



Larkspur Excavation and Remediation Project

Date: April 29, 2019
To: All Plan Holders and Builder’s Exchanges for the subject Project
CC: Steve Moore, P.E., General Manager, Ross Valley Sanitary District
From: Joshua Andresen, P.E.
Subject: Addendum No. 4 – **Larkspur Excavation and Remediation Project**

TO ALL PROSPECTIVE BIDDERS:

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES THE ORIGINAL SPECIFICATIONS AND DRAWINGS AS NOTED HEREIN. BY SUBMISSION OF A PROPOSAL FOR THIS PROJECT, THE BIDDER IS ACKNOWLEDGING THAT THE BIDDER HAS CONFIRMED THAT THEY HAVE RECEIVED ALL ADDENDA ISSUED FOR THE PROJECT AND HAVE INCLUDED COSTS FOR SUCH IN THE PROPOSAL SUBMITTED AND SO ACKNOWLEDGED THE ADDENDA IN THE BID FORM.

It shall be the responsibility of the general (prime) contractor to inform any affected sub-contractors of the content of this Addendum.

CHANGES TO SPECIFICATIONS:

1. SECTION 00800 – SUPPLEMENTAL GENERAL CONDITIONS, ARTICLE 2, Paragraph 2.02, Damages for Delay has been reduced from \$8,000 to \$2,000 per day as shown in track changes below:

2.02 DAMAGES FOR DELAYS

In accordance with the provisions of Section 00700-6.05, LIQUIDATED DAMAGES, for the period of time that any portion of the Work remains unfinished after the time fixed for Substantial Completion in Section 00800-2.01, TIME ALLOWED FOR COMPLETION, as modified by extensions of time granted by the District, it is understood and agreed by the Contractor and the District that the Contractor shall pay the District the damages listed below.

<u>Item</u>	<u>Dollars Per Calendar Day Liquidated Damages</u>
Substantial Completion	\$ 8,000.00 <u>2,000.00</u>
Final Completion	\$ 8,000.00 <u>2,000.00</u> in addition to the Liquidated Damages for Substantial Completion

2. SECTION 01275 – Measurement and Payment, Paragraph 1.06, D. No. 2 is replaced with the following:
 2. Bid Item No. 26. Controlled Low Strength Material Backfill
 - a. Work required to complete the Controlled Low Strength Material (CLSM) Backfill includes, but is not limited to:

- i. CLSM material as specified from an approved source.
- b. Controlled Low Strength Material Backfill shall be measured for payment on a per cubic yards basis as documented by tickets from the batch plant of the material supplier.
- c. Payment for Controlled Low Strength Material Backfill Work shall be made in accordance with the unit price for the Bid Item "Controlled Low Strength Material Backfill" listed on Bid Form Schedule A. Payment of the unit price for this Bid Item shall constitute full compensation for all labor, supervision, materials, equipment, incidentals and all other costs necessary to complete Controlled Low Strength Material Backfill Work as shown on the Construction Drawings and in these Specifications. Payment shall only be made for materials used for the Project. Contractor shall be responsible for excess material brought to the Site and not used.

RESPONSE TO REQUEST FOR INFORMATION:

1. Question: Please provide Specification 01720 – Field Surveys and Controls. Specification 02300 Section 3.07 G.3 references this Specification.

Response: Specification 1720 is attached.

2. Question: Page 00100-3 Instructions to Bidders. Are you able to provide any additional information as to what specifically the District wants included in this summary? How does this methodology impact the determination of the apparent low bidder? Will there be some sort of scoring scale? What is it? Or Is this a pass/fail? Will this provided technical approach be shared publicly?

Response: Refer to Addendum 3, Item 3. The summary will be used to confirm the Contractor is responsive and responsible. All information provided with the bids will be made available for public review.

3. Question: Due to the complex nature of the project we formerly request a bid date postponement of 2 weeks.

Response: The Bid submittal date will not be extended.

4. Question: Could bidders be provided the project Auto CAD dwgs files for use in excavation quantities for bidding purposes?

Response: AutoCad files will be provided to the successful bidder for use during construction.

5. Question: On page 46 Section 5.5.2 of the Revised Updated Application for Remediation of Polychlorinated Biphenyls Report dated February 27th 2018 Surveying and Compaction Testing CQA activities are described. Will the owner be completing these activities or shall the Contractor complete these activities?

Response: Surveying and compaction testing are the responsibility of Contractor (Section 01275, Page 2. Paragraph 1.03. B; Section 02300, Page 13, Paragraph G.; and Section 01720)

6. Question: The summary of work does not specify which party is responsible for surveying and staking of the excavations. Is the environmental engineer going to be responsible for this work?

