

### ADDENDUM NO. 3

## TO THE PLANS, SPECIFICATIONS, PROPOSAL AND CONTRACT FOR THE CITY OF LACEY

### BEACHCREST WELLFIELD IMPROVEMENTS

### LACEY CONTRACT NO. PW 2019-29

### TO ALL PLAN HOLDERS:

You are hereby notified of the following changes, revisions, deletions, additions, corrections and/or clarifications to the plans, specifications, and contract documents for the *BEACHCREST WELLFIELD PH IMPROVEMENTS* project. This addendum is made part of these contract documents as though it was originally included in the Contract. The Contractor shall note the location of the Addenda Receipt Acknowledgement on Page B-3 of the Contract Proposal.

Issued this 19th day of December 2022.

### I. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE SPECIFICATIONS

### ITEM NO. 1: Section R

1) The revisions include changes to bid item A9, A11, A13, A15, A16, A25, A38 quantities and change in bid item A29 to I-1/2 inch single meter service connected to existing water main (Items A9, A11, A13, A15, A16, A25, A38, A29).

DELETE Bid Proposal Pages B-1 to B-3 and REPLACE with new Bid Proposal as

attached.

### ITEM NO. 2: Section D, Section 8-50.7

1) The revisions include modifications to Section D, Section 8-50.7.

**DELETE** this section in its entirety and **REPLACE** with the following:

### "Description

This work is described in Section E Technical Specifications.

### Measurement

No unit of measurement shall apply to the lump sum price for "Treatment Facility".

### **Payment**

"Treatment Facility", lump sum.

The unit contract price per lump sum for "Treatment Facility" shall be all full compensation for all labor, materials, tools and equipment to furnish, place, assemble, and install the treatment facility including treatment facility building, foundation, structure, architectural components, hardware, walls, roof, gutter, lighting, treatment facility finishes, painting and coating, doors, hatches, vents, HVAC system, keys, interior piping, *sodium hypochlorite system equipment and piping*, gantry crane, valves, and appurtenances, as shown on the Plans and described in the Project Technical Specifications and these Special Provisions. This item includes all excavation and structural fill associated with the Treatment Facility."

### ITEM NO. 3: Section D, Section 2-03.1

1) The revisions include modifications to Section D, Section 2-03.1

**DELETE** this section in its entirety and **REPLACE** with the following:

"The following is added at the beginning of this section:

The Work described in this Section includes debris pile removal, excavating below the groundwater table, and hauling and disposing of all excavated material. Work includes but is not limited to all operations and material handling necessary to prepare, stockpile, and otherwise process the excavated material for hauling and disposal offsite.

Incidental to the Work will be all necessary and required clearing, grubbing, and water management. Water management will include, but is not limited to, construction of any cofferdams, pumping, and treatment. Clearing and grubbing will include the removal and disposal of any and all existing vegetation within the clearing limits necessary for the project as well as salvaging and stockpiling any logs for reuse as described in Section 2-01.

All Work described here shall be in accordance with the lines, grades, cross-sections and elevations shown on the Plans or established by the Engineer, and shall include any additional excavation necessary to accommodate placement of soil amendment to the elevations described in 8-02.3(6) Soil Amendments."

### **ITEM NO. 4:**

Section D, Section 2-03.3(19)

1) The revisions include modifications to Section D, Section 2-03.3(19).

**DELETE** this section in its entirety.

### **ITEM NO. 5:**

Section D, Section 2-03.4

1) The revisions include modifications to Section D, Section 2-03.4.

**DELETE** this section in its entirety, and **REPLACE** with the following:

"Supplement this section with the following:

The quantities in the bid proposal are based on a computer generated earthwork calculated on the existing ground survey. The quantities do not incorporate expansion, clearing and grubbing, or construction methodology. These values are listed for the convenience of the Contractor in determining the volume of work involved as calculated by the Engineer and are not guaranteed to be accurate. The prospective bidders shall verify these quantities prior to submitting the bid. A digital copy of the survey is available to prospective bidders from the Contracting Agency at the Contractor's request. No adjustments will be made in these quantities although the actual quantities may deviate from those listed."

### ITEM NO. 6:

Section D, Section 2-03.5

1) The revisions include modifications to Special Provisions – Part D, Section 2-03.5.

**DELETE** this section in its entirety.

### **ITEM NO. 7:**

Section D, Section 7-01.5

1) The revisions include modifications to Section D, Section 7-01.5.

**DELETE** this section in its entirety, and **REPLACE** with the following:

"Modify this section with the following:

"Storm Infiltration System", per lump sum.

The unit contract price per lump sum shall be full pay for furnishing all labor, materials, and equipment required to excavate, prepare, and construct the filter vault, piping, stormwater pond, turf reinforcement mat (TRM), and all work described in the specifications and shown on the Plans.

This work consists of constructing stormwater ponds by clearing and grubbing, excavating including haul, storing and moving existing material onsite and embankment construction to form the general shapes and slopes as shown on the Plans, or as directed by the Engineer. If it is determined that additional material is need to construct the pond(s) per the Plans and these Specifications, then the additional material shall be paid under the separate bid item, "Bank Run Gravel for Trench Backfill.""

### ITEM NO. 8:

## Section D, Section 7-26.4 Measurement and 7-26.5 Payment

1) The revisions include modifications to Section D, Section 7-26.4 and 7-26.5.

**DELETE** these sections in entirety, and **REPLACE** with the following:

### 7-26.4 Measurement

(March 3, 2022 Lacey GSP)

"Contractor-Supplied Temporary Pump", lump sum.

50 percent shall be payable upon completion of the well development and the remaining 50 percent shall be payable upon final removal of the temporary pump.

"Pumping Test", per hour.

"Pump Removal", per each.

"Control of Rehabilitation Derived Waste", lump sum

"Well Rehabilitation, Brushing", per hour.

"Well Rehabilitation, Redevelopment", per hour.

"Pump Installation", per each.

"Well Disinfection", per each.

Payable once laboratory analysis of post-rehabilitation bacterial samples indicates the well is free of bacterial contamination.

"Authorized Standby Time", per hour.

"Well Rehabilitation – Force Account", force account. This force account item is intended to pay for alternative well rehabilitation methods as needed such as Jetting, High-Pressure Gas Impulse, hydropuls Method, Carbon Dioxide Injection, Detonation, and Chemical Treatment.

### **7-26.5 Payment**

(March 3, 2022 Lacey GSP)

Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the proposal.

The "Contractor-Supplied Temporary Pump" shall be used for well development and pumping tests. The lump sum shall include procurement, installation, operation, and removal of the pump as required by the rehabilitation plan. In the event of equipment failure or inability to meet pumping requirements, the Contractor shall replace the temporary pump at Contractor's expense.

"Pumping Test" per hour shall include operation of the contractor-supplied temporary pump and collection of measurements during pumping tests. In the event that the test is terminated due to equipment failure or operator error, no payment will be made during recovery and during the time taken to return to the portion of the test when the equipment failure or operator error occurred. For bid purposes, this step is assumed to require a minimum of four hours.

"Pump Removal", per each shall include successful removal of a pump from the well, safe on-site storage of any well equipment identified by the City for re-use or salvage, and disposal of any equipment identified by the City for disposal. Removal of the Contractor-supplied temporary pump is included in the Contractor-supplied temporary pump item and is not part of this item. Additional removals of the existing pump at each well beyond the first removal shall be at the Contractor's expense, unless directed by the City. Failed attempts to remove an existing pump due to equipment failure or operator error shall be at the Contractor's expense. Failed attempts to remove an existing pump due to pre-existing and unforeseen conditions at and within the well shall be measured and compensated at the direction of the City.

"Control of Rehabilitation Derived Waste", lump sum as provided in Section 1-09.6, covers procurement, installation, operation, and removal of equipment necessary to control and dispose of RDW as required by the RDW plan. This includes labor and equipment to clarify and discharge development and discharge water; and safely store, separate, remove, and dispose of solid RDW. Any permits, if any, required to discharge or dispose of RDW are also included in this item.

"Well Rehabilitation, Brushing", per hour includes setup, brushing of the well casing and screen, removal of debris, and sounding of well depth upon completion of the brushing.

"Well Rehabilitation, Redevelopment", per hour includes setup and using surging, bailing, pumping, and/or simultaneous surging and pumping techniques to mobilize, remove debris from the well, and sounding of well depth. For bid purposes, this step is assumed to require 2 hours per foot of screen.

"Pump Installation", per each includes the successful installation of a pump, motor, sounding tubes, and all other equipment and materials to provide a complete and operating well pump. It also includes the labor, equipment, and materials to seal the well shut after completion of rehabilitation, when there is a delay in acquiring pump and materials. Installation of the Contractor-supplied temporary pump is included in the Contractor-supplied temporary pump item and is not part of this item. Additional installations of the pump beyond the first installation shall be at the Contractor's expense, unless directed by the City. Failed attempts to install a pump due to equipment failure or operator error shall be at the Contractor's expense. Failed attempts to install the pump due to damage to the pump caused by improper storage of the pump shall be at the Contractor's expense. Equipment and fittings damaged due to Contractor error, failure of the Contractor's equipment, or improper storage shall be replaced by the Contractor at the Contractor's cost.

