

**ZONING COMMISSION**  
Town of New Fairfield  
203-312-5646 Fax 203-312-3508

**SPECIAL PERMIT APPLICATION**

Application Number \_\_\_\_\_

Map: 19 Block: 15 Lot: 18.1/18.1A

Please type or print:

Date: 5/15/2020

Applicant: Snyder Civil Engineering, LLC (Attn: Zachary Kuegler)

Mailing Address: 150 Marlborough Street, Portland, CT 06480

Project Address: 00 Heron View Road, New Fairfield, CT 06812

Phone No: (860) 342-1370

Owner (s) of Record: Aquarion Water Company of CT (Attn: Phat Phung)

Address: 600 Lindley Street, Bridgeport, CT 06606

Phone No: (203) 448-9457

Application is hereby made for Special Permit per section 8.2 pursuant to the following section (s) of the Zoning Regulations:

\_\_\_\_\_  
\_\_\_\_\_

For the following purpose: Aquarion Water Company proposes to construct a 12' x 11' addition to the existing well station at the site to house the proposed upgraded treatment system to better serve the community. The building will be completely buried below grade. Please refer to the attached site plan for additional information.

In compliance with the requirements of the Zoning Regulations, I am hereby submitting the fee, plans, documents and additional information as required.

(X) Fee of **\$460.00\*** as specified in Section 10.1.2C (\$200.00 application, \$60.00 State Surcharge and \$200.00 Two Legal Notice for Public Hearing and Results of Application Advertised in News Paper).

(X) Letter of authorization from property owner stating an agent may apply for permit. Signature on letter must be original not copied, facsimile or e-mail.

(X) Ten (10) copies of site plans including a **A-2 SURVEY by a CT Land surveyor with existing and proposed percentage of impervious surfaces** together with existing proposed site improvements including building, parking landscaping access & egress and **proposed signage**. A-2 survey shall be drawn at a scale of at least 1" = 50', and shall be on sheets either 36" x 24", 18" x 12" or 18" x 24" (Check regulations for further details).

(N/A) Ten (10) copies of a narrative report prepared by a Connecticut licensed engineer as required in Section 6.7 – Storm Water Management Plan.

(N/A) Report from Health Department on adequacy of sewage disposal system and water supply. **Applicant to write letter requesting such report. Complete description of project to be included.**

(X) Proposed use(s) - written statement describing in detail proposed use(s).


(N/A) Traffic Study – Ten (10) copies if development anticipates the generation of more than one hundred (100) vehicular trips per day.

(N/A) Report (s) from other Town Agencies (if required) as follows:

- Fire Marshal
- Inland Wetland Commission
- Zoning Enforcement Officer
- Other Agency (please specify) \_\_\_\_\_
- Copy of additional information as follows: \_\_\_\_\_
- Town Engineer
- CT Department of Transportation
- Water Supply Committee

**Applicant to write letter requesting such report. Complete description of project to be included.**

(X) Attach a list with the names and addresses of all adjacent property owners including those across any adjacent roadways. Submit proof that all such neighbors have been notified of this proposed activity. These letters shall be sent **CERTIFIED MAIL with RETURN RECEIPT**. Both certified mail receipt and return receipt shall be submitted to the Commission either before or at the time of Public Hearing.

  
 \_\_\_\_\_  
 5/15/2020  
**Signature of owner (date)**

  
 \_\_\_\_\_  
 5/15/2020  
**Signature of Applicant (date)**

***\*Fee does not include Zoning Permit Fee (issued by Zoning Enforcement Officer, if required.***

**For Office Use Only**

This Application Complies       Does Not Comply with the requirements of the zoning regulations.

Application Complete: \_\_\_\_\_ Yes \_\_\_\_\_ No

The application fails to comply as follows: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Review by Zoning Enforcement Officer \_\_\_\_\_ Date \_\_\_\_\_

Date of Receipt by Zoning Commission: \_\_\_\_\_

Date of Scheduled Public Hearing: \_\_\_\_\_

Date of Commission Action: \_\_\_\_\_ Legal Notice Published \_\_\_\_\_

Application Approved       Application Denied

Application Approved & Modified

Conditions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**AQUARION**  
Water Company

*Stewards of the Environment*

May 15, 2020

Town of New Fairfield  
Zoning Commission  
4 Brush Hill Road.  
New Fairfield, CT 06812

Re: **Special Permit Application for the Dunham Pond Water System  
New Fairfield, CT**

To whom it may concern:

Aquarion Water Company of Connecticut authorizes Snyder Civil Engineering, LLC as our agent for permitting for the Dunham Pond Water System Chlorination Project located at 00 Heron View Road.

If you have any questions, please contact me at (203) 448-9457 or [pphung@aquarionwater.com](mailto:pphung@aquarionwater.com)

Sincerely,

Phat Phung, Engineer  
Engineering and Planning  
(203) 337-5957  
[pphung@aquarionwater.com](mailto:pphung@aquarionwater.com)

May 15, 2020

Town of New Fairfield  
Zoning Commission  
4 Brush Hill Road.  
New Fairfield, CT 06812

Re: **Special Permit Application for the Dunham Pond Water System  
New Fairfield, CT**

To whom it may concern:

The Dunham Pond Condominium Association authorizes Aquarion Water Company of Connecticut and Snyder Civil Engineering, LLC as our agent for permitting for the Dunham Pond Water System Chlorination Project located at 00 Heron View Road.

If you have any questions, please contact me at 203-790-6888 ext. 694 or [rdelavega@scalzoproperty.com](mailto:rdelavega@scalzoproperty.com)

Sincerely,



Robert Delavega, CMCA  
Community Association Manager  
Scalzo Property Management, Inc.  
2 Stony Hill Road, Suite 201  
Bethel, CT 06801  
203-790-6888 ext.694  
203-790-9390 fax  
[rdelavega@scalzoproperty.com](mailto:rdelavega@scalzoproperty.com)



# DUNHAM POND WATER SYSTEM CHLORINATION PROJECT (GROUP B-2) NEW FAIRFIELD, CONNECTICUT CONTRACT DRAWING

**GENERAL NOTES:**

1. BASE MAPPING AND PROPERTY LIMITS WERE OBTAINED FROM THE "PROPERTY BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED FOR AQUARION WATER COMPANY OF CONNECTICUT PROPERTY KNOWN AS LOT 5 - DUNHAM POND CONDOMINIUM ASSOCIATION, INC. LOT 6 - THE WOODS AT DUNHAM POND CONDOMINIUM ASSOCIATION, INC. HIGH WINDS ROAD & HERON VIEW ROAD NEW FAIRFIELD, CONNECTICUT," AS PREPARED BY JACKOWIAK LAND SURVEYING IN DECEMBER OF 2019.
2. REFERENCE FOR THE LOCATION OF THE SUBSURFACE OR UNDERGROUND UTILITIES AND STRUCTURES SHOWN ON THE DRAWINGS IS BASED ON INFORMATION PROVIDED BY THE FOLLOWING:  
  
ELECTRIC - FIELD LOCATION  
STORM DRAINAGE - FIELD LOCATION  
WATER - FIELD LOCATION AND MAPPING PROVIDED BY AWC  
SANITARY SEWER - NONE  
COMMUNICATIONS - NONE  
GAS - NONE
3. THE LOCATION OF ALL SUBSURFACE OR UNDERGROUND UTILITIES AND STRUCTURE INCLUDING BUT NOT LIMITED TO PIPES, CABLES AND CONDUITS ARE NOT GUARANTEED TO BE EXACT, NOR IS IT GUARANTEED THAT ALL UNDERGROUND OR SUBSURFACE ITEMS ARE SHOWN.
4. THE EXACT TYPE, SIZE, LOCATION AND DEPTH OF EXISTING WATER MAINS IS UNKNOWN. THE EXISTING WATER MAINS ON THIS PLAN ARE SHOWN FOR SCHEMATIC PURPOSES ONLY BASED ON THE BEST AVAILABLE INFORMATION OBTAINED BY FIELD LOCATION AND MAPPING AND INFORMATION PROVIDED BY AQUARION WATER COMPANY.
5. MINIMUM WATER MAIN SANITARY INSTALLATION CLEARANCES ARE LISTED AS FOLLOWS:  
  
FOR WATER MAINS INSTALLED BELOW SANITARY SEWERS OR STORM DRAINS - 18" VERTICAL CLEARANCE  
  
FOR WATER MAINS INSTALLED ABOVE SANITARY SEWERS OR STORM DRAINS - 12" VERTICAL CLEARANCE  
  
IF MINIMUM INSTALLATION CLEARANCES CANNOT BE MET, THE CONTRACTOR SHALL
  - NOTIFY THE ENGINEER
  - PROVIDE A WATER TIGHT SEAL AT JOINTS WITHIN 10' OF THE CROSSING USING A PIPE JOINT REPAIR CLAMP OR MECHANICAL JOINT
  - INSTALL A 2" RIGID INSULATION PROTECTIVE BARRIER BETWEEN THE WATER MAIN AND SEWER OR STORM DRAIN
7. AQUARION WATER COMPANY RESERVES THE RIGHT TO ADD, SUBTRACT OR RELOCATE TEST PITS AS DIRECTED BY THE PROJECT MANAGER.
8. ALL VALVES SHALL BE OPEN LEFT (OTL).  
  
\*ELEVATION DATUM - NAD 1983 (IN FEET)



**LOCATION PLAN**  
SCALE: 1" = 1000'



**SUGGESTED CONSTRUCTION SEQUENCE:**

1. PROVIDE AUTOMATIC TRANSFER SWITCH AND VARIABLE FREQUENCY DRIVE SUBMITTALS WITHIN ONE WEEK OF CONTRACT AWARD.
2. INSTALL EROSION AND SEDIMENTATION CONTROLS AND TEMPORARY SECURITY FENCE.
3. PERFORM CLEARING AND GRUBBING.
4. TEMPORARILY TRANSPLANT TREES, TO BE MAINTAINED DURING CONSTRUCTION.
5. PERFORM TEST PITS.
6. TAP EXISTING MAINS AND INSTALL NEW WATER MAIN.
8. DISINFECT AND TEST NEW WATER MAINS.
9. ONCE NEW WATER MAIN IS ACCEPTED BY AWC, PERFORM INSERTION VALVE.
10. DELIVER TEMPORARY PUMPS AND EQUIPMENT TO THE SITE AND INSTALL UP TO AND INCLUDING CONNECTION LOCATIONS.
11. DISINFECT AND TEST TEMPORARY PUMPING EQUIPMENT.
12. IN ONE WORKING DAY, PERFORM THE FOLLOWING ACTIVITIES:
  - a. PUT THE TEMPORARY PUMPING SYSTEM INTO OPERATION AND REMOVE THE EXISTING PUMPS FROM SERVICE.
  - b. REMOVE THE EXISTING HYDROPNEUMATIC WATER STORAGE TANK FROM SERVICE.
  - c. FILL, DISINFECT AND TEST THE TEMPORARY BYPASS SYSTEM.
9. ONCE THE TEMPORARY BYPASS SYSTEM IS ACCEPTED BY AWC, PUT THE TEMPORARY SYSTEM INTO SERVICE AND TAKE THE EXISTING WELL STATION OUT OF SERVICE.
10. DEMOLISH EXISTING HYDROPNEUMATIC WATER STORAGE TANK.
11. EXCAVATE FOR THE NEW WELL STATION ADDITION AND CONCRETE FOUNDATION PAD.
12. CONSTRUCT NEW WELL STATION ADDITION.
13. DEMOLISH/SALVAGE EXISTING TREATMENT, ELECTRICAL AND CONTROL EQUIPMENT.
14. COMPLETE INTERIOR STATION PIPING AND WIRING AND INSTALL NEW EQUIPMENT.
15. FILL, TEST AND DISINFECT NEW TREATMENT SYSTEMS AND PIPING.
16. PERFORM STARTUP AND TESTING OF STATION.
17. REMOVE TEMPORARY BYPASS SYSTEM FROM SERVICE AND PLACE THE WELL STATION INTO SERVICE.
18. REPLANT TEMPORARILY TRANSPLANTED TREES.
19. PERFORM FINAL SITE RESTORATION.
20. AFTER TURF IS ESTABLISHED, REMOVE EROSION AND SEDIMENTATION CONTROLS.