Response: Surveying and compaction testing are the responsibility of Contractor (Section 01275, Page 2. Paragraph 1.03. B; Section 02300, Page 13, Paragraph G; and Section 01720)

7. Question: At the bottom of page 5 of the Initial Study/Mitigated Negative Declaration Report dated April 14th, 2017 it states that the proposed project is expected to result in, on average 40 vehicle trips per day. Will the contractor be limited to 40 truckloads per day? Is this a

combination of both import and export totaling 40 vehicle trips? Or 40 export trips as well as 40 import trips.

Response. Refer to Addendum 3, Item 4.

8. Question: In the middle of page 8, Other Permits and Project Approvals, of the Initial Study/Mitigated Negative Declaration Report dated April 14th, 2017 it states that a City of Larkspur Grading and Hauling Permit and a Construction General Permit Order 2009-0009-DWQ (Construction Stormwater Permit) will likely be required. Who is responsible for applying for these permits? Who is responsible for paying for these permits?

Response: Owner has taken responsibility for securing the grading permit from the City of Larkspur. Contractor is responsible for securing the Construction General Permit (SWPPP), including all associated costs.

9. Question: 02490, Table 1: Please provide threshold and limiting values for monitoring of features applicable to this project (peak particle velocity of seismographs and displacement tolerance pertaining to nail wall, segmental retaining wall, shoring segments, sheet piles, etc.)

Response: See attached table.

10. Questions: 02300-12: Paragraph 3.06 states that excavation support and protection system need to be completely and entirely removed. Should tie backs be required per the shoring design, can tie-back anchors be left in place if severed from removed shoring?

Response: Yes. Owner requires that Contractor allow time to inspect and approve prior to backfilling, if anchors are left in-place.

11. Question: Please provide specifications for 15-in pipe to be reused/replaced. Please provide diameters for components of manhole to be reused/replaced.

Response: The 2007 Nute Engineering Drawings for the existing storm drain system are included in Appendix C (see C-1, C-5 and C-6). For the specification, refer to note 5 on Sheet C-1, which states "STORM DRAIN PIPE SHALL BE PVC, ASTM D-3036, SDR 26, UNLESS OTHERWISE NOTED. STORM DRAIN PIPE SHALL HAVE MANUFACTURED ELBOWS AND FITTINGS, GLUED AND CONNECTED WATERTIGHT AS PER MANUFACTURER'S RECOMMENDATIONS." In addition, C-6 of the 2007 Nute drawings includes a detail for the storm drain manhole ("Stormceptor STC 900 detail") and additional information for the DI inlets.

12. Question: The general contractor will carry the insurance specified in the general conditions, but does this carry over to all of their subcontractors? Some of the subcontractors will be a small business and will be unable to carry this insurance

Response: Contractor shall be fully responsible for insurance coverage per the contract documents, regardless of level of insurance provided by subcontractors. Contractor's responsibility for subcontractor's insurance is specified in Section 00700, Page 12 and 13.

13. Question: The contractor is required to install the grass swale shown on detail 3 on sheet C13? If so, please provide the specification for the type of grass

Response: Contractor shall hydroseed grass swale areas in accordance with Section 02376 and in accordance with the SWPPP to be prepared by the Contractor.

14. Question: This question is a follow up on your answer to Question No. 4 in Addendum No. 3. Will the Grading Permit (a.k.a City Permit) or other local ordinances limit the number of loads

leaving or entering the site each day? If there is a restriction(s) can you please advise on the maximum number of allowable loads per day? Are the City Permits available for review.

Response: The City has not yet issued the grading permit for the project. The City is aware of the load limit presented in the CEQA document but has not provided further comment or information on hauling restrictions.

15. Question: Please provide a title report for the subject parcel, if available.

Response: District has owned the site for more than 50 years. Title report will not be provided for bid submittal

16. Question: 01275-14: For Bid Item 26, work description doesn't match typical application of Controlled Low Strength Material (i.e., CLSM is flowable, self-leveling, and self-compacting). Please clarify work for this Bid Item and provide specifications for this material

Response: See item 2 under change to specifications of this addendum.

17. 02301-3: Paragraph 2.02 specifies 4- to 6-inch angular rock for temporary construction entrance and Detail 2 on Drawing 12 calls for 1-2" coarse gravel. Please clarify

Response: Section 00700, Paragraph 1.07, Order of Precedence, places Technical Specification ahead of Typical Details; therefore, Contractor shall use 4- to 6-inch angular rock for temporary construction entrance.