"Well Disinfection", per each includes well disinfection, purging, and dechlorination. It shall be considered a single item measured per each successful disinfection of a well. Disinfection shall be considered successful if laboratory analysis of post-disinfection bacterial samples taken per Section 7-26.3(16) are free of bacterial contamination. Post-disinfection bacterial sampling and tests completed by the City are not pay items.

"Authorized Standby Time" per hour shall be measured for only that part of a regular 8-hour shift during which the Contractor is directed by the Hydrogeologist or the City to suspend work.

"Well Rehabilitation – Force Account", by force account as provided in Section 1-09.6, includes the labor, equipment, and materials to provide any alternative well rehabilitation methods as needed. This may include but is not limited to any of the following work:

Jetting includes the labor, equipment, and materials to setup and perform fluid jetting on the well casing and screen, the removal of debris, and sounding of well depth upon completion of the jetting.

High-Pressure Gas Impulse includes the labor, equipment, and materials to setup and perform managed release of compressed gases within the well casing and screen, removal of debris, and sounding of well depth upon completion of the method.

hydropuls Method includes the labor, equipment, and materials to setup and perform the patented hydropuls® method using hydropuls®-specific tooling, where applicable; removal of debris; and sounding of well depth upon completion of the method. Impulse generation methods that do not conform to the patented hydropuls® method using hydropuls®-specific tooling are not included in this item, but shall instead be included in the "Well Rehabilitation, High-Pressure Gas Impulse Generation", per hour item.

Carbon Dioxide Injection includes the labor, equipment, and materials to setup and inject carbon dioxide into the well screen and casing, neutralization, removal of debris, and sounding of well depth upon completion of the carbon dioxide injection.

Detonation includes the labor, equipment, materials, and any necessary permits to setup and detonate an explosive device within the well. This item also includes removal of debris and sounding of well upon completion of the detonation.

Chemical Treatment includes the labor, equipment, and materials to setup and apply the chemical(s) to the well, circulate and disperse it within the well, remove or neutralize it, and measure its concentration within the well. This item also includes removal of debris, and sounding of well depth upon completion of the treatment. This item does not include chlorine, chlorinated compounds, or similar chemical treatments for the purpose of well disinfection as described in Section 7-23.3(15).

### ITEM NO. 9: Section E, Section 08330-1.7

1) The revisions include modifications to Section E, Section 08330 - 1.7.

**DELETE** this section and **REPLACE** with the following:

### "1.7 WARRANTY

In addition to the warranty required in the General Conditions, the equipment manufacturer shall provide a warranty covering defects in material and workmanship for 3 years following the date of substantial completion. The warranty shall be in printed form, shall apply to all similar units, and shall include parts and labor."

<u>ITEM NO. 10:</u> Section E, Section 15050-1.4 1) The revisions include modifications to Section E, Section 15050 - 1.4.

**DELETE** this section and **REPLACE** with the following:

### **"1.4** PIPE MATERIALS

The materials to be utilized for the various pipe sizes and applications on the project shall be as follows, unless otherwise noted on the Plans or herein:

Process	Abby.	Above Grade	<b>Below Grade</b>
Air, Low Pressure	AER	Schedule 80 PVC	
Drain <4"	D	Cast Iron, No Hub	Cast Iron, No Hub
Drain >4"	D	Ductile Iron, FL	Corrugated Polyethylene
Carrier	CAR	Schedule 80 PVC <sup>(1)</sup>	
Water (≤2")	W	Copper, THD/S	Per Section D
Water (>2")	W	Ductile Iron, FL	Ductile Iron, MJ
Water, Plumbing	W	Copper, THD/S	Welded HDPE
Sample	SAM	Solvent Welded PVC (80)	
Sodium Hypochlorite	HYP	Solvent Welded PVC (80)	
Vent, Plumbing and Drainage	V	Schedule 40 PVC	Cast Iron, No Hub
Vent, Aerator	VA	Schedule 80 PVC	
Vent, Hypochlorite	HV	Schedule 80 PVC	

(1) All bends shall be long-radius sweeps."

### **ITEM NO. 11:**

Section E, Section 15050-2.5

1) The revisions include modifications to Section E, Section 15050 - 2.5.

**ADD** the following section:

### **"2.5 COPPER PIPE**

Pipe shall be Type "K" copper, ASTM B88, silver solder. Fittings shall be wrought copper, ANSI B1622, silver solder."

### **ITEM NO. 12:**

Section E, Section 13207-2.2-B.1.a.i

1) The revisions include modifications to Section E, Section 13207 - 2.2.

**DELETE** this section and **REPLACE** with the following:

"i. Design Temperature: 100 degrees F."

ITEM NO. 13: Section E, Section 13426-1.4

1) The revisions include modifications to Section E, Section 13426 - 1.4.

**DELETE** the performance requirement table and **REPLACE** it with the following:

Flow Meter	Flange Diameter (inches)	Flow Range (gpm)	Typical Operational Flow (gpm)	Transmitter Location
FM 01	4	5 - 600	150 - 200	Integral
FM 02	4	5 - 600	150 - 200	Integral
FM 03	8	5 - 1,200	150 - 400	Integral

### **ITEM NO. 14:**

### Section E, Section 15050-3.1-A

1) The revisions include modifications to Section E, Section 15050 - 3.1.

**DELETE** the last paragraph in this section and **REPLACE** with the following:

"All buried, submerged, or intermittently submerged piping that is bolted together or uses bolts to hold materials together shall use nuts, bolts, and washers as defined in Special Provision 7-12.2."

### **ITEM NO. 15:**

### Section E, Section 13128-2.1-D.1

1) The revisions include modifications to Section E, Section 13128 – 2.1-D.1.

**DELETE** this section in its entirety and **REPLACE** with the following:

"1. Electrical

Provide circuit breaker panel [PB 02] with a 240/120VAC single phase power configuration suitable for operation at 208VAC single phase. Panel shall be rated for 125 amps, include a 50amp main breaker, include 12 branch circuits (minimum), and shall be surface mounted NEMA 3R metallic enclosure."

### **ITEM NO. 16:**

### Section E, Section 14630-2.1

1) The revisions include modifications to Section E, Section 14630 - 2.1.

**DELETE** this section in its entirety and **REPLACE** with the following:

### "2.1 APPROVED MANUFACTURERS

The portable gantry crane shall be as manufactured by Dayton®, or equal."

### ITEM NO. 17:

### Section E, Section 14630-2.4

1) The revisions include modifications to Section E, Section 14630 - 2.4.

**DELETE** this section in its entirety and **REPLACE** with the following:

### **"2.4 HOIST**

The hoist shall be as manufactured by Dayton®, or equal, and shall meet the following requirements:

Type: Hook Mount

Speed: >15 feet per minute

Minimum Hoist Lift: 20 feet

Motor Size: 1.5 hp (maximum)

Electrical Connection: Plug-in cord, 120VAC, 60 Hz, 1-ph

Rated Load: 2,000 pounds

Control: 24VDC push button pendant"

### **ITEM NO. 18:**

### Section E, Section 16130-3.1-C.1

1) The revisions include modifications to Section E, Section 16130 – 3.1-C.1.

**DELETE** this section in its entirety and **REPLACE** with the following:

"1. All straight portions of conduits completely concealed in walls, attics, concrete, or below ground (not exposed) shall be PVC Schedule 40.

### **Exceptions:**

- Power conduits containing non-linear loads shall be 100 percent continuous over their entire length.
- Control conduits containing intrinsically safe circuits shall be 100 percent continuous over their entire length.
- All Instrumentation conduits shall be 100 percent continuous over their entire length.
- All conduits containing grounding electrode conductors shall be PVC Schedule 80 over their entire length.
- PVC conduit areas under roads or heavy traffic areas shall be Schedule 80.

- Where specifically called out otherwise in the Cable and Conduit Schedule.
- Where specifically noted otherwise in the Plans."

### <u>ITEM NO. 19:</u> Section E, Section 16230-3.5-D.12

1) The revisions include modifications to Section E, Section 16230-3.5-D.12.

### **DELETE** this section and **REPLACE** with the following:

- "12. The Contractor shall demonstrate the backup power system is fully functional by simulating a power outage at the site. Coordinate phase rotation with the contractor prior to transferring power.
  - a. Document the generator assemblies' power output accommodates starting and operating the site loads in the specified steps as listed in the Manufacturer provided GENERATOR SIZING CALCULATION report. The generator's power output shall maintain frequency and voltage quality standards as defined above.
  - b. Notify the Engineer in the event that the installed generator assembly is unable to start and operate the specified loads. At minimum, document the generator's output voltage, current and frequency during the demonstration including the point of failure. Provide written descriptions of the general conditions encountered during the demonstration, any field diagnostic actions performed, recommendations to rectify the witnessed scenario and any site conditions encountered that differ from the approved GENERATOR SIZING CALCULATION report."

