

AMENDMENT NO. 1

CITY OF CHICO - PROFESSIONAL SERVICES AGREEMENT

AGREEMENT DATED MAY 18, 2023

BETWEEN CITY OF CHICO

AND

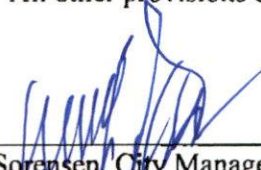
HARRIS & ASSOCIATES
Architect/Consultant/Engineer

2024 PAVEMENT MANAGEMENT PROGRAM UPDATE
Project Title


307-000-8801/50558-307-4140
Budget Account Number

THIS PROFESSIONAL SERVICES AGREEMENT AMENDMENT (Amendment) is entered into on Aug 29, 2023, between the City of Chico, a municipal corporation under the laws of the State of California (City), and Harris & Associates, (Consultant). On May 18, 2023, City and Consultant entered into City of Chico - Professional Services Agreement” (Agreement). The provisions of the Agreement are hereby amended as follows:

1. Exhibit B is hereby superseded and replaced by revised Pages B1-R1 through B8-R1 attached hereto.
2. Exhibit C is hereby superseded and replaced by revised Pages C1-R1 through C2-R1 attached hereto.
3. All other provisions of the Agreement shall remain in full force and effect.

CITY: 

Mark Sorensen, City Manager*

CONSULTANT: 

By: MARK NASSAR
Title VICE PRESIDENT

*Authorized pursuant to Section 3.08.060 of the Chico Municipal Code

APPROVED AS TO FORM:



Vincent C. Ewing, City Attorney*

*Pursuant to The Charter of the
City of Chico, Section 906(D)

APPROVED AS TO CONTENT:



Brendan Ottoboni, Public Works Director,
Engineering

REVIEWED AS TO CONTENT:



Barbara Martin, Administrative Services Director*

*Reviewed by Finance and Information Systems

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EXHIBIT B

SCOPE OF PROFESSIONAL SERVICES - BASIC; COMPLETION SCHEDULE

Amendment No. 1 Services in Bold:

Scope of Professional Services - Basic

The Consultant shall provide professional services as follows:

TASK 1 – PROJECT ADMINISTRATION

Task 1.1 – Kick-Off Meeting

Consultant shall hold a kick-off meeting with the City to establish project guidelines and standards for services, deliverables, and administration. Consultant shall work with the City representatives to confirm the scope of work and review past maintenance records for accuracy. The team shall also discuss pavement maintenance procedures, schedule, budget, and project documents; review project goals and the quality control plan; and clarify the responsibilities of all parties. The purpose of this meeting is to ensure that all parties have a clear understanding of the project scope and the City's specific needs before work commences.

Deliverables:

- *Meeting notes (via email) with lists of responsibilities as detailed during meeting*
- *QA/QC plan*

Task 1.2 – Meetings

Consultant shall conduct two additional meeting web meetings with the City. Examples of meetings include post-survey meetings and a draft report meeting. Any additional interim online meetings during the project will be held upon Agency's request to keep the project on track.

Deliverables:

- *PCI condition listing reports and PCI map (after post-survey meeting)*
- *Draft & Final reports (after respective report meetings)*

Task 1.3 – Project Updates

CA STD FORMS 04/25/22

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B1-R1

Consultant Project Manager shall communicate with the City's Project Manager to ensure smooth project progress. This shall include submitting regular project updates via email, monitoring budgets, invoices, resources, and tracking schedule/milestones, thus keeping the city informed and up-to-date with project progress.

Deliverables:

- *Project progress schedule with milestone activities (via email)*

TASK 2 – PAVEMENT MANAGEMENT PROGRAM (PMP) AUDIT AND UPDATE

Task 2.1 – StreetSaver® Database Review & Audit

Consultant shall conduct a comprehensive review and audit of the City's *StreetSaver®* program, updating and refining the inventory as necessary. This shall include splitting, combining, or adding new sections, as well as checking and verifying the street attributes such as the begin and end locations, functional class, measurements, and surface type. The field surveys shall be thoroughly prepared using the results of the database review and will aid in generating inspection sheets for the field survey crew. The goal of this process is to ensure the accuracy and completeness of the City's roadway network information.