Joshua Andresen, P.E. C70354



25 April 2019

Date

SECTION 01720

FIELD SURVEYS AND CONTROL

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. This Work shall consist of General requirements for survey Work to be performed by the Contractor for layout of Work features, for performance of Work, and for field measurements of Work quantities for payment purposes.

1.02 SUBMITTALS

- A. Contractor shall submit the name and qualifications of a Registered Land Surveyor licensed in the State of California for approval to provide required surveying services. Approvals shall not be unreasonably withheld.
- B. Contractor shall submit all field notes, computations, data logger information, and other survey records for the purposes of layout of the Work to the Engineer on a weekly basis.
- C. Contractor shall provide survey data electronically in AutoCAD Civil 3D 2011 or newer and in tabulated formats. All data points shall have the horizontal and vertical datums listed, horizontal and vertical data, and reference point name, if appropriate. Control datum for survey is that indicated on the Drawings.
- D. Contractor shall provide the Engineer the final pay quantities as well as monthly progress payment quantities, as applicable, for all bid items.

1.03 PROJECT RECORD DOCUMENTS

- A. The Contractor shall perform a survey for the original ground surface ("baseline" survey) of the areas designated on the Drawings as part of the Work prior to the Work.
- B. The baseline survey shall be expanded approximately 100 feet beyond the proposed limits of Work where possible.
- C. The Contractor's Surveyor shall be responsible to maintain a complete and accurate log of control and survey Work as it progresses.

1.04 EXAMINATION

- A. The Contractor's surveyor shall verify the Owner's original survey used for quantity calculations prior to construction. Contractor shall assume all responsibility to verify survey prior to starting Work. Discrepancies shall be promptly reported to the Engineer.
- B. Contractor shall assume all responsibility to verify location of survey control points as shown on the Drawings prior to starting Work. Control used shall be verified weekly using monuments at quarter corners acceptable to Engineer.
- C. Contractor shall be responsible for continuous protection and maintenance of all local control hubs used in performing the Work. Contractor shall direct Contractor's surveyor to submit to Engineer all survey data, in both original and reduced form. Data shall be reduced to show northing and easting, measured elevation, design

elevation, thickness in feet (where applicable), and shall be presented in Microsoft® Excel format.

PART 2 - PRODUCTS

NOT APPLICABLE.

PART 3 - EXECUTION

3.01 QUALITY CONTROL

- A. The Contractor shall employ a Land Surveyor registered in the State of California and acceptable to the Engineer.
- B. The Contractor instruments and other survey equipment shall be accurate, suitable for the surveys required in accordance with recognized professional standards, and in proper condition, adjustment, and calibration at all times.
- C. Contractor shall maintain a complete and accurate log of control and survey Work as it progresses. Contractor shall record all Work changes on an as-built markup set of the Drawings as they occur. Contractor shall maintain the as-built markup onsite for Engineer review during the performance of the Work.
- D. Survey control for construction and documentation purposes shall be the responsibility of the Contractor. The Contractor shall protect and safeguard all construction control points, bench marks and preserve permanent reference points during construction. If displaced by the Contractor, replacement of these construction control points will be at the expense of the Contractor. The Contractor shall assume the entire expense of rectifying work improperly constructed due to failure to maintain and protect such established survey points, control points and bench marks
- E. The Contractor shall be responsible to provide his own construction control stakes to establish lines, slopes and grade necessary for layout and completion of the Work and as necessary for proper documentation and testing of the work. All survey Work performed for layout of the Work and final grade checks shall be performed by a licensed surveyor of the State of California. Survey activities shall include, but not be limited to: verifying existing conditions/elevations, excavation depths and horizontal limits through performance of a post-excavation survey, ensuring specified layer thicknesses are used during backfilling activities, and performing an as-built survey of all constructed site features (e.g., final grades, locations and elevations of any discovered site utilities, etc.). The Surveyor shall have construction experience with construction projects of a similar type and nature. The Contractor shall also be responsible to set his or her own initial and intermediate grade stakes and provide his or her own intermediate and final grade checking. The Engineer will perform a final grade check after the Contractor has provided the final grade. The final grade check by the Engineer will determine compliance with these Specifications.

3.02 SURVEY REFERENCE POINTS

- A. The control datum for the Work is established by the existing monument or survey reference as indicated on the Drawings.

