

Add. 1

#9314-6

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII

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DEPARTMENT OF WATER SUPPLY

COUNTY OF HAWAII

HILO, HAWAII

ADDENDUM NO. 1

JOB NO. 2006-899

CONSTRUCTION OF THE
OLA'A NO. 6 PRODUCTION WELL
AND 1.0 MG RESERVOIR
District of PUNA
County of Hawai'i – State of Hawai'i

The following revisions shall be made a part of the contract bidding documents:

1. REVISION TO SPECIFICATIONS

- a. **ADD** the following after the last paragraph of Invitation to Bidders, Section 22 (page IB-20):

“Manufacturers are not required to submit a new Self-Certification Application (SPO-38) to the department for their material/product if that material/product is already on the Hawaii Product List, (listed on the following website):

(<http://www4.hawaii.gov/spoh/HiProducts/hiProductsConstruction.htm>).”

- b. **ADD** new section 303.06C – Tank Plaster (Stucco) Finish, Addendum No.1, to “Proposal and Specifications”.

- c. **REVISE** second paragraph of GENERAL DESCRIPTION on page 304.10-1 to:

“Electromagnetic Flow Meter shall be ABB MagMaster Flow Sensor (Model MFF for pipes 8” and larger, Model MFE for pipes 6” and smaller) with an ABB MagMaster Converter or a Siemens Model MAG 5100 W flow sensor with a Siemens Model MAG 6000 signal converter with optimal MOSCAD/RTU 485 module, or approved equal conforming to the following specifications:”

...Water, Our Most Precious Resource... Ka Wai A Kāne...

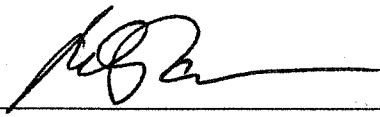
The Department of Water Supply is an Equal Opportunity provider and employer.

2. REVISION TO PLANS

- a. **REVISE** Sheet S2.2, "Reservoir Section and Subgrade Detail", added note to specify stucco finish to exterior of tank. See attached sketch SKS-1.

BY AUTHORITY OF THE DEPARTMENT OF
WATER SUPPLY COUNTY OF HAWAI'I

Date: January 11, 2010

By  _____
Milton D. Pavao, Manager

Please Sign And Return Immediately To The Manager Of The Department Of Water Supply

Receipt of a copy of **Addendum No. 1** for JOB NO. 2006-899, OLA'A PRODUCTION WELL AND 1.0 MG RESERVOIR, District of Puna, County of Hawai'i, State of Hawai'i, is hereby acknowledged.

NAME OF BIDDER

Date _____

By _____

WATER SYSTEM STANDARDS

DIVISION 300
SECTION 303 – STRUCTURES

SECTION 303.06C – TANK PLASTER (STUCCO) FINISH

A. GENERAL

1. Scope: The work included in this section is the provision of a finished plaster coating for all reservoir walls.
2. References: The following references refer to the American Society for Testing and Materials (ASTM):
 - a. ASTM C 28-92 Gypsum Plasters
 - b. ASTM C 35 REV A-89 Inorganic Aggregates for Use in Gypsum Plaster
 - c. ASTM C 59-91 Gypsum Casting and Molding Plaster
 - d. ASTM C 61-91 Gypsum Keene's Cement
 - e. ASTM C 91-E1-91 Masonry Cement
 - f. ASTM C 144-E1-91 Aggregate for Masonry Mortar
 - g. ASTM C 150-92 Portland Cement
 - h. ASTM C 206-E1-91 Finishing Hydrated Lime (R 1992)
 - i. ASTM C 472 REV A-90 Test Method for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete

B. STANDARD SPECIFICATIONS

Except as otherwise indicated in this section of the Special Provisions, the CONTRACTOR shall comply with all pertinent codes and regulations and comply with the materials handling and workmanship provisions of the California lathing and plastering contractors association (CLPA).

C. SHOP DRAWINGS

1. Submittals shall be made in compliance with these Specifications.
2. Samples: Prepare two (2) 24-inch square samples of each finish for approval before starting any work of this section. Completed plaster work shall match the appropriate approved samples.

D. DELIVERY, STORAGE & HANDLING

Keep cementitious materials dry and stored off the ground, under cover, and away from sweating walls and other damp surfaces until ready to be used.