Deliverables:

- *List of streets and roadways broken into management sections*

Task 2.2 – Add New Streets

Consultant shall conduct a comprehensive research and review of the City's Street records, databases, maps, and plans to obtain as much pertinent information as possible on streets that were recently built, annexed by the City, or not included in the previous updates. The new streets shall be added to the existing *StreetSaver®* database (upon the City's review) and shall also be verified in the field. This task, along with Task 2.1, shall help to ensure the City has the most up-to-date database available.

Deliverables:

- *List of new streets to be added to the PMP*

Task 2.3 – GIS Updates

Consultant shall review the City's *StreetSaver®* GIS toolbox for any unlinked and missing street sections and shall digitize them accordingly. As part of this update, the new streets (neighborhood) shall also be added to the GIS toolbox. This updated toolbox shall assist in generating the PCI and work plan maps.

Deliverables:

- *Updated GIS toolbox (as a PCI map indicating all updates post-Task 3)*

Task 2.4 – Enter Maintenance & Rehabilitation Data

The historical treatment (overlays, reconstructions, and surface seals) data is extremely useful for determining future treatments and predicting the performance of various pavement sections. Therefore, collecting and entering this information is highly recommended. Consultant shall input the slurry and rehab projects, as well as other treatments received since the last PMP update performed in 2019, in the City's *StreetSaver®* program. Data on these segments must be

provided by the City in the form of treatment maps or pavement segment lists detailing the treatment type, date, and limits. This task shall provide the City with updated maintenance data in the *StreetSaver*® program for future use.

Deliverables:

- *Applied maintenance treatment report*

TASK 3 – PAVEMENT CONDITION SURVEYS & FIELD QA/QC

Task 3.1 – Pavement Distress Surveys

Consultant shall perform manual pavement distress surveys on approximately ~~282~~ **317 centerline miles** of Chico's roadways and new additions, following the latest MTC Pavement Distress Manuals (AC 4th Editions, PCC 3rd Edition, June 2016). Consultant's surveyors are certified by MTC and are competent in conducting accurate inspections using the PMP distress survey method.

Before conducting pavement surveys, Consultant's Project Manager shall create a street survey list using the City's *StreetSaver*® database, specifying the parameters to be surveyed. This shall enable the pavement inspectors to easily and quickly verify street information, including name, limits, segment ID, length, width, surface type, functional classification, lanes, surface condition, distress, and pavement condition index (PCI) during the survey process.

Consultant's inspectors shall assess flexible pavements for 8 distresses, including but not limited to alligator cracking, block cracking, distortions, longitudinal and transverse cracking, patching, rutting, weathering, and raveling. Rigid pavements shall be inspected for 7 distresses, such as corner break, divided slab, faulting, linear cracking, patching, scaling, and spalling.

The inspectors shall record distress, severity, and quantity data for a 10% representative sample of each management segment, after reviewing 100% of the segment to determine the most representative sample. The inspectors shall also make notes on sections as necessary and submit these to the City upon completing the surveys, ensuring the most current pavement condition data and accurate budget projections.

Task 3.2 – Quality Control Checks (QC Field Inspection)

Quality control checks are critical on a project such as this when a large amount of data needs to be collected and processed. Consultant includes a superior QC module in all projects. A copy of consultant's PMS QA/QC procedures shall be provided at the kickoff meeting. As part of the process, Consultant's Project Manager shall:

- Review field procedures and make changes as needed, after discussion with the City.
- Make sure the field crew has all the equipment required for inspections.
- Carry out a series of tests on the inspection data to further check accuracy, quality, missing inspections, modifications, splits, and additions.
- Oversee (as part of field QC) 5% of re-inspections of the total inspection mileage. This shall be performed by someone other than the main inspector and shall be in addition to 100% of the field distress surveys.

This step assures that pavement inspections are accurate, and that methodology is consistent between inspection crews.

TASK 4 – DATA ENTRY & PCI CALCULATION

Task 4.1 – Field Inspection Data Entry

Consultant shall enter all data collected into the MTC *StreetSaver*® pavement management database. This task shall be done in conjunction with Task 3.1. All field data collected shall be uploaded into the *StreetSaver*® program regularly.

Task 4.2 – PCI Calculation & QC Checks (QC PMP Database)

PCI's shall be calculated for each street segment and for the entire network based on field inspections and the recent maintenance update.

Upon completion of the data entry, a condition report shall be generated showing each street section and its current PCI.

