



STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
91-5420 Kapolei Parkway,
Kapolei, HI. 96707

TECHNICAL SPECIFICATIONS

FOR

FURNISHING LABOR AND MATERIALS FOR

Puukapu Pasture Lots Section 1

Subdivision of Lot 22

Water System Improvements

KAMUELA, SOUTH KOHALA, ISLAND OF HAWAII, HAWAII,

T.M.K. (3) 6-4-038:008 & 6-4-038:013 (ROAD)

IFB No.: IFB-22-HHL-005

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SECTION 01200 – UNEXPLODED ORDNANCE PROTECTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The General Provisions of the contract, including General and Special Provisions and General Requirements of the Specifications, apply to the work specified in this section.

1.02 DESCRIPTION OF WORK

A. Section Includes:

1. Unexploded ordnance (UXO) protection

1.03 REFERENCE STANDARDS

- A. State of Hawaii Department of Health, Areawide Environmental Hazard Management Plan for the Waikoloa Maneuver Area, Island of Hawaii, March 2019, (DOH AEHMP).

PART 2- PRODUCTS (NOT USED)

PART 3– EXECUTION

- A. Perform a preconstruction evaluation and survey to assess the likelihood and identify any areas which may require ordnance health and safety monitoring during construction. If the assessment recommends monitoring during construction, provide monitoring services in accordance with recommendations.
- B. The UXO Construction Support Team (UXOCST) shall observe all excavation activities throughout the project site to identify potential UXO or discarded military munitions (DMM) as they are exposed. In the event that a UXO or DMM are encountered during the Contractor's construction operations, cease all work immediately in the vicinity of the site and flag and cordon off the area from public and worker access until the ordnance is mitigated by the UXOCST. The Contractor shall immediately notify the Engineer.
- C. The UXOCST shall be on-site during all excavation activities. Where soil excavation or grading will penetrate greater than 12 inches below the ground surface, the soil shall be removed in 12-inch layers and the UXOCST shall perform additional scans after each layer. This process also applies when boring holes for posts or wells, and when collecting soil samples. The UXOCST shall re-scan with a magnetometer at every 12 inches of depth until desired depth or bedrock is reached. If the excavation does not reach bedrock, the UXOCST shall perform a final scan at the completion of the excavation to ensure that a clearance has been achieved to 12 inches below the final excavation. All soil excavated from the site shall be managed in accordance with the Soil Management Plan described in Section 8.9 of the DOH AEHMP.

If an anomaly is detected, the UXO Contractor shall mark the location and instruct the property owner and workers not to dig in that location. The property owner and construction contractor(s) shall perform construction activities only in areas that have been cleared by the UXO Contractor. This may require revisions to the construction plans.

If the construction plans cannot be altered to avoid the anomaly and the UXO Contractor determines the anomaly may be a UXO, the property owner or the contractor shall call 911 to report the suspected UXO and complete the UXO Report Form (Form 1) in the Appendix of the DOH AEHMP. The US Department of Defense Explosives Ordnance Disposal (EOD) specialists who respond to the report will assess and dispose of the anomaly. Under no circumstances, shall the privately hired UXO Contractor attempt to remove or otherwise dispose of any UXO.

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this section will be paid for as shown in the proposal schedule:

Item No.	Item	Unit
4	Unexploded Ordnance Protection	Allowance

END OF SECTION

SECTION 02270 - SOIL EROSION CONTROL

PART 1 - GENERAL

1.01 SCOPE

- A. Furnish all labor, materials, services, equipment and related items necessary as required by these specifications and drawings and as ordered by the Engineer during the life of the contract to control water pollution through the use of berms, fiber mats, netting, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.
- B. Erosion and siltation control measures as described herein shall be applied to any erodible material within this project, including local material sources and work areas.
- C. The Contractor shall be responsible for providing the necessary erosion control measures. All grading operations shall be performed in conformance with the applicable provisions of the "Water Pollution Control and Water Quality Standards" contained in the "Public Health Regulations," State Department of Health.
- D. The Contractor shall be responsible for removing all silt and debris resulting from his work and deposited in drainage facilities, roadways, neighboring lands, and other areas.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Mulches: To be bagasse, hay, straw, fiber mats, netting, wood cellulose, bark, wood chips, or other suitable material and shall be reasonably clean and free of noxious weeds and deleterious materials.
- B. Slope Drains: To be constructed of pipe, fiber mats, rubble, Portland cement concrete, bituminous concrete, plastic sheets, or other materials.
- C. Grass: To be Common Bermuda or other grass suitable to the area and which provides permanent cover.

PART 3 - EXECUTION

3.01 TEMPORARY EROSION CONTROL

- A. The Engineer has the authority to limit the surface area exposed by clearing and grubbing and to limit the surface area exposed by excavation, borrow and fill operations. The Engineer may also direct the Contractor to provide immediate, permanent, or temporary pollution control measures to prevent contamination of streams, lakes, ponds, drainage channels and pipes, roads, neighboring lands, and other areas.

The Contractor shall determine the appropriate erosion control measures to use. Such work may involve the construction of temporary berms, and slope drains, and the use of temporary mulches, mats, and grassing, or the construction and use of other control devices or methods as necessary to control erosion.

- B. The Contractor shall limit the surface area exposed by grubbing, stripping of topsoil, and grading to that which is necessary for him to perform the next operation and which is within his capability and progress in keeping the finish grading, mulching, grassing, and other such pollution control measures current.