**EXISTING FEATURES LEGEND**

CATCH BASIN	ROCK/BOULDER	STONE WALL
STREET SIGN	SURVEY CONTROL POINT	COMM. LINE
MAILBOX	SPOT ELEVATION	ELEC. LINE
SHRUB/BUSH	IRON PIN/PIPE	SANITARY SEWER MAIN
VALVE	CONIFEROUS TREE	WATER MAIN
HYDRANT	DECIDUOUS TREE	GAS MAIN
CURB VALVE	TREE STUMP	TRAFFIC CTRL LINE
WATER METER	UTILITY POLE W/ GUY WIRE	TREELINE/ BRUSHLINE
LIGHT POST	GARDEN	PROPERTY LINE
FENCE	TRAFFIC LOOP	STORM DRAIN PIPE
SHRUB ROW	CROSS WALK	RETAINING WALL

NOTE: ALL DRAIN PIPE ELEVATIONS SHOWN ON CATCH BASIN NOTES ARE INVERT ELEVATIONS

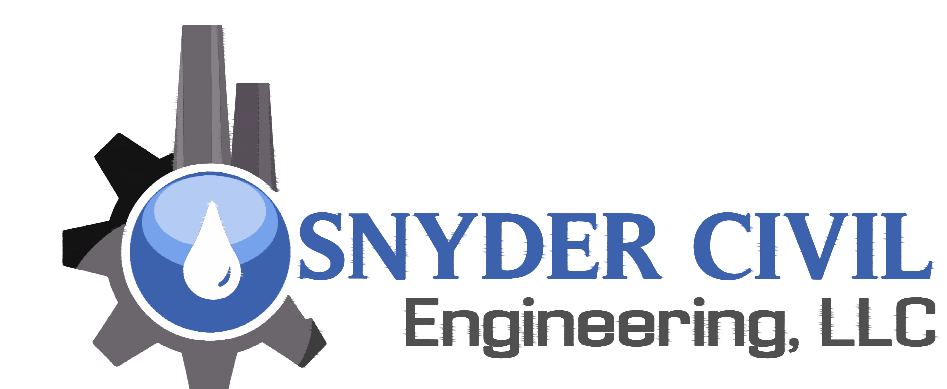
SHEET DIRECTORY	
SHEET NO.	SHEET CONTENTS
1	EXISTING SITE PLAN
2	PROPOSED SITE PLAN AND DETAILS
3	EXISTING BUILDING AND EAST WALL LAYOUT
4	PROPOSED PUMP STATION AND EAST WALL LAYOUT AND DETAILS
5	EXISTING AND PROPOSED PIPING SCHEMATICS
6	ELECTRICAL WORK
7	PROCESS AND INSTRUMENTATION DIAGRAM
8	INSTRUMENTATION AND CONTROL PLAN

**PREPARED FOR:**



AQUARION WATER COMPANY OF CT  
600 LINDLEY STREET  
BRIDGEPORT, CT 06606

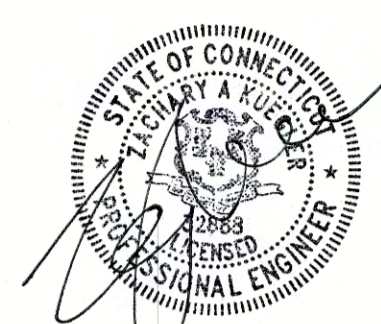
**PREPARED BY:**



SNYDER CIVIL ENGINEERING, LLC  
150 MARLBOROUGH STREET  
PORTLAND, CT 06480



PORTLAND, CONNECTICUT



NOT VALID WITHOUT SEAL



High Winds Roads Subdivision Lot 5  
Dunham Pond Condominium  
Associates, Inc.

**EXISTING SITE PLAN**  
SCALE: 1" = 20'

**EXISTING SITE PLAN**

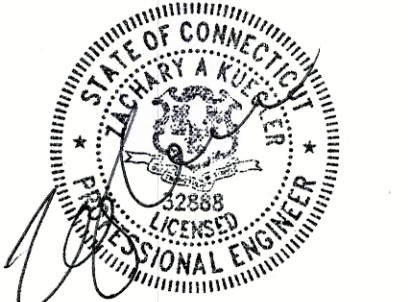
PREPARED FOR:  
**AQUARIUM WATER  
COMPANY OF CT**  
Bridgeport, CT

**DUNHAM POND  
WATER SYSTEM  
CHLORINATION PROJECT  
(GROUP B-2)**  
New Fairfield, Connecticut

A P R I L 2 0 2 0  
SHEET NO. 1 OF 8  
JOB NO. A W C - 1 5 2

DESIGNED	ZAK
DRAWN	MFP
SCALES AS NOTED	CHECKED
	ZAK
	REVISED

CONTRACT DRAWING



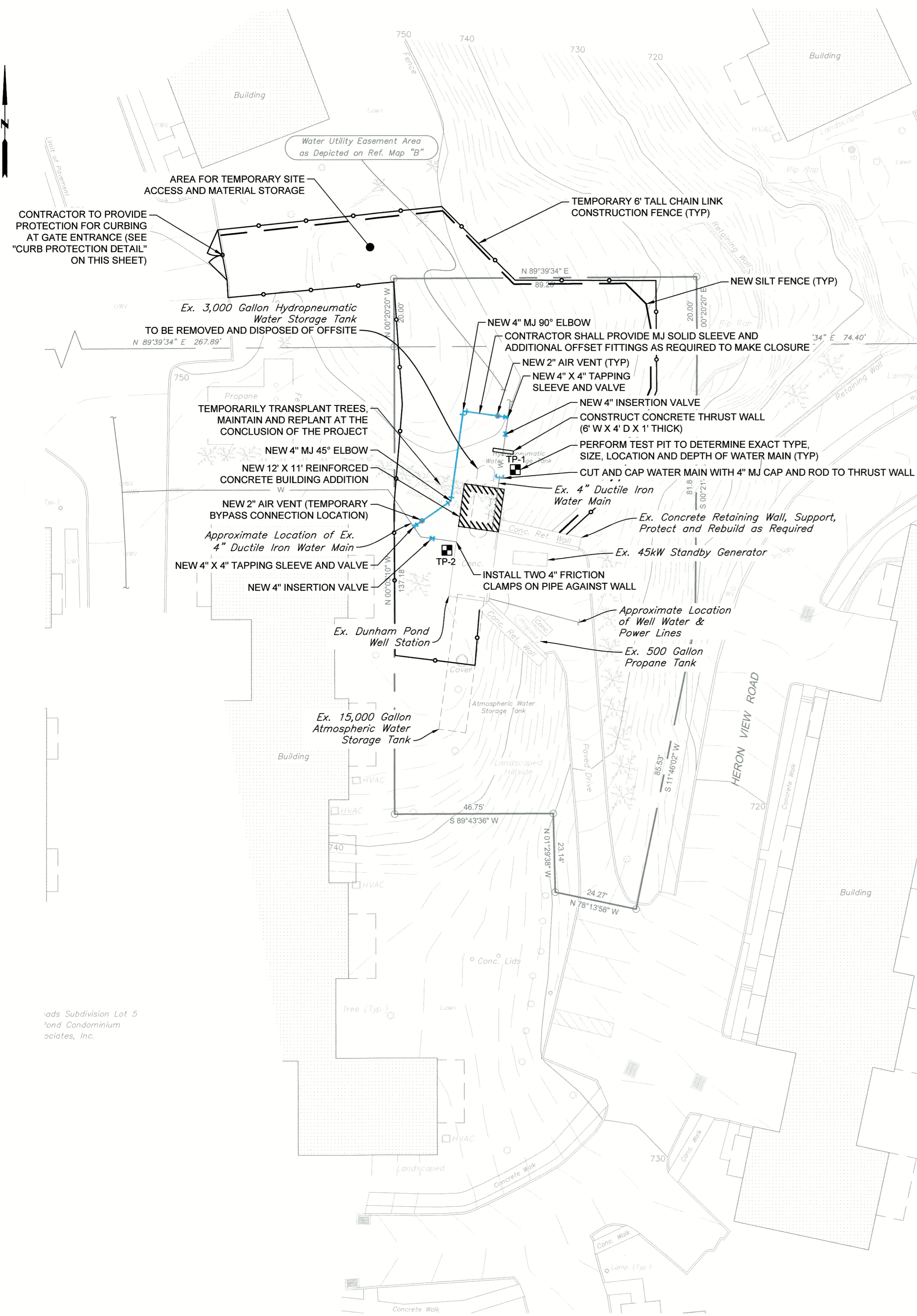
PROPOSED SITE PLAN AND DETAILS

DESIGNED ZAK  
DRAWN MFP  
CHECKED ZAK  
REVISED

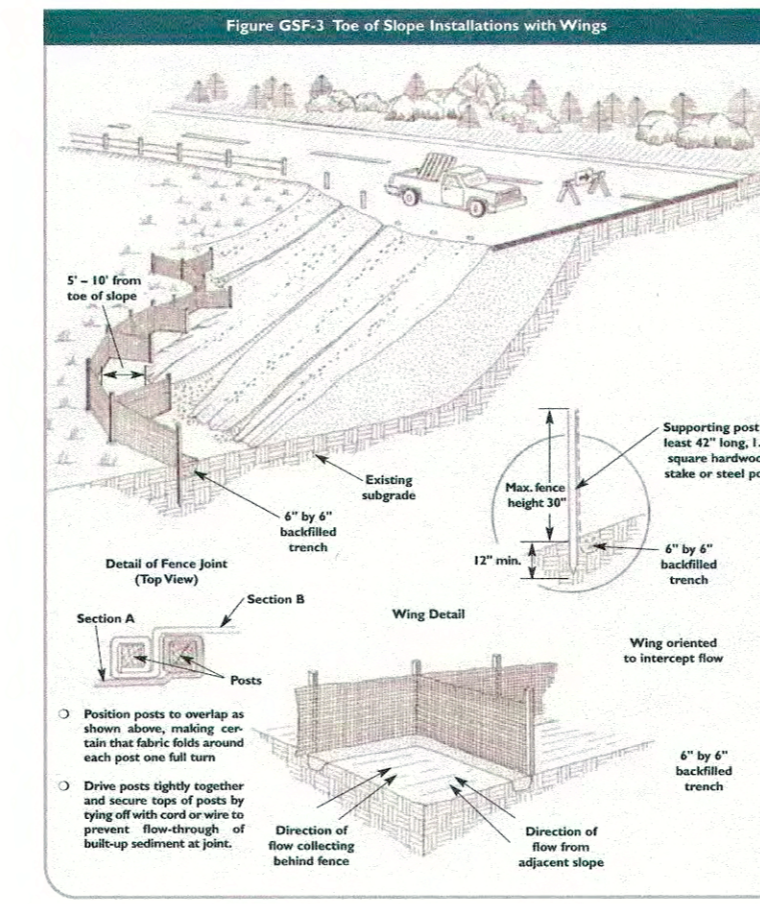
PREPARED FOR:  
AQUARIUM WATER  
COMPANY OF CT  
Bridgeport, CT

DUNHAM POND  
WATER SYSTEM  
CHLORINATION PROJECT  
(GROUP B-2)  
New Fairfield, Connecticut

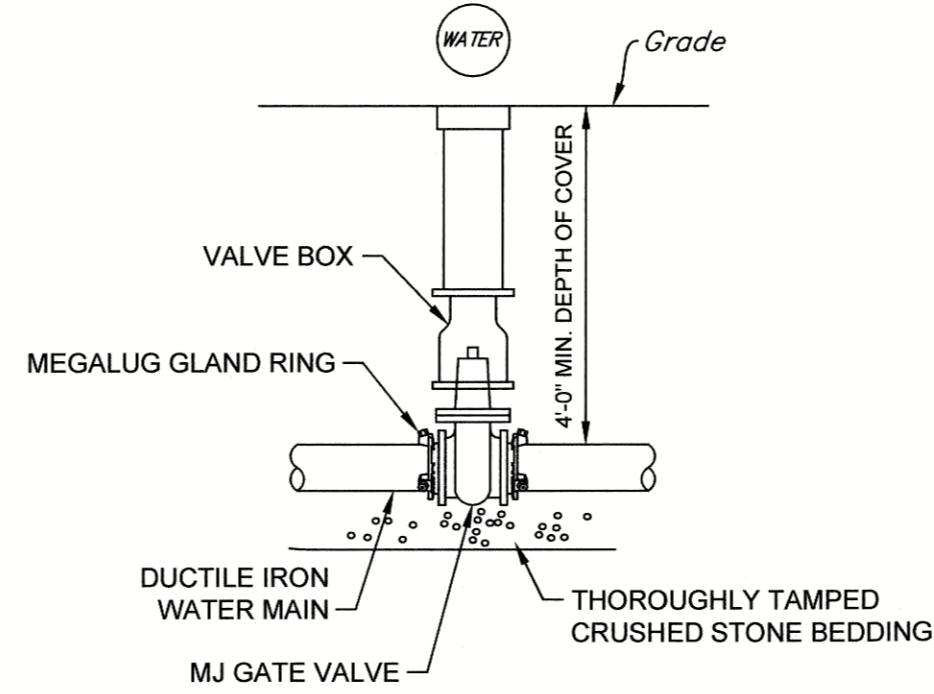
A P R I L 2 0 2 0  
SHEET NO. 2 OF 8  
JOB NO. A W C - 1 5 2



