NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY HOST Park Fence Replacement eRFQ-24-03-NELHA

January 2025

1.0 Scope of Work

The services to be performed are for replacement of various sections of chain link fence in and around NELHA's HOST Park located at 73-970 Makako Bay Drive, Kailua-Kona, Hawaii 96740 (Refer to Exhibit E1). More precisely, the services shall include (1) Removal and proper disposal of specified deteriorated fencing, and (2) Installation of approximately 3,330-ft of new replacement fencing. The project is divided into six (6) work packages or line items within this solicitation requiring the contractor to bid on each one separately. The Contractor shall provide all labor, tools, equipment, and materials to perform all work related to removal of specified old fence and construction of new fence. No existing materials shall be utilized to construct the new fence except where noted in Section 1.2: Materials & Constructions Practices.

1.1 Site Preparation

All site preparation work, including removal and disposal of specified old chain link fencing shall be performed by contractor. Contractor shall perform removal of old fencing in a manner that does not disturb current client operations. If existing fence posts slated for removal cannot be pulled from the ground footing intact, Contractor shall cutoff post at ground level. At Contractor's expense, old fencing material shall be disposed of at a proper location designated by the County of Hawaii.

1.2 Materials & Construction Practices

All materials and construction practices referred to in "2005 Standard Specifications" (Hawaii State Department of Transportation) shall apply. For reference purposes, this document can be found at:

https://hidot.hawaii.gov/highways/s2005-standard-specifications/2005-standard-specifications

Relevant Sections of 2005 Standard Specifications include:

- Section 105 Control of Work
- Section 202 Removal of Structures and Obstructions
- Section 601 Structural Concrete
- Section 607 Chain Link Fences and Gates
- Section 701 Hydraulic Cement
- Section 703 Aggregates
- Section 712 Miscellaneous
- Section 722 Chain Link Fence Materials

Sections D-02, D-03, and D-04 in "2007 SDOT Standard Plan" (Hawaii State Department of Transportation) shall apply. For reference purposes, relevant sections D-02, D-03, and D-04 are included in Exhibit E2 of this document. For additional security, NELHA requires installation of top rail along the entire length of fence which includes the "Clear Zone" as defined by SDOT Standard Plan. Additional security shall also include three (3) strands of barbwire above top rail.

Some work packages have fence section locations that are difficult to access. Many of these locations have existing footings left from the previous fencing installation. In these cases, NELHA

will accept the Sleeve Method for fence post installation as an alternative to drilling new post holes. Refer to Exhibit E3 for detail on Sleeve Method of Fence Post Installation. Work package exhibits indicate which fence sections are eligible for sleeve method of post installation.

In addition, the following material specifications shall be met or exceeded:

- **Gate Posts:** Schedule 40, 4-inch diameter, hot-dipped galvanized corrosion treatment that meets Hawaii DOT specification.
- **Terminal, Corner, and End Posts**: Schedule 40, 2⁷/₈-inch diameter, hot- dipped galvanized corrosion treatment that meets Hawaii DOT specification.
- Line Posts: Schedule 40, 2%-inch diameter, hot-dipped galvanized corrosion treatment that meets Hawaii DOT specification.
- **Top Rails:** Schedule 40, 1%-inch diameter, hot-dipped galvanized corrosion treatment that meets Hawaii DOT specification.
- Gates, Fittings, Floor Flanges & Barbwire: Hot-dipped galvanized corrosion treatment that meets Hawaii DOT specification.
- **Chain Link Fabric:** Type 1 Class D Zinc coated steel, 9-gauge, 2-inch diamond mesh, hot-dipped galvanized with minimum average coating of 2.0 oz/ft². Galvanize Before Weave (GBW) and Galvanize After Weave (GAW) fabric that meets or exceeds Hawaii DOT specification is acceptable. Contractor is not required to perform any material testing provided they submit a manufacturer's Affidavit of Compliance with the material specification.
- **Post Sleeves (If Alternate Method Used):** Schedule 40, hot-dipped galvanized corrosion treatment that meets Hawaii DOT specification. Post sleeve diameter is listed in Exhibit E3.
- Post Sleeve Grout (If Alternate Method Used): Ameristar Quik-Rok self-leveling cement or approved equivalent.