Consultant's Project Manager shall also compare the latest PCI data to recent maintenance data and previous updated PCI data, if available. As-needed additional field checks shall be performed on the segments with a considerable PCI shift (-ve or +ve). Based on the follow-up field review, Consultant's Project Manager shall notify the City of any abnormalities and, if needed, shall request additional maintenance data to be updated in the *StreetSaver*® database. These additional field checks shall be documented in a QC log where the actions taken to correct or justify the considerable PCI shift shall be explained. Consultant's Project Manager shall send a QA/QC report summarizing the QA/QC methodology, results, corrections made, and any field notes or pictures taken in the field to the City. A post survey meeting shall be held with the City to go over the survey results and quality management reports. This task shall ensure accurate PCI data for the City's use.

Deliverables:

- *PCI report*
- *Color-coded PCI map*
- *Quality Management Report (QMR)*

TASK 5 – BUDGET ANALYSIS

Task 5.1 – Update Maintenance & Rehabilitation Strategies (*StreetSaver*® Decision Tree Updates)

Pavement Management Program use a "treatment decision tree" to define the City treatment strategy for each pavement section based on its functional class, surface type, and condition rating. Any update to this decision tree is significant to the PMP implementation as it has a major impact on the recommended work plan and budget consequences.

Consultant shall review the City's recent bid-tabs to update unit costs for treatments entered in the treatment decision tree. The City will be asked to identify the components of treatment costs they would like to include in their unit costs (i.e., staff time, design, inspection, etc.) Consultant's Project Manager shall discuss with the City any decision tree options and treatment costs for future analyses, considering current industry repair and rehabilitation options that are anticipated within the area. The price shall then be used to estimate project costs over the next five (5) years.

Once City staff approves the final strategy, Consultant shall update the PMP database to reflect any changes. The developed decision tree shall be included in the final report.

Deliverables:

- *Treatment decision tree*

Task 5.2 – Define & Modify Future Cost Assumptions

Consultant shall discuss with the City and define interest rate and inflation assumptions used to project future costs.

Task 5.3 – Define Budget Assumptions

Consultant shall request information on expected future budgets. This shall provide the City with a budget projection that accurately reflects City funding practices.

Task 5.4 – Calculate Budget Needs

Consultant shall generate a budget needs analysis (unconstrained budget) that calculates the financial and work program effort needed to bring the City pavement network to an optimum preventive maintenance cycle. This cost-benefit analysis shall project condition ratings based on updated ratings for all segments and identify the best treatment type for each segment including preventative and rehabilitation strategies. This report shall demonstrate the level of funding the City will need to practice the most cost-effective means of managing its pavements.

Deliverables:

- *Budget needs report*

Task 5.5 – Calculate Budget Needs

Harris shall calculate funding scenarios to evaluate the impact of current and desired funding levels of overall pavement condition and deferred maintenance costs over time. Charts comparing the impact of each funding strategy shall be provided. Up to 5 funding scenarios shall be calculated and reports generated.

The primary emphasis of this task is to maximize the programming of street maintenance projects using the most cost-effective maintenance strategies available and considering a life-cycle cost analysis of each strategy recommended. The program recommendations shall be provided to the City to be used to put pavement projects out to bid for the next four-five years. The following scenarios shall be generated for the following funding levels:

- No funds
- Budget needs assessment (unconstrained funding level)
- Maintain current PCI
- Improve network PCI by 5 pts
- Expected Annual Budget

The report shall show the impact of various funding levels on the City PCI and maintenance backlog.

Deliverables:

- *Budget scenario reports*

- *PCI chart*
- *Deferred maintenance chart*

TASK 6 – REPORTS & POWERPOINT PRESENTATION

Task 6.1 – Draft Report

Consultant shall provide the following sections in the PMS report for the City, incorporating all data generated from this project:

- Executive Summary – project methodology, results of budget analysis, and findings.
- Introduction – the need for a PMS.
- Methodology – field survey procedure & maintenance strategies.
- PCI Report – current PCI from inspection data for each pavement section.
- Budget Reports – impact of various budget scenarios on PCI & deferred maintenance, charts, and annual work programs.
- Backup Data
 - Description Report – all pavement section data.
 - Inspection Inventory – pavement distresses, severity, and quantity for each pavement section inspected.
 - Maintenance treatment decision trees and inventory of applied historical treatments.