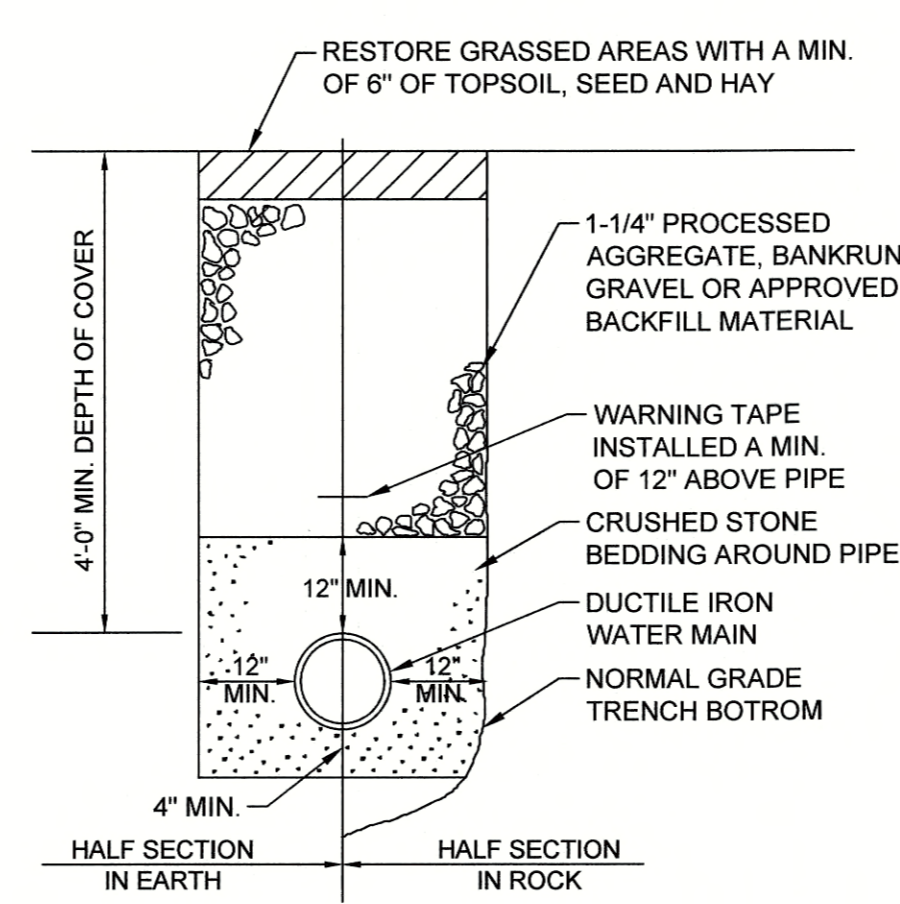
**PROPOSED SITE PLAN**  
SCALE: 1" = 20'