### II. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE PLANS

### ITEM NO. 20: Sheet M-2

2) The revisions include modifications to the Notes on Sheet M-2.

Delete Sheet M-2 and replace it with the new page as attached.

### ITEM NO. 21: Sheet M-3

3) The revisions include modifications to the Notes on Sheet M-3.

Delete Sheet M-3 and replace it with the new page as attached.

## ITEM NO. 22: Sheet M-4

4) The revisions include modifications to the Notes on Sheet M-4.

Delete Sheet M-4 and replace it with the new page as attached.

# ITEM NO. 23: Sheet EC-1

5) The revisions include modifications to Sheet EC-1.

Delete Sheet EC-1 and replace it with the new page as attached.

Scott Egger, P.E.
Director of Public Works

### CITY OF LACEY

# Beachcrest Wellfield pH Improvements ADDENDUM 3

Lacey Contract Number:

PW 2019-29

Federal Aid Project Number: WSDOT Contract Number: TIB Contract Number:

No. Quantity Unit

A16

A17

A18

A19

A20

A21

3

280

220

80

12

130

EΑ

TN

TN TN

LF

LF

705-248

708-610

708-620

708-670

709-503

709-507

DATE:	

The undersigned, as bidder, has examined the bid documents as prepared by the Public Works Department, City of Lacey.

A Water

Catch Basin Type 2 - 48 In. Diam.

Bank Run Gravel for Trench Backfill

Imported Pipe Bedding

Gravel Backfill For Walls

6 Inch D.I. Water Main

3 Inch Water Main

**Item Description** 

The undersigned, as bidder, proposes to furnish all material and perform all labor in accordance with the bid documents at the following prices.

Bidder must fill in unit prices in figures for each item and total.

Bidder shall sign this proposal form and submit all required paperwork with the bid.

Item ID

		•		nom 2 occupation	• · · · · · · · · · · · · · · · · · · ·	=20000000000000000000000000000000000000
A1	200000	МС	104-010	Minor Change	\$1.00	\$200,000.00
A2	1	LS	105-010	Record Drawing	\$5,000.00	\$5,000.00
АЗ	1	LS	109-010	Mobilization	LUMP SUM	-
A4	1	LS	201-010	Clearing and Grubbing	LUMP SUM	
A5	1	LS	202-510	Removal of Structures and Obstructions	LUMP SUM	-
A6	1	LS	202-520	Special Removal of Structures and Obstructions	LUMP SUM	
A7	30	CY	203-120	Unsuitable Foundation Excavation Incl. Haul		-
A8	1	LS	205-510	Trench Safety System	LUMP SUM	
A9	880	TN	404-010	Crushed Surfacing Base Course		
A10	40	TN	404-730	Washed Coarse Aggregate		
A11	310	TN	504-011	HMA CI. 1/2" PG 58H-22		
A12	1	LS	701-500	Storm Infiltration System	LUMP SUM	
A13	330	LF	704-508	8 Inch Diameter Storm Sewer Pipe		_
A14	70	LF	704-512	12 Inch Diameter Storm Sewer Pipe		
A15	6	EA	705-210	Catch Basin Type 1		-

**Unit Price** 

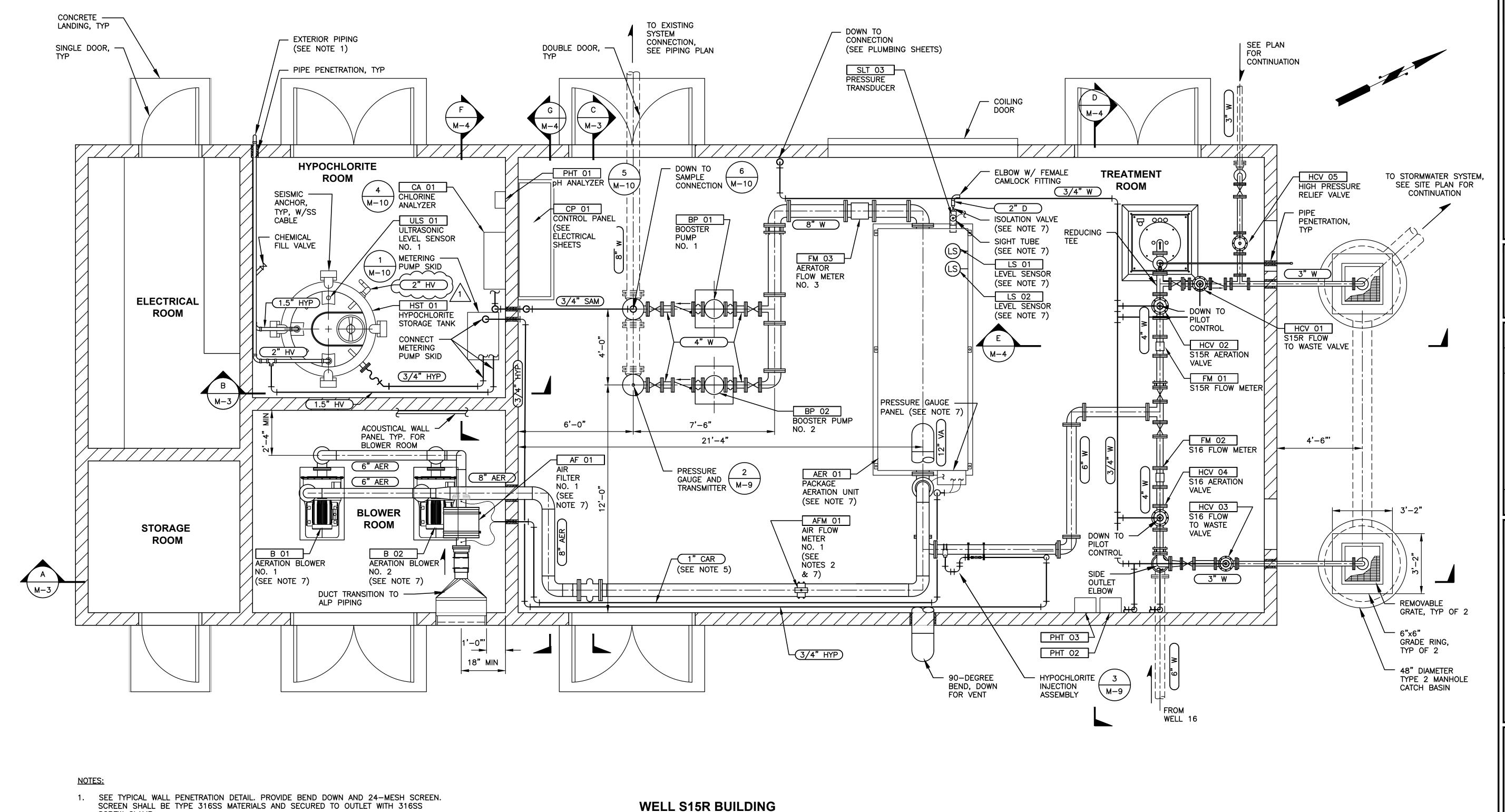
**Extended Price** 

A22	120	LF	709-509	8 Inch D.I. Water Main		
A23	10	LF	709-512	12 Inch D.I. Water Main		
A24	1	EA	709-950	Connect to Existing Water Main		
A25	2	EA	712-506	6 Inch Gate Valve		
A26	1	EA	712-508	8 Inch Gate Valve		
A27	1	EA	712-551	1 1/2 Inch Service Tap with Tapping Valve		
A28	1	EA	714-510	Hydrant Assembly		
A29	1	EA	715-530	1 1/2 Inch Single Meter Service Connected to Existing Water Mai		
A30	1	LS	726-510	Contractor-Supplied Temporary Pump	LUMP SUM	
A31	10	HR	726-520	Pumping Test		
A32	1	LS	726-530	Control of Rehabilitation Derived Waste	LUMP SUM	
A33	60	HR	726-540	Well Rehabilitation - Brushing		
A34	60	HR	726-550	Well Rehabilitation - Redevelopment		
A35	5000	FA	726-560	Well Rehabilitation - Force Account	\$1.00	\$5,000.00
A36	10	HR	726-600	Authorized Standby Time		
A37	1	LS	726-610	Records	LUMP SUM	
A38	870	LF	801-100	Silt Fence		
A39	1	LS	801-680	Erosion/Water Pollution Control	LUMP SUM	
A40	1	LS	803-505	Irrigation System	LUMP SUM	
A41	1	LS	805-510	Lawn and Landscape Restoration	LUMP SUM	
A42	2	EA	812-520	Chain Link Slide Gate		
A43	200	LF	812-610	Chain Link Fence Type 3 w/ Top Rail		
A44	6	EA	850-550	Bollard		
A45	1	LS	850-720	Well Pump and Motor	LUMP SUM	
A46	1	LS	850-725	Electrical	LUMP SUM	
A47	1	LS	850-730	Telemetry and Automatic Control	LUMP SUM	
A48	1	LS	850-792	Project Closeout	\$5,000.00	\$5,000.00
A49	1	LS	850-802	Standby Generator	LUMP SUM	
A50	1	LS	850-905	Treatment Facility	LUMP SUM	
A51	1	LS	850-910	Aeration System	LUMP SUM	
A52	1	LS	890-907	Decommission Well	LUMP SUM	
				Schedule A	Subtotal:	
				Tax Rate (%): 9.50 Tax:	_	
				Schedule A	Total:	
				Contra	ct Total:	
					hedules)	

