Drawings For

City of Hailey
Woodside Wastewater
Reclamation Facility

VOLUME 3 -
UV INSTALLATION
DRAWINGS

ISSUE FOR BID
HDR Project No.
0000000010162649
October 2022
1. OWNER SUPPLIED EQUIPMENT. SEE MANUFACTURERS SHOP DRAWINGS FOR DETAILED INSTALLATION REQUIREMENTS.

2. REMOVE EXISTING VALVES AND REPLACE WITH NEW ELECTRICALLY ACTUATED OPERATOR. TYP OF 2.

3. REMOVE EXISTING MUD VALVE AND RETURN TO OWNER. PLUG EXISTING 6" C.I. PIPE AT BOTH ENDS OF AND ABANDON IN PLACE.

4. REMOVE EXISTING GRATING FOR INSTALLATION OF UV EQUIPMENT. MODIFY ACCORDINGLY. ADD 1/8" THICK CHECKER PLATE OVER UV BANKS (NOT FUTURE BANKS).

5. 3/8" AIR TUBING FROM COMPRESSOR CONNECTION UP TO CABLE TRAY. ROUTE IN CABLE TRAY TO UV JUNCTION BOX. USE COMPRESSION FITTINGS.
FIRST FLOOR

EXISTING SLIDE GATE

BAFFLE PLATE,
TYP OF 2

JUNCTION BOX

FINGER WEIRS

RECTANGULAR WEIR.

SEE DETAIL 1 ON SHEET D-03

JUNCTION BOX (FUTURE)

UV BANK UV BANK (FUTURE)

HWL - 33.73

3" FLANGED STAINLESS STEEL BALL VALVE WITH OPERATOR EXTENSION UP TO GRATING.

NOTCH EXISTING GRATING FOR OPERATOR ACCESS, TYP OF 2 CHANNELS

3" SCH 40, 304 STAINLESS STEEL DRAIN PIPE CAST INTO NEW 9" CHANNEL FLOOR.

GROUT IN NEW 9" CHANNEL FLOOR.

LEVEL PROBE

HWL - 33.70

WEIR - 33.60

WEIR - 32.75

THICKENED WALL EXTENTS 24'-10" D-03 6

UVT TRANSMITTER

LE/LIT - 101

LE/LIT - 102

MODIFY EXISTING GRATING AS REQUIRED FOR NEW INSTALLATION, TYP

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING

PROJECT MANAGER
BRAD BJERKE

ISSUE DATE DESCRIPTION
10/03/2022 ISSUE FOR BID

PRELIMINARY DESIGN BY B. BJERKE

DRAWN BY E. SJOBERG

CHECKED BY P. URSILLO

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EXISTING CHANNEL DIVIDER WALL

**GENERAL NOTES:**
1. SEE SECTION FOR YARD PIPING CONTINUATION.

**KEY NOTES:**
1. SEE MANUFACTURERS SHOP DRAWINGS FOR DETAILED INSTALLATION REQUIREMENTS.
2. NEW THICKENED WALL AND FLOOR TO BE TROWELED SMOOTH SURFACE.
   GROUT AND GRIND SMOOTH ANY HOLE.

**ELEVATION VIEW 1**

WEIR DETAIL

CALK BOARD BETWEEN ANGLE AND CONCRETE, TYP ALL SIDES
NEW 9" GROUTED CHANNEL BOTTOM
NEW 6" GROUTED CHANNEL WALL
1 1/2" X 3 1/2" KEYWAY AT EACH FILLET TAPER
CAULK SEAMS BETWEEN ANGLE AND CONCRETE, TYP ALL SIDES
CAULK SEAMS BETWEEN ANGLE AND CONCRETE, TYP ALL SIDES
APPLY BONDING AGENT END OF EXISTING CHANNEL WALL

**THICKENED WALL DETAIL**

1/2" X 1/2" ANGLE TYP ON 3 SIDES
3" X 3" X 3/8" SS ANGLE, TYP OF 3 SIDES
3\3/16" DIA. SS304 OR SS316 ANCHORS, EMBED 4" WITH EPOXY ADHESIVE.
3/8" SS PLATE
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3/16" X 3/16" X 3/16" SS ANGLE, TYP OF 3 SIDES
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**END CONDITION PLAN**