1.3 Submittals

Submit manufacturers' technical data sheets in duplicate for the chain link fence fabric, posts, rails, braces, all fittings, tension wire, tie wire, hog rings, barbed wire, barbed wire arms and miscellaneous hardware. Submit manufacturers' material certifications in duplicate for all materials used for this project stating compliance with the current American Association of State Highway and Transportation Officials (AASHTO) and American Society of Testing and Materials (ASTM) specifications. Any material substitutions must be deemed an approved equivalent by NELHA prior to making an award.

1.4 Work Package Installations

All new replacement fencing will be 6-ft-high chain link fabric with top rail and three (3) strands of barbed security wire on top. Installation of all new fencing shall conform to current Hawaii DOT standards. Contractor shall field verify with NELHA Officer in Charge (OIC) each location requiring replacement fencing prior to installation. At these locations, contractor shall replace entire section of fence from corner post to corner post. New fence sections shall attach to adjacent existing fencing in a secure and aesthetic manner.

Work Package 1: Makai Discharge

Refer to Exhibit E4 of this document for layout. Work Package 1 includes removal and disposal of approximately 430-ft of old fencing and installation of approximately 434-ft of new fencing. In addition, one (1) 3-ft wide single gate will be installed in the location identified in the layout.

Work Package 2: Makai Research Campus

Refer to Exhibit E5 of this document for layout. Work Package 2 includes removal and disposal of approximately 830-ft of old fencing and installation of approximately 828-ft of new fencing. In addition, one (1) 20-ft wide double gate will be installed in the location identified in the layout.

Work Package 3: Makai Research Campus Expansion

Refer to Exhibit E6 of this document for layout. Work Package 3 includes removal and disposal of approximately 500-ft of old fencing and installation of approximately 579-ft of new fencing. In addition, three (3) 20-ft wide double gates will be installed in the location identified in the layout.

Work Package 4: Expansion Area Discharge

Refer to Exhibit E7 of this document for layout. Work Package 4 includes removal and disposal of approximately 370-ft of old fencing and installation of approximately 602-ft of new fencing. In addition, one (1) 3-ft wide single gate will be installed in the location identified in the layout.

Work Package 5: 55 Pump Station

Refer to Exhibit E8 of this document for layout. Work Package 5 includes removal and disposal of approximately 70-ft of old fencing and installation of approximately 73-ft of new fencing. In addition, two (2) 20-ft wide double gates will be installed in the location identified in the layout.

Work Package 6: 4-Acre CSP Facility

Refer to Exhibit E9 of this document for layout. Work Package 6 includes removal and disposal of approximately 810-ft of old fencing and installation of approximately 812-ft of new fencing. In addition, one (1) 20-ft wide double gate will be installed in the location identified in the layout.

2.0 NELHA Contraction Notes

Please adhere to the following construction best practices that apply to this project:

- 1. Contractor shall be responsible to obtain all required Federal, State, and County permits for this project at no additional cost.
- 2. All work, including all additional materials and labor required to complete this project, whether shown or called for, shall be considered incidental to the various contract items in the proposal, and no additional compensation will be allowed, therefore.
- 3. Should the plans or drawings disagree in themselves; the better quality or greater quantity of work or materials shall be estimated upon and unless otherwise ordered in writing shall be furnished.
- 4. Contractor shall document damage to existing structures and facilities in and around the work area before starting work, and shall, at that time, provide copies of said documentation to NELHA's designated Officer in Charge (OIC) for concurrence. Failing to do so shall be cause for Contractor to be responsible for all costs and remedies relating to restoring and repairing undocumented damage.
- 5. Coordinate with the OIC for mobilization, storing of equipment and materials, barricades, parking, traffic flow, etc.
- 6. Contractor must conduct his construction work with minimum Interference to the operations of NELHA or its tenants.
- 7. Normal working hours shall be between the hours of 7:00 a.m. to 3:30 p.m., Mondays to Fridays excluding holidays observed by the State of Hawaii.
- 8. No work shall be done outside of normal working hours without prior approval of the OIC, provided such grading work is also in conformance with Hawaii Administrative Rules (HRS), chapter 11-46, "Community Noise Control".
- 9. Contractor, at his own expense, shall keep the project area and surrounding area free from dust nuisance. The work shall be in conformance with the air pollution control standards contained In HRS chapter 342B, "Air Pollution Control".
- 10. Contractor shall always provide at least one (1) lane for traffic movement. Two (2) lanes for traffic movement shall be provided between the hours of 3:30 p.m. to 8:00 a.m.
- 11. Contractor shall provide and install all traffic signs and markings for all project-related temporary traffic control requirements. Contractor shall coordinate and hire special duty police officer(s) as needed to provide traffic control.
- 12. Contractor shall provide and install all traffic control devices in conformance with the current edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and as Directed by the OIC.
- 13. Except during actual working hours, all signs that do not pertain to the construction activity, such as "men working" and "flagman ahead" shall be covered or laid down. However, all signs necessary for the safety of the public shall be maintained.
- 14. Contractor shall protect structures and property from damages during construction, and shall support, secure, and take all precautions to prevent damaging these facilities and improvements.
- 15. Existing facilities and/or improvements to remain including but not limited to graded unpaved areas, pavement, pavement striping, signage, fencing, gates, landscaping and irrigation that are damaged by Contractor shall be restored to their original condition at Contractor's expense and to the satisfaction of the OIC.