Deliverables:

- *Draft report for review by City staff*

Task 6.2 - Final Report

After the City's review of the draft report, Consultant shall submit a final report to the City incorporating their comments, along with a pen drive containing PMS files.

Deliverables:

- *Final report*
- *Updated StreetSaver® program, Excel files, and GIS shapefiles*
- *Pen drive with MTC PMS files*

Task 6.3 – PowerPoint Presentation

Consultant shall prepare a PowerPoint presentation after the final report is completed. The presentation shall be tailored to City management staff and shall provide a summary of the pavement network, including budgets and planning recommendations. The City shall review and provide input on the final presentation.

Deliverables:

- *PowerPoint presentation*

TASK 7 – TRAINING (FIELD DISTRESS SURVEY TRAINING AND *StreetSaver®* PROGRAM TRAINING)

Task 7.1 – Field Distress Survey Training

Consultant encourages the City staff to accompany our field crew for hands-on inspection training and learn the inspection procedures

- Accompany Consultant staff out in the field
- 3 sections with various PCI conditions shall be reviewed
- Review of the 8 distresses collected in the field
- Demonstration of how the Consultant's team performs pavement distress surveys
- Answer any questions the City has about the survey process. By the end of the field training, the City staff will be familiar with performing inspections and the methodology.

Task 7.2 - StreetSaver® Program Training

Consultant shall provide a training on the *StreetSaver*® program to City staff. This training shall aim at providing users general concept on PMS and *StreetSaver*® software. Each module of the program shall be covered. At minimum, following topics shall be covered;

- System requirements for accessing Data Entry and Editing
- PCI Calculations
- Budget Scenarios & Project selection
- PMS Reports & Graphs

Training on the GIS module shall be covered.

- General toolbar navigation
- Standard Features
- Creating project
- Printing map
- Exporting shapefiles online.

Services to be Provided by City

Consultant shall strive to minimize the impact of staff's time in the conduct of the Consultant's work. Generally, City staff will assist with:

1. Attend kick-off meeting and brief the Consultant team on the existing system.
2. PMP login details – Provide access to the City's *StreetSaver*® online program by adding the Consultant as a user.
3. Street maps – Provide City street maps showing street names.
4. Unit costs and treatment types:
 - a. Provide access to historical budgets, work reports and bid sheets related to pavement maintenance within the City or
 - b. If the current treatment unit costs are known, please edit/update the worksheet provided by the Consultant.
5. M&R history – Provide records showing the maintenance history (reconstructions, overlays, surface seals, etc.) since the last PMP update. Information to be included:
 - a. Street name of street ID-Sec ID
 - b. Treatment type
 - c. Treatment date
6. Interest, inflation, and # of years in analysis period
7. Provide desired budget scenarios.
8. Timely review of Consultant's draft submittals and RFI's

Completion Schedule

The Consultant shall complete all services outlined herein within 5 months of receipt of the City's Notice to Proceed.

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EXHIBIT C

COMPENSATION

Compensation for the services shall be in accordance with the following schedule of hourly rates. Total maximum compensation for the services outlined herein shall not exceed \$80,372.00 **\$90,902.00**.

Compensation shall be based upon actual invoices received and shall be paid according to the following schedule:

Cost Proposal PMP Update

Hourly Breakdown by Personnel

Task	Description	Project Director \$351	Project Manager/ Engineer \$260	Asst. PM/Sr. Tech \$130	Field/Office Technician \$125	Total	Total \$/Task
1.0	Project Administration	2	10	10	8	30	\$5,602
2.0	PMP Audit and Update	0	4	16	8	28	\$4,120
3.0	Pavement Condition Surveys/Field QA-QC	0	8	12	370	390	\$49,890
4.0	Data Entry & PCI Calculation	0	2	8	36	46	\$6,060
5.0	Budget Analysis Inputs	0	10	24	8	42	\$6,720
6.0	Reports (Draft & Final)	0	8	20	8	36	\$5,680
7.0	Training (Field Distress Survey & StreetSaver Program	0	3	4	8	15	\$2,300
Total Hours		2	45	94	446	587	
Billable		\$702.00	\$11,700.00	\$12,220.00	\$55,750.00		
						Total	\$80,372

Amendment No. 1 Services:

\$10,530.00

Amended Total:

\$90,902.00