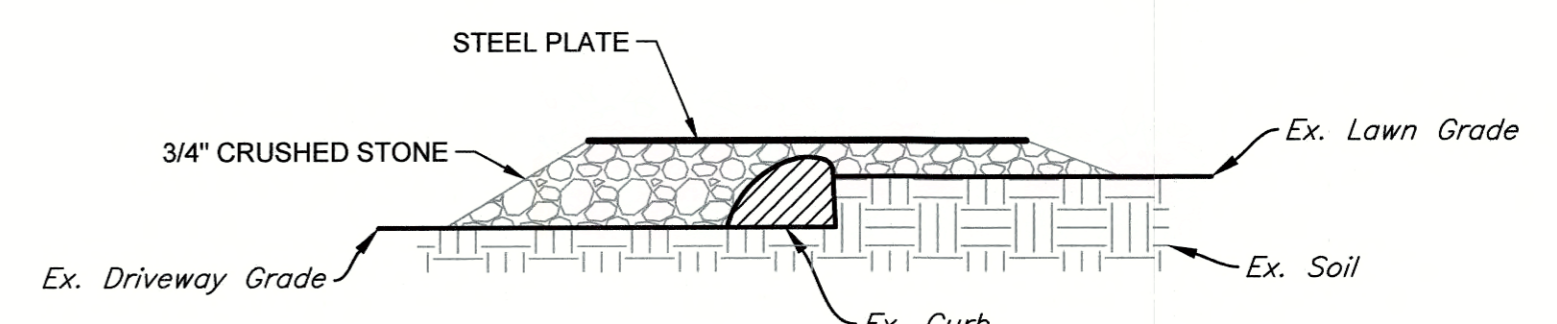
**SILT FENCE DETAIL**  
NOT TO SCALE



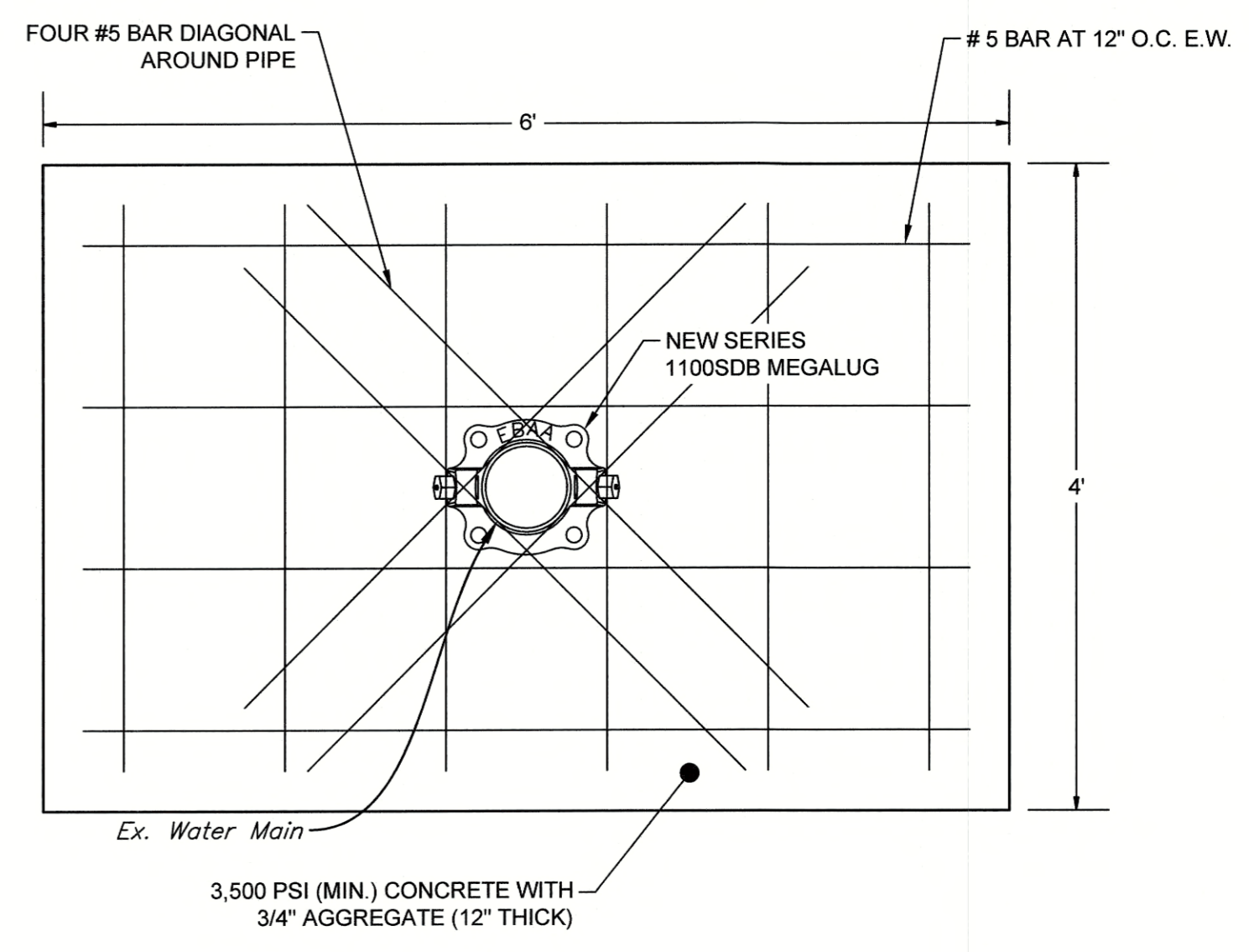
**TYPICAL VALVE DETAIL**  
NOT TO SCALE



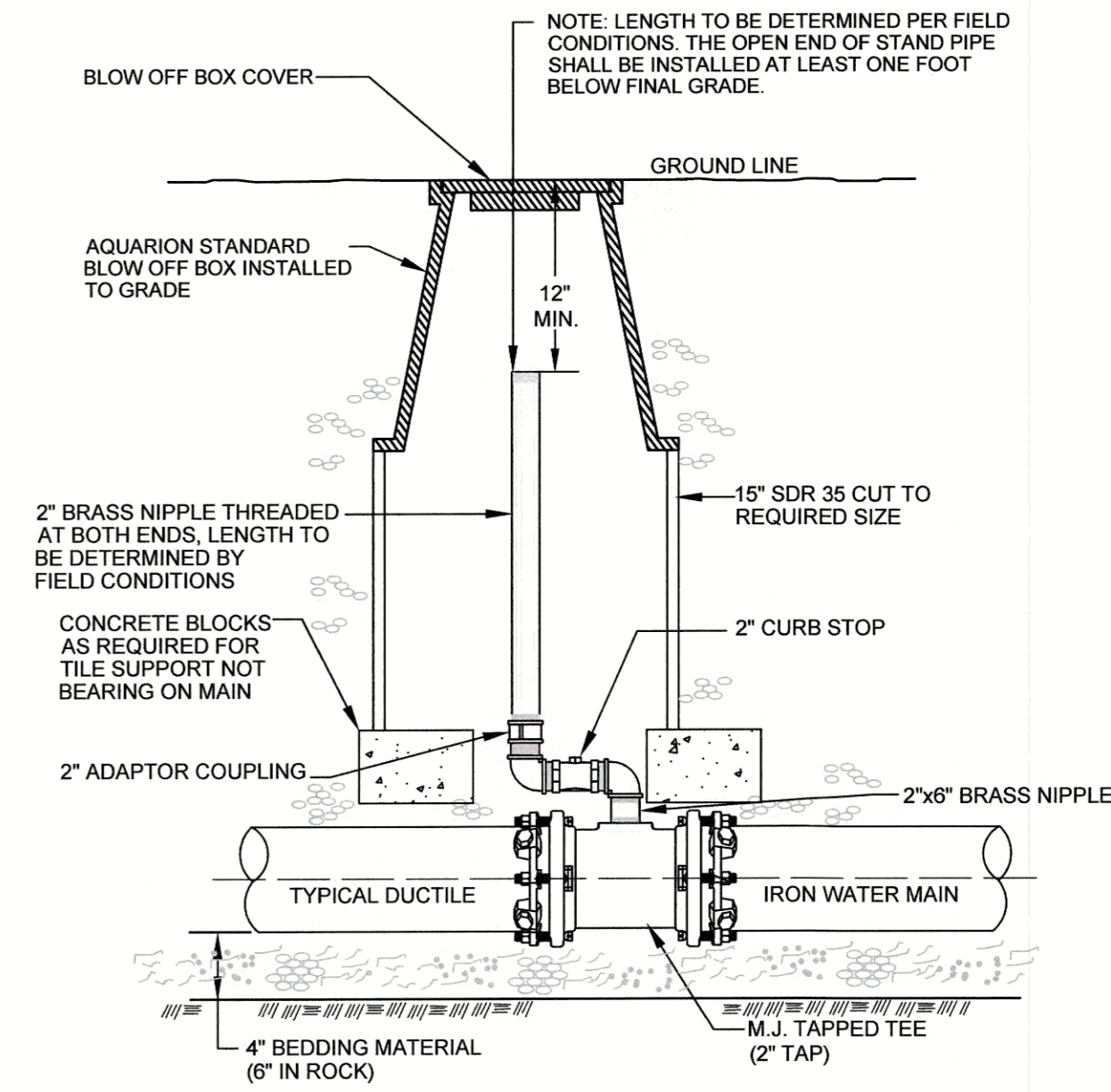
**TYPICAL WATER MAIN TRENCH DETAIL**  
NOT TO SCALE



**CURB PROTECTION DETAIL**  
NOT TO SCALE

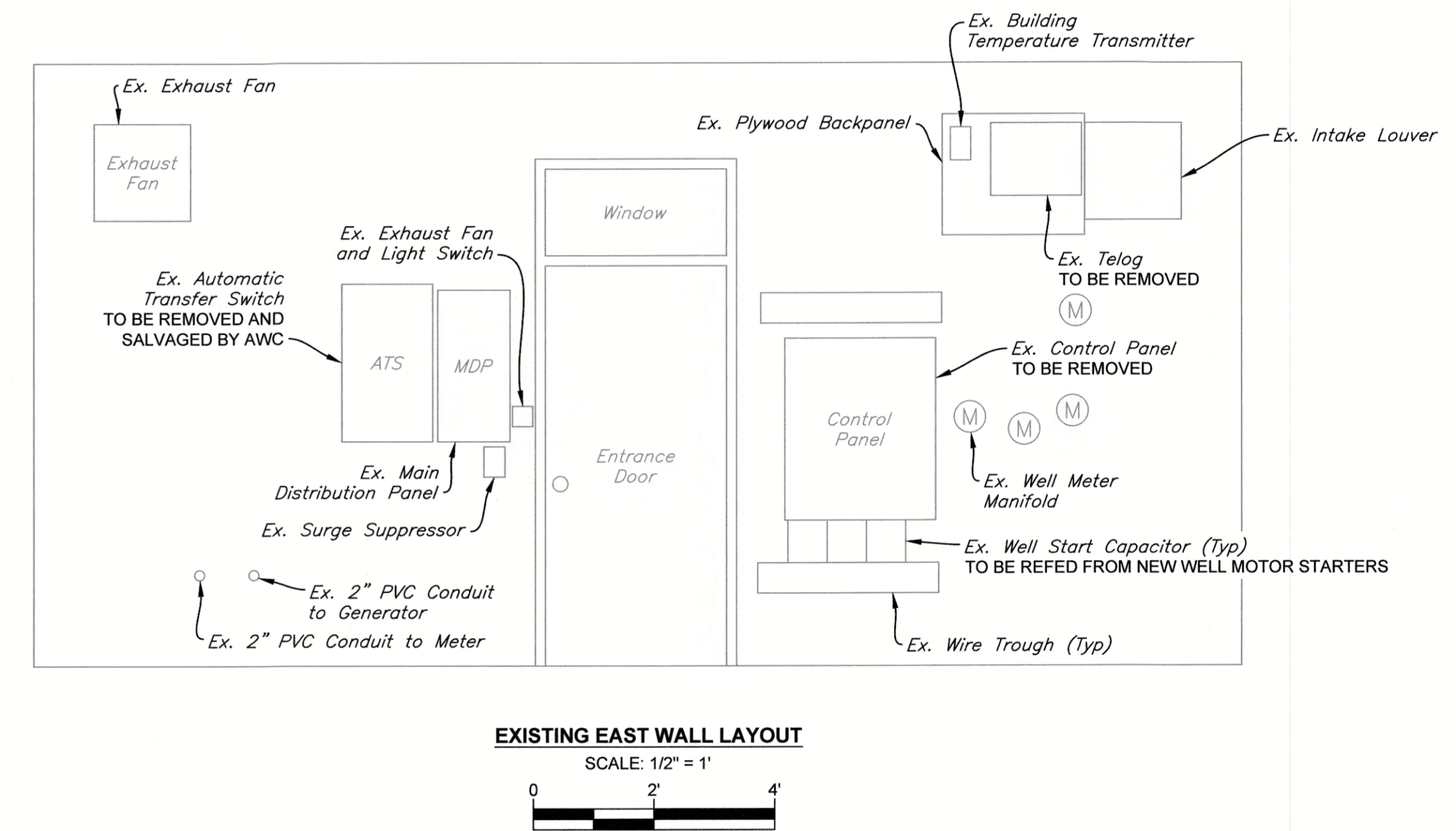
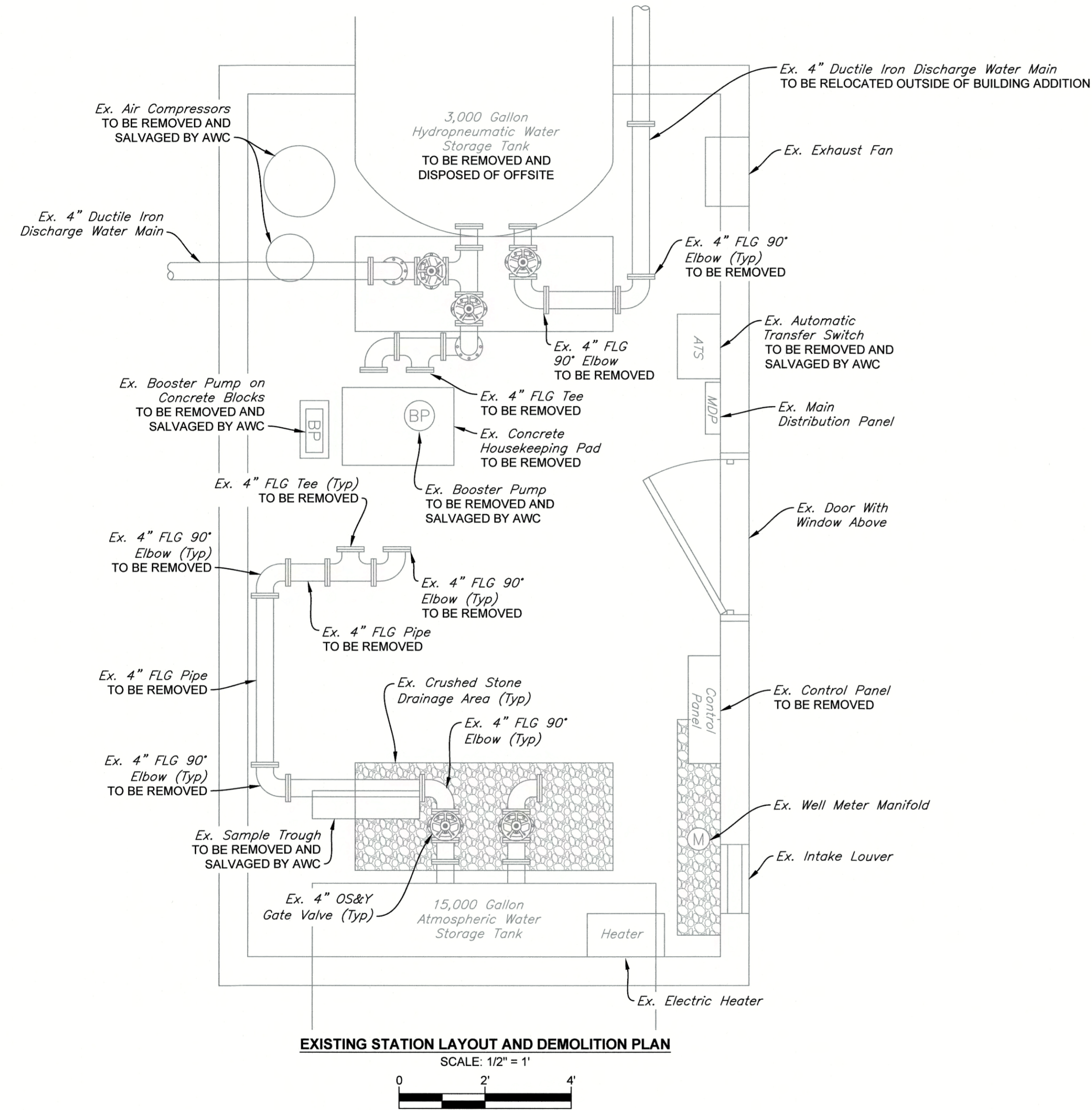
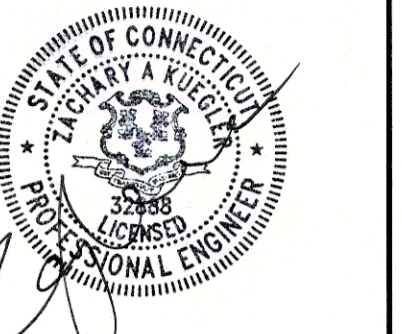


**THRUST WALL DETAIL**  
NOT TO SCALE



**ON LINE AIR VENT / BLOW-OFF DETAIL**  
NOT TO SCALE





EXISTING BUILDING AND EAST WALL LAYOUT

DESIGNED	ZAK	
DRAWN	MFP	YER
CHECKED		ZAK
SCALES AS NOTED		
REVISED		

PREPARED FOR:  
**AQUARIUM WATER  
 COMPANY OF CT**  
 Bridgeport, CT

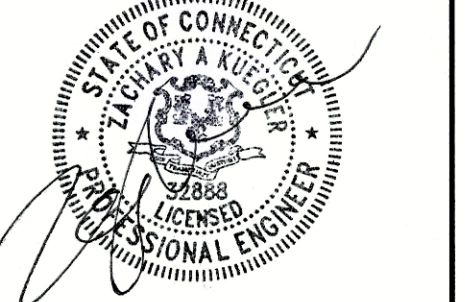
**DUNHAM POND  
 WATER SYSTEM  
 CHLORINATION PROJECT  
 (GROUP B-2)**  
 New Fairfield, Connecticut

A P R I L 2 0 2 0  
 SHEET NO. 3 OF 8  
 JOB NO. A W C - 1 5 2

CONTRACT DRAWING



PORTLAND, CONNECTICUT



NOT VALID WITHOUT SEAL

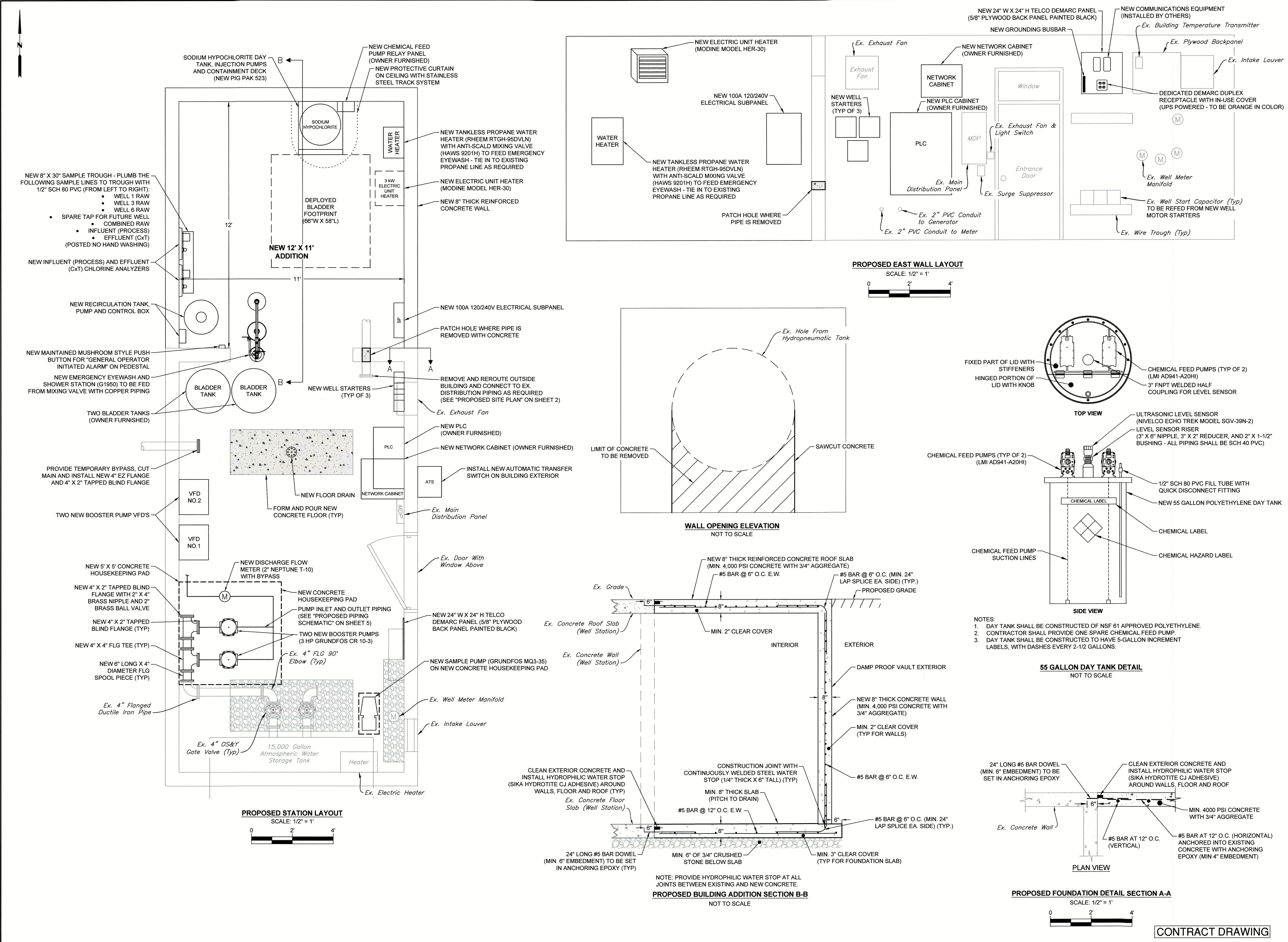
PROPOSED PUMP STATION AND EAST WALL LAYOUT AND DETAILS

DESIGNED	ZAK	DATE	
DRAWN	MFP	DATE	
CHECKED		DATE	
REVISED		DATE	

PREPARED FOR:  
AQUARION WATER COMPANY OF CT  
Bridgeport, CT

DUNHAM POND WATER SYSTEM CHLORINATION PROJECT (GROUP B-2)  
New Fairfield, Connecticut