EXISTING CONCRETE CHANNEL WALL
NEW 6" THICKENED WALL WITH HIGH STRENGTH GROUT

**PLAN**

EXISTING CHANNEL DIVIDER WALL
APPLY BONDING AGENT

**REINFORCING PLAN VIEW**

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**UV INSTALLATION DETAILS**

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1. Furnish and install new circuit breakers sized as shown in existing Square D Model 6 Motor Control Center, 'MCC-D'. Modify MCC spaces as needed for installation. Provide new door covers and nameplate for each new circuit breaker.

2. Signals between existing UV panel and Filter PLC are analog and digital, hard-wired connections consisting of UV WEIR TOTALIZATION, UV BANK 1A ON, UV BANK 1B ON, UV BANK 1C ON, and UV MAJOR ALARM.

3. Transformer shall be 480V DELTA - 480Y/277V ISOLATION TRANSFORMER in NEMA 3R ENCLOSURE with full capacity 2.5% voltage taps, with 2 above, 2 below normal voltage rating. Provide with wall brackets and vibration isolators to minimize and isolate sound transmission.

4. Enclosed molded case thermal magnetic circuit breaker shall be 480VOLTS, 3-PHASE, MINIMUM SCCR OF 42kA, AND BE SUITABLE FOR 75°C RATED CONDUCTORS WITHOUT DERATING BREAKER OR CONDUCTOR AMPACITY. PROVIDE IN NEMA TYPE 1 ENCLOSURE BELOW TRANSFORMER MOUNTED ON THE WALL.

KEY NOTES:

- TABLE

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** FILENAME**

- ONE-LINE & NETWORK DIAGRAMS

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**PROJECT NUMBER**

10162649

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**COMPANY**

HDR

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**FILE NUMBER**

E-002

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**DESIGNATED BY**

CALVIN BURTON

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**ISSUE FOR BID**

10/03/2022

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**ISSUE DATE**

10/03/2022

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**PROJECT MANAGER**

JOHN BARRUTIA

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**DRAWN BY**

JOHN BARRUTIA

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**CHECKED BY**

CALVIN BURTON

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**DEPICTION**

ONE-LINE & NETWORK DIAGRAMS

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**DESCRIPTION**

UV INSTALLATION DRAWINGS
1. NUMBER ADJACENT TO HOME RUN INDICATES POLE POSITION WITHIN PANEL TO WHICH DEVICES SHALL BE CIRCUITED.

2. INSTALL ALL OWNER-SUPPLIED UV EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS.

3. EXISTING UV CONTROL PANEL TO BE DEMOLISHED AFTER NEW UV SYSTEM IS OPERATIONAL.

4. ROUTE CABLE TRAY DOWN TO FLOOR TO PROVIDE COMPLETE RACEWAY BETWEEN LCP-01 AND ALL UV JUNCTION BOXES FOR OWNER-FURNISHED UV LAMP CABLES. CABLE TRAY TO BE INSTALLED A MINIMUM OF 10' AFF BEFORE HORIZONTAL TRAVEL.

5. UTILIZE SPARE 15A/1P BREAKER IN EXISTING PANEL LPD.

6. LEVEL TRANSMITTER SHALL BE公元G 拍 CHAIN PM4 RP4 Transmitter OR APPROVED EQUAL. LEVEL SENSOR SHALL BE公元G 拍 CHAIN PM4 RP4 Transmitter OR APPROVED EQUAL.

7. FURNISH AND INSTALL 24VDC POWER BLOCK AS REQUIRED FOR LEVEL TRANSMITTER POWER SUPPLY. SEE CABLE SCHEDULE.

8. MOUNT TRANSFORMER ABOVE AIR COMPRESSOR ON WALL PER MANUFACTURER'S RECOMMENDATIONS.

9. ENCLOSURE CIRCUIT BREAKER SEE ONE-LINE DIAGRAM.