E. MATERIALS

1. Metal Plastering Accessories: All Screeds and other metal accessories shall be standard shapes for their intended use and shall be fabricated from 26 gauge or heavier hot-dipped zinc galvanized steel, prime-coated, and coated with protective material to permit removal of overspray at completion of plastering.
2. Plaster:
 - a. Cement for plaster shall be Portland cement conforming to ASTM C150, Type 2.
 - b. Gun plastic Portland cement machine application of basecoats shall conform to ASTM C- 78A, Type 1 or 2. Plasticizing agents may be added in manufacturing process not to exceed 12% of the total volume.
 - c. Sand used for plaster shall be clean and well graded from coarse to fine, and shall conform to ASTM C 144.
3. Water used for plaster shall be clean and free from deleterious amounts of acid, alkali, and organic materials.
4. Mixes:
 - a. General: Except where otherwise specified, materials are specified on a volume basis and shall be measured in approved containers, which will ensure that the specified proportions will be controlled and accurately maintained during the progress of the work. Measuring materials with shovels (shovel count) will not be permitted. Ready-mix stucco shall be prepared for use by the addition of water only.
 - b. Mixing: Mix materials in approved, mechanical mixers of the type in which the quantity of water can be controlled accurately and uniformly, except that finish coats containing lime may be hand mixed. While the mixer is in continuous operation, add approximately 90 percent of the estimated quantity of water, half of the sand, all of the cementitious materials, and the other one-half of the sand shall be introduced into the mixer in that sequence and mix thoroughly in the remainder of the water until the mixture is uniform in color and consistency. Avoid excessive mixing or agitation.

- c. Finish Coat Proportions:
 - 1. Plastic Portland Cement Stucco Finish Coat: Mix finish coat in the proportion of one part by volume of cement to not less than 2-1/2 nor more than 3 parts by volume of damp, loose sand.
 - 2. Stucco Finish Coat: Factory mixed and complying with the general requirements of the "Specifications and Standards of Manufactured Stucco Finishes" prepared by the Stucco Manufacturer's Association.

F. CONSTRUCTION

- 1. Preparation: Clean the surfaces to which stucco is to be applied of dust, loose particles, grease, bond breakers, projections, and other foreign matter. Do not apply stucco directly to (1) surfaces of masonry or concrete that have been coated with bituminous compound or other waterproofing agents, or (2) to surfaces that have been painted or previously plastered. Before stucco work is started, wet masonry surfaces thoroughly with a fine fog spray of clean water to produce a uniformly moist condition.
- 2. Application: Stucco may be applied by hand or by machine. When a plastering machine is used, the fluidity of portland cement stucco shall be controlled to have a slump of not more than 2-1/2 inches when tested using a 2 by 4 by 6 inch high slump cone. Subsequent to determining water content to meet this slump, do not add additional water to the mix.
- 3. Slump Test: Conduct the slump test according to the following procedure:
 - a. Place cone on level, dry, non-absorptive base plate.
 - b. While holding cone firmly against base plate, fill cone with plaster taken directly from the hose or nozzle of the plastering machine, tamping with metal rod during filling to release air bubbles.
 - c. Screed off plaster level with top of cone. Remove cone by lifting it straight up with a slow and smooth motion.
 - d. Place cone in vertical position adjacent to freed plaster sample, using care not to jiggle base plate.
 - e. Lay a straightedge across top of cone, again being careful not to vibrate cone. Measure slump in inches from the bottom edge of the straightedge to the top of the slumped plaster sample.
- 4. Workmanship: Apply stucco in three coats as follows. Base coats shall be applied with sufficient pressure and stucco shall be sufficiently plastic to provide a good bond to bases. Base coats shall be worked to screeds at intervals of from 5 to 8 feet. Finish stucco work level, plumb, square, and true, within a tolerance of 1/8 inch in 8

feet, without waves, cracks, blisters, pits, crazing, discoloration, projections, or other imperfections. Form stucco work carefully around angles and contours, and well up to screeds. Special care shall be taken to prevent sagging and consequent dropping of applications. There shall be no visible junction marks in finish coat where one day's work adjoins another.

5. Plastering Concrete:

- a. Brown Coat: Scratch and brown to a total 1/2" thickness. Brown coat shall be brought to a true even surface by rodding and floating, and left rough, ready to receive finish coat. The natural gun finish provided by the automated shotcrete process may be used for the brown coat.
- b. Finish Coat: Light to medium sprayed texture and troweled finish to match approved samples. Apply the finish coat to a thickness of not less than 1/8 inch. Where any previous coat has become dry, dampen the surface evenly with water, prior to the application of the next coat. Finish coat for stucco shall be of the color and texture selected. Moist cure stucco for 24 hours using a fine fog spray of water and apply to the finish coat as frequently as required to prevent dry-out of the stucco. Do not stucco to the point where free water stands on the surface. Prevent staining of the finish coat.