The undersigned also agrees as follows:

- Within 10 calendar days after the contract is awarded to sign and return the contract and provide insurance documents.
- That this proposal cannot be withdrawn within 45 days after receipt of bids.
- That it is the understanding that the City of Lacey may accept or reject any or all bids.
- The undersigned hereby agrees to pay for labor not less than the prevailing rates of wages per the bid documents.
- Enclosed with this proposal is a bid deposit in the sum of 5% of the bid total amount which it is agreed shall be collected and retained by the City of Lacey as liquidated damages in the event this proposal is accepted by the City of Lacey with 45 calendar days after the receipt of bids and the undersigned fails to execute the contract and the required bond with the City of Lacey, under the conditions thereof, within 10 calendar days after the undersigned is notified that said proposal has been accepted, otherwise said bid deposit shall be returned to the undersigned upon demand.
- A Performance/Payment Bond will be furnished to the City with the contract.
- Retention will be held on this contract per RCW 60.28.011.

Addenda Receipt Acknowledged		
Signature of Bidder	Date	
(If an Individual, Partnership, or Non-Incorporated organiza	ation)	
Firm Name Please Print	Phone	
Address of Bidder:		
Name and Address of Firm Members:		
Signature of Bidder (if a Corporation)		
Title:		
Firm Name:	Phon	o.
rim name:	Pnon	<del>.</del>
Business Address:		
Incorporated under the Laws of the State of		
Officers Address	s	
President:		
Secretary:		



SCREEN SHALL BE TYPE 316SS MATERIALS AND SECURED TO OUTLET WITH 316SS SCREW CLAMP.

2. PROVIDE ROMAC 202NS OR EQUAL WITH 1-INCH TAP FOR INSTALLATION OF AFM 01. CONTRACTOR SHALL PROVIDE 1-INCH PLUG TO OWNER. AIR FLOW METER SHALL BE INSTALLED WITH 20 PIPE DIAMETERS (13.3 FEET) STRAIGHT PIPE UPSTREAM OF THE

PIPE SUPPORTS NOT SHOWN FOR CLARITY. PROVIDE SUPPORTS AS REQUIRED IN SPECIFICATION SECTION 15066. SUPPORTS FOR PIPE GREATER THAN 2-INCHES IN DIAMETER SHALL BE FLOOR OR WALL MOUNTED ONLY.

4. FOR ALL SAMPLE/INJECTION CONNECTIONS, PROVIDE TRANSITION FITTINGS AND MATERIALS AS REQUIRED FOR A COMPLETE AND WORKABLE SYSTEM.

5. FOR ALL CARRIER PIPE, BENDS SHALL BE LONG RADIUS SWEEP FITTINGS. 

ALL AER PIPING CONNECTION DIMENSIONS MUST BE VERIFIED WITH AERATION SYSTEM MANUFACTURER.

7. IT IS ANTICIPATED THAT THIS EQUIPMENT WILL BE PROVIDED BY THE AERATION UNIT MANUFACTURER. CONFIRM EQUIPMENT TO BE PROVIDED WITH EQUIPMENT MANUFACTURER. CONTRACTOR IS RESPONSIBLE TO ENSURE ALL EQUIPMENT IS FURNISHED AND INSTALLED. PLEASE SEE SECTION 11320 FOR ADDITIONAL INFORMATION.

SCALE: 3/8"=1'-0"

TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

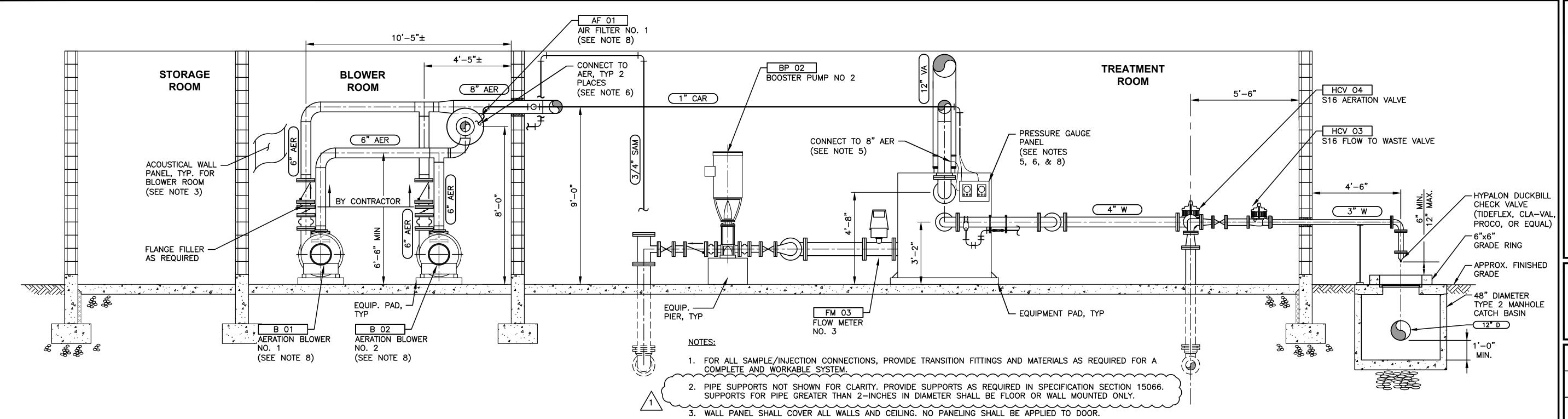
SHEET: M-2 SHEET: 22 of 81

CITY OF

JOB NO.: 19520 DWG:M\_MECH\_SEC

CHCREST

BARA.



CONNECT TO BLOWER AIR PRESSURE GAUGE.

CONTINUATION

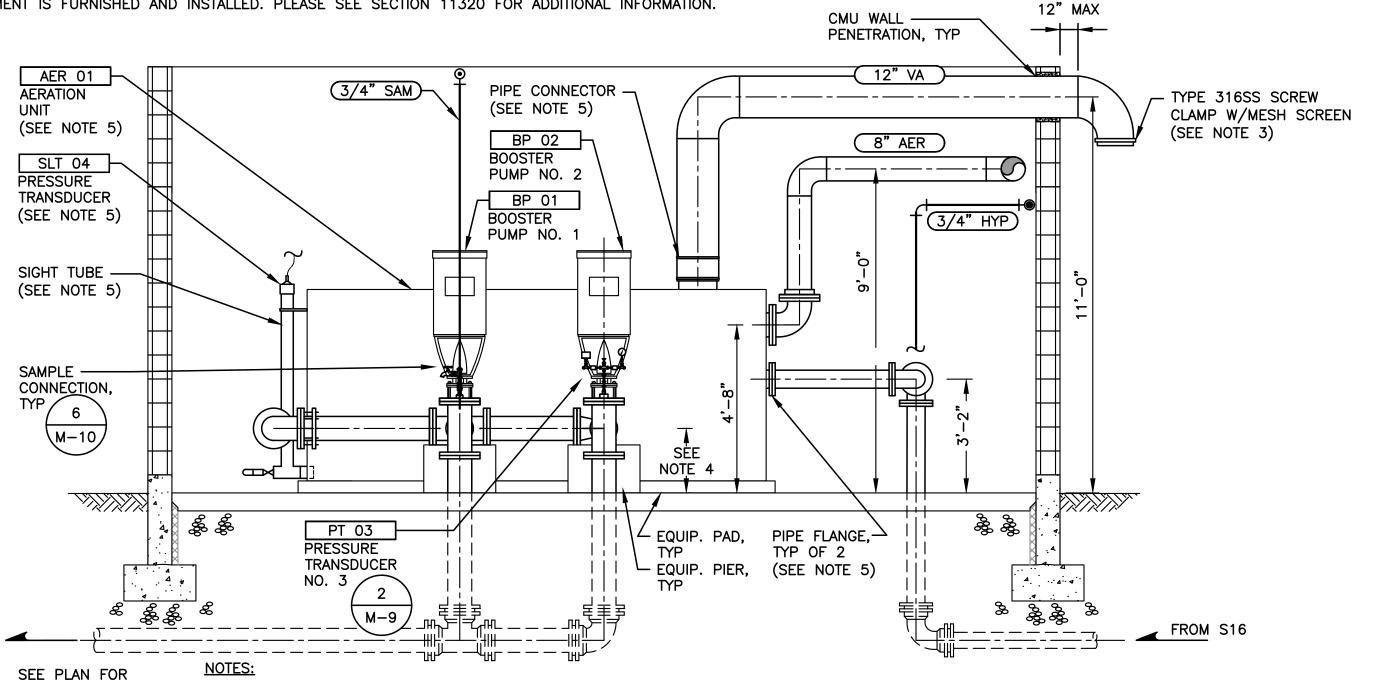


6. CONNECT 3/8-INCH HD VINYL TUBING UPSTREAM AND DOWNSTREAM OF AIR FILTER. FURNISH AND INSTALL THD TAPS W/ ISOLATION VALVES, AND BARBED FITTINGS TO CONNECT TO TUBING. ROUTE BOTH TUBES TO PRESSURE GAUGE PANEL THROUGH CAR PIPING AND CONNECT TO DIFFERENTIAL PRESSURE GAUGE. TUBES SHALL BE DIFFERENT COLORS FOR DIFFERENTIATION.