- 16. Contractor shall tone and locate all existing utilities prior to start of excavation. Contractor shall hand excavate at all crossings with existing utilities and shall take whatever measure necessary to protect utilities, such as constructing special reaction blocks to protect waterlines and/or modifying his construction methods.
- 17. Contractor shall immediately repair all damaged utilities. Contractor shall be held liable for any damages incurred to the existing utilities as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at Contractor's expense. Contractor shall coordinate such utility repair work with the respective utility companies.
- 18. All grading operations shall be performed in conformance with the applicable provisions of the Water Pollution Control and Water Quality Standards contained in Hawaii Administrative Rules, Chapter 11-55, "Water Pollution Control" and chapter 11-54, "Water Quality Standards", and with Hawaii County Code Chapter 10: Erosion & Sediment Control dated 2005, as amended.
- 19. The limits of the area to be graded shall be flagged before the commencement of the grading work.
- 20. No contractor shall perform any grading operation to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural watercourses. Should such violations occur, the costs incurred for any remedial action by the State, shall be payable by Contractor.
- 21. Contractor and his sub-contractors shall, at intervals during the progress of work, remove and properly dispose of accumulated dirt and debris.
- 22. Contractor shall, at his own expense, relocate and dispose of all excess grading materials, rocks and dirt in accordance with all applicable Federal, State and County regulations to an off-site location, or to a location on-site as directed by the OIC.
- 23. After the project is completed, Contractor shall restore grades and groundcover within the project limits to a condition equal to or better than the condition existing prior to construction.
- 24. Contractor, at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in conformance with the air pollution standards and regulations of the state of Hawaii, Department of Health. State may require supplementary dust control measures.
- 25. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill furthermore, adequate provisions shall be made to prevent sediment-laden runoff from leaving the site.
- 26. If the grading work involves contaminated soil, then all grading work shall be done in conformance with applicable State and Federal requirements.
- 27. Fills on slopes' steeper than 5:1 shall be keyed.
- 28. Fills shall be compacted to 90 percent (90%) of maximum density per ASTM D-1557 test.
- 29. Contractor shall remove all vegetation before placing fills on natural ground surface.
- 30. Surplus excavated material shall be disposed of by Contractor at his own expense.
- 31. Contractor shall be responsible for the clearing and removal of all silt and debris generated by his grading and construction work and deposited and accumulated on roadways and other areas.
- 32. Any pavement outside the contract zone limits damaged as a result of construction operations shall be restored to its original condition, or better, as directed by the OIC.
- 33. No material, except the trench excavated material, shall be stockpiled closer than six (6) feet from the existing edge of roadway pavement.
- 34. No construction equipment shall be parked within a road right-of-way in such a manner that the equipment will obstruct the normal movement and sight distance of the driving motorist, except during actual working hours.

