Installation of Deepwell Pump & Appurtenances @ Well No. 1
For Kapalua Water Company
Kapalua, Maui, Hawaii

Plans Prepared By:
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Sheet 1 of 10 Sheets
FLOW TUBE PRESSURE LINE

DIAPHRAGM OPERATOR FOR BUTTERFLY VALVE

SCHEMATIC PIPING DIAGRAM FOR AIR SYSTEM

PLATE WELDED TO PIPE WITH 3/4" CAP SCREWS W/ WASHERS.

NOTES:
1. ALL FABRICATED ITEMS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
2. PROVIDE BRASS UNIONS WHERE REQUIRED TO FACILITATE INSTALLATION & REMOVAL OF PIPING SYSTEM.
3. SLOPE PIPING DOWN & AWAY FROM FLOW TUBE @ 1/2" PER FT. MIN. SLOPE.
4. TOP OF ENERGY METER COVER SHALL BE 1" CLEAR OF BOTTOM COVER & 2" LOWER THAN BOTTOM TRANSMITTER.

ELEVATION

FLOW TUBE TRANSMITTER

PUMP CONTROL VALVE

TEST GAGE AT PUMP FLANGE

FLOW CONTROL VALVES

PRESSURE GAGE

BALL VALVE

3-WAY SOLENOID VALVE

1/8" STRAINER

WATER SUPPLY LINE

FLOW TUBE PRESSURE CELL MOUNTED ON PIPE WITH BRACKET FURNISHED BY PRESSURE CELL MANUFACTURER.

DIFFERENTIAL PRESSURE CELL MOUNTED ON PIPE WITH BRACKET FURNISHED BY PRESSURE CELL MANUFACTURER.

REMOVABLE 1/8" GALV. SHEET METAL WEATHER-PROOF COVER.

2-TIER MOUNTING PIPE. FASTEN COVER TO PLATE WITH 1/4" I.S. CAP SCREWS W/ WASHERS.

NOTE:
1/8" CONNECTION BRASS CARTRIDGE VALVE TO 3-WAY SOLENOID VALVE

NOT TO SCALE

NOT TO SCALE

NOT TO SCALE
SECTON B  SECTON D
PLATE/GRAINING COVER FRAME DETAILS

SCALE: 1" = 1'-0"

NOTES:
1. PROVIDE BRASS 3/4" HOSE X 6 TO DRAIN.
2. ALL STEEL SHALL BE HOT-DIPPED GALVANIZED
   AFTER FABRICATION.
3. CHECKERED PLATE & GRATING DIMENSIONS CALLED
   FOR ON PLAN ARE NORMAL ONLY. FABRICATED
   DIMENSIONS SHALL CONFORM TO SECTIONS "F & "C"
   DETAILS AND 3/4" CLEARANCE REQUIRED BETWEEN
   ADJACENT COVER SECTIONS.

PLAN - GENERATOR PAD

SCALE: 1" = 1'-0"

SECTION A

SCALE: 1" = 1'-0"

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SEPT 1-26-76

INSTALLATION OF DEEPWELL PUMP &
SUBMERSIBLE & WELL NO. 1
FOR RAY D. DAVIS, INC.
HENDEN-GENERATOR
INSTALLATION DETAILS

M-4
FILTER BED SITE PIPING MODIFICATIONS

- CONTRACTOR SHALL EXPOSE EXISTING 12" VALVE & VERIFY CLASS II VALVE. IF LESS THAN 200 WORKING PRESSURE, REMOVE & REPLACE WITH 200 W.P. GATE VALVE.
- CUT SECTION & PLUG BOTH ENDS
- 1-1/2" TRUC-HF TE & VALVE
- 1" VALVE BOX
- 2-12" PLUGS
- 2-CONC. BLOCKS
- NEW 12" LINE (BY OTHERS)
- 1-1/2" 1/4 BEND (NO)
- 1-CONC. BLOCK