APRIL 2020  
SHEET NO. 4 OF 8  
JOB NO. A W C - 1 5 2



- NEW 8" X 30" SAMPLE TROUGH - PLUMB THE FOLLOWING SAMPLE LINES TO TROUGH WITH 1/2" SCH 80 PVC (FROM LEFT TO RIGHT):
  - WELL 1 RAW
  - WELL 3 RAW
  - WELL 6 RAW
  - SPARE TAP FOR FUTURE WELL
  - COMBINED RAW
  - INFLUENT (PROCESS)
  - EFFLUENT (CXT) (POSTED NO HAND WASHING)

NEW INFLUENT (PROCESS) AND EFFLUENT (CXT) CHLORINE ANALYZERS

NEW RECIRCULATION TANK PUMP AND CONTROL BOX

NEW MAINTAINED MUSHROOM STYLE PUSH BUTTON FOR "GENERAL OPERATOR INITIATED ALARM" ON PEDESTAL

NEW EMERGENCY EYEWASH AND SHOWER STATION (G1950) TO BE FED FROM MIXING VALVE WITH COPPER PIPING

TWO BLANDER TANKS (OWNER FURNISHED)

PROVIDE TEMPORARY BYPASS, CUT MAIN AND INSTALL NEW 4" EZ FLANGE AND 4" X 2" TAPPED BLIND FLANGE

TWO NEW BOOSTER PUMP VFD'S

NEW 5' X 5' CONCRETE HOUSEKEEPING PAD

NEW 4" X 2" TAPPED BLIND FLANGE WITH 2" X 4" BRASS NIPPLE AND 2" BRASS BALL VALVE

NEW 4" X 2" TAPPED BLIND FLANGE (TYP)

NEW 4" X 4" FLG TEE (TYP)

NEW 6" LONG X 4" DIAMETER FLG SPOOL PIECE (TYP)

Ex. 4" Flanged Ductile Iron Pipe

Ex. 4" OS&Y Gate Valve (Typ)

15,000 Gallon Atmospheric Water Storage Tank

Heater

Ex. Electric Heater

NEW 12' X 11' ADDITION

DEPLOYED BLADDER FOOTPRINT (66"W X 58"L)

SODIUM HYPOCHLORITE DAY TANK INJECTION PUMPS AND CONTAINMENT DECK (NEW PIG PAK 523)

NEW CHEMICAL FEED PUMP RELAY PANEL (OWNER FURNISHED)

NEW PROTECTIVE CURTAIN ON CEILING WITH STAINLESS STEEL TRACK SYSTEM

NEW TANKLESS PROPANE WATER HEATER (RHEEM RTGH-95DVLN) WITH ANTI-SCALD MIXING VALVE (HAWS 9201H) TO FEED EMERGENCY EYEWASH - TIE IN TO EXISTING PROPANE LINE AS REQUIRED

NEW ELECTRIC UNIT HEATER (MODINE MODEL HER-30)

NEW 8" THICK REINFORCED CONCRETE WALL

NEW 100A 120/240V ELECTRICAL SUBPANEL

PATCH HOLE WHERE PIPE IS REMOVED WITH CONCRETE

REMOVE AND REROUTE OUTSIDE BUILDING AND CONNECT TO EX. DISTRIBUTION PIPING AS REQUIRED (SEE "PROPOSED SITE PLAN" ON SHEET 2)

Ex. Exhaust Fan

NEW PLC (OWNER FURNISHED)

NEW NETWORK CABINET (OWNER FURNISHED)

INSTALL NEW AUTOMATIC TRANSFER SWITCH ON BUILDING EXTERIOR

Ex. Main Distribution Panel

Ex. Door With Window Above

NEW 24" W X 24" H TELCO DEMARC PANEL (5/8" PLYWOOD BACK PANEL PAINTED BLACK)

NEW SAMPLE PUMP (GRUNDFOS MQ3-35) ON NEW CONCRETE HOUSEKEEPING PAD

Ex. Well Meter Manifold

Ex. Intake Louver

CLEAN EXTERIOR CONCRETE AND INSTALL HYDROPHILIC WATER STOP (SIKA HYDROTITE CJ ADHESIVE) AROUND WALLS, FLOOR AND ROOF (TYP)

Ex. Concrete Floor Slab (Well Station)

24" LONG #5 BAR DOWEL (MIN. 6" EMBEDMENT) TO BE SET IN ANCHORING EPOXY (TYP)

MIN. 8" THICK SLAB (PITCH TO DRAIN)

#5 BAR @ 12" O.C. E.W.

MIN. 6" OF 3/4" CRUSHED STONE BELOW SLAB

MIN. 3" CLEAR COVER (TYP FOR FOUNDATION SLAB)

CONSTRUCTION JOINT WITH CONTINUOUSLY WELDED STEEL WATER STOP (1/4" THICK X 6" TALL) (TYP)

MIN. 8" THICK REINFORCED CONCRETE ROOF SLAB (MIN. 4,000 PSI CONCRETE WITH 3/4" AGGREGATE)

#5 BAR @ 6" O.C. E.W.

#5 BAR @ 6" O.C. (MIN. 24" LAP SPLICE EA. SIDE) (TYP.)

PROPOSED GRADE

EX. GRADE

EX. CONCRETE ROOF SLAB (WELL STATION)

EX. CONCRETE WALL (WELL STATION)

NEW ELECTRIC UNIT HEATER (MODINE MODEL HER-30)

NEW 100A 120/240V ELECTRICAL SUBPANEL

NEW TANKLESS PROPANE WATER HEATER (RHEEM RTGH-95DVLN) WITH ANTI-SCALD MIXING VALVE (HAWS 9201H) TO FEED EMERGENCY EYEWASH - TIE IN TO EXISTING PROPANE LINE AS REQUIRED

NEW TANKLESS PROPANE WATER HEATER (RHEEM RTGH-95DVLN) WITH ANTI-SCALD MIXING VALVE (HAWS 9201H) TO FEED EMERGENCY EYEWASH - TIE IN TO EXISTING PROPANE LINE AS REQUIRED

PATCH HOLE WHERE PIPE IS REMOVED

NEW WELL STARTERS (TYP OF 3)

NEW NETWORK CABINET (OWNER FURNISHED)

NEW PLC CABINET (OWNER FURNISHED)

NEW GROUNDING BUSBAR

NEW COMMUNICATIONS EQUIPMENT (INSTALLED BY OTHERS)

DEDICATED DEMARC DUPLEX RECEPTACLE WITH IN-USE COVER (UPS POWERED - TO BE ORANGE IN COLOR)

Ex. Well Meter Manifold

Ex. Well Start Capacitor (Typ) TO BE REFD FROM NEW WELL MOTOR STARTERS

Ex. Wire Trough (Typ)

Ex. Surge Suppressor

Ex. Main Distribution Panel

Ex. Exhaust Fan & Light Switch

Ex. Plywood Backpanel

Ex. Intake Louver

Ex. Exhaust Fan

Ex. Exhaust Fan

Ex. PVC Conduit to Generator

Ex. PVC Conduit to Meter

WINDOW

ENTRANCE DOOR

ULTRASONIC LEVEL SENSOR (NIVELCO ECHO TREK MODEL SGV-39N-2)

LEVEL SENSOR RISER (3" X 6" NIPPLE, 3" X 2" REDUCER, AND 2" X 1-1/2" BUSHING - ALL PIPING SHALL BE SCH 40 PVC)

1/2" SCH 80 PVC FILL TUBE WITH QUICK DISCONNECT FITTING

NEW 55 GALLON POLYETHYLENE DAY TANK

CHEMICAL LABEL

CHEMICAL HAZARD LABEL

CHEMICAL FEED PUMPS (TYP OF 2) (LMI AD941-A20HI)

FIXED PART OF LID WITH STIFFENERS

HINGED PORTION OF LID WITH KNOB

TOP VIEW

CHEMICAL FEED PUMPS (TYP OF 2) (LMI AD941-A20HI)

CHEMICAL LABEL

CHEMICAL HAZARD LABEL

SIDE VIEW

NOTES:

1. DAY TANK SHALL BE CONSTRUCTED OF NSF 61 APPROVED POLYETHYLENE.

2. CONTRACTOR SHALL PROVIDE ONE SPARE CHEMICAL FEED PUMP.

3. DAY TANK SHALL BE CONSTRUCTED TO HAVE 5-GALLON INCREMENT LABELS, WITH DASHES EVERY 2-1/2 GALLONS.

24" LONG #5 BAR DOWEL (MIN. 6" EMBEDMENT) TO BE SET IN ANCHORING EPOXY

CLEAN EXTERIOR CONCRETE AND INSTALL HYDROPHILIC WATER STOP (SIKA HYDROTITE CJ ADHESIVE) AROUND WALLS, FLOOR AND ROOF

MIN. 4000 PSI CONCRETE WITH 3/4" AGGREGATE

#5 BAR AT 12" O.C. (VERTICAL)

#5 BAR AT 12" O.C. (HORIZONTAL) ANCHORED INTO EXISTING CONCRETE WITH ANCHORING EPOXY (MIN 4" EMBEDMENT)

PLAN VIEW

PROPOSED FOUNDATION DETAIL SECTION A-A

SCALE: 1/2" = 1'

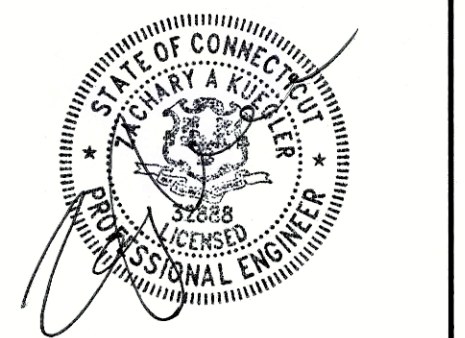
NOTE: PROVIDE HYDROPHILIC WATER STOP AT ALL JOINTS BETWEEN EXISTING AND NEW CONCRETE.