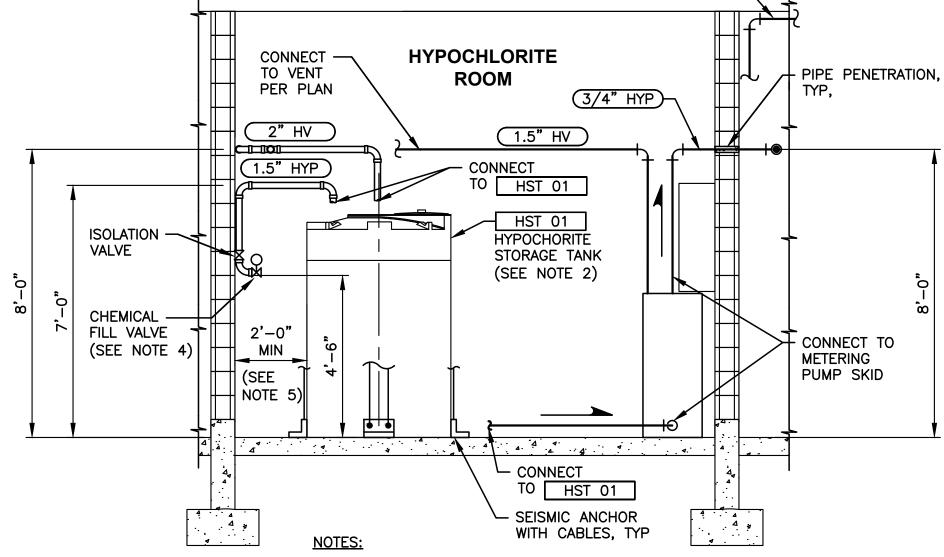
4. COORDINATE FINAL HEIGHT WITH OUTLET OF AER 01. DISCHARGE CENTERLINE IS APPROXIMATELY 28 INCHES AFF.

5. TAP AER PIPING AND CONNECT TO 3/8-INCH HD VINYL TUBING. ROUTE TUBING TO PRESSURE GAUGE PANEL AND

- 7. ALL AER PIPING CONNECTION DIMENSIONS MUST BE VERIFIED WITH AERATION SYSTEM MANUFACTURER.
- 8. IT IS ANTICIPATED THAT THIS EQUIPMENT WILL BE PROVIDED BY THE AERATION UNIT MANUFACTURER. CONFIRM EQUIPMENT TO BE PROVIDED WITH EQUIPMENT MANUFACTURER. CONTRACTOR IS RESPONSIBLE TO ENSURE ALL EQUIPMENT IS FURNISHED AND INSTALLED. PLEASE SEE SECTION 11320 FOR ADDITIONAL INFORMATION.



6" MIN.



- 1. PROVIDE TRANSITION FITTINGS AS REQUIRED FOR SYSTEM CONNECTION.
- 2. SEE SPECIFICATION SECTION 13207 FOR ADDITIONAL INFORMATION.
- 3. ULS 01 NOT SHOWN FOR CLARITY.
- 4. FILL VALVE SHALL CONTAIN 1.5-INCH FEMALE CAMLOCK END FITTING, BANJO DM150A. NO OTHER MFRS SHALL BE ACCEPTED. FURNISH AND INSTALL DUTY VALVE, AND PROVIDE ONE SPARE VALVE TO OWNER.

(3/4" SAM)

5. PROVIDE 2-FOOT MIN CLEARANCE FROM ALL WALLS.



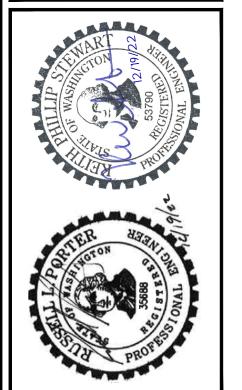


- 2. PIPE SUPPORTS NOT SHOWN FOR CLARITY. PROVIDE PIPE SUPPORTS PER SPECIFICATION SECTION 15066.
- 3. MESH SCREEN MUST HAVE AT LEAST 65% OPEN AREA.
- 4. COORDINATE FINAL HEIGHT WITH OUTLET OF AER 01. DISCHARGE CENTERLINE IS APPROXIMATELY 28 INCHES AFF.



TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

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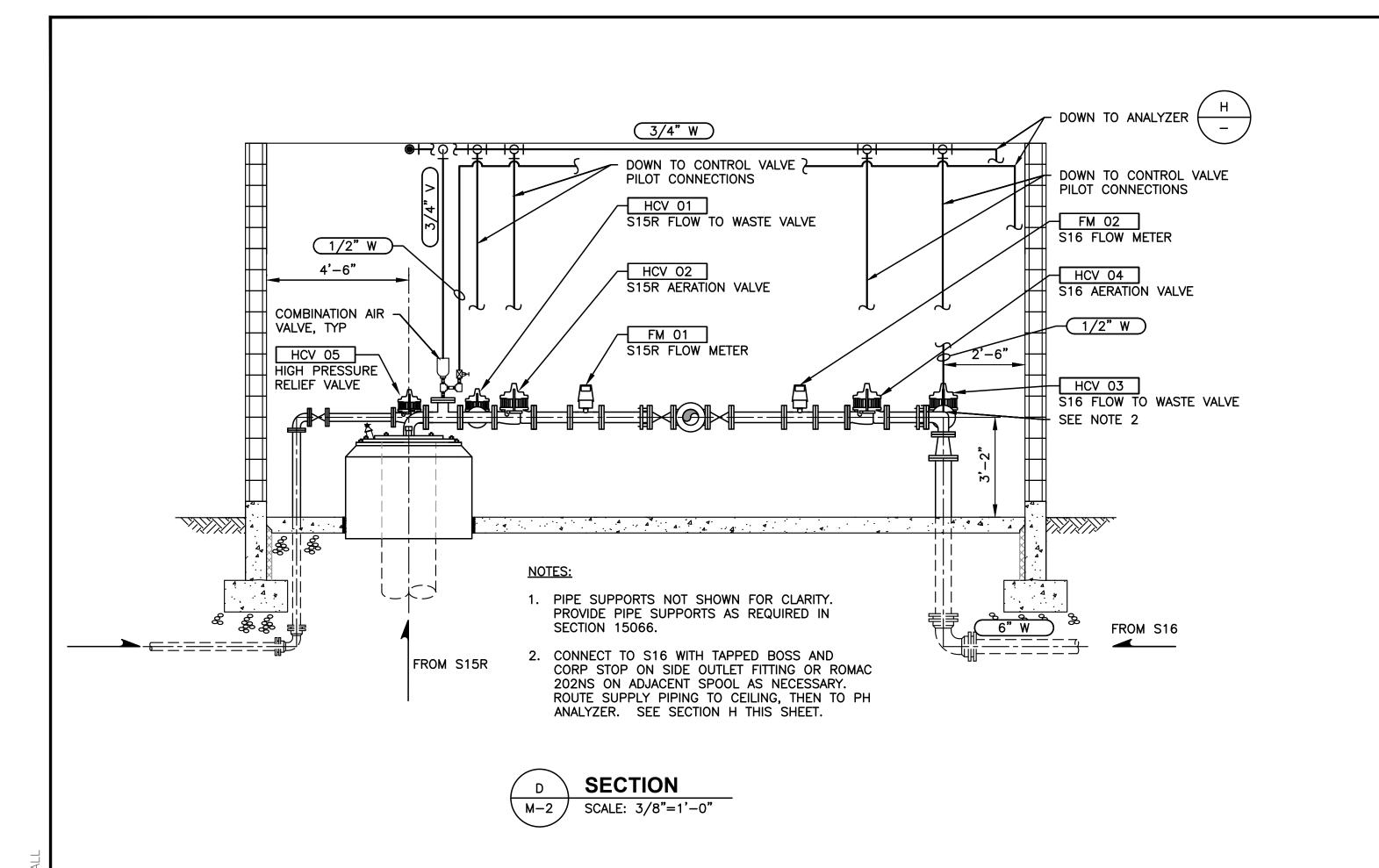


