

Authorization for Additional Services

This Agreement is to provide additional professional engineering services for the project identified as follows:

Project Name: Raw Water Line Replacement Project
Client Project Number: 2019-02
Consultant Project Number: FTBG18-001
Additional Services #: 1
Date of Original Agreement: January 24, 2019

The Client and the Consultant are identified as follows:

| | |
|--|---|
| CLIENT: <u>City of Fort Bragg</u> | CONSULTANT: <u>Coleman Engineering, Inc.</u> |
| Name: <u>Diane O'Connor</u> | Name: <u>Simon Gray</u> |
| Title: <u>Project Manager</u> <u>City of Fort Bragg, Public Works</u> | Title: <u>Principal</u> |
| Address: <u>Department, 416 N Franklin</u> | Address: <u>1358 Blue Oaks Blvd., Suite 200</u> |
| City, ST, Zip: <u>Fort Bragg, CA 95437</u> | City, ST, Zip: <u>Roseville, CA 95678</u> |
| Phone: <u>707-961-2823 x 134</u> | Phone: <u>916-791-1188</u> |
| Fax: <u>-</u> | Fax: <u>-</u> |
| e-mail: <u>doconnor@fortbragg.com</u> | e-mail: <u>simon@coleman-eng.com</u> |

The following Scope of Additional Services, Schedule, Budget, and Budget Summary are added to the existing agreement referenced above, are effective as of the date signed on the last page and are subject to all of the terms of the original agreement.

DESIGN ENGINEERING AND ENVIRONMENTAL SERVICES FOR THE HARE CREEK CROSSING REPLACEMENT

Background

The ongoing Raw Water Line Replacement Project includes for phased replacement of the City's raw water supply pipeline that conveys raw water by gravity from the Waterfall Gulch and Newman Gulch intakes to the City's water treatment plant (WTP) at the east end of Cedar Street. The pipeline crosses both the Noyo River and Hare Creek. The project includes the following phases:

- Phase II – from the WTP to the north side of the Noyo River crossing.
- Phase III – from the south side of the Noyo River crossing to the Summers Lane Reservoir.

- Phase IV – from the north side of Highway 20 (and also replacing the current Highway 20 crossing) to the north side of the Hare Creek crossing.
- Phase V – from the south side of the Hare Creek crossing along Waterfall Gulch to a connection with the new pipeline section which ends at Forest Road 450.

Phase 1 of the project, which comprises the section of pipeline from the north side of State Highway 20 to the Summers Lane Reservoir, was completed in 2013 and is not part of this project.

Replacement of the Noyo River Crossing and the Hare Creek Crossing was not included in the original project.

Following completion of the Final Project Practicality Report that included route alternatives evaluation and selection, design engineering for all phases, including plans and specifications preparation is approximately 60% complete. Environmental studies for CEQA compliance and preparation of the Project Description and Initial Study / Mitigated Negative Declaration (IS/MND) documents are underway, with field studies and investigations primarily complete.

At Hare Creek, the existing raw water pipeline has been exposed in the creek bank after floodwater scouring during winter storms. There is a significant risk of a pipeline failure that would endanger a portion of the City's raw water supply. As such, the City wants to add to the Raw Water Line Replacement Project the design of a replacement crossing and connecting pipelines that will link with the new Phases IV and V replacement pipelines. The crossing site is very inaccessible for construction, and is environmentally sensitive, so the associated design engineering and environmental studies will require detailed consideration of methods of construction, access routes and entry points, creek diversion and SWPPP methods, staging areas, material storage and disposal locations, and the timing and duration of each construction activity. CEQA environmental studies will likely require additional consultation with the State Department of Fish and Wildlife, Mendocino County Planning, the Corps of Engineers, the Regional Water Quality Control Board, and other permitting agencies.

Scope of Services

The Scope detailed below includes the tasks and sub tasks necessary to complete the design and environmental studies for the Hare Creek Crossing replacement. An interim 60% engineering design-level-of-completion submittal will be made for the City's review and comment. Agreed comments will be incorporated into a subsequent 100% design submittal for further City review prior to finalization: it is anticipated that the Hare Creek Crossing replacement plans and technical specifications will be incorporated into the plans for a combined Phases IV / V construction contract.

Note that no additional project management tasks have been added by this additional services scope: project management for the existing Raw Water Line Replacement Project will be able to incorporate that needed for the Hare Creek Crossing replacement design phase.

Task 1 – Topographical Mapping

Consultant’s subconsultant Cinquini and Passarino will perform additional ground topographical mapping and survey of the proposed location of the replacement Hare Creek Crossing and pipelines to connect to the current Phase IV and V pipelines. The Hare Creek Crossing location and surrounding area were previously mapped earlier in the project using aerial photography and LiDAR, and the additional ground survey will supplement this data. Mapping will be prepared on California Coordinate System of 1983, Zone 2 and NAVD 1988 Vertical Datum. The topographic survey will be at a drawing scale of 1 inch = 20 feet, with a one-foot contour interval. The topographic survey will include necessary work to produce a topographic map, including features such as pipeline surface features, blowoffs, valves, manholes (including rim, invert and pipe information), utility markings and poles, trees six (6) inches and larger, and other pertinent information that could apply to the project during design.

The topographical mapping and survey data will be processed into an AutoCAD format suitable for use in plan preparation under subsequent tasks.

Task 1 Deliverable:

- Topographical mapping in AutoCAD format.