PROPOSED BUILDING ADDITION SECTION B-B

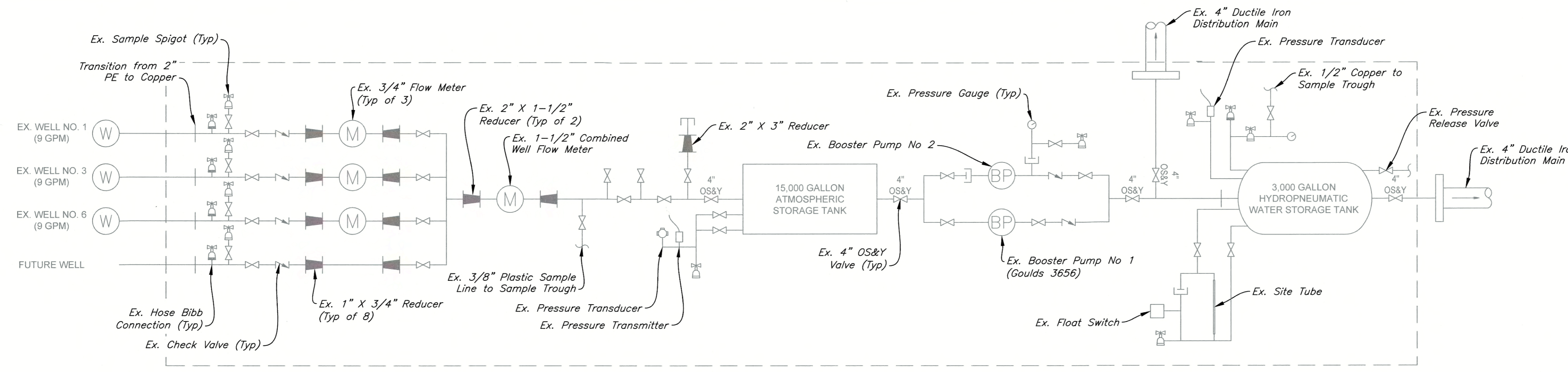
NOT TO SCALE



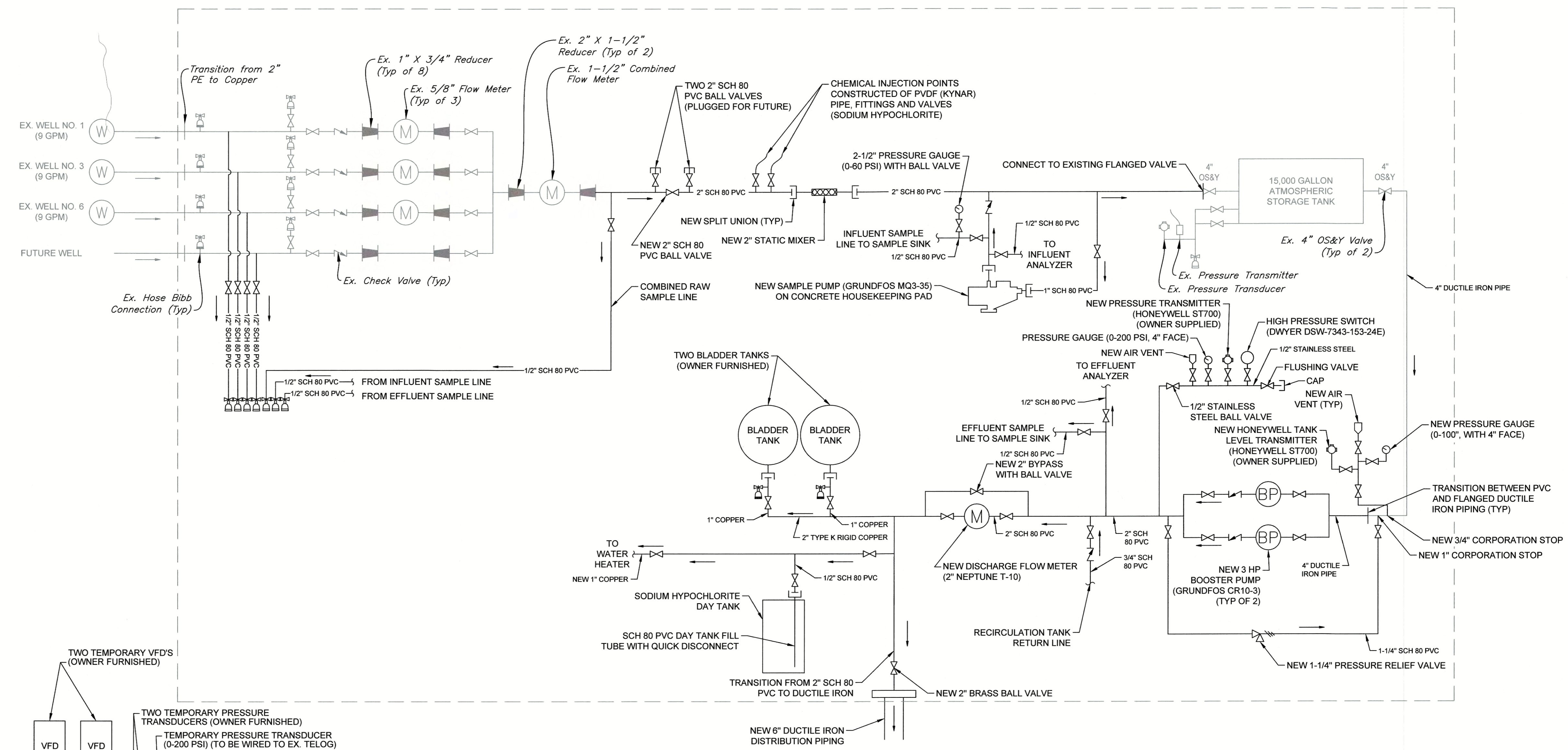
PORTLAND, CONNECTICUT



NOT VALID WITHOUT SEAL



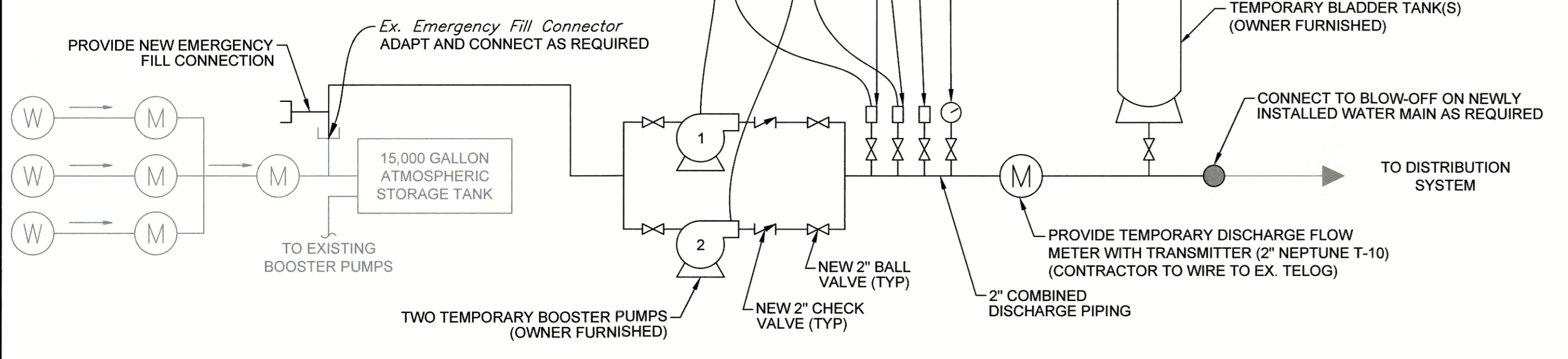
**EXISTING PIPING SCHEMATIC**  
NOT TO SCALE



**PROPOSED PIPING SCHEMATIC**  
NOT TO SCALE

**TEMPORARY WATER SYSTEM NOTES:**

1. THE CONTRACTOR SHALL COORDINATE WITH AWC TO ACQUIRE THE OWNER FURNISHED MATERIALS. OWNER FURNISHED MATERIALS SHALL BE RETURNED TO AWC IN GOOD WORKING CONDITION FOLLOWING CONSTRUCTION.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AS THIS SCHEMATIC SHOWS ONLY MAJOR COMPONENTS OF THE TEMPORARY SYSTEM ONLY FOR THE PURPOSE OF GENERALLY CONVEYING THE CONCEPT OF THE TEMPORARY PUMPING SYSTEM.
3. ALL MATERIALS AND SYSTEM COMPONENTS SHALL MEET THE REQUIREMENTS OF AWC, CT DPH AND SHALL BE NSF APPROVED AS REQUIRED.
4. CONTRACTOR SHALL PROVIDE A TEMPORARY STRUCTURE TO HOUSE TREATMENT EQUIPMENT, BOOSTER PUMPS AND ELECTRICAL EQUIPMENT FOR THE TEMPORARY SYSTEM.
5. ALL MATERIALS SHALL BE SUBJECT TO DISINFECTION, TESTING AND ACCEPTANCE BY AWC PRIOR TO PLACING THE SYSTEM IN SERVICE.
6. THE CONTRACTOR SHALL SUBMIT A DETAILED PLAN SHOWING A DETAILED SCHEMATIC OF THE PROPOSED BYPASS SYSTEM AND SUBMITTALS FOR ALL COMPONENTS.
7. THE TEMPORARY SYSTEM SHALL BE PROTECTED AND SECURELY LOCKED FOR SECURITY.



**PROPOSED TEMPORARY SYSTEM SCHEMATIC**  
NOT TO SCALE

EXISTING AND PROPOSED PIPING SCHEMATICS

DESIGNED	ZAK
DRAWN	MFP
CHECKED	ZAK
REVISED	

PREPARED FOR:  
**AQUARIUM WATER COMPANY OF CT**  
Bridgeport, CT

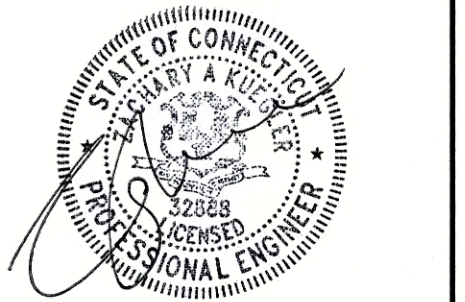
**DUNHAM POND WATER SYSTEM CHLORINATION PROJECT (GROUP B-2)**  
New Fairfield, Connecticut

A P R I L 2 0 2 0  
SHEET NO. 5 OF 8  
JOB NO. A W C - 1 5 2

CONTRACT DRAWING



PORTLAND, CONNECTICUT



NOT VALID WITHOUT SEAL

ELECTRICAL WORK

REVISIONS: ZAK, MFP, ZAK

PREPARED FOR:  
AQUARIUM WATER  
COMPANY OF CT  
Bridgeport, CT

DUNHAM POND  
WATER SYSTEM  
CHLORINATION PROJECT  
(GROUP B-2)  
New Fairfield, Connecticut

APRIL 2020  
SHEET NO. 6 OF 8  
JOB NO. A W C - 1 5 2

**ELECTRICAL WORK ITEMS:**

- DISCONNECT THE EXISTING FEED FROM THE COMBINATION METER AND MAIN DISCONNECT AND PROVIDE A NEW FEED FROM THE COMBINATION METER AND MAIN DISCONNECT TO THE AUTOMATIC TRANSFER SWITCH.
- PROVIDE TRANSFER SWITCH:
  - TRANSFER SWITCH SHALL BE OPEN TRANSITION WITH THE NUMBER OF POLES AND SIZES AS INDICATED.
  - TRANSFER SWITCH SHALL HAVE A SOLID ISOLATED NEUTRAL.
  - TRANSFER SWITCH SHALL HAVE A SOLID GROUNDING BUSBAR CONNECTED TO ITS CHASSIS.
  - BOND TRANSFER SWITCH TO THE INTERIOR GROUND RING.
- PROVIDE FEEDER AS INDICATED TO PANEL MDP.
- PROVIDE PANEL AS INDICATED, SEE PANEL SCHEDULE AND BOND TO GROUNDING RING.
- PROVIDE SUBPANEL FEED FROM PANEL MDP, SEE PANEL SCHEDULE AND BOND TO GROUNDING RING.

EXISTING MAIN DISTRIBUTION PANEL (MDP)					
PANELBOARD	Class: LIGHTING	Circuit Short Rating (Min.):			
	Type:	Remark:			
SERVICE	120/240 Volts, Single Phase, 3 Wire	S/E Label:			
PANELBOARD CONFIGURATION	200 AMPERE MAIN BUS, COPPER	Entrance: TOP			
	Trim: SURFACE	Equipment Ground Bus:			
MAIN	Wire Size:				
BRANCH CIRCUITS	Branch Protective Devices: MOLDED CASE CIRCUIT BREAKERS, BOLT-ON TYPE				
Ckt. No.	Circuit Designation	Num. Pole	Trip Amps	Frame Amps	Wire (min.), Remarks
1	BATTERY CHARGER	1	20	200	TO BE REPLACED
2	GFI OUTLET	1	20	200	TO BE REPLACED
3	GFI IN GENERATOR SET	1	20	200	TO REMAIN
4	LIGHTS AND FAN	1	20	200	TO REMAIN
5,7,9,11	CONTROL CABINET	4	150	200	TO BE REMOVED
6,8	SPACE	2	60	200	TO BE REPLACED
10	SPACE	1	15	200	TO BE REPLACED
12	TELOG	1	20	200	TO BE REMOVED
13,15	SPACE	2	30	200	TO BE REPLACED
14	AIR COMPRESSOR	1	20	200	TO BE REMOVED
17,19	SPACE	2	100	200	TO BE REPLACED
24,26	HEATER OUTLET	2	20	200	TO REMAIN
28,30	SURGE	2	30	200	TO REMAIN