- B. The Work shall be completed using the following minimum methods:
 - 1. Horizontal control shall be set to the nearest one-hundredth of a foot using techniques which will provide results equal to or more accurate than first-order traverse.
 - 2. Vertical control shall be set to the nearest one-hundredth of a foot using techniques which will provide results equal to or more accurate than second-order leveling.
- C. The Owner will provide up to two reference points for horizontal and vertical control. The Owner will also provide any survey necessary for verification of the reference points. The Contractor shall be responsible for all other surveying required to complete the Work according to the Drawings and Specifications.
- D. The following minimum spacings and locations shall be provided for survey points:
 - 1. All "flat" surfaces with gradients less than 10 percent shall be surveyed on a square grid not wider spaced than 50 feet.
 - 2. All slopes greater than 10 percent shall be surveyed on a square grid not wider than 50 feet, but in any case, a line at the crest, midpoint, and toe of the slope shall be taken.
 - 3. A line of survey points no further than 50 feet apart shall be taken along any slope break (this will include the inside edge and outside edge of any bench on a slope).
 - 4. A line of survey points no further than 50 feet apart must be taken at the invert and/or top of any pipes or other appurtenances.
- E. The Contractor shall not make changes to the layout, dimensions, grade, etc., without the prior written authorization of the Engineer.

3.03 SURVEY REQUIREMENTS

- A. The Contractor shall perform all surveys for layout and performance of the Work, reduce the field notes, make necessary calculations, and prepare drawings necessary to carry out such Work.
- B. The Owner reserves the right to perform any desired checking and correction of the Contractor's surveys; however, this shall not relieve the Contractor of the responsibility for adequate performance of the Work.

PART 4 - MEASUREMENT AND PAYMENT

- A. No direct payment will be made for the Work described in this section. Payment for survey Work to be performed by the Contractor for layout of Work features, for performance of Work, for field measurements of Work quantities for payment purposes, and related Work as described in this Section shall be incorporated as part of the bid item to be measured.

END OF SECTION

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TABLE 1 – THRESHOLD LIMITING VALUES

Instrument	Threshold Value		Limiting Value	
Seismographs at soil nail wall and segmental retaining wall: Continuous or Steady State Vibration (see Note A)	Peak Particle Velocity: 0.2 in/sec for frequencies less than 30 Hz. 0.35 in/sec for frequencies greater than 60 Hz.		Peak Particle Velocity: 0.4 in/sec for frequencies less than 30 Hz. 0.6 in/sec for frequencies greater than 60 Hz.	
Seismographs at soil nail wall and segmental retaining wall: Transient or Impact Vibration (see Note B)	Peak Particle Velocity: 0.45 in/sec for frequencies less than 60 Hz. 0.9 in/sec for frequencies greater than 90 Hz.		Peak Particle Velocity: 1.0 in/sec for frequencies less than 60 Hz. 1.5 in/sec for frequencies greater than 90 Hz.	
Seismographs at shoring segments and sheet pile Continuous or Steady State Vibration (see Note A)	Peak Particle Velocity: 0.3 in/sec for frequencies less than 30 Hz. 0.5 in/sec for frequencies greater than 60 Hz.		Peak Particle Velocity: 0.4 in/sec for frequencies less than 30 Hz. 0.8 in/sec for frequencies greater than 60 Hz.	
Seismographs at shoring segments and sheet pile: Transient or Impact Vibration (see Note B)	Peak Particle Velocity: 0.75 in/sec for frequencies less than 60 Hz. 1 in/sec for frequencies greater than 90 Hz.		Peak Particle Velocity: 1.5 in/sec for frequencies less than 60 Hz. 2.0 in/sec for frequencies greater than 90 Hz.	
Displacement points on slabs, building and foundation walls (where applicable as deemed by Contractor (see Note C)	Vertical -0.375 inches		Vertical -0.50 inches	
Displacement points on steel sheet pile (see Note D)	Wall Type		Wall Type	
	Cantilever (see Note E)	Anchored with Temporary Ties	Cantilever (see Note E)	Anchored with Temporary Ties
	Horizontal Adjacent to soil nail/retaining wall: +1.50 inches.	Horizontal Adjacent to soil nail/ retaining wall: +0.5 inch.	Horizontal Elsewhere: +2.5 inches.	Horizontal Elsewhere: +1.5 inches

Notes:

- A. Response Values for Continuous or Steady State Vibrations apply to vibrations such as vibratory pile drivers, jack hammers, reciprocating pavement breakers, compactors, large pumps and compressors, bulldozers, trucks, cranes, and other large machinery. Use linear interpolation for frequencies between 30 Hz and 60 Hz.
- B. Response Values for Transient or Impact Vibrations apply to vibrations, such as blasting, drop chisels, clam shell buckets, impact pile drivers, wrecking balls, building demolition, gravity drop ground compactors and gravity drop pavement breakers. Use linear interpolation for frequencies between 60 Hz. And 90 Hz.
- C. (+) shall denote upward and (-) shall denote downward movement.
- D. (+) shall denote outward and (-) shall denote inward movement.
- E. Wall condition applies when temporary tie is disconnected locally.