

MENDOCINO COUNCIL OF GOVERNMENTS

AMENDMENT and EXTENSION of PROFESSIONAL SERVICES AGREEMENT

Pavement Management Program Update and GIS Linkage Update in Mendocino County

This first **Amendment** of the Professional Services Agreement between the Mendocino Council of Governments, hereinafter referred to as "**MCOG**" and **NCE**, hereinafter referred to as "**Consultant**," effective March 19, 2021, is now entered into effective August 13, 2021, by and between **MCOG** and **Consultant**.

WHEREAS:

- The Professional Services Agreement ("Agreement") expires on September 30, 2021;
- MCOG requires additional services beyond the agreed scope of work; and
- The Agreement allows for additional services by mutual written Amendment;

MCOG and **Consultant** agree to the following amendments:

1. WORK TO BE PERFORMED

Consultant agrees to provide additional services, tasks and products detailed in the Scope of Work dated June 24, 2021 between **MCOG** and **Consultant**, added to Exhibit B and incorporated herein by reference:

City of Fort Bragg Alleys:

- Alley Inventory Set-up
- Conduct Walking Survey
- Data Input
- GIS Update

Except as noted herein, all **Consultant** services are to be performed under the same terms and conditions as identified in the original Agreement.

2. PAYMENT FOR SERVICES

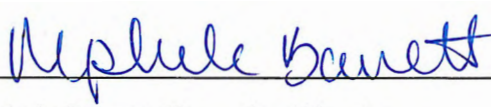
Compensation for additional services provided shall be added to the Agreement in the amount of \$11,200, increasing the not-to-exceed total from **\$137,382** to **\$148,582**.

6. TERM OF AGREEMENT

The term of this Agreement shall be extended from September 30 to December 31, 2021.

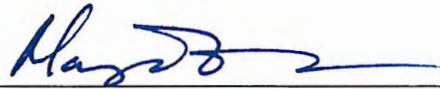
ALL OTHER TERMS AND CONDITIONS of the original Agreement shall remain in full force and effect unless amended in writing by both **MCOG** and **Consultant**.

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized officers to execute this Agreement Amendment in duplicate.



Nephele Barrett, Executive Director
Mendocino Council of Governments

Date: 8-23-21



Margot Yapp, P.E., President
Nichols Consulting Engineers, Chtd. (NCE)

Date: 8/23/2021

Scope of Work

The following tasks describe in detail NCE's work approach:

Task A. Alley Inventory Set-up

The City of Fort Bragg (City) has prepared a city-wide Alley Master Plan in 2011. There are approximately 100 alleys or alley segments within the city limit, where all are located in the central portion of Fort Bragg east of the Mill Site, south of Pudding Creek, north of Noyo Harbor, and west of Sanderson Way. The Alley Master Plan has introduced alley designations with a systemic approach. For instance, alleys located north of Oak Street are northerly or "N" alleys, versus "S" alleys that are located south of Oak Street. NCE would use the same designations in generating the alley database in StreetSaver® for better consistency.

If necessary, NCE will recommend any sectionalization (either combining or splitting sections) to better represent the City maintenance practices. Factors to be considered when re-sectionalizing include:

- Alley geometry
- Age of pavement
- Geographical boundaries
- Pavement performance
- Maintenance practices

DELIVERABLES:

- Updated StreetSaver® database with alley database added

Task B. Conduct Walking Survey

NCE will next perform walking pavement condition surveys on approximately 100 alleys. The distress collection protocols will be in accordance with MTC's "Pavement Condition Index Distress Identification Manual for Flexible Pavements," 4th edition, June 2016. The walking survey will be performed with one-person crew for alleys. The major advantage of this inspection method is that it is highly accurate, since cracks and all other pavement distresses are measured, and recorded. A minimum of one sample unit per section will be inspected. Approximately one sample unit will be inspected for each 1,000 lineal feet of roadway. Any variation from the established procedures will be to accommodate unique local conditions (e.g., gap-graded texture of rubberized asphalt concrete overlays, chip seals over portland cement concrete pavements, bleeding, edge cracking, etc.). These conditions typically exhibit unique distresses that may not be reflected in any distress manual, so special exceptions will need to be made. Any areas which are not typical of the entire section will be inspected and recorded as a special sample unit.

Our scope of work and condition inspections do not address issues including, but not limited to; traffic, safety and road hazards, geometric issues, road shoulders, sidewalks, curb and gutters, drainage issues, or short-term maintenance that should be performed.