1) LOADS ARE BALANCED BETWEEN PHASES/LEGS - CHANGES TO PANEL SCHEDULE SHALL NOT BE MADE WITHOUT APPROVAL FROM ENGINEER

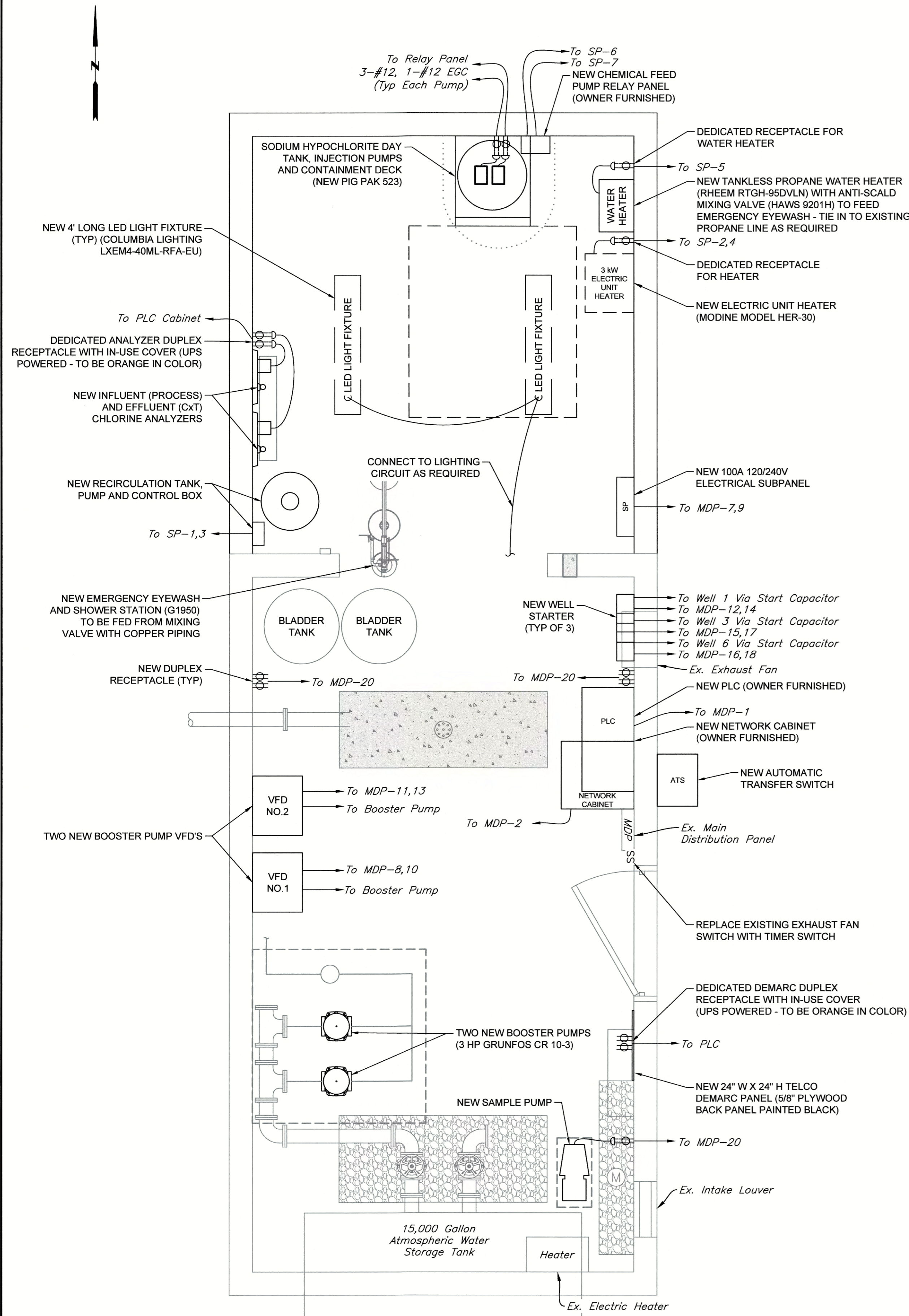
PROPOSED MAIN DISTRIBUTION PANEL (MDP)					
PANELBOARD	Class: LIGHTING	Circuit Short Rating (Min.):			
	Type:	Remark:			
SERVICE	120/240 Volts, Single Phase, 3 Wire	S/E Label:			
PANELBOARD CONFIGURATION	200 AMPERE MAIN BUS, COPPER	Entrance: TOP			
	Trim: SURFACE	Equipment Ground Bus:			
MAIN	Wire Size:				
BRANCH CIRCUITS	Branch Protective Devices: MOLDED CASE CIRCUIT BREAKERS, BOLT-ON TYPE				
Ckt. No.	Circuit Designation	Num. Pole	Trip Amps	Frame Amps	Wire (min.), Remarks
1	PLC	1	20	200	(2) #12 & (1) #12 EGC
2	NETWORK CABINET AND UPS	1	20	200	(2) #12 & (1) #12 EGC
3	GFI IN GENERATOR SET	1	20	200	EXISTING
4	LIGHTS AND FAN	1	20	200	EXISTING
5	GFI OUTLET	1	20	200	(2) #12 & (1) #12 EGC
6	BATTERY CHARGER	1	20	200	(2) #12 & (1) #12 EGC
7,9	SUBPANEL	2	100	200	(3) #3 & (1) #8 EGC
8,10	VFD NO. 1	2	30	200	(3) #10 & (1) #10 EGC
11,13	VFD NO. 2	2	30	200	(3) #10 & (1) #10 EGC
12,14	WELL 1	2	30	200	(3) #10 & (1) #10 EGC
15,17	WELL 3	2	30	200	(3) #10 & (1) #10 EGC
16,18	WELL 6	2	30	200	(3) #10 & (1) #10 EGC
19,21	SPACE	2	30	200	FUTURE WELL
20	RECEPTACLES	1	20	200	(2) #12 & (1) #12 EGC
22	SPACE				SPACE
23	SPACE				SPACE
24,26	HEATER OUTLET	2	20	200	EXISTING
25	SPACE				SPACE
27	SPACE				SPACE
29	SPACE				SPACE
28,30	SURGE	2	30	200	EXISTING

1) LOADS ARE BALANCED BETWEEN PHASES/LEGS - CHANGES TO PANEL SCHEDULE SHALL NOT BE MADE WITHOUT APPROVAL FROM ENGINEER

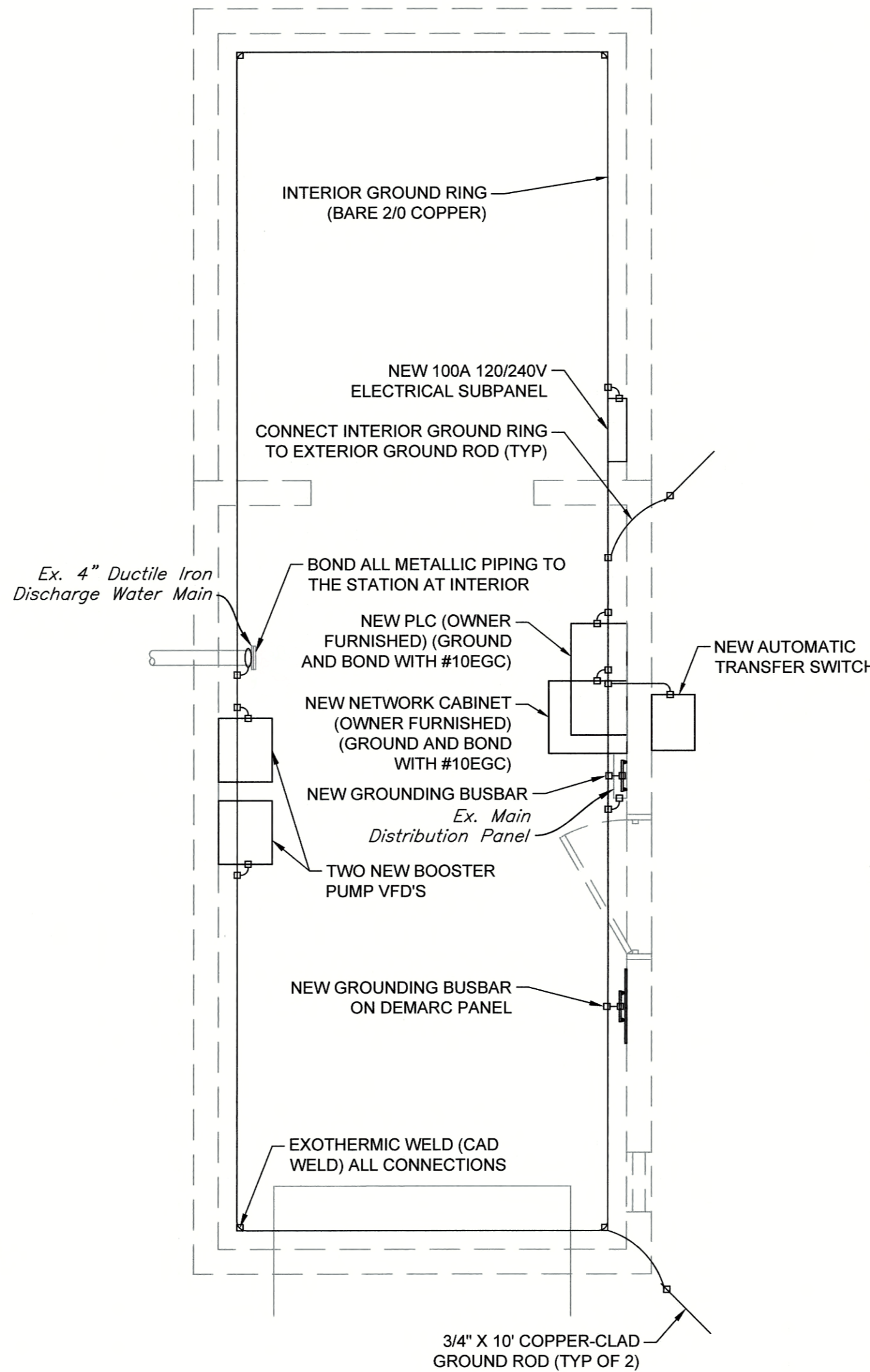
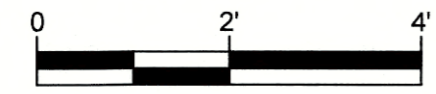
NOTE: WHERE "TO BE REPLACED" IS NOTED IN EXISTING PANEL SCHEDULE, PROVIDE NEW BREAKER AND FEED NEW LOADS FROM PANELS AS SHOWN ON PROPOSED PANEL SCHEDULE

PROPOSED SUBPANEL (SP)					
PANELBOARD	Class: LIGHTING	Circuit Short Rating (Min.): 22 KA.I.C.			
	Type: G.E. AQ	Remark: NEMA 12			
SERVICE	120/240 Volts, Single Phase, 3 Wire	S/E Label: NO			
PANELBOARD CONFIGURATION	100 AMPERE MAIN BUS, COPPER	Entrance: TOP			
	Trim: SURFACE	Equipment Ground Bus: Copper			
MAIN	Type: 100A MCCB	Wire Size: #3 AWG, #8 EGC			
BRANCH CIRCUITS	Branch Protective Devices: MOLDED CASE CIRCUIT BREAKERS, BOLT-ON TYPE				
Ckt. No.	Circuit Designation	Num. Pole	Trip Amps	Frame Amps	Wire (min.), Remarks
1,3	RECIRCULATION TANK	2	30	100	(3) #10 & (1) #10 EGC
2,4	ELECTRIC UNIT HEATER	2	30	100	(3) #10 & (1) #10 EGC
5	PROPANE WATER HEATER	1	20	100	(2) #12 & (1) #12 EGC
6	SODIUM HYPOCHLORITE PUMP 1	1	20	100	(2) #12 & (1) #12 EGC
7	SODIUM HYPOCHLORITE PUMP 2	1	20	100	(2) #12 & (1) #12 EGC

1) LOADS ARE BALANCED BETWEEN PHASES/LEGS - CHANGES TO PANEL SCHEDULE SHALL NOT BE MADE WITHOUT APPROVAL FROM ENGINEER

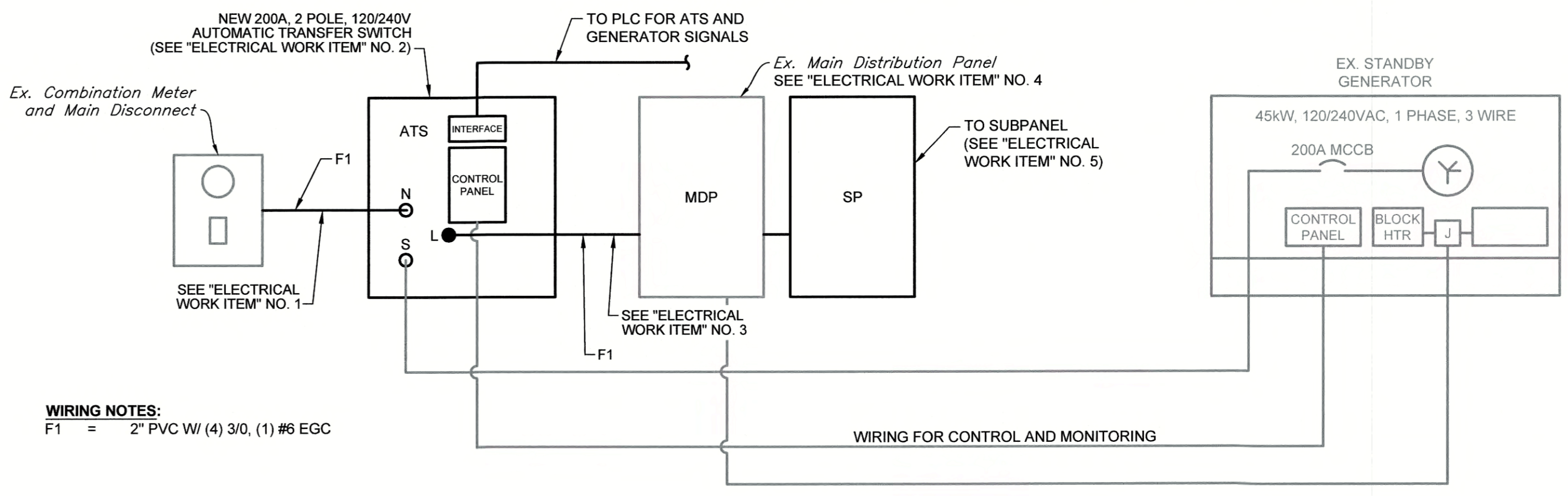


**ELECTRICAL PLAN**  
SCALE: 1/2" = 1'



NOTE: BOND ADDITIONAL METALLIC PIPING WITHIN STATION.