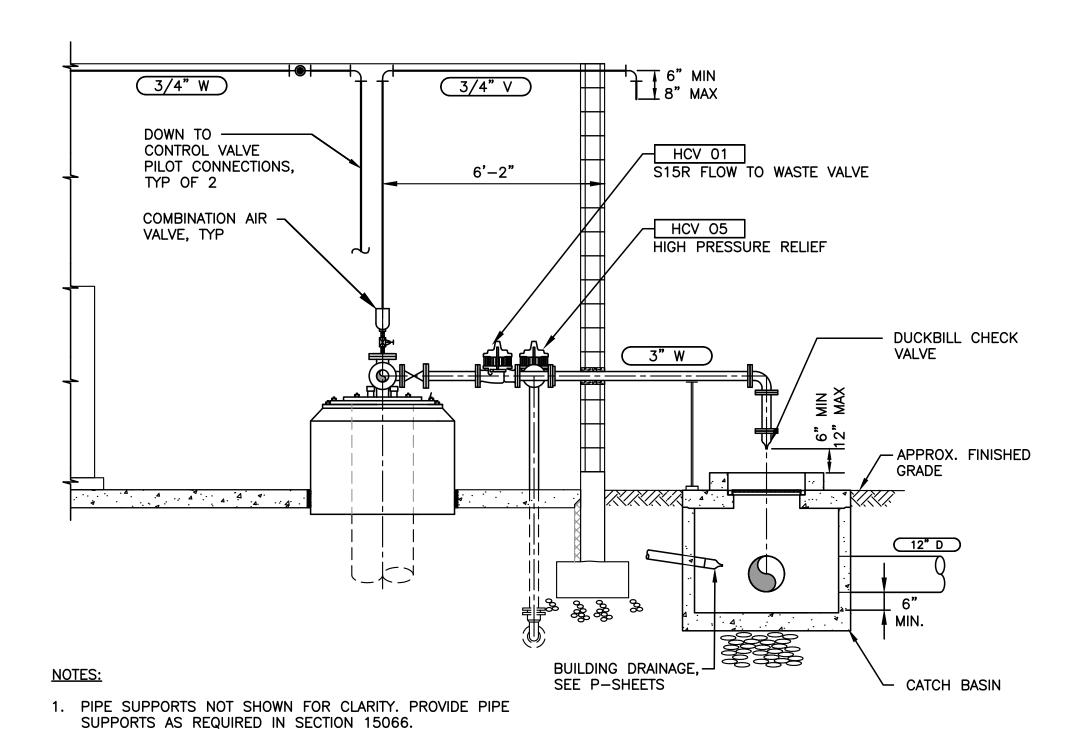
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SHEET: M-3 SHEET: 23 of 81

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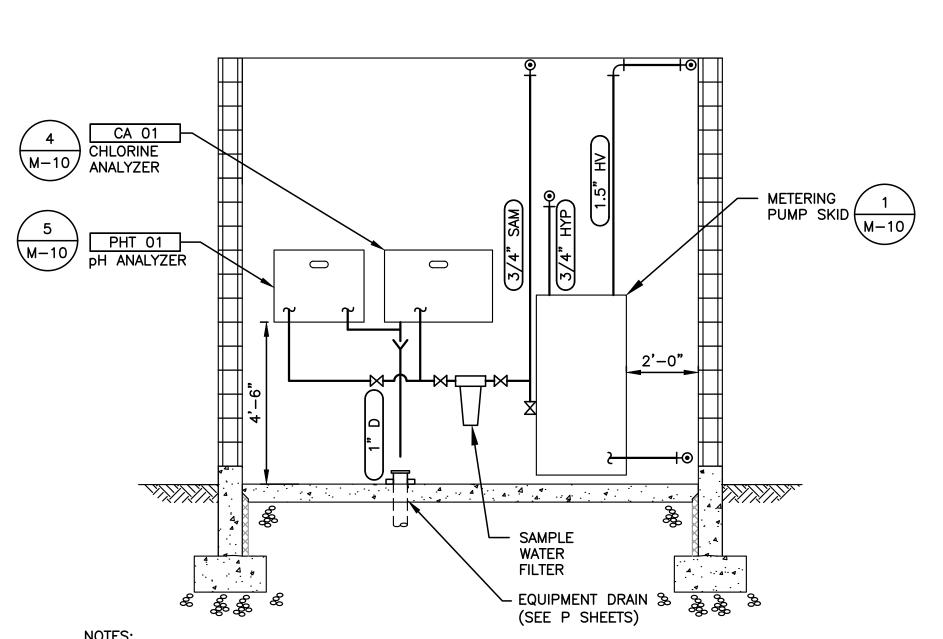
5. IT IS ANTICIPATED THAT THIS EQUIPMENT WILL BE PROVIDED BY THE AERATION UNIT MANUFACTURER. CONFIRM EQUIPMENT TO BE PROVIDED WITH EQUIPMENT MANUFACTURER. CONTRACTOR IS RESPONSIBLE TO ENSURE ALL EQUIPMENT IS FURNISHED AND INSTALLED. PLEASE SEE SECTION 11320 FOR ADDITIONAL INFORMATION.





SCALE: 3/8"=1'-0"

**SECTION** 



1. CONTRACTOR SHALL FURNISH AND INSTALL TRANSITION FITTINGS AS REQUIRED AND SHALL FURNISH AND CONNECT SAMPLE SUPPLY PIPING TO ANALYZERS PER MANUFACTURERS RECOMMENDATIONS FOR A COMPLETE AND WORKABLE SYSTEM.

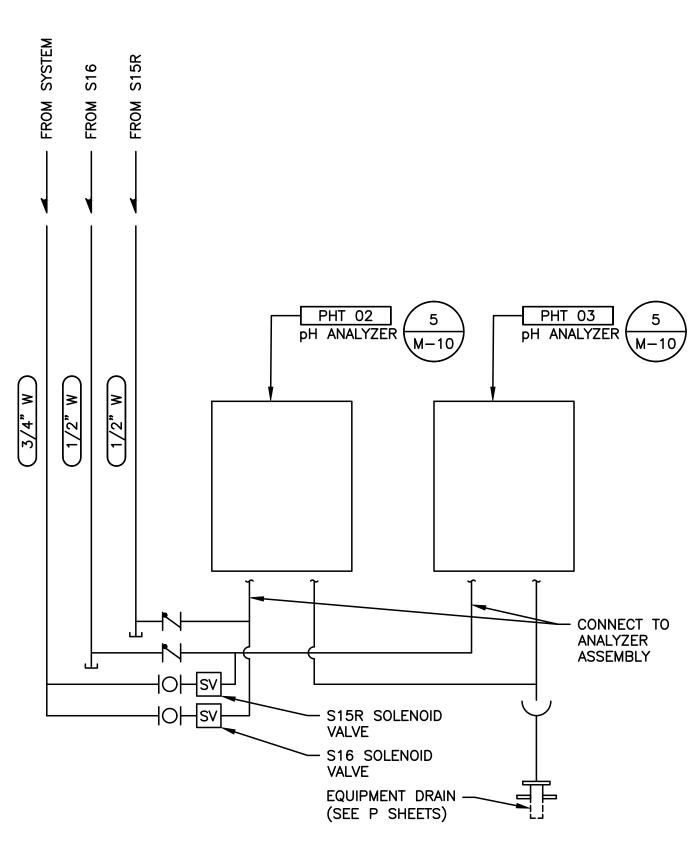
2. SEE P-SHEETS FOR DRAIN PIPING CONNECTION AND ADDITIONAL INFORMATION.

15'-6"± (1" CAR )— 8" AER CP 01
CONTROL PANEL (SEE ELECTRICAL SHEETS) (3/4" HYP) 

> PIPE SUPPORTS NOT SHOWN FOR CLARITY. PROVIDE PIPE SUPPORTS AS REQUIRED IN SPECIFICATION SECTION 15066. SUPPORTS FOR PIPE GREATER THAN 2-INCHES IN DIAMETER SHALL BE FLOOR OR WALL MOUNTED ONLY.

2. CONTRACTOR SHALL FURNISH AND INSTALL TRANSITION FITTINGS AS REQUIRED AND SHALL FURNISH AND CONNECT SAMPLE SUPPLY PIPING TO ANALYZERS PER MANUFACTURERS RECOMMENDATIONS FOR A COMPLETE AND WORKABLE SYSTEM.

