NAPA SANITATION DISTRICT

ESA WATER - TASK ORDER No. 29

Los Carneros Recycled Water Pipeline Project (CIP #15718)

Date: _____

Issued under Professional Services Agreement dated August 5, 2014.

To: ESA Water

Project Description:

Streambed Alteration Agreement Compliance for the LCWD Recycled Water Pipeline Project.

Description of Scope of Services to be performed by Consultant under this Task Order:

See Attachment 'A' – Scope of Services

Description of Services to be Provided by District:	See Attachment 'A' – Scope of Services
Deliverables:	See Attachment 'A' – Scope of Services
Consultant Project Manager:	Katie Baker
Consultant Quality Control Manager:	James O'Toole
Schedule to Perform Services:	June 2015 to October 2021
Time & Materials Not-to-Exceed Cost Limit:	$79,973.60
	See Attachment 'B' – Budget Summary

APPROVALS:

ESA WATER

By: _____ _____

Authorized Representative Date

NAPA SANITATION DISTRICT

By: _____ _____

Purchasing Agent Date

NSD Account No.: CIP 15718

SCOPE OF WORK

Los Carneros Recycled Water Pipeline Project (CIP 15718)

This scope of work includes revegetation planning, implementation of restoration planting, final site review and recommendations, agency coordination, vegetation monitoring, and report preparation, to support compliance with California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreement No. 1600-2014-0416-R3 for restoration of temporary impacts. ESA staff has extensive experience in conducting this scale of restoration program, and would ensure continuity in coordinating with the District and regulatory staff, understanding of permit conditions and IS/MND mitigation, and successful implementation of the Vegetation Enhancement Plan.

Task 1. Vegetation Enhancement Plan

ESA will prepare a Vegetation Enhancement Plan to satisfy CDFW SAA Condition 2.27, which requires recovery or enhancement of approximately 625 square feet of riparian habitat. The Plan would include a map showing restoration locations, area dimensions, enhancement methods, a plant palette of species/quantity, and native erosion control seed mix. The Plan would reflect the frequency of monitoring events, performance criteria established in the CDFW SAA for survival and cover rates, and establish a framework and methodology for a monitoring and reporting program. The Plan will establish designated photo stations that will be used prior to construction to document pre-project conditions, post-project as-built conditions, and annual monitoring. This scope includes a field visit to establish photo stations and take pre-project photos to use for development of the Plan. This scope assumes revision in response to one round of comments from the District on the draft plan, and response to one round of comments from CDFW on the final draft.

> Schedule: draft to District by April 10, 2015; final submittal to CDFW April 13, 2015.
> Deliverables: draft and final Vegetation Enhancement Plan

Task 2. Planting Implementation

ESA would contract with a qualified restoration landscape subconsultant to provide planting implementation services. Since the Vegetation Enhancement Plan has not been developed at this point in time, this scope section serves as a placeholder for this task. The final scope and fee for planting implementation would be developed by ESA and its subcontractor for District review

once the Vegetation Enhancement Plan is finalized and approved, and the final site walk is completed to determine final disturbance areas. Prior to implementation of this task, a detailed list of tasks, labor costs, and materials list and associated costs will be prepared for District review. The scope may include, but is not limited to, the following subtasks:

- **Mobilization:** May include activities such as field meetings, submittals, layout, administrative work, materials procurement, and/or mobilization of personnel, vehicles, materials, and equipment to the project site.

- **Topsoil Delivery and Soil Prep:** May include delivery and installation of topsoil mix, ripping and tilling of the site prior to placement, placement and/or compaction of soil to an appropriate depth, and tilling to incorporate soil.

- **Plant Installation/Hydroseeding:** May include furnishing and installation of plants and/or hydroseed per specifications in the Vegetation Enhancement Plan, including activities such as plant layout, fertilizer for all plantings, and/or installation plant cages/protection.

- **Irrigation:** May include installation of irrigation systems or water truck irrigation at the restoration sites.

- **Erosion Control:** May include installation of erosion control blankets, netting, mulching, or otherwise.

- **Maintenance:** May include site visits to perform weeding or irrigation maintenance; frequency will be determine based on the Vegetation Enhancement Plan and coordination between the District, ESA, and subcontractor.

This scope includes ESA time for subconsultant contracting, oversight, and management. For planning purposes, this scope assumes a placeholder value of $30,000 for Vegetation Enhancement Plan implementation. Actual implementation costs may be higher or lower than this placeholder.

Schedule: as soon as possible after October 15 and completed by December 31.
Deliverables: Final plant species and totals sketched on design drawings

Task 3. Revegetation Monitoring and Reporting

The permit requires that all plants installed as part of the project be monitored and maintained for 5 years. Permit requirements include minimum of 80% survival at the end of the minimum monitoring period, with 70% cover after 3 years and 75% coverage after 5 years. Based on project status and our subsequent discussions, this Task is intended to assist the District meet this mitigation obligation.

Task 3.1 Year 0 Baseline Assessment

ESA's restoration monitor will assess post-construction vegetation conditions; results will be developed as part of the As-Built Report for CDFW submittal. Monitoring will be implemented in accordance with the Vegetation Enhancement Plan. Field assessment will include establishment of photo points, vegetation transects, and a written report. This scope includes 16 hours for field survey and 16 hours for results analysis and report preparation, and senior technical review of results.