EXISTING RESERVOIR 12" INFLUENT/EXFLUENT LINE

NEW CONC. BLOCKS

EXISTING RESERVOIR 12" INFLUENT/EXFLUENT LINE

NEW CONC. BLOCKS

EXISTING RESEVOIR CONTROL BOX PIPING

SCALE: 1/4" = 1'-0"
CONDUIT PLAN @ MOTOR CONTROL CENTER

CONDUIT DESCRIPTION & ROUTING SCHEDULE

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<th>ITEM</th>
<th>CONDUIT DESCRIPTION &amp; ROUTING</th>
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<tr>
<td>1</td>
<td>1/2&quot; BҳC CONDUIT FROM TRANSFORMER TO TRANSFORMER SWITCH</td>
</tr>
<tr>
<td>2</td>
<td>3/4&quot; BҳC CONDUIT FROM TRANSFORMER TO TRANSFORMER SWITCH</td>
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<td>10</td>
<td>3/4&quot; BҳC CONDUIT FROM TRANSFORMER TO TRANSFORMER SWITCH</td>
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ELECTRICAL SITE PLAN

CONDUIT INSTALLATION • RISER POLE

NOT TO SCALE
BACKFILL NOTES:
- TYPE "C" BACKFILL - EARTH & GRAVEL
- MIXTURE MUST FORM A 1/4" WEAK SCREEN AND PASS 1/4" VOLUME OF ROCK PARTICLES. 55% COMPACTATION.
- TYPE "F" BACKFILL - EARTH & GRAVEL
- MIXTURE MUST FORM A 1/4" WEAK SCREEN AND PASS 1/4" VOLUME OF ROCK PARTICLES. 55% COMPACTATION.
- NOTE: - IF NORMAL MATERIALS AT BOTTOM OF TRENCH IS TYPE "C", IT CAN BE EXCAVATED AND TYPE "F" BACKFILL PROPOSED.
- CONCRETE - 3" ENSEMBLE, 2000 PSI COMPRRESSIVE STRENGTH IN 28 DAYS.

DUCT BANK SCHEDULE

<table>
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<tr>
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<td>DRAINAGE CONDUIT FROM FLOOR PRIMARY UNDERGROUND SYSTEM</td>
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<td>5</td>
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ELECTRICAL DUCT SECTIONS

 план - transformer pad

electrical duct sections

section c

typical duct section detail

notes:
1. contractor shall obtain service drawings from the main electric co., utility company drawings shall be used for the contract documents and shall supersede the requirements of these drawings.
2. contractor shall coordinate all work with the main electric co.
3. contact polyethylene 300 lb. test pulling in all empty conduits.

front view

side view

detail - waterproof receptacle

electrical symbols, duct sections
NOTES:
1. ALL EQUIPMENT SHOWN IN PUMP SELECTOR PANEL SHALL BE FURNISHED UNDER THIS CONTRACT.
2. ALL FLOAT CONTACTS SHOWN IN WATER LEVEL CONTROLLER SHALL BE FURNISHED UNDER THIS CONTRACT.
3. ELEMENTS TO BE 24VDC REACTED WITH 1/2" WHITE LETTERING AND BURLAP COVERS.

KAPALUA BREAKER TANK
1/4" CD. PRESSURE SEWING LINE

LEVEL MAN.
PUMP SELECTOR PANEL
RADIO-FREQUENCY EQUIPMENT
AT RESERVOIR SITE

1 PRO WIRE BY ELECTRICAL CONTRACTOR. PULL AND TAG WIRE AT RADIO PANEL. RADIO EQUIPMENT SUPPLIER TO MAKE FINAL TERMINATIONS.

CLIFFORD S. JANVLE, P.E.
INSTALLATION OF DEEPWELL PUMP & ADJUSTMENTS AS WELL NO. 1 FOR KAPALUA WATER COMPANY
DRAWN AND SIGNED AS PUMP SELECTOR PANEL DETAILS

RESERVOIR/PUMP CONTROL BLOCK DIAGRAM

WATER LEVEL CONTROLLER

PUMP NO. 1
PUMP NO. 2
PUMP NO. 3

TO PUMP NO. 1
TO PUMP NO. 2
TO PUMP NO. 3

LEVEL MAN.

INSTRUMENT HOUSE ENCLOSURE

CENTER OF INSTRUMENT 12" ABOVE ENCLOSURE FLOOR

12" NON-FUSED DISCONNECT SWITCH IN EACH ENCLOSURE

RESERVOIR/PUMP CONTROL BLOCK DIAGRAM

DUETLINE TRENCH DETAIL

INSTRUMENT HOUSE ENCLOSURE

SCALE: 1/8" = 1'-0"
TELEMETERING & SUPERVISORY CONTROL DIAGRAM