6. Tolerances: Finish all plaster true and even within a tolerance of one in 240, leaving the finished surface free from tool marks and all other blemishes.

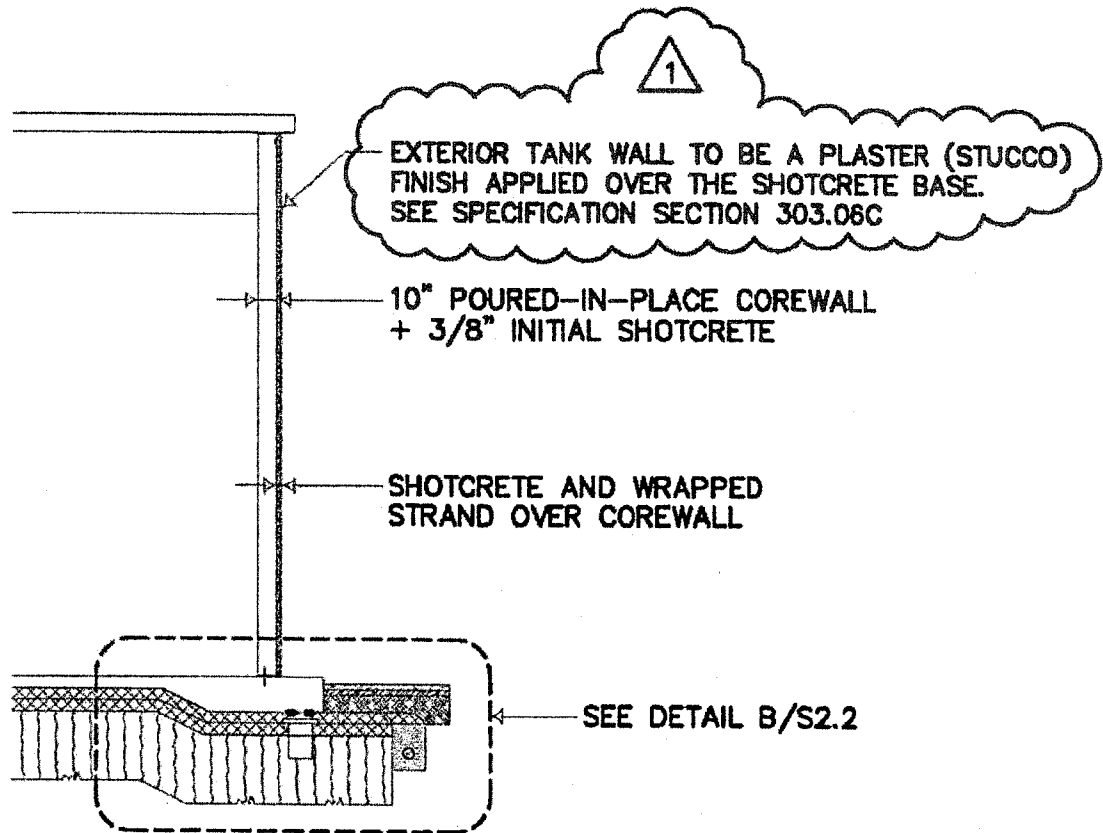
7. Cleaning:

- a. General: Remove stucco droppings or spatters from surfaces. Remove protective covering from floors and other surfaces, and rubbish and debris from the building.
- b. Patching: Upon completion of the building, cut out and patch loose, cracked, damaged, or defective stucco. Patch shall match existing work in texture, color and shall be finished flush with stucco previously applied. Do pointing and patching of stucco surfaces and stucco work abutting or adjoining other finish work in a neat and workmanlike manner.
- c. Finishes: Leave clean, exposed stucco surfaces, in condition ready to receive paint or other finish.

G. PAYMENT:

Payment for the work in this section will be included as part of the lump sum bid amount stated in the proposal.

END OF SECTION



A
RESERVOIR SECTION
S2.2
NOT TO SCALE

OLAA NO. 6 PRODUCTION WELL AND 1.0 MG RESERVOIR		
REFERENCE SHEET NO. <u>S2.2</u>	ADDENDUM NO. <u>1</u>	SKETCH NO. <u>SKS-1</u>
DWS JOB NO. <u>2006-899</u>		PAGE NO. <u>1 OF 1</u>