- 35. Contractor shall maintain, to the satisfaction of the OIC, the area worked within the government right-of-way including any repairs to pavement and shoulder damaged as a result of the installation work, for a period of one (1) year from the date of final inspection. The permittee shall undertake repairs expeditiously, whenever directed by the State during the maintenance period.
- 36. Contractor shall be responsible for conformance with the applicable provisions of the Water Quality and Water Pollution Control Standards contained in Hawaii Administrative Rules, Title 11, Chapter 54, "Water Quality Standards" and Title 11, Chapter 55, "Water Pollution Control", as amended. Best management practices shall be always employed during construction.
- 37. Manage concrete waste including installing a concrete washout area and properly disposing of concrete curing water (California stormwater BMP handbook ns-12 concrete Curing).
- 38. Protect all drainage inlets receiving runoff from disturbed areas.
- 39. Good housekeeping shall be utilized to ensure protection of roadways from mud, dirt, and debris. Contractor shall ensure that all tires of construction vehicles are sufficiently cleaned off so that dirt or debris is not tracked off the construction site. Washing off tires with water will not be acceptable unless the runoff is contained and does not enter the storm drain system or onto the roadway.
- 40. Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved BMP practices. Do not allow discharge into the drainage system or State waters.
- 41. Waste materials collect and store all waste materials in a securely lidded container with cover to keep rain out or loss of waste during windy conditions. Deposit all trash and construction debris from the site in the container. Empty the container when it is two-thirds full or sooner. Do not bury construction waste materials onsite. Properly dispose of all waste material off-site in accordance with all applicable Federal, State and County regulations.
- 42. Hazardous waste dispose all hazardous waste materials in the manner specified by local or State regulations and by the manufacturer. Contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.
- 43. Sanitary waste collect all sanitary waste from the portable units a minimum of once per week, or as required. Position sanitary facilities where they are secure and will not be tipped over or knocked down.
- 44. Use Material Management Practices to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. Store only enough product on-site as is required to do the job.
- 45. All materials stored onsite shall be kept in a neat, orderly manner in their appropriate containers and if possible, under a roof or other enclosure.
- 46. Keep products in their original containers with the original manufacturer's label.
- 47. Do not mix substances with one another unless recommended by the manufacturer.
- 48. Whenever possible, use a product up completely before disposing of the container.
- 49. Follow manufacturer's recommendations for proper use and disposal.
- 50. Conduct a daily inspection to ensure proper use and disposal of materials onsite.
- 51. Retain original labels and Safety Data Sheets (SDS), formerly Material Safety Data Sheets (MSDS).
- 52. Dispose of surplus products according to manufacturers' instructions and local and State regulations.
- 53. Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.

- 54. Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or State waters. Do not discharge water in the drainage system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the OIC.
- 55. Contractor shall designate at least one person on site as the spill prevention coordinator. This person shall be trained in spill prevention and cleanup procedures and practices.
- 56. Keep ample materials and equipment necessary for spill cleanup in the material storage area onsite.
- 57. Clean up all spills immediately after discovery.
- 58. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- 59. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, Contractor shall notify the Engineer as soon as Contractor has knowledge of the discharge. The Engineer will notify the National Response Center (NRG) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch (DOH-CWBJ via email at cleanwaterbranch@doh.hawaii.qov during non-business hours immediately. Contractor shall also provide to the Engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The Engineer will provide this information to the DOH-CWB. The Engineer will provide information to the NRG if requested.
- 60. Comply with all applicable state and federal permit conditions. Permits may include, but not limited to the following: (A) NPDES permit for construction activities, (B) NPDES permit for construction dewatering, (C) NPDES permit for hydrotesting waters, (D) Water quality certification, (E) Stream channel alteration permit, (F) Section 404 army corps of engineer permit, (G) Site-specific BMP requirements: Each BMP below is referenced to the corresponding section of the current HDOT construction best management Practices field manual and appropriate supplemental sheets. The manual may be obtained from the HDOT Statewide stormwater management program website at http://www.stormwaterHawaii.com/resources under Construction best management practices field manual. Supplemental BMP sheets are located at http://stormwaterHawaii.com/contractors/contractors BMPmanual.aspx under concrete curing and irrigation Water.

3.0 General Conditions

Please adhere to the following sets of General Conditions attached to this HIePRO solicitation:

- AG 008 103D General Conditions
- DAGS Interim General Conditions 1999 Edition for Construction
- General Conditions Amendment Revised for NELHA TG 00700 v1304







STANDARD PLAN D-03 05/31/07

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STANDARD PLAN D-04

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Location: 4-Acre CSP Facility Straight Fence: 812 ft Qty of 20' Double Gates: 1

192, 30, 12,

e Gate