5.7	Quality Control Review		16	2			18			\$4,725
5.8	Town Review Workshop	1		2	2		5			\$1,181
5.9	PS&E (90%)	1		10	30	40	81			\$14,516
5.10	Quality Control Review		16	2			18			\$4,725
5.11	Town Review Workshop	1		2	2		5			\$1,181
5.12	Final Bid Documents	1		10	20	30	61			\$11,156
TASK SUBTOTAL		7	48	88	176	210	529			<b>\$102,034</b>
<b>6.0 UTILITY AND PUBLIC COORDINATION</b>										
6.1	Communication Plan w/ Property Owners and Utilities	1		8	16	4	29			\$5,938
6.2	Property Owners and Utility Companies Meetings (2)	1		4	4		9			\$2,074
6.3	Town Review Meeting (1)	1		1	1		3			\$735
TASK SUBTOTAL		3	0	13	21	4	41			<b>\$8,747</b>
<b>7.0 PERMITTING SUPPORT (TASKS COVERED IN PHASE 1)</b>										
<b>8.0 BID PHASE SUPPORT</b>										
8.1	Prepare Addenda (assume 2)	1		8	24	4	37			\$7,408
8.2	Respond to Contractor Technical Questions			8	4		12			\$2,835
8.3	Attend Pre-Bid Meeting			2	2		4			\$893
8.4	Conform Bid Documents		2	2	8	16	28			\$4,956
TASK SUBTOTAL		1	2	20	38	20	81			<b>\$16,091</b>
<b>9.0 CONSTRUCTION SUPPORT</b>										
9.1	Attend Pre-Construction Meeting			2	2		4			\$893
9.2	Attend Weekly Construction Meetings (assume 10 mtgs)	1		10	10		21			\$4,751
9.3	Provide Technical Advice to Town			8	4		12			\$2,835
9.4	Review Contractor RFI's (assume 10 RFI's)			8	10	2	20			\$4,242
9.5	Review Contractor Submittals (assume 20 submittals)			8	12		20			\$4,305
9.6	Attend Intermittent Site Inspections	1		8	8	8	25			\$5,077
9.7	Attend Punch List and Final Inspection Walks	1		4	4		9			\$2,074
9.8	Review As-builts and prepare record drawings		2	2	8	16	28			\$4,956
TASK SUBTOTAL		3	2	50	58	26	139			<b>\$29,132</b>
<b>TOTAL HARRIS HOURS</b>		<b>21</b>	<b>53</b>	<b>293</b>	<b>339</b>	<b>278</b>	<b>984</b>			
<b>TOTAL SUBCONSULTANT HOURS</b>							<b>0</b>			
<b>PHASE 2 TOTAL HOURS</b>							<b>984</b>			
HOURLY RATE (2022-2023)		\$289	\$263	\$263	\$184	\$152				
FEE ESTIMATE PER POSITION		\$6,064	\$13,913	\$76,913	\$62,291	\$42,326		\$0	\$0	\$0
<b>PHASE 2 TOTAL</b>										<b>\$201,506</b>
								<b>PHASE 1 + PHASE 2</b>		<b>\$803,519</b>

**ASSUMPTIONS UPON WHICH LEVEL OF EFFORT ESTIMATE IS BASED:**

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10. Task 3.3 assumes 8 days of field work to perform pavement testing.
11. Task 3.4 assumes utilizing 2020 Contra Costa County orthophotos and 8 days of supplemental topographic survey. See assumptions 14 and 15 below.
12. ADA Curb ramps will be per Caltrans standard details except where detailed design is required due to site constraints.
13. Utility Locating is performed only on FDR streets as identified in the Pavement Design Report.
14. Topographic surveys will be performed only for critical locations/areas where detailed information is required.
15. Allowance for Topographic Survey and utility locating will be used on as-needed basis
16. Utilities will design their relocations, if any are needed. Harris will prepare exhibits for the relocation work, if requested.
17. Property lines and rights-of-way will be shown on plans as provided on Assessor's Parcel Maps and GIS data. No boundary surveys will be performed.
18. Significant redesign required due to changes made by City after 60% submittal review is subject to additional fee for Harris
19. For streets where underground utility locating will not be performed, utilities will be shown based on available facility maps from utility owners.
20. City will provide the traffic index (TI) for design of pavement structural sections, where needed.
21. Traffic control will be based on Caltrans Standards and no traffic control plans will be prepared.
22. Bike lanes will be included in the design only if it can be accommodated within the paved section through striping.
23. Extensive design for bike lane planning and implementation is not included in the budget.
23. Detailed Environmental studies are not included. This project is anticipated to be categorically exempt.