3. SEE P-SHEETS FOR DRAIN PIPING CONNECTION AND ADDITIONAL INFORMATION.



**SECTION** 

NOT TO SCALE

**SECTION** SCALE: 3/8"=1'-0"

**SECTION** SCALE: 3/8"=1'-0" TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

SHEET: **24 of 81** 

JOB NO.: 19520 DWG:M\_MECH\_SEC

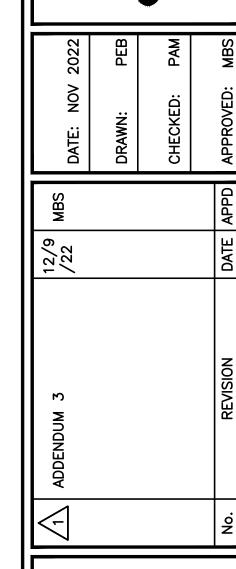
SHEET: M-4

CITY OF

	POWER CABLE AND CONDUIT SCHEDULE							
NUMBER	SOURCE	DESTINATION	SIZE	CONDUCTORS	E-1	NOTES		
P0101A	[UT 01], UTILITY TRANSFORMER	[CTE 01], CURRENT TRANSFORMER ENCLOSURE	2"	3X #3/0 AWG XHHW-2; 1X #2/0 AWG XHHW-2 N				
P0101B	[UT 01], UTILITY TRANSFORMER	[CTE 01], CURRENT TRANSFORMER ENCLOSURE	2"	3X #3/0 AWG XHHW-2; 1X #2/0 AWG XHHW-2 N				
P0102A	[CTE 01], CURRENT TRANSFORMER ENCLOSURE	[MCB 01], MCC CIRCUIT BREAKER, MAIN	2"	3X #3/0 AWG XHHW-2; 1X #2/0 AWG XHHW-2 N; 1X #3 AWG XHHW-2 G				
P0102B	[CTE 01], CURRENT TRANSFORMER ENCLOSURE	[MCB 01], MCC CIRCUIT BREAKER, MAIN	2"	3X #3/0 AWG XHHW-2; 1X #2/0 AWG XHHW-2 N; 1X #3 AWG XHHW-2 G				
P0103	[GEN 01], GENERATOR, AUXILIARY	[ATS 01], AUTOMATIC TRANSFER SWITCH	3"	3X 500 KCM XHHW-2; 1X #2/0 AWG XHHW-2 N; 1X #3 AWG XHHW-2 G				
P0104	[MCB 03], MCC CIRCUIT BREAKER, NORTH WALL MOTOR CONTROL CENTER	[MCCN 01], MOTOR CONTROL CENTER, NORTH WALL	2"	3X #3/0 AWG XHHW-2; 1X #3 AWG XHHW-2 N; 1X #3 AWG XHHW-2 G				
P0105	[MCB 03], MCC CIRCUIT BREAKER, NORTH WALL MOTOR CONTROL CENTER	[MCCN 01], MOTOR CONTROL CENTER, NORTH WALL	2"	3X #3/0 AWG XHHW-2; 1X #3 AWG XHHW-2 N; 1X #3 AWG XHHW-2 G	$\sim$			
P0106	[MS 03], MOTOR STARTER, AERATION BLOWER NO. 1	[MSDS 03], MOTOR SAFETY DISCONNECT SWITCH, AERATION BLOWER NO. 1	3/4"	3X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 G	*1			
P0107	[MSDS 03], MOTOR SAFETY DISCONNECT SWITCH, AERATION BLOWER NO. 1	[MTR 03], MOTOR, AERATION BLOWER NO. 1	3/4"	3X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 G	*1			
	BLOWER NO. 2	[MSDS 04], MOTOR SAFETY DISCONNECT SWITCH, AERATION BLOWER NO. 2	3/4"	3X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 G	*1			
P0109	[MSDS 04], MOTOR SAFETY DISCONNECT SWITCH, AERATION BLOWER NO. 2	[MTR 04], MOTOR, AERATION BLOWER NO. 2	3/4"	3X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 G	*1	1\		
P0110	[MS 01], MOTOR STARTER, WELL PUMP S15R	[MSDS 01], MOTOR SAFETY DISCONNECT SWITCH, WELL PUMP S15R	3/4"	3X #10 AWG XHHW-2; 1X #10 AWG XHHW-2 G				
P0111	[MSDS 01], MOTOR SAFETY DISCONNECT SWITCH, WELL PUMP S15R	[MTR 01], MOTOR, WELL PUMP S15R	3/4"	3X #10 AWG XHHW-2; 1X #10 AWG XHHW-2 G				
P0112	[MS 02], MOTOR STARTER, WELL PUMP S16	[MSDS 02], MOTOR SAFETY DISCONNECT SWITCH, WELL PUMP S16	3/4"	3X #10 AWG XHHW-2; 1X #10 AWG XHHW-2 G				
P0113	[MSDS 02], MOTOR SAFETY DISCONNECT SWITCH, WELL PUMP S16	[MTR 02], MOTOR, WELL PUMP S16	3/4"	3X #10 AWG XHHW-2; 1X #10 AWG XHHW-2 G	$\sim$			
P0114	[MS 05], MOTOR STARTER, BOOSTER PUMP NO. 1	[MSDS 05], MOTOR SAFETY DISCONNECT SWITCH, BOOSTER PUMP NO. 1	1-1/4"	3X #4 AWG XHHW-2; 1X #4 AWG XHHW-2 G	*1			
P0115	[MSDS 05], MOTOR SAFETY DISCONNECT SWITCH, BOOSTER PUMP NO. 1	[MTR 05], MOTOR, BOOSTER PUMP NO.	1-1/4"	3X #4 AWG XHHW-2; 1X #4 AWG XHHW-2 G	*1			
P0116	[MS 06], MOTOR STARTER, BOOSTER PUMP NO. 2	[MSDS 06], MOTOR SAFETY DISCONNECT SWITCH, BOOSTER PUMP NO. 2	1-1/4"	3X #4 AWG XHHW-2; 1X #4 AWG XHHW-2 G	*1	<b>X</b>		
P0117	[MSDS 06], MOTOR SAFETY DISCONNECT SWITCH, BOOSTER PUMP NO. 2	[MTR 06], MOTOR, BOOSTER PUMP NO. 2	1-1/4"	3X #4 AWG XHHW-2; 1X #4 AWG XHHW-2 G	*1	1		
P0118	[CTE 01], CURRENT TRANSFORMER ENCLOSURE	[MB 01], METER BASE	1"	PROVIDED BY ELECTRICAL UTILITY				
P0119	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[GADP 01], AUXILIARY DEVICE PANEL, AUXILIARY GENERATOR	1"	2X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 N; 1X #8 AWG XHHW-2 G				
P0120	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[PB 02], PANELBOARD 208/120V, S16 ENCLOSURE	3/4"	2X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 N; 1X #10 AWG XHHW-2 G				
P0121	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[GO 01], MOTORIZED GATE OPERATOR NO. 1, ENTRANCE	3/4"	1X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 N; 1X #8 AWG XHHW-2 G				
P0122	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[GO 02], MOTORIZED GATE OPERATOR NO. 2, EXIT	3/4"	1X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 N; 1X #8 AWG XHHW-2 G				
P0123	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[CP 01], CONTROL PANEL, MAIN	3/4"	3X #12 AWG XHHW-2; 3X #12 AWG XHHW-2 N; 1X #10 AWG XHHW-2 G; 1X #12 AWG XHHW-2 G		CONTROL PANEL POWER		
P0124	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[RDOS 01] ROLLUP DOOR OPERATOR SYSTEM	1/2"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0125	[CP 01], CONTROL PANEL, MAIN	[FIT 01], FLOW INDICATING TRANSMITTER, WELL PUMP S15R MAGNETIC FLOW METER NO. 1	1/2"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0126	[CP 01], CONTROL PANEL, MAIN	[FIT 02], FLOW INDICATING TRANSMITTER, WELL PUMP S16 MAGNETIC FLOW METER NO. 2	1"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0127	[CP 01], CONTROL PANEL, MAIN	[FIT 03], FLOW INDICATING TRANSMITTER, PACKAGE AERATION UNIT MAGNETIC FLOW METER NO. 3	1/2"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0128	[CP 01], CONTROL PANEL, MAIN	[FIT 05], FLOW INDICATING TRANSMITTER, AIRFLOW METER	1/2"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0129	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	RECEPTACLES, ELECTRICAL ROOM, STORAGE ROOM	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0130	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	RECEPTACLES, CHLORINE ROOM, BLOWER ROOM, AND DEDICATED	3/4"	3X #12 AWG XHHW-2; 3X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0131	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	RECEPTACLES, TREATMENT ROOM	3/4"	2X #10 AWG XHHW-2; 2X #10 AWG XHHW-2 N; 1X #10 AWG XHHW-2 G				
P0132	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	INTERIOR LIGHTING, TREATMENT ROOM	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0133	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	INTERIOR LIGHTING, ELECTRICAL ROOM, CHLORINE ROOM, AND BLOWER ROOM	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				
P0134	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[C 02], CONTROL PANEL, EXTERIOR LIGHTING	3/4"	1X #8 AWG XHHW-2; 1X #8 AWG XHHW-2 N; 1X #8 AWG XHHW-2 G				
P0135	[CP 02], CONTROL PANEL, EXTERIOR LIGHTING	EXTERIOR BUILDING LIGHTING, NORTH	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G				