**GROUNDING AND BONDING PLAN**  
NOT TO SCALE



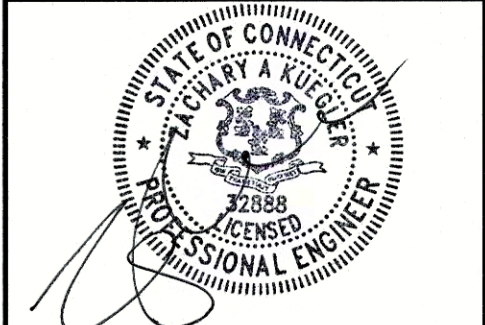
**WIRING NOTES:**  
F1 = 2" PVC W/ (4) 3/0, (1) #6 EGC

**ELECTRICAL ONE LINE DIAGRAM**  
NOT TO SCALE

CONTRACT DRAWING



PORTLAND, CONNECTICUT



NOT VALID WITHOUT SEAL

PROCESS AND INSTRUMENTATION DIAGRAM

PREPARED FOR:  
AQUARIAN WATER  
COMPANY OF CT  
Bridgeport, CT

DUNHAM POND  
WATER SYSTEM  
CHLORINATION PROJECT  
(GROUP B-2)  
New Fairfield, Connecticut

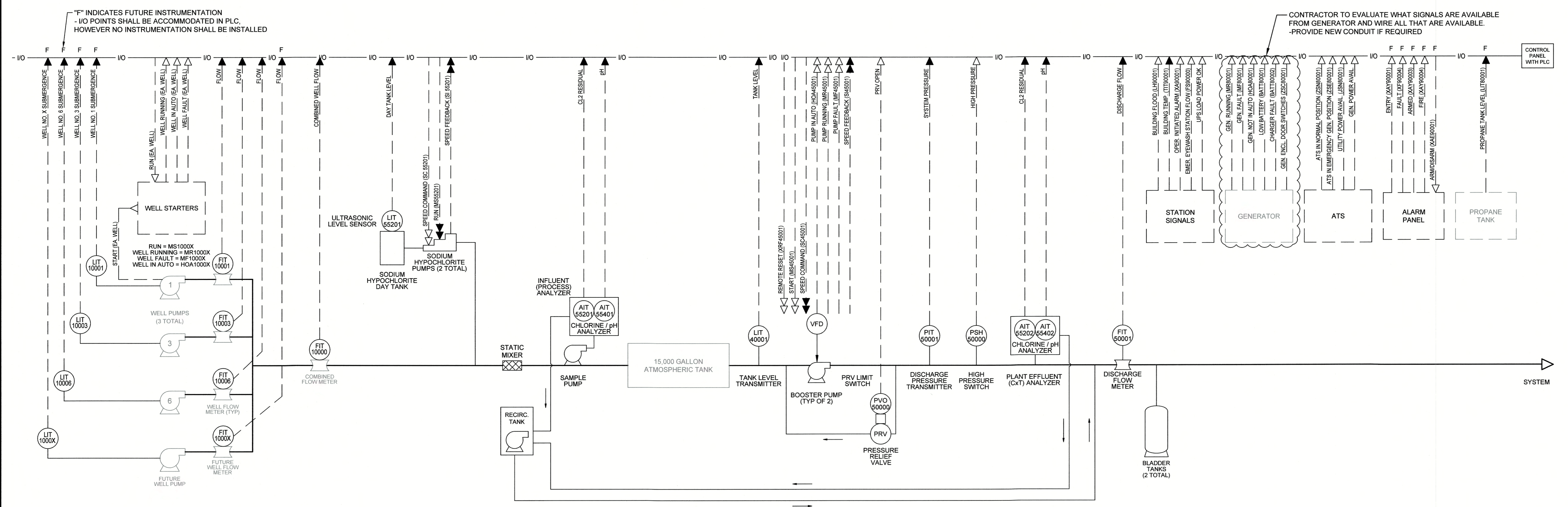
A P R I L 2 0 2 0  
SHEET NO. 7 OF 8  
JOB NO. A W C - 1 5 2

DESIGNED	ZAK
DRAWN	MFP
CHECKED	ZAK
REVISED	

**LEGEND**

FIRST LETTER	SUCCEEDING LETTER
A - ANALYSIS	A - ALARM
F - FLOW	C - CONTROL OR CLOSED
J - POWER	E - ELEMENT
L - LEVEL	H - HIGH
M - MOTOR	I - INDICATOR
P - PRESSURE	L - LOW OR LIGHT
S - SPEED	O - OPEN
T - TEMPERATURE	S - SWITCH OR STARTER
U - MULTIVARIABLE	T - TRANSMITTER
X - UNCLASSIFIED	Y - COMPUTE
Y - EVENT	
Z - POSITION	

NOTE: ITEMS SHOWN IN GRAY ARE EXISTING DEVICES  
ITEMS SHOWN IN BLACK ARE PROPOSED



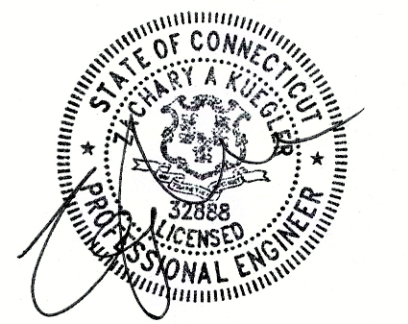
**PROPOSED PROCESS AND INSTRUMENTATION DIAGRAM**  
NOT TO SCALE

"F" INDICATES FUTURE INSTRUMENTATION  
- I/O POINTS SHALL BE ACCOMMODATED IN PLC.  
HOWEVER NO INSTRUMENTATION SHALL BE INSTALLED

CONTRACTOR TO EVALUATE WHAT SIGNALS ARE AVAILABLE  
FROM GENERATOR AND WIRE ALL THAT ARE AVAILABLE.  
- PROVIDE NEW CONDUIT IF REQUIRED



PORTLAND, CONNECTICUT



NOT VALID WITHOUT SEAL

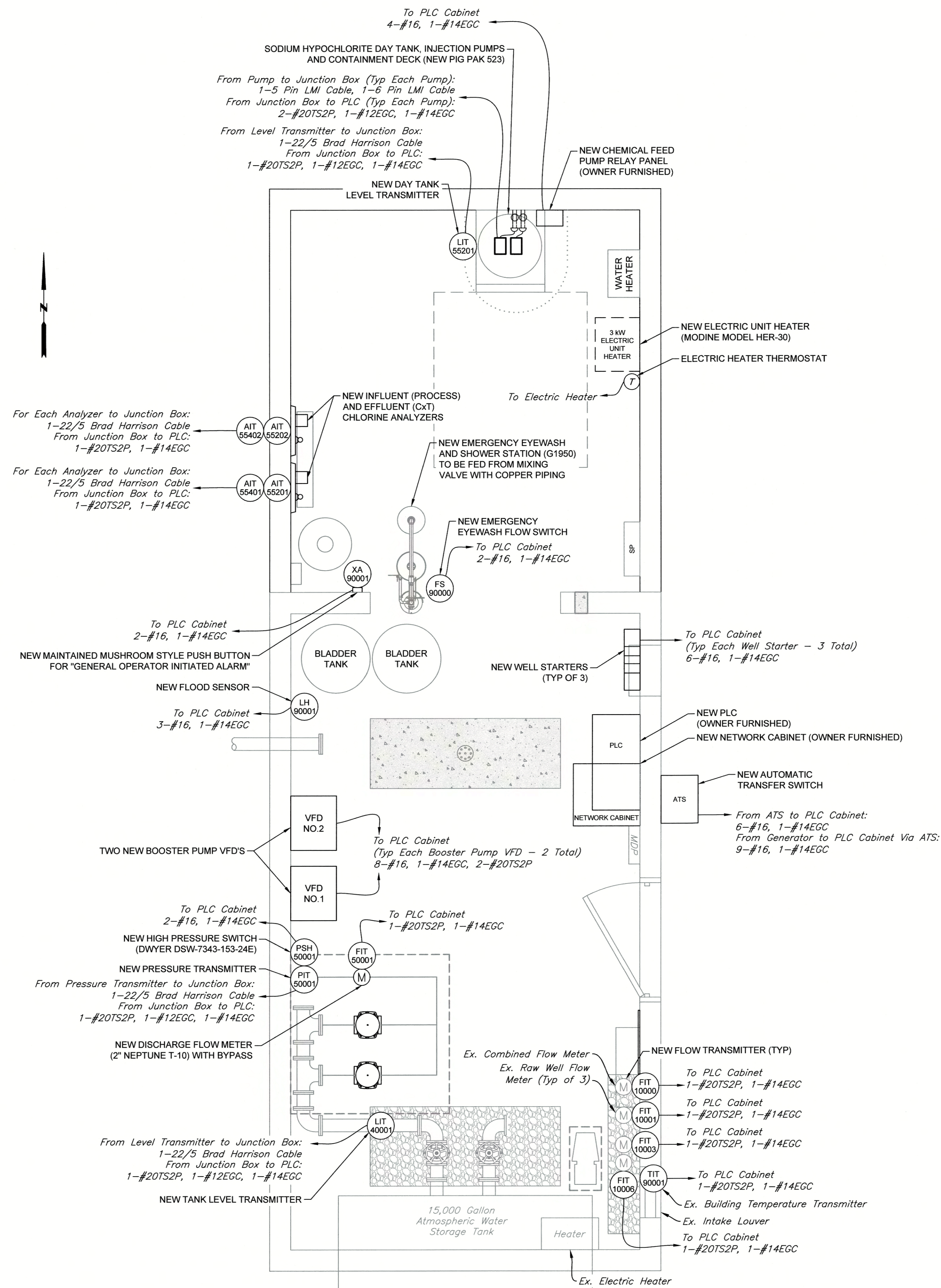
INSTRUMENTATION AND CONTROL PLAN

PREPARED FOR:  
AQUARIUM WATER  
COMPANY OF CT  
Bridgeport, CT

DUNHAM POND  
WATER SYSTEM  
CHLORINATION PROJECT  
(GROUP B-2)  
New Fairfield, Connecticut

A P R I L 2 0 2 0  
SHEET NO. 8 OF 8  
JOB NO. A W C - 1 5 2

DESIGNED	ZAK	
DRAWN	MFP	VER
CHECKED	ZAK	REVISED



INSTRUMENTATION AND CONTROL PLAN  
SCALE: 1/2" = 1'



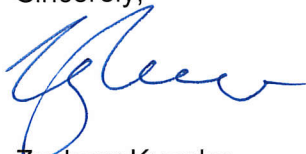
CONTRACT DRAWING

May 15, 2020

Re: Proposed Use Documentation per Special Permit Application

Aquarion Water Company of Connecticut proposes to continue to utilize their easement located at 00 Heron View Road to treat well water and to distribute water to their customers. The site currently utilizes three wells and a pump station to distribute water to the system. Aquarion plans to construct an addition to the existing facility that is currently in use and perform other related improvements to increase the reliability of the water supply.

Sincerely,



Zachary Kuegler  
Senior Engineer, PE  
Snyder Civil Engineering, LLC

## Dunham Pond - Abutter List

488900  
DUNHAM POND  
60 OLD NEW MILFORD RD STE  
BROOKFIELD, CT 06804

488500  
ANDERSON DAVID G  
2 HIGH WINDS RD  
NEW FAIRFIELD, CT 06812

489500  
SILVA MICHAEL A &  
150 RTE 37  
NEW FAIRFIELD, CT 06812

488400  
COTTE DEBRA A & JOHN M  
6 CLOVERLEAF DR  
NEW FAIRFIELD, CT 06812

489600  
SMALL RAYMOND+JUDITH C  
152 RTE 37  
NEW FAIRFIELD, CT 06812

489700  
FLEISCHMANN JUDITH A AKA  
154 RTE 37  
NEW FAIRFIELD, CT 06812

488700  
GUCKER MARTIN K+DIANE 4  
HIGH WINDS RD  
NEW FAIRFIELD, CT 06812

488100  
NEW FAIRFIELD MEDICAL 94  
DANBURY RD STE 11  
RIDGEFIELD, CT 06877

489200  
KOTALIK JOHN G JR  
3 HIGH WINDS RD  
NEW FAIRFIELD, CT 06812

489100  
MCNEIL ULLA B  
6 HIGH WINDS RD  
NEW FAIRFIELD, CT 06812