The grubbing of the vegetative root mat and stumps and the stripping of topsoil shall be confined within the limits of grading which can be actively and continuously prosecuted within 15 calendar days. The area to be graded shall be limited to the minimum area necessary to accommodate the Contractor's equipment and work force and shall not at any time exceed 15 acres without prior approval of the Engineer.

Any area remaining bared or cleared for more than 10 calendar days and which is not within the limits of active construction shall be immediately hydro-mulch seeded or remedied as directed by the Engineer at the Contractor's expense without cost to the Owner. All areas where finish grading has been completed shall be grassed within 3 calendar days after the completion of grading for that area.

- C. The Contractor shall, at the end of each work operation in any one day, shape the earthwork in such a manner as to control and direct the runoff to minimize the erosion of soils. He shall construct earth berms along the top edges of embankments or along the property line with adjacent properties, streams and water channels, to intercept any runoff. Temporary slope drains shall be provided to carry runoff from the top of cuts and fills. Temporary facilities for controlled discharges shall be provided for runoff impounded, directed, or controlled by project activities or by any erosion control measure employed.
- D. Cut slopes shall be shaped, topsoil added if necessary, and planted as the work progresses. In no case shall the exposed surface be greater than 15 feet in height. Whenever major excavation is suspended or halted and the slope is bared for more than 15 consecutive days, the exposed surfaces shall be hydro-mulch seeded or protected as directed by the Engineer at the Contractor's expense without cost to the Owner.

Fill slopes shall be finished as specified and in accordance with the requirements outlined for cut slopes above.

- E. Construction of berms, cofferdams, or other such construction in or near the vicinity of streams, ponds, waterways, or other bodies of water shall be with approved materials.

- F. The temporary erosion and siltation control measures outlined in these specifications are minimum requirements and shall not preclude the provision of any additional measures which the Contractor may deem necessary. Damages caused by the erosion of soils and the pollution of downstream areas shall be the responsibility of the Contractor and all costs for repairing, correcting, replacing, and cleaning damaged or polluted facilities shall be borne by the Contractor.

PART 4 – MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this section will be paid for as shown in the proposal schedule:

Item No.	Item	Unit
3	Erosion Control	Lump Sum

END OF SECTION

SECTION 02324 - TRENCHING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The General Provisions of the contract, including General and Special Provisions and General Requirements of the Specifications, apply to the work specified in this section.

1.02 DESCRIPTION OF WORK

A. Section Includes:

1. Excavating trenches for utilities
2. Compacted fill from top of utility bedding
3. Backfilling and compaction

B. Related Sections:

Section 02512 - Site Water Distribution

1.03 REFERENCE STANDARDS

State of Hawaii Department of Transportation (DOT) Highways 2005 Standard Specifications for Road and Bridge Construction.

1.04 QUALITY ASSURANCE

Perform Work in accordance with Section 105 - Control of Work of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.

PART 2- PRODUCTS

2.01 MATERIALS

- A. Provide materials in accordance with Section 703 - Aggregates of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.
- B. Provide materials in accordance with County of Hawaii Department of Water Supply, Water System Standards, 2002

PART 3 – EXECUTION

EXECUTION

- A. Perform Work in accordance with Section 624 - Water System of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.
- B. Perform Work in accordance with County of Hawaii Department of Water Supply, Water System Standards, 2002

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the prices bid for the various items of work in this project.

END OF SECTION

SECTION 02512 - SITE WATER DISTRIBUTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The General Provisions of the contract, including General and Special Provisions and General Requirements of the Specifications, apply to the work specified in this section.

1.02 DESCRIPTION OF WORK

A. Section Includes:

1. Pipe and fittings for site water system.
2. Valves
3. Water meters
4. Backflow preventers
5. Bedding and cover materials.

B. Related Sections:

Section 02324 - Trenching

1.03 REFERENCE STANDARDS

- A. State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.
- B. County of Hawaii Department of Water Supply, Water System Standards, 2002.

1.04 QUALITY ASSURANCE

- A. Perform Work in accordance with Section 105 - Control of Work of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.
- B. Perform Work in accordance with County of Hawaii Department of Water Supply, Water System Standards, 2002.

1.05 SUBMITTALS

DHHL Construction General Conditions - Article 5: Control of Work

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Provide materials in accordance with Section 712 – Miscellaneous of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.
- B. Provide materials in accordance with County of Hawaii Department of Water Supply, Water System Standards, 2002.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Perform Work in accordance with Section 624 - Water System of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.
- B. Perform Work in accordance with County of Hawaii Department of Water Supply, Water System Standards, 2002.

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this section will be paid for as shown in the proposal schedule:

Item No.	Item	Unit
1	Water System Improvements	Lump Sum

END OF SECTION

SECTION 02721 - AGGREGATE BASE COURSE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The General Provisions of the contract, including General and Special Provisions and General Requirements of the Specifications, apply to the work specified in this section.

1.02 DESCRIPTION OF WORK

A. Section Includes:

1. Aggregate subbase.
2. Aggregate base course.

1.03 SUBMITTALS

DHHL Construction General Conditions - Article 5: Control of Work

1.04 REFERENCE STANDARDS

State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction

1.05 QUALITY ASSURANCE

Perform Work in accordance with Section 105 - Control of Work of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.

PART 2 - PRODUCTS

2.01 MATERIALS

Provide materials in accordance with Section 703 - Aggregates of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.

PART 3- EXECUTION

3.01 INSTALLATION

Perform Work in accordance with Section 304 - Aggregate Base Course of the State of Hawaii DOT Highways 2005 Standard Specifications for Road and Bridge Construction.

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the prices bid for the various items of work in this project.

END OF SECTION