Task 2 - Prepare 60% Design Submittal, including Constructability Technical Memorandum

Under this task, Consultant, with the assistance of its constructability subconsultant, Aaron Smud, will prepare 60% design-level-of-completion plans and associated specification sections for submittal to the City for review and comment. A conference call will be held approximately 10 business days after submittal to review and agree on comments to be incorporated into the next phase of design.

The following plans are anticipated for this and the remaining design submittals. All plans will be submitted for the 100% and Final Submittals.

| HARE CREEK CROSSING REPLACEMENT PROJECT PLANS | | |
|---|-------|---|
| 60% | Sheet | Title |
| ✓ | C1 | Sheet Layout Key Plan |
| ✓ | C2 | Hare Creek Crossing Pipeline Plan and Profile 1 |
| ✓ | C3 | Hare Creek Crossing Pipeline Plan and Profile 2 |
| ✓ | C4 | Hare Creek Crossing Pipeline Plan and Profile 3 |
| ✓ | C5 | Design Details 1 |
| | C6 | Design Details 2 |
| | C7 | Design Details 3 |

In addition to the design plans, Consultant’s constructability subconsultant will prepare a

constructability technical memorandum (TM) as part of this task that details methods of construction, access routes and entry points for construction equipment, potential creek diversion and SWPPP methods, staging areas, material storage and disposal locations, the timing and duration of each construction activity, and overall construction duration. The TM will also be used for the environmental studies and permitting, and for consultation with the environmental regulatory agencies.

Task 2 Deliverables:

- 60% Design Submittal, including Plans and Specifications in electronic (pdf) format.
- Constructability Technical Memorandum in electronic (pdf) format.

Task 3 - Prepare 100% Design Submittal

Under this task, Consultant and its subconsultants will prepare 100% design-level-of-completion plans and associated specification sections and/or modifications to existing construction contract specifications for submittal to the City for review and comment. A conference call will be held approximately 10 business days after submittal to review and agree comments to be incorporated into the final design.

Task 3 Deliverable:

- 100% Design Submittal, including Plans and Specifications in electronic (pdf) format. This will be in conjunction with the Phases IV and V 100% Design Submittal.

Task 4 - Prepare Final Design Submittal

Following final agreement on review comments on the 100% Design Submittal, Consultant and its subconsultants will finalize the plans and associated specification sections and/or modifications to existing construction contract specifications.

Task 4 Deliverable:

- Final Design Submittal, including Plans and Specifications in electronic (pdf) format. This will be in conjunction with the Phases IV and V Final Design Submittal.

Task 5 – CEQA Environmental Services

Under Task 5, Consultant’s environmental sub consultant Dewberry will review and update all CEQA documents prepared to date, including the Project Description, the Initial Study Checklist and the Initial Study / Mitigated Negative Declaration (IS/MND) to take into account the addition of the Hare Creek Crossing replacement. No additional field work will be performed at

this point: the existing Hare Creek Crossing was examined during previous field study for Phases IV and V.

5.1 - Revise Project Description

City staff have made recent revisions and updates to the Project Description. Dewberry will review the revised Project Description prepared by City staff and determine that the text describing the construction methods for each section and supporting graphics for the Hare Creek crossing are complete. Dewberry will coordinate with the City and Consultant before any suggested revisions or clarifications needed to the Project Description are included in an updated IS/MND.

5.2 - Update All Initial Study Checklist Sections

All 21 sections and 90 technical questions of the CEQA Initial Study Checklist will be revised and updated with new analysis in this task. Each relevant IS/MND section will be revised to include the Hare Creek replacement project under the following subtask. A cultural records search has been obtained and the cultural resources section was initiated but needs to be completed in this task. Previous AB 52 tribal consultation letters prepared by the City will be reviewed.

5.3 - Prepare Updated Admin Draft IS/MND for City Review

Dewberry will update the Administrative Draft IS/MND for one round of review and comments.

Task 5 Deliverables:

- Revised Project Description (in electronic pdf and Word format)
- Updated Initial Study Checklist (in electronic pdf and Word format)
- Updated Administrative Draft IS/MND text for incorporation into the master project Administrative Draft IS/MND

Schedule

Coleman Engineering will provide the services outlined in this Scope consistent with the requirements of the project and in conjunction with the design schedule for Phases IV and V.

Additional Services Budget

Services detailed above will be provided using the following budgets. Coleman Engineering reserves the right to transfer budgets between tasks without changing the Total Additional Services Budget. Services will be provided on a time and materials basis not to exceed a total amount summarized below. The attached spreadsheet provides a detailed breakdown of the additional fee by task.

| | |
|--|-----------------|
| Task 1 – Topographical Mapping | \$10,434 |
| Task 2 – Prepare 60% Design Submittal | \$21,502 |
| Task 3 – Prepare 100% Design Submittal | \$8,252 |
| Task 4 – Prepare Final Design Submittal | \$5,742 |
| Task 5 – CEQA Environmental Studies | \$18,990 |
| Total Budget for Additional Services #1 = | \$64,920 |

Project Budget Summary

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|---|-----------|
| Original Budget = | \$594,096 |
| Sum of Previous Changes to Budget = | \$0 |
| Budget of this Scope of Additional Services = | \$64,920 |
| New Project Budget = | \$659,016 |

The above is mutually agreed to this ____ day of _____, 2020.

City of Fort Bragg

Coleman Engineering, Inc.



By: _____
Name: _____
Title: _____

By: _____
Name: Simon N. Gray, P.E.
Title: Principal
CA PE #: C 60311