P0136	[CP 02], CONTROL PANEL, EXTERIOR LIGHTING	EXTERIOR BUILDING LIGHTING, SOUTH	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G	
P0137	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[C 01], CONTROL TIMER, EXHAUST FAN NO. 1	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G	
P0138	NOT USED				
20139	NOT USED				
P0140	NOT USED				
20141	NOT USED				
20142	[C 01], CONTROL TIMER, EXHAUST FAN NO. 1	[EF 01], EXHAUST FAN NO. 1	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G	
P0143	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[SDS 01], SAFETY DISCONNECT SWITCH, HEAT PUMP	3/4"	2X #10 AWG XHHW-2; 1X #10 AWG XHHW-2 G	
P0144	[SDS 01], SAFETY DISCONNECT SWITCH, HEAT PUMP	[HP 01], HEAT PUMP	3/4"	2X #10 AWG XHHW-2; 1X #10 AWG XHHW-2 G	
P0145	[HP 01], HEAT PUMP	[SDS 02], SAFETY DISCONNECT SWITCH	3/4"	2X #10 AWG XHHW-2; 1X #10 AWG XHHW-2 G	
P0146	[SDS 02], SAFETY DISCONNECT SWITCH	[FC 01], FAN COIL, WALL MOUNTED, HEAT PUMP	3/4"	2X #10 AWG XHHW-2; 1X #10 AWG XHHW-2 G	
P0147	[MCB 04], MCC CIRCUIT BREAKER, 3KW HEATER NO. 1	[HT 01], HEATER NO. 1, 3KW	3/4"	3X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 G	
P0148	[MCB 07], MCC CIRCUIT BREAKER, 3KW HEATER NO. 4	[HT 04], HEATER NO. 4, 3KW	3/4"	3X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 G	
P0149	[MCB 05], MCC CIRCUIT BREAKER, 3KW HEATER NO. 2	[HT 02], HEATER NO. 2, 3KW	3/4"	3X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 G	
P0150	[MCB 06], MCC CIRCUIT BREAKER, 3KW HEATER NO. 3	[HT 03], HEATER NO. 3, 3KW	3/4"	3X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 G	
P0151	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[SDS 03], SAFETY DISCONNECT SWITCH, SUPPLY FAN	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G	
P0152	[SDS 03], SAFETY DISCONNECT SWITCH, SUPPLY FAN	[SF 01], SUPPLY FAN	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G	
P0153	[PB 01], PANELBOARD 208/120V, WELL S15R BUILDING	[CEP 02], COMMUNICATION EQUIPMENT POLE NO. 2	3/4"	1X #12 AWG XHHW-2; 1X #12 AWG XHHW-2 N; 1X #12 AWG XHHW-2 G	
P0154	[MCB 05], MCC CIRCUIT BREAKER, WATER HEATER	[MSDS 07] MOTOR SAFETY DISCONNECT SWITCH	3/4"	3X #8 AWG XHHW-2; 1X #10 AWG XHHW-2 G	
P0155	[MSDS 07] MOTOR SAFETY DISCONNECT SWITCH	[WH 01], WATER HEATER (20KW)	3/4"	3X #8 AWG XHHW-2; 1X #10 AWG XHHW-2 G	
P0156~	ELECTRICAL ROOM NE CORNER	STUB OUT 2' AND CAP	1"	PULL STRING	

	CONTROL CABLE AND CONDUIT SCHEDULE								
NUMBER	SOURCE	DESTINATION	SIZE	CONDUCTORS	E-1	NOTES			
C0101	[MS 03], MOTOR STARTER, AERATION BLOWER NO. 1	[MSDS 03], MOTOR SAFETY DISCONNECT SWITCH, AERATION BLOWER NO. 1	3/4"	6X #14 AWG XHHW-2		OVER TEMPERATURE, AND MSDS STATUS, 2X #14 ARE SPARE			
C0101A	[MSDS 03], MOTOR SAFETY DISCONNECT SWITCH, AERATION BLOWER NO. 1	[MTR 03], MOTOR, AERATION BLOWER NO. 1	3/4"	2X #14 AWG XHHW-2		OVER TEMPERATURE STATUS			
C0102	[MS 04], MOTOR STARTER, AERATION BLOWER NO. 2	[MSDS 04], MOTOR SAFETY DISCONNECT SWITCH, AERATION BLOWER NO. 2	3/4"	6X #14 AWG XHHW-2		OVER TEMPERATURE, AND MSDS STATUS, 2X #14 ARE SPARE			
C0102A	[MSDS 04], MOTOR SAFETY DISCONNECT SWITCH, AERATION BLOWER NO. 2	[MTR 04], MOTOR, AERATION BLOWER NO. 2	3/4"	2X #14 AWG XHHW-2		OVER TEMPERATURE STATUS			
C0103	[MS 05], MOTOR STARTER, BOOSTER PUMP NO. 1	[MSDS 05], MOTOR SAFETY DISCONNECT SWITCH, BOOSTER PUMP NO. 1	3/4"	6X #14 AWG XHHW-2		OVER TEMPERATURE, AND MSDS STATUS, 2X #14 ARE SPARE			
C0103A	[MSDS 05], MOTOR SAFETY DISCONNECT SWITCH, BOOSTER PUMP NO. 1	[MTR 05], MOTOR, BOOSTER PUMP NO. 1	3/4"	2X #14 AWG XHHW-2		OVER TEMPERATURE STATUS			
C0104	[MS 06], MOTOR STARTER, BOOSTER PUMP NO. 2	[MSDS 06], MOTOR SAFETY DISCONNECT SWITCH, BOOSTER PUMP NO. 2	3/4"	6X #14 AWG XHHW-2		OVER TEMPERATURE, AND MSDS STATUS, 2X #14 ARE SPARE			
C0104A	[MSDS 06], MOTOR SAFETY DISCONNECT SWITCH, BOOSTER PUMP NO. 2	[MTR 06], MOTOR, BOOSTER PUMP NO. 2	3/4"	2X #14 AWG XHHW-2		OVER TEMPERATURE STATUS			
C0105	[MS 01], MOTOR STARTER, WELL PUMP S15R	[MSDS 01], MOTOR SAFETY DISCONNECT SWITCH, WELL PUMP S15R	3/4"	4X #14 AWG XHHW-2		MSDS STATUS, 2X #14 ARE SPARE			
C0106	[MS 02], MOTOR STARTER, WELL PUMP S16	JUNCTION BOX JS0102	3/4"	4X #14 AWG XHHW-2		MSDS STATUS, 2X #14 ARE SPARE			
C0106A	JUNCTION BOX JS0102	[MSDS 02], MOTOR SAFETY DISCONNECT SWITCH, WELL PUMP S16	3/4"	4X #14 AWG XHHW-2		MSDS STATUS, 2X #14 ARE SPARE			
C0107	[ATS 01], AUTOMATIC TRANSFER SWITCH	[GCP 01], CONTROL PANEL, AUXILIARY GENERATOR	3/4"	2X #14 AWG XHHW-2		GENERATOR RUN REQUEST			
C0108	[CP 01], CONTROL PANEL, MAIN	[ATS 01], AUTOMATIC TRANSFER SWITCH	3/4"	6X #14 AWG XHHW-2		ATS STATUS			
C0109	[CP 01], CONTROL PANEL, MAIN	[GCP 01], CONTROL PANEL, AUXILIARY GENERATOR	1"	18X #14 AWG XHHW-2		GENERATOR STATUS, 4X #14 ARE SPARE			
C0110	[CP 01], CONTROL PANEL, MAIN	[MCCS 01], MOTOR CONTROL CENTER, SOUTH WALL	2"	10X #14 AWG XHHW-2; 4X 8-C, 4-TP, #23 AWG, CAT6		MS AND PMU COMMUNICATION, 1X CAT6 IS SPARE AND [MCB 01], 2X SPD, AND PMU STATUS, 2X #14 AR SPARE			
C0111	[CP 01], CONTROL PANEL, MAIN	[MCCN 01], MOTOR CONTROL CENTER, NORTH WALL	2"	5X 8-C, 4-TP, #23 AWG, CAT6		MS COMMUNICATION, 1X CAT6 IS SPARE			
C0112	[CP 01], CONTROL PANEL, MAIN	[SD 01], SMOKE DETECTOR, WEST, ELECTRICAL ROOM	1"	14X #14 AWG XHHW-2; 1X #12 AWG XHHW-2 G		SD STATUS, 2X #14 ARE 24 VDC POWER			
C0112A	[SD 01], SMOKE DETECTOR, WEST, ELECTRICAL ROOM	[SD 02], SMOKE DETECTOR, EAST, ELECTRICAL ROOM	1"	12X #14 AWG XHHW-2; 1X #12 AWG XHHW-2 G					





COUNTY WASHINGTON
REST WELLFIELD PH
IPROVEMENTS

CITY OF LACEY
THURSTON COUNTY WASH
BEACHCREST WELLFIEL
IMPROVEMENTS

SHEET: **EC-1**SHEET: **76 of 81** 

JOB NO.: 19520 DWG:E\_CCS