Schedule: immediately following planting implementation, Fall/Winter 2015
Deliverables: draft and final Baseline Assessment/As-Built Report

Task 3.2 Years 1 – 5 Annual Monitoring

Pursuant to CDFW SAA Condition 2.29, ESA's qualified botanist will monitor restoration plantings for five years. This scope assumes a frequency of one monitoring event per year (two 8-hour field surveys); however in the event that the Vegetation Enhancement Plan identifies a different frequency, additional monitoring would be completed on a time and materials basis. ESA's botanist will: 1) record status of plantings relative to the performance criteria established in the Vegetation Enhancement Plan, 2) take photos at designated photo stations, and 3) develop recommendations for corrective actions, as appropriate. (CDFW SAA Condition 2.29)

Schedule: annually, beginning Spring 2016
Deliverables: five (5) draft and final Results Technical Memorandum

Task 3.3 Enhancement Plan Reports

Based on annual monitoring results, ESA will prepare an annual Enhancement Plan Report for submittal to CDFW by December 31 of each year for five years. The Enhancement Plan Report will demonstrate compliance with CDFW SAA Conditions 2.27 and 2.29 and status of restoration and enhancement goals. The report will includes results of survival, percent cover, and height of both tree and shrub species planted. The report will also include the number of species of plants replaced, and overview of the restoration effort, and the monitoring survey methodology. The report will also include photos from designated photo stations and other relevant information, a summary of invasive species control, methods used to remove non-native plants, and a list of wildlife observed on site. (CDFW SAA Condition 3.2)

This scope assumes 32 hours for preparation of the first report, and 24 hours for each report thereafter, and senior technical review of results.

Schedule: annually, draft by November, final by December 31.
Deliverables: five (5) draft and final Enhancement Plan Reports

Assumptions

- This scope assumes no permanent impacts occurred at stream crossings.

- Care shall be taken by the construction contractor during construction activities during placement or movement of materials on the stream banks to prevent any damage to stable stream banks and to minimize damage to any streamside vegetation. Streamside vegetation overhanging into the channel shall not be removed, trimmed, or otherwise modified.

- No trees will be removed as part of the project.

- Prior to construction, contractor and ESA arborist will review the project site and flag and record vegetation to be removed, trees to be trimmed, and vegetation to be avoided. During vegetation removal contractor will remove and retain vegetation tags to provide to ESA.

- Construction activities will conclude by October 15, 2015 and planting will be implemented during the same construction season.

- Careful attention to weed control in the first year would be sufficient to manage noxious weeds.

- Restoration and Enhancement goals established in the CDFW SAA will be met within 5 years of planting. In the event that performance criteria are not met within this timeframe, or if a substantial amount of plants fail and replacement is required, thereby extending the monitoring schedule, ESA will monitor up to the five years from original planting, and additional monitoring would be completed under a separate scope.

- This scope assumes plantings will be successful and does not provide for development of additional mitigation in the event that the restoration component of the project fails.

Level of Effort

ESA has presented estimated level of effort and budgets by task in **Table 1**.

ATTACHMENT 'B'

TABLE 1: Estimated Costs for Mitigation Restoration Services

ESA Labor Detail and Expense Summary

	Employee Name	O'Toole	Rogers	Holmboe	Boldt	Baker	Huynh	Carlson	Giolli	Hill		
	Title	Senior Director II	Director II	Managing Associate II	Managing Associate I	Senior Associate III	Senior Associate I	Senior Associate I	Senior Associate I	Associate I	Hours	Labor Price
Task #	**Task Name/Description**	**$240**	**$205**	**$170**	**$155**	**$150**	**$130**	**$130**	**$130**	**$95**		
1	Vegetation Enhancement Plan		1	1		1		36		6	45	$ 5,775
2	Planting Implementation *(See Subconsultant Detail)*			33		4					37	$ 6,210
3	Revegetation Monitoring and Reporting											
3.1	Year 0 Baseline Assessment		1	2		1				32	36	$ 3,735
3.2	Years 1 – 5 Annual Monitoring		1	10		5				110	126	$ 13,105
3.3	Enhancement Plan Reports		1	10		5				128	144	$ 14,815
Total Hours		-	4	56	-	16	-	36	-	276	388	
Subtotals - Labor Costs		$ -	$ 820	$ 9,520	$ -	$ 2,400	$ -	$ 4,680	$ -	$ 26,220		**$ 43,640**
Percent of Effort - Labor Hours Only		0.0%	1.0%	14.4%	0.0%	4.1%	0.0%	9.3%	0.0%	71.1%	100.0%	
Percent of Effort - Total Project Cost		0.0%	1.0%	11.9%	0.0%	3.0%	0.0%	5.9%	0.0%	32.8%		54.6%

ESA Labor Costs	**$ 43,640**
Communication Fee on Labor Cost (3%)	**$ 1,309**
ESA Non-Labor Expenses	
Reimbursable Expenses (see Attachment A for detail)	$ 524
ESA Equipment usage (see Attachment A for detail)	$ -
Subtotal ESA Non-Labor Expenses	**$ 524**
Subconsultant Costs (see Attachment B for detail)	**$ 34,500**
TOTAL PROJECT PRICE	**$ 79,973.60**

Attachment B
Cost Proposal Template
Subconsultant Detail

Task Number / Description	Subconsultant Costs			
	Subconsultant 1 TBD	Subtotal Subconsultant Cost	Fee @ 15%	Total Subconsultant Project Cost
Budget By Task				
2		$ 30,000	$ 4,500	$ 34,500.00
Subconsultant Total	$ -	$ 30,000	$ 4,500	$ 34,500