Quality Control

Quality control checks are critical when a large amount of data needs to be collected and processed. As part of NCE's goal to provide a superior quality product for our clients, we incorporate a QC component

into all our projects. For this project, we have proposed the inclusion of a QC Manager, Dr. James Signore. He will be responsible for:

- Calibrating all data collection activities
- Reviewing field activities, including spot checks on the field crews
- Reviewing field procedures and making changes, as needed
- Comparing the field data collected with on-site conditions
- Reviewing all data entry functions, including random spot checks
- Reviewing reports generated and analyses performed to ensure a quality product

NCE will prepare a QC Plan that will include the following components:

- Description of condition survey procedures (distress types, severities). All procedures, changes, or modifications should be well documented in the QCP so that future updates will be consistent.
- Accuracy required for data collection or acceptability criteria.
- Description of how data will be checked for accuracy

A draft QC Plan will be submitted to City of Fort Bragg for approval, and no field work will commence until a final plan has been accepted. Our QC Plan meets MTC's requirements for all 100+ jurisdictions in the Bay Area.

DELIVERABLES:

- Quality Control plan
- Inspection schedule
- Updated StreetSaver® database with pavement distress data
- Spreadsheet containing distress data

Task C. Data Input

Task C-1 PCI Calculation

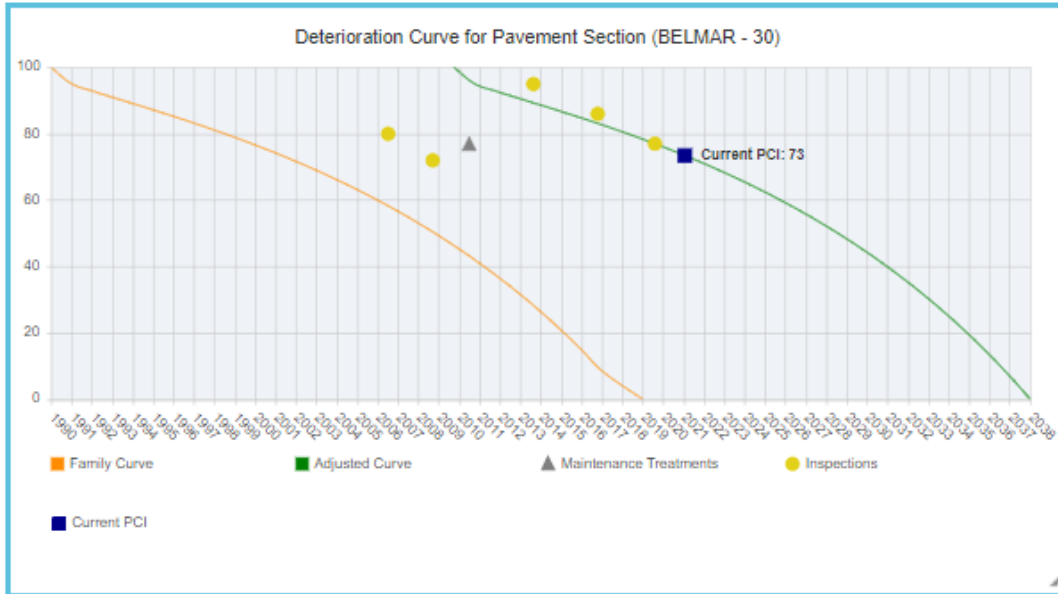
All data collected from the condition surveys will then be uploaded into the database. This task will be performed at NCE's office to provide quality control of all data entered into the system. NCE will then perform the PCI calculations, and correct any errors found.

DELIVERABLES:

- Updated StreetSaver® database with PCIs calculated
- Street Inventory Report

Task C-2 Maintenance and Rehabilitation History Update

All historical M&R records, if any, will also be entered into StreetSaver®. Populating the database with recent M&R historical data is extremely useful for determining future treatments and predicting the performance of the various pavement sections.



M&R activities include overlays, reconstructions and any surface seals. All M&R historical records must include the following information:

- Alley name and limits or approximate geographical location
- Date and type of treatment
- Cost of treatment (optional)

DELIVERABLES:

- All data collected shall be submitted (Excel format) for city/county staff to review prior to updating the StreetSaver® database
- M&R history report

Task C-3 Maintenance and Rehabilitation Strategies

NCE will next review M&R strategies with City staff. This will include the recommendation and selection of appropriate treatments and the determination of treatment unit costs. This will also be an appropriate time to review the use of new/sustainable treatments or materials, such as portland cement concrete bonded overlays, rubberized asphalt, rubberized cape seals, microsurfacing, rejuvenators, cold-in-place recycling, full-depth reclamation (see figure), warm mix asphalt, etc.



NCE’s experience in pavement engineering and design, as well as local conditions, allows our staff to be able to provide the City with solutions that are innovative, sustainable, practical, and workable. For example, we recently worked with Chula Vista to develop strategies for implementing “cool pavements”. Dr. James Signore will share his knowledge from research on new pavement materials and designs and apply them

to Mendocino County/City roads as appropriate. He has developed maintenance and design guidelines for rural roads in Sonoma County.

Development of the M&R decision tree is a critical step in any pavement management update as it has a direct and significant impact on the final work plan that is developed, as well as the budgeting consequences. NCE's experience in pavement engineering and design, as well as local conditions, allows our staff to be able to provide member agencies of Mendocino County with solutions that are practical and workable.

Since paving construction costs have increased dramatically in the last ten years, NCE strongly recommends that this be performed prior to any budget analyses.

The unit costs will have a huge impact on funding projections or needs assessments. Therefore, NCE will review any recent bid tabs, together with those from neighboring cities, as appropriate. Also, unit prices will be fully loaded rates, and will include not just contractors' prices, but also design, inspection and testing costs.

DELIVERABLES:

- Maintenance and rehabilitation decision trees
- Updated unit costs

Task D. GIS Update

NCE will add the alley inventory to the City's GIS street inventory shapefile and will link the added alleys with the StreetSaver® updated database. NCE will ensure that a full linkage is created between the alley and street inventory with the final GIS shapefile. Once fully linked, the built-in queries in StreetSaver® can be used to easily generate various maps such as:

- Current PCI Map
- Future PCI by road section
- Maintenance Treatment History
- Historical PCI Condition
- Surface Type and Functional Class Maps
- Impacts of different budget scenarios
- Sections Selected for Treatment

DELIVERABLE:

- GIS full linkage with the StreetSaver® street inventory
- Updated GIS Shapefile

Budget

Detailed below is NCE's detailed cost breakdown by task for this project.

EXHIBIT 10-H1 COST PROPOSAL
ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS
 (DESIGN, ENGINEERING AND ENVIRONMENTAL STUDIES)

Note: Mark-ups are Not Allowed X Prime Consultant Subconsultant 2nd Tier Subconsultant
 Consultant NCE

Project No. Pavement Management Program Update Contract Date 6/24/2021
 & GIS Linkage in Mendocino County No. TBD

(2020/21)

DIRECT LABOR

Classification/Title	Name	Hours	Actual Hourly Rate	Total
Project Manager	Shahram Misaghi	1	\$ 50.50	\$50.50
Principle	Margot Yapp	0	\$ 105.90	\$0.00
QA/QC Manager	James Signore	1	\$ 72.34	\$72.34
Project Engineer	Debaroti Ghosh/Sharlan Dunn	40	\$ 40.00	\$1,600.00
Senior Technician	Marvin Mann	10	\$ 23.59	\$235.90
Technician	Jacob Rajnowski	0	\$ 22.28	\$0.00
Clerical	Lydia Alderete	1	\$ 20.00	\$20.00

LABOR COSTS

a) Subtotal Direct Labor Costs \$1,978.74

b) Anticipated Salary Increases (see page 2 for calculation) \$0.00

c) TOTAL DIRECT LABOR COSTS [(a) + (b)] \$1,978.74

INDIRECT COSTS

d) Fringe Benefits (Rate: 93.79%) e) Total Fringe Benefits [(c) x (d)] \$1,855.86

f) Overhead (Rate: 139.79%) g) Overhead [(c) x (f)] \$2,766.08

h) General and Administrative (Rate: 0.00%) i) Gen & Admin [(c) x (h)] \$0.00

j) TOTAL INDIRECT COSTS [(e) + (g) + (i)] \$4,621.94

FIXED FEE 8.00% **k) TOTAL FIXED FEE [(c) + (j)] x (q) \$528.05**

l) CONSULTANT'S OTHER DIRECT COSTS (ODC) – ITEMIZE (Add additional pages if necessary)

Description of Item	Quantity	Unit	Unit Cost	Total
NCE Vehicle	2	day	\$ 85.00	\$ 170
Supplies / Expenses / Reproduction	1	LS	\$ 129	\$ 129
StreetSaver® GIS Integration	1	user	\$ 3,500	\$ 3,500
Meals and incidentals	2	day	\$ 46	\$ 92
Lodging	2	day	\$ 90	\$ 180
l) TOTAL OTHER DIRECT COSTS				4,071

m) SUBCONSULTANTS' COSTS (Add additional pages if necessary) \$

m) TOTAL SUBCONSULTANTS' COSTS \$

n) TOTAL OTHER DIRECT COSTS INCLUDING SUBCONSULTANTS [(l)+(m)] \$4,071.26

TOTAL COST [(c) + (j) + (k) + (n)] \$11,200.00

NOTES:

1. Key personnel must be marked with an asterisk (*) and employees that are subject to prevailing wage requirements must be marked with two asterisks (**). All costs must comply with the Federal cost principles. Subconsultants will provide their own cost proposals.
2. The cost proposal format shall not be amended. Indirect cost rates shall be updated on an annual basis in accordance with the consultant's annual accounting period and established by a cognizant agency or accepted by Caltrans.
3. Anticipated salary increases calculation (page 2) must accompany.

EXHIBIT 10-H1 COST PROPOSAL Page 2 of 3
ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS
 (CALCULATIONS FOR ANTICIPATED SALARY INCREASES)

1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)

Direct Labor <u>Subtotal</u> per Cost Proposal	Total Hours per Cost Proposal	=	Avg Hourly Rate	5 Year Contract Duration
\$1,978.74	53		\$37.33	Year 1 Avg Hourly Rate

2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)

	Avg Hourly Rate		Proposed Escalation			
Year 1	\$37.33	+	3.5%	=	\$38.64	Year 2 Avg Hourly Rate
Year 2	\$38.64	+	3.5%	=	\$39.99	Year 3 Avg Hourly Rate
Year 3	\$39.99	+	3.5%	=	\$41.39	Year 4 Avg Hourly Rate
Year 4	\$41.39	+	3.5%	=	\$42.84	Year 5 Avg Hourly Rate
Year 5	\$42.84	+	3.5%	=	\$44.34	Year 6 Avg Hourly Rate
Year 6	\$44.34	+	3.5%	=	\$45.89	Year 7 Avg Hourly Rate

3. Calculate estimated hours per year (Multiply estimate % each year by total hours)

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	100.00%	*	53.0	=	53.0	Estimated Hours Year 1
Year 2	0.00%	*	53.0	=	0.0	Estimated Hours Year 2
Year 3	0.00%	*	53.0	=	0.0	Estimated Hours Year 3
Year 4	0.00%	*	53.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	53.0	=	0.0	Estimated Hours Year 5
Year 6	0.00%	*	53.0	=	0.0	Estimated Hours Year 6
Total	100%		Total	=	53.0	

4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$37.33	*	53.0	=	\$1,978.74	Estimated Hours Year 1
Year 2	\$38.64	*	0.0	=	\$0.00	Estimated Hours Year 2
Year 3	\$39.99	*	0.0	=	\$0.00	Estimated Hours Year 3
Year 4	\$41.39	*	0.0	=	\$0.00	Estimated Hours Year 4
Year 5	\$42.84	*	0.0	=	\$0.00	Estimated Hours Year 5
Year 6	\$44.34	*	0.0	=	\$0.00	Estimated Hours Year 6
	Total Direct Labor Cost with Escalation			=	\$1,978.74	
	Direct Labor Subtotal before Escalation			=	\$1,978.74	
	Estimated total of Direct Labor Salary Increase			=	\$0.00	Transfer to Page 1

NOTES:

1. This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
2. An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology)
3. This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
4. Calculations for anticipated salary escalation must be provided.

Certification of Direct Costs:

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

- 1 Generally Accepted Accounting Principles (GAAP)
- 2 Terms and conditions of the contract
- 3 Title 23 United States Code Section 112 - Letting of Contracts
- 4 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
- 5 23 Code of Federal Regulations Part 172 - Procurement, Management, and Administration of Engineering and Design Related Service
- 6 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

Prime Consultant or Subconsultant Certifying:

Name: Darren J. Leitzke Title *: Director of Finance
Signature : *Darren J. Leitzke* Date of Certification (mm/dd/yyyy): 3/10/2021
Email: dleitzke@ncenet.com Phone Number: (775) 329 4955
Address: 501 Canal Blvd, Ste I, Pt. Richmond, CA 94804

*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract: