RIVERHEAD WATER DISTRICT

**** ADDENDUM NO. 1 ****
NOVEMBER 8, 2021

Project No.: RDWD2102
Project Name: Wellhead Treatment for PFAS at Plant No. 5
Bid Due Date: Thursday, November 18, 2021 – 11:00 AM (NO CHANGE)
Description: Drawing Changes

DRAWINGS

1. Replace all drawings with attached drawings.

==========

To verify receipt of this Addendum, the contractor must sign and date this sheet and return immediately via email. **A copy shall also be included with the bid submission documents.**

To: Teresa Baldinucci, Town Purchasing Agent
Email: baldinucci@townofriverheadny.gov

Name: _____ Signature: _____
(Please Print)

Company: _____ Date: _____

Riverhead Water District

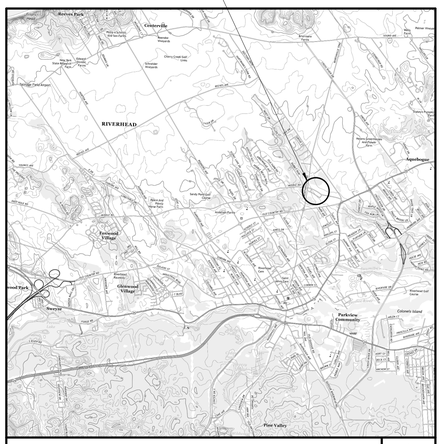
Wellhead Treatment for PFAS at Plant No. 5

Contract M - PFAS Treatment System

162 Middle Road
Riverhead NY, 11901

RDWD2102
OCTOBER 2021

PROJECT LOCATION



SITE LOCATION MAP

TOWN SUPERVISOR
Yvette Aguiar

TOWN BOARD
Timothy Hubbard
Catherine Kent
Frank Beyrodt
Kenneth Rothwell

TOWN CLERK
Diane Wilhelm

SUPERINTENDENT
Frank Mancini

ASSISTANT SUPERINTENDENT
John Flynn

H2M architects + engineers

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STATE OF NEW YORK · JOHN R. COLLINS · LICENSED PROFESSIONAL ENGINEER · NO. 086905

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
CTW/NAW	NAW		
PROJECT No:	DATE:	SCALE:	
RDWD2102	OCTOBER 2021	AS SHOWN	

CLIENT

Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

CONTRACT M - PFAS TREATMENT SYSTEM

162 Middle Road
Riverhead NY, 11901

STATUS

FINAL BID DOCUMENT

DRAWING No.

G 000.00

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PROJECT SHEET LIST

SHEET NO.	DRAWING NO.	SHEET TITLE
1	G 000	COVER SHEET
2	G 001	PROJECT SHEET LIST AND GENERAL NOTES
3	DS 100	PROCESS PIPING SITE PLAN
4	DS 500	PROCESS SITE PIPING DETAILS
5	S 100	STRUCTURAL FOUNDATION PLAN AND DESIGN LOADS
6	S 500	STRUCTURAL FOUNDATION DETAILS
7	A 001	GENERAL NOTES AND LEGENDS
8	A 101	FIRST FLOOR PLAN, SCHEDULE AND NOTES
9	A 121	REFLECTED CEILING PLAN
10	A 130	ROOF PLAN
11	A 200	BUILDING ELEVATIONS
12	A 201	BUILDING ELEVATIONS
13	A 300	BUILDING SECTION
14	A 301	BUILDING SECTION
15	A 500	DETAILS
16	A 600	DOOR AND FINISH SCHEDULES, DETAILS AND NOTES
17	D 001	PROCESS NOTES AND LEGENDS
18	D 010	PROCESS DIAGRAM LEGENDS
19	D 011	PROPOSED PROCESS DIAGRAM
20	D1 110	GAC BUILDING MECHANICAL FLOOR PLAN
21	D1 120	GAC BUILDING SMALL PIPING FLOOR PLAN
22	D1 300	GAC BUILDING LARGE PIPING SECTIONS
23	D2 110	WELL NO. 5-1 BUILDING LARGE PIPING FLOOR PLAN
24	D 500	PIPING DETAILS
25	GAC1.0	GAC DETAILS
26	E 001	ELECTRICAL LEGENDS
27	ES 100	ELECTRICAL SITE PLAN
28	E 100	ELECTRICAL POWER AND CONTROLS PLAN GAC BUILDING
29	E 120	ELECTRICAL LIGHTING PLAN GAC BUILDING
30	E 500	ELECTRICAL DETAILS SHEET NO. 1
31	E 501	ELECTRICAL DETAILS SHEET NO. 2
32	E 600	ELECTRICAL SCHEDULES
33	E 610	ELECTRICAL SINGLE LINE DIAGRAM
34	FA 001	FIRE ALARM LEGENDS
35	FA 100	FIRE ALARM PLAN GAC BUILDING

SYMBOLS LEGEND

℄	CENTERLINE
1 / G 001	DETAIL KEY
1 Drawing Title SCALE:	DRAWING TITLE
Level Name	ELEVATION LEVEL
PROJECT NORTH	NORTH ARROW
1 / G 001	SECTION CUT KEY

GENERAL CONSTRUCTION AND PROJECT NOTES:

1. CONTRACTOR SHALL INSPECT THE CONSTRUCTION SITE PRIOR TO SUBMISSION OF BIDS AND SHALL MAKE NO ADDITIONAL CLAIMS REGARDING SITE CONDITIONS THEREAFTER.
2. CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST 24 HOURS PRIOR TO THE COMMENCEMENT OF THE WORK. THE SAME NOTICE SHALL BE REQUIRED WHEN RESUMING WORK AFTER ANY STOPPAGE OR DELAY.
3. LOCATION OF ALL UNDERGROUND UTILITIES, ELECTRIC AND TELEPHONE CONDUITS, STORM DRAINS AND UNDERGROUND PIPING WERE OBTAINED FROM EITHER OLD MAPS, SURVEYS, DRAWINGS AND RECORDS SUPPLIED BY OTHERS. THE OWNER AND ENGINEER DO NOT GUARANTEE OR ACCEPT RESPONSIBILITY FOR ANY DAMAGE TO SUCH FACILITIES DUE TO DISCREPANCIES IN LOCATION AND SIZE SHOWN ON THE PLANS, NOR WILL ANY COMPENSATION BE MADE TO THE CONTRACTOR FOR ANY INCONVENIENCES CAUSED BY HIM BY ENCOUNTERING THE AFOREMENTIONED UTILITIES WHICH ARE NOT SHOWN, OR ARE INCORRECTLY SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATIONS OF ANY UNDERGROUND UTILITIES, GAS MAINS, ELECTRIC AND TELEPHONE CONDUITS.
4. CONTRACTOR SHALL PERFORM DAILY CLEAN-UP OPERATIONS WHICH INCLUDE REMOVAL OF DEBRIS AND EXCESS CONSTRUCTION MATERIAL TO THE SATISFACTION OF THE OWNER AND THE ENGINEER.
5. DURING ALL NON-WORKING HOURS, THE CONTRACTOR WILL BE REQUIRED TO STORE ALL EQUIPMENT AND MATERIALS WITHIN THE DESIGNATED AREAS AT THE PROJECT SITE.
6. ALL DIMENSIONS SHOWN ARE APPROXIMATE AND SUBJECT TO THE APPROVAL OF THE OWNER AND THE ENGINEER.
7. CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODE REQUIREMENTS, THE CONTRACT, AND SUBJECT TO THE APPROVAL OF THE OWNER AND THE ENGINEER.
8. CONTRACTOR SHALL SECURE CONSTRUCTION SITE IN ACCORDANCE WITH ALL APPLICABLE SAFETY STANDARDS AND SUBJECT TO THE APPROVAL OF THE OWNER AND THE ENGINEER.
9. CONTRACTOR SHALL COORDINATE ACTIVITIES WITH THE OWNER SO AS TO MINIMIZE INTERRUPTION TO THE WATER SUPPLY.
10. ALL ELEVATIONS ARE BASED ON USGS, UNLESS OTHERWISE INDICATED.
11. CONTRACTOR WILL BE REQUIRED TO PROTECT AND MAINTAIN ALL BENCHMARKS AND MONUMENTS. CONTRACTOR WILL BE RESPONSIBLE TO RESTORE ALL BENCHMARKS OR MONUMENTS DISTURBED BY THE CONTRACTOR'S WORK.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LAYOUT, SURVEY, ETC. AS REQUIRED TO COMPLETE THE WORK.
13. THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY. THE PROJECT SPECIFICATIONS, SEPARATELY BOUND, CONTAIN THE CONDITIONS OF THE CONTRACT, PROCEDURES AND TECHNICAL SPECIFICATIONS.
14. ALL CONTRACTORS ARE TO VISIT THE SITE AND BECOME FAMILIAR WITH THE CONDITIONS OF THE SITE AND DIFFICULTIES ATTENDING THE WORK.
15. DO NOT SCALE MEASURE ANY DRAWING. VERIFY THE FIGURES, DIMENSIONS AND DESIGN INTENTION SHOWN ON THE DRAWINGS BEFORE BEGINNING LAYOUT OF THE WORK.
16. REPORT ANY ERRORS, INACCURACIES, MISSING DIMENSIONAL REQUIREMENTS OR CONFLICTS TO THE ARCHITECT/ENGINEER IN WRITING BEFORE BEGINNING ANY WORK.
17. VERIFY EXACT LAYOUT CAPABILITY WITH ALL EXISTING CONDITIONS AND COORDINATE ALL WORK TO BE UNDERTAKEN PRIOR TO BEGINNING ANY WORK. NOTIFY THE ARCHITECT/ENGINEER IN WRITING BEFORE BEGINNING WORK. IF ANY DISCREPANCIES ARE FOUND WITH CONDITIONS ENCOUNTERED, AS WELL AS ITEMS COVERED IN 8 AND 9. CONTRACTOR WILL BE RESPONSIBLE FOR ALL TEMPORARY MEASURES, TIME LOST, CHANGES TO THE WORK SCOPE WITHOUT ANY ADDITIONAL COMPENSATION IF CONTRACTOR FAILS TO PROVIDE AFOREMENTIONED VERIFICATIONS AND COORDINATION PRIOR TO COMMENCING WORK.
18. DISTURB ONLY THOSE AREAS OF THE SITE AFFECTED BY NEW CONSTRUCTION, UNLESS NOTED OTHERWISE. PROTECT ALL OTHER AREAS. CONTRACTOR SHALL COMPLETELY RESTORE ALL AREAS DISTURBED DURING CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO GRASS AREA, LANDSCAPING, PAVEMENTS, SIDEWALKS, CURBING AND IN-GROUND SPRINKLER SYSTEMS.
19. PROTECT ADJOINING PROPERTIES WHEN CONDUCTING WORK.
20. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, LAWS, AGENCIES HAVING JURISDICTION, AND STATUS AS REQUIRED.
21. CONTRACTOR SHALL STRICTLY ADHERE TO MANUFACTURER'S PRINTED INSTRUCTIONS.
22. VERIFY ALL CHANGES TO WORK IN WRITING WITH THE ARCHITECT/ENGINEER AND OWNER BEFORE BEGINNING RELATED WORK.
23. PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING PERIMETER, PITCH 1/4" PER FOOT. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES WITH THIS REQUIREMENT BEFORE PROCEEDING.
24. IF APPLICABLE, ALL CONTRACTS MUST REVIEW ALL DRAWINGS CONTAINED IN THE SET SO AS TO BECOME FAMILIAR WITH THE WORK REQUIRED UNDER THEIR SCOPE AND THE WORK OF ALL OTHER CONTRACTORS. ADDITIONALLY, ALL CONTRACTORS ARE RESPONSIBLE FOR THE COORDINATION OF THEIR WORK WITH ALL OTHER TRADES AND CONTRACTORS.
25. DIMENSIONS NOTED AS "EQUAL" OR "EQ" WITHIN A ROOM REFER TO A DISTANCE RELATIONSHIP CONTAINED ONLY IN THAT ROOM AT AN OPPOSING OR PARALLEL WALL UNLESS NOTED OTHERWISE.
26. VERIFY AND ADJUST APPROXIMATE DIMENSIONS (+/-) IN THE FIELD. VERIFY WITH ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION.
27. ALL ITEMS DETAILED OR SPECIFIED TO RUN WITHIN OR ATTACHED TO WALLS AND CEILINGS ARE TO BE CONCEALED OR RECESSED UNLESS NOTED OTHERWISE.
28. CONTRACTOR SHALL LOCATE ALL PENETRATIONS REQUIRED TO ACCOMMODATE ALL WORK DETAILED OR SPECIFIED FOR THEIR SCOPE, AND COORDINATE THIS WORK WITH OTHERS.
29. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING WATER-TIGHT WEATHER PROTECTION THROUGHOUT ALL WORK AREAS AND EXISTING AREAS IMMEDIATELY ADJACENT TO THOSE WORK AREAS, FOR THE DURATION OF THE ENTIRE PROJECT.
30. CONTRACTOR SHALL PROTECT ALL ADJACENT EXISTING CONSTRUCTION, ITEMS, FINISHES, ETC. AND SHALL PATCH, REPAIR AND/OR REPLACE, AND REFINISH AS REQUIRED TO RESTORE ANY AND ALL AREAS DAMAGED DURING CONSTRUCTION.
31. CONTRACTOR SHALL PROVIDE, AND COORDINATE THE INSTALLATION OF, ALL ACCESS PANELS THAT ARE NEEDED TO ACCESS OR SERVICE FOR ALL ITEMS INSTALLED AS PART OF THEIR SCOPE OF WORK.
32. PROVIDE TEMPORARY FENCING TO PROTECT ALL WORK AREAS.
33. CONTRACTOR SHALL MINIMIZE REMOVAL OF EXISTING TREES. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE LAYOUT, TAGGING AND REMOVAL OF TREES REQUIRED TO COMPLETE ALL WORK. OWNER SHALL APPROVE TREES TO BE REMOVED PRIOR TO ACTUAL REMOVALS. REMOVALS SHALL INCLUDE REMOVAL OF COMPLETE STUMP AND ROOT SYSTEM. CONTRACTOR SHALL NOT BE PERMITTED TO GRIND STUMPS.
34. CONCRETE SIDEWALKS SHALL BE SAWCUT BACK TO EXPANSION/CONTROL JOINTS.

H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
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CONSULTANTS:

MARK	DATE	DESCRIPTION
1	10/28/21	ADDENDUM NO. 1

STATE OF NEW YORK · JOHN R. COLLINS · LICENSED PROFESSIONAL ENGINEER · NO. 086205

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DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
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PROJECT No:	DATE:	SCALE:
RDWD2102	OCTOBER 2021	AS SHOWN

CLIENT

Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD · 1792 · PAX ET PROSPERITAS · PER PROGRESSUM

162 Middle Road
Riverhead NY, 11901

CONTRACT

CONTRACT M
PFAS TREATMENT SYSTEM

STATUS

FINAL BID DOCUMENT

SHEET TITLE

PROJECT SHEET LIST AND GENERAL NOTES

DRAWING No.

G 001.00

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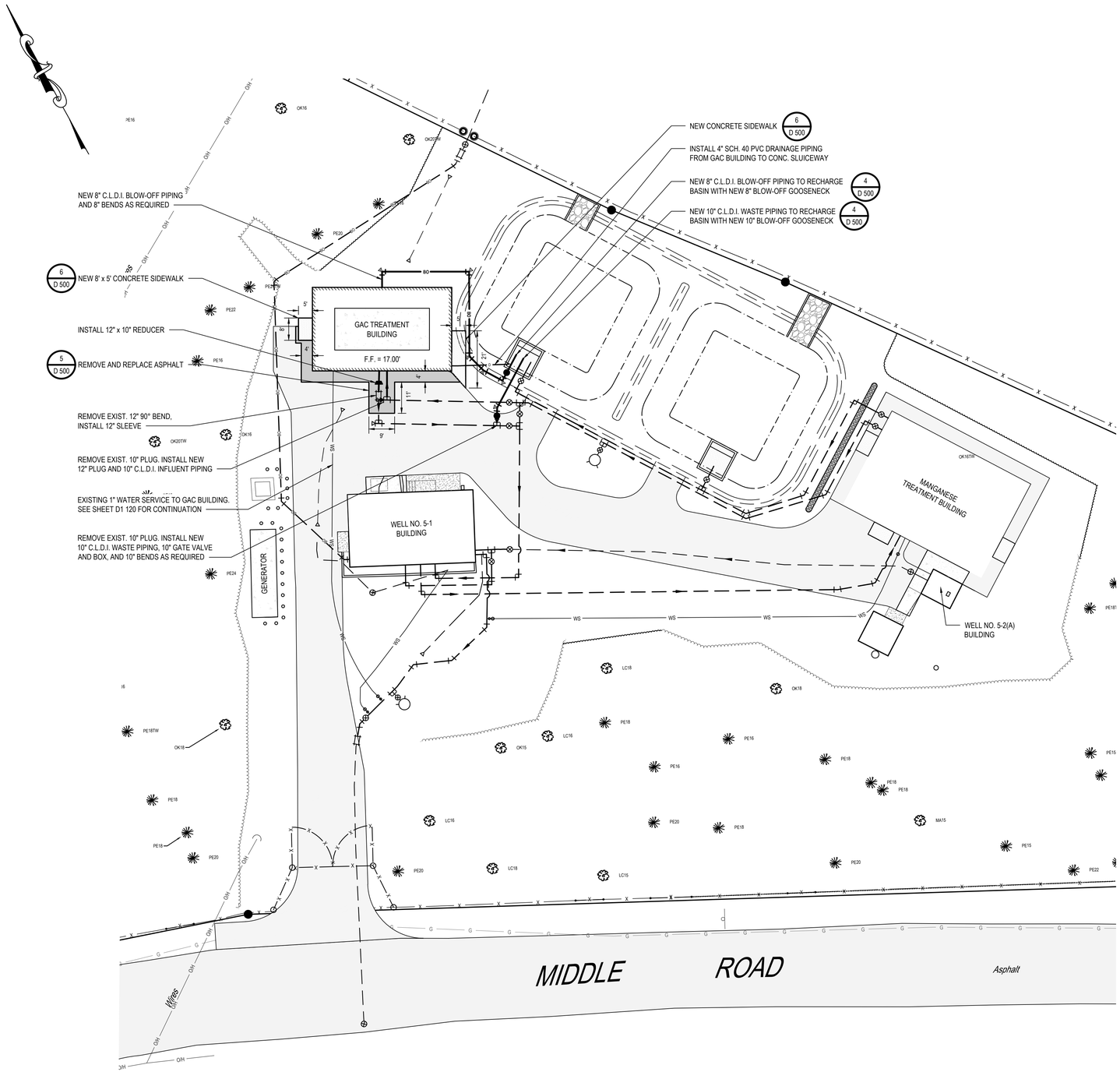

LEGEND

PROPOSED WATER VALVE	EXISTING WATER MAIN
PROPOSED HYDRANT ASSEMBLY	ABANDONED WATER MAIN
PROPOSED TEE	EXISTING WATER SERVICE
PROPOSED CROSS	EXISTING GAS MAIN
PROPOSED REDUCER	EXISTING SANITARY SEWER
PROPOSED CAP/PLUG	EXISTING STORM DRAIN
PROPOSED PLUG & BLOW-OFF	EXISTING OVERHEAD ELECTRIC
PROPOSED BENDS (ANGLES VARY)	EXISTING UNDERGROUND ELECTRIC
PROPOSED SLEEVE	EXISTING UNDERGROUND TELEPHONE
PROPOSED CURB STOP	EXISTING FENCE
PROPOSED BENDS (ANGLES VARY)	PROPOSED WATER MAIN
TRAFFIC SIGN	PROPOSED WATER SERVICE
UTILITY POLE	PROPOSED FIRE SERVICE
LEACHING POOL	LOT LINE
CATCH BASIN	RIGHT OF WAY
MANHOLE	PROPERTY LINE

SITE PLAN NOTES:

1. INSPECT THE SITE PRIOR TO SUBMISSION OF BIDS AND MAKE NO ADDITIONAL CLAIMS REGARDING SITE CONDITIONS THEREAFTER.
2. NOTIFY THE OWNER AND H2M (TELEPHONE 631-756-8000) AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF THE WORK. THE SAME NOTICE SHALL BE REQUIRED WHEN RESUMING WORK AFTER ANY STOPPAGE OR DELAY.
3. COMPLETE ALL SURVEY AND STAKEOUT AS REQUIRED TO PROPERLY COMPLETE THE WORK.
4. PERFORM DAILY CLEANUP OPERATIONS INCLUDING REMOVAL OF DEBRIS AND EXCESS CONSTRUCTION MATERIAL, AND DRIVEWAY/STREET CLEANING TO THE SATISFACTION OF THE OWNER.
5. DURING ALL NON-WORKING HOURS, STORE ALL EQUIPMENT AND MATERIALS WITHIN AN AREA DESIGNATED BY THE OWNER AT THE PROJECT SITE.
6. ALL CURB DIMENSIONS SHOWN REFER TO THE FACE OF CURB.
7. ALL CONSTRUCTION TO CONFORM WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODE REQUIREMENTS.
8. COORDINATE CONSTRUCTION ACTIVITIES WITH OWNER TO MINIMIZE INTERRUPTION TO THE OWNER'S OPERATIONS.
9. RESTORE SURROUNDING AREAS DAMAGED OR DISTURBED DURING CONSTRUCTION. RESTORE TO NEW CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
10. RESTORE ALL DISTURBED GRASS AREAS AND ALL AREAS NOT SPECIFICALLY IDENTIFIED FOR OTHER IMPROVEMENTS WITH 4 INCHES OF TOPSOIL AND SEED.
11. REMOVE ALL ASPHALT FROM EXISTING CASTINGS.

Plant No. 5 Site Plan

SCALE: 1" = 20'-0"

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

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CONSULTANTS:

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JOHN R. COLLINS — STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER — NO. 086205

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RDWD2102	OCTOBER 2021	AS SHOWN

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

162 Middle Road
Riverhead NY, 11901

CONTRACT

CONTRACT M
PFAS TREATMENT SYSTEM

STATUS

FINAL BID DOCUMENT

SHEET TITLE

PROCESS PIPING SITE PLAN

DRAWING No.

DS 100.00

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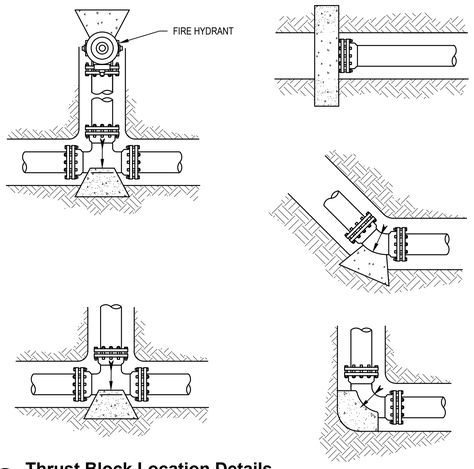


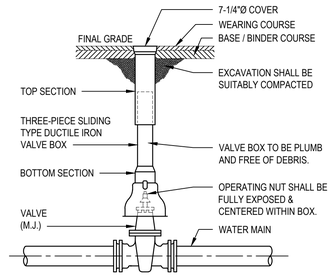
NOTES:

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS. (TEST CYLINDERS STRENGTH MAY BE REQUIRED, AS REQUESTED BY INSPECTOR OR TOWN ENGINEER)
2. CONCRETE BLOCKING SHALL BE APPLIED ON ALL PIPE LINES 4-INCH IN DIAMETER AND LARGER AT ALL TEES, PLUGS, CAPS, AND AT BENDS DEFLECTING 22 1/2 DEGREES OR MORE. BLOCKING SHALL BE OF CONCRETE OF A MIX HAVING A COMPRESSIVE STRENGTH OF NOT LESS THAN 2,000 PSI, AND BLOCKING SHALL BE PLACED BETWEEN SOLID GROUND AND THE FITTING TO BE ANCHORED. THE BLOCKING SHALL BE PLACED SO THAT THE PIPE AND FITTING JOINTS WILL BE ACCESSIBLE FOR REPAIR.
3. THE SQUARE FOOT BEARING AREA OF THE BLOCKING ON SOLID GROUND SHALL BE INDICATED IN THE TABLE FOLLOWING OR AS INDICATED BY THE ENGINEER:

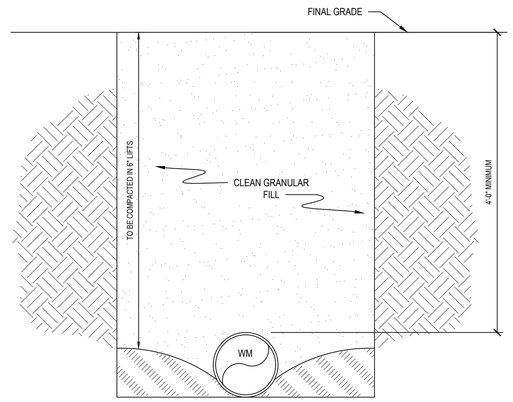
PIPE SIZE	DEAD END OR TEE	90° BEND	45° BEND	22 1/2° BEND
4"	1	1-1/2	3/4	1/2
6"	2	3	2	1
8"	4	5-1/2	3	1-1/2
10"	6	8-1/2	4-1/2	2-1/2
12"	9	12	6-1/2	3-1/2
16"	12	15-1/2	8-1/2	4-1/2
20"	15	18-1/2	10-1/2	5-1/2

4. FOR ALL VERTICAL BENDS, 3/4-INCH DIAMETER TIE RODS AND PIPE CLAMPS OR RETAINER GLANDS SHALL BE PROVIDED IN ADDITION TO THE CONCRETE BLOCKING SPECIFIED ABOVE FOR BENDS DEFLECTING 22-1/2 DEGREES OR MORE.

1 Thrust Block Location Details
SCALE: NTS



2 Valve Box Installation
SCALE: NTS 331411



3 Typical Water Main Trench
SCALE: NTS 331411 H2MX1

NOTES:

1. REFER TO SITE PIPING PLAN FOR ADDITIONAL INFORMATION.

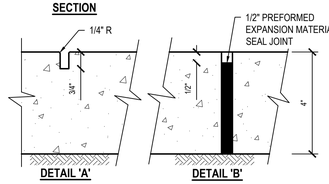
4 Single Blowoff
SCALE: NTS 334923.13

NOTE:
COMPACT SUBGRADE TO 92% MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D1557.

5 Asphalt Pavement - Heavy Duty
SCALE: NTS 321216.13

NOTES:

1. CONCRETE TO BE AIR-ENTRAINED AND ACHIEVE 4000 PSI STRENGTH AT 28 DAYS
2. COMPACT SUBGRADE TO 92% MAXIMUM DENSITY IN ACCORDANCE WITH ASTMD1557.
3. APPLY BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.



6 Concrete Sidewalk
SCALE: NTS 321216.13

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

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CONTRACT
CONTRACT M
PFAS TREATMENT SYSTEM

STATUS
FINAL BID DOCUMENT

SHEET TITLE
PROCESS SITE PIPING DETAILS

DRAWING No.
DS 500.00

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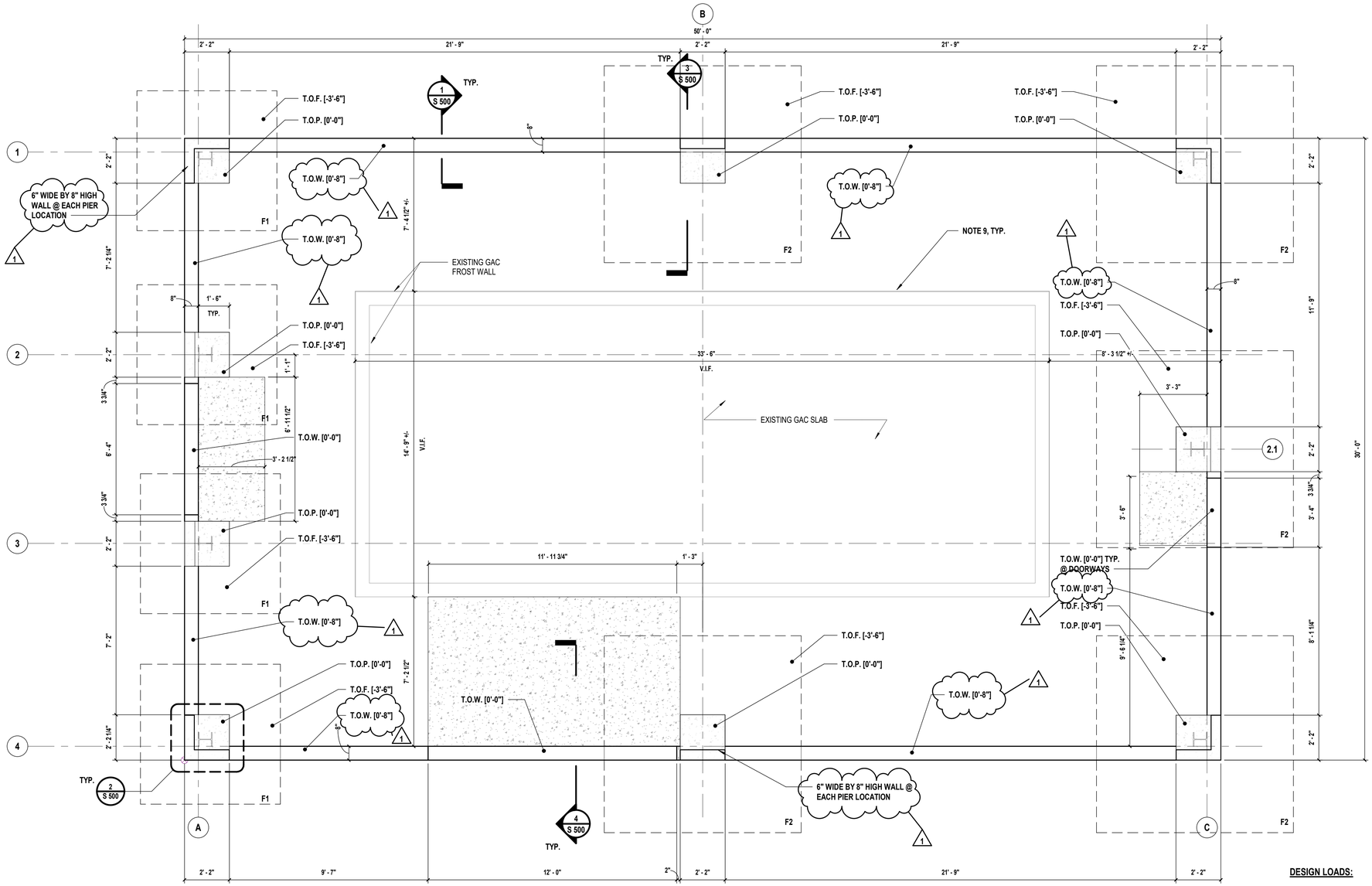
LEGEND:

U.O.N. =	UNLESS OTHERWISE NOTED
F# =	FOOTING DESIGNATION
T.O.F. =	TOP OF FOOTING
T.O.W. =	TOP OF WALL
T.O.B.S. =	TOP OF BRICK SHELF
T.O.P. =	TOP OF PEDESTAL
T.O.Sh. =	TOP OF METAL DECK, STEEL JOIST, OR EXTERIOR SLAB BEARING SHELF



1 Foundation Plan

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

FOOTING SCHEDULE				
FOOTING TYPE	SIZE	THICKNESS	REINFORCEMENT	COMMENTS
F1	6'-9" x6'-9"	12"	(6) #5 BARS. E.W.	-
F2	9'-6" x 9'-6"	12"	(9) #5 BARS E.W.	-

FOUNDATION PLAN NOTES:

1. ELEVATIONS SHOWN THUS [ ] ARE RELATIVE TO FINISHED FIRST FLOOR ELEVATION [0'-0"].
2. ALL EXCAVATED EARTH SHALL BE REPLACED WITH TYPE 'C' CONTROLLED FILL AS PER SPECIFICATION SECTION 312323.13.
3. ALL CONCRETE PEDESTALS SHALL BE 2'-2" x 2'-2" AND CONSTRUCTED AS PER DETAIL UNLESS OTHERWISE NOTED.
4. ALL CONCRETE PEDESTALS AND COLUMN FOOTINGS SHALL BE CENTERED ON THE COLUMN UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHALL COORDINATE SIZE AND LOCATIONS OF ALL REQUIRED PIPING AND CONDUIT PENETRATIONS THROUGH FOUNDATION WALL WITH ALL OTHER CONTRACTS. PROVIDE PIPE SLEEVES AND REINFORCEMENT AROUND PENETRATIONS AS PER DETAILS 5 AND 6 ON SHEET S500.
6. REFER TO 'A' DWGS FOR WATERPROOFING REQUIREMENTS.
7. GRID LOCATIONS AND DESIGNATIONS ARE SHOWN FOR REFERENCE. INDIVIDUAL COLUMN SIZES, LOCATIONS, AND ANCHOR BOLT OFFSETS SHALL BE ESTABLISHED FROM THE FOUNDATION EDGE AS PER THE APPROVED BUILDING MANUFACTURER'S DETAIL.
8. THE DESIGN OF THE BUILDING HAS BEEN PERFORMED AS PER PRELIMINARY FRAMING PLANS AND RESULTING REACTIONS PROVIDED BY IRONBUILT STEEL BUILDINGS. FORCES IN THE FOUNDATION WERE DETERMINED FROM BUILDING CODE OF NEW YORK STATE DEFINED LOADS APPLIED TO A PRE-MANUFACTURED BUILDING WITH LATERAL FORCE RESISTING SYSTEMS. THIS FOUNDATION PLAN IS VOID AND TO BE CONSIDERED INADEQUATE IF ANY DEVIATION FROM THE PRELIMINARY FRAMING PLANS IDENTIFIED ABOVE ARE IMPLEMENTED PRIOR TO THE ENGINEER OF RECORD REVIEWING AND APPROVING THE SUBSTITUTION.
9. CONTRACTOR TO PROTECT EXISTING GAC SLAB FROM UNDERMINING DURING EXCAVATION. BOTTOM OF EXISTING FROST WALL FOR SLAB EXPECTED TO BE A MIN. OF 3 FEET BELOW GRADE.

DESIGN LOADS:

1. BUILDING DESIGN LOADS:
   - DEAD LOAD = 3 PSF
   - COLLATERAL DEAD LOAD = 1 PSF
   - ROOF LIVE LOAD = 20 PSF
   - SNOW LOAD = 17.5 PSF
   - WIND SPEED = 130 MPH
   - WIND CODE = BCNYS 20 (IBC 18)
   - EXPOSURE = B
   - CLOSED/OPEN = CLOSED
   - IMPORTANCE WIND = 1.00
   - IMPORTANCE SEISMIC = 1
   - SEISMIC ZONE = B
   - SEISMIC COEFF. (Fa*Ss) = 0.27
2. SOIL BEARING CAPACITY: 1.5 TONS/S.F.
   AS REFERENCED BY SUB-SURFACE SOILS INVESTIGATION PERFORMED BY CARLIN SIMPSON & ASSOCIATES DATED OCTOBER 2, 2019

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CONSULTANTS:

MARK	DATE	DESCRIPTION
1	11/02/21	ADDENDUM NO. 1

STATE OF NEW YORK · SCOTT D LEHN · 087145 · LICENSED PROFESSIONAL ENGINEER

"ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL IS ILLEGAL"

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
JRI	JRI		

PROJECT No:	DATE:	SCALE:
RDWD2102	October 2021	AS SHOWN

CLIENT

Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

162 Middle Road
Riverhead, NY 11901

CONTRACT

CONTRACT M
PFAS TREATMENT SYSTEM

STATUS

FINAL BID DOCUMENT

SHEET TITLE

STRUCTURAL FOUNDATION PLAN AND DESIGN LOADS

DRAWING No.

S 100.00

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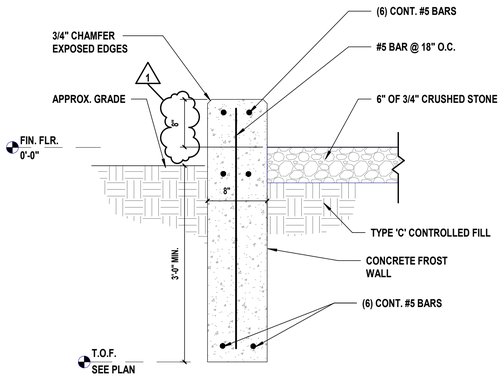
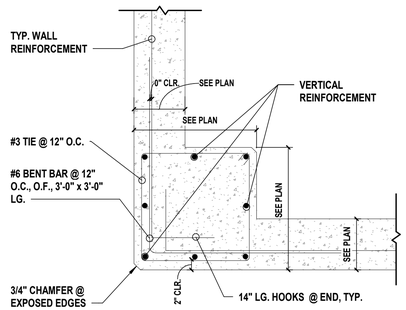


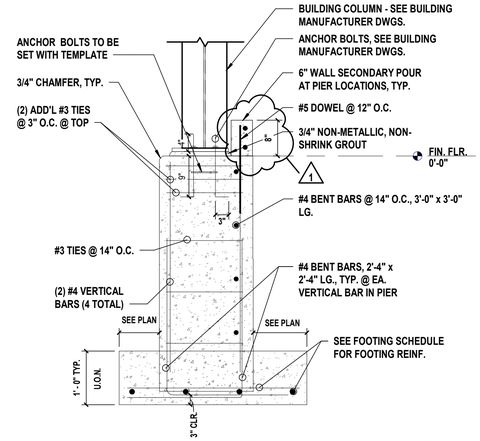
NOTE:
REFER TO 'A' DWGS FOR FOUNDATION AND SLAB INSULATION AND DAMP PROOFING REQUIREMENTS

1 Exterior Frost Wall
SCALE: 1" = 1'-0"



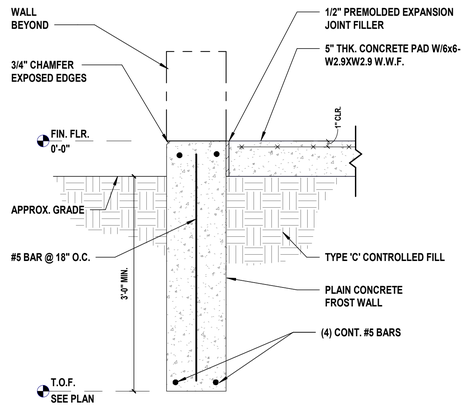
PLAN VIEW

2 Corner Pedestal/Foundation Wall Intersection
SCALE:N T S



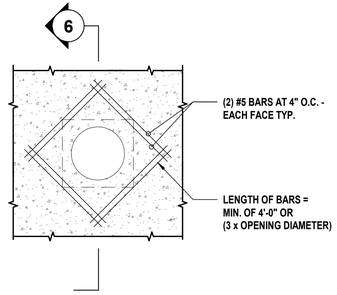
NOTE: CONTRACTOR MAY ELECT TO INSTALL THE SECONDARY WALL AT THE PIERS MONOLITHICALLY WITH THE PERIMETER FOUNDATION IF THE BUILDING COLUMNS CAN BE INSTALLED WITHOUT CONFLICT. IF CONFLICT ARISES, INSTALL DOWELS USING HILTI HIT HY 200 ADHESIVE OR EQUAL. MIN. OF 4" EMBEDMENT INTO PIER.

3 Pedestal Footing
SCALE: N T S



NOTE:
REFER TO 'A' DWGS FOR FOUNDATION AND SLAB INSULATION AND DAMP PROOFING REQUIREMENTS

4 Exterior Frost Wall @ Doorway
SCALE: 1" = 1'-0"



5 Pipe Penetration at Wall or Slab (Elevation)
SCALE:NTS

NOTE:
WALL REINFORCEMENT NOT SHOWN FOR CLARITY - SEE DETAIL THIS SHEET.

6 Pipe Penetration at Wall or Slab (Section)
SCALE:NTS

H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

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Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD 1792 · PAX ET PROSPERITAS · PER PROGRESSUM

162 Middle Road
Riverhead, NY 11901

CONTRACT
CONTRACT M
PFAS TREATMENT SYSTEM

STATUS
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SHEET TITLE
STRUCTURAL FOUNDATION DETAILS

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ABBREVIATIONS

A.B.	ANCHOR BOLT
ABV.	ABOVE
A/C	AIR CONDITIONER
ACI	AMERICA CONCRETE INSTITUTE
ACST.	ACOUSTIC
A.C.P.	ACOUSTICAL CEILING PANEL
A.C.U.	AIR CONDITIONER UNIT
A.D.	ACCESS DOOR
ADAPT.	ADAPTATION
ADH.	ADHESIVE
ADJ.	ADJUSTABLE
ADMIN.	ADMINISTRATION
A.D.O.	AUTOMATIC DOOR OPERATOR
A/E	ARCHITECT/ENGINEER
A.F.F.	ABOVE FINISH FLOOR
ALT.	ALTERNATE
ALUM.	ALUMINUM
ANCH.	ANCHOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
A.P.	ACCESS PANEL
APPROX.	APPROXIMATE
ASPH.	ASPHALT
ASPPLK.	ASPHALT PLANK
ASSIST.	ASSISTANT
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
A.T.	ACOUSTICAL TILE
AWS	AMERICAN WELDING SOCIETY
BAL.	BALANCE
B.B.	BULLETIN BOARD
B.C.	BRICK COURSE
BRD.	BOARD
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.O.	BOTTOM OF
B.O.L.	BOTTOM OF LINTEL
BOT.	BOTTOM
B.R.	BUMPER RAIL
BRKT.	BRACKET
B/U	BUILT-UP
CAB.	CABINET
C.B.	CATCH BASIN
C.C.	CONTRACTOR
CLG.	CEILING
CEM.	CEMENT
CER.	CERAMIC
C.FL	CONDUCTIVE FLOORING
CG	CORNER GUARD
CIP	CAST-IN-PLACE
C.J.	CONTROL JOINT
CLG.	CEILING
CL.GL.	CLEAR GLASS
CLO.	CLOSER
CMU	CONCRETE MASONRY UNIT
C.O.	CLEAN OUT
COL.	COLUMN
CONC.	CONCRETE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
CORR.	CORRIDOR
CPT.	CARPET
C.R.	CARD READER
C.R.S.	CORROSION-RESISTANT STEEL
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
C/S	COUNTERSUNK
C.T.	CERAMIC TILE
CTG.	COATING
CTR.	CENTER
CU.	COPPER
C.W.	COLD WATER
DBL.	DOUBLE
DET.	DETAIL
D.F.	DRINKING FOUNTAIN
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DISP.	DISPENSER
DN.	DOWN
DRSG.	DRESSING
D.S.	DOWNSPOUT
DRWG.	DRAWING
DWR.	DRAWER
E.	ELECTRICAL
EA	EACH
E.J.	EXPANSION JOINT
EL.	ELEVATION
ELEC.	ELECTRIC/ELECTRICAL
ELEV.	ELEVATION
ENG	ENGINEER
EP	ELECTRICAL PANEL
EPY	EPOXY COATING
EQ	EQUAL
EQUIP	EQUIPMENT
E.S.	EACH SIDE
EXAM	EXAMINATION
EXIST.	EXISTING
EXH.	EXHAUST
EXP	EXPOSED
EXPN.	EXPANSION
EXT.	EXTERIOR
F.A.I.	FRESH AIR INTAKE
FC	FIRE CODE
F.B.O.	FURNISHED BY OTHERS
F.C.	FILING CABINET
F.C.U.	FAN COIL UNIT
F.D.	FLOOR DRAIN
FE.	FIRE EXTINGUISHER
FE-W	WATER FIRE EXTINGUISHER
F.F.	FINISH FLOOR
F.H.C.	FIRE HOUSE CABINET
FHMS	FLAT HEAD MACHINE SCREW
FIN.	FINISH
FLAM	FLAMMABLE
FLR.	FLOOR
FLSHG.	FLASHING
FDN.	FOUNDATION
F.P.	FIRE PARTITION
F.R.	FIRE RETARDANT
F.SP.	FIRE STANDPIPE
FTG.	FOOTING
F.GL.	FIXED GLASS
FUR'G	FURRING
G.	GAS
GA.	GAUGE
GALV.	GALVANIZED
G.B.	GRAB BAR
GEN.	GENERAL
GL.	GLASS, GLAZED
GR.	GRADE
GRT.	GROUT
G.W.B.	GYPSUM WALL BOARD
GYP.	GYPSUM
GYP.BD.	GYPSUM BOARD
H.C.	HANDICAPPED
HDBD.	HARDBOARD
HDWD.	HARDWOOD
HDWE.	HARDWARE
H.M.	HOLLOW METAL
HOR.	HORIZONTAL
H.R.	HANDRAIL
HT.	HEIGHT
HTG	HEATING
H.W.	HOT WATER
INSUL.	INSULATION/INSULATING
INT.	INTERIOR
JNT.	JOINT
JST.	JOIST
K.P.	KICK PLATE
LAM.	LAMINATE
LAV.	LAVATORY
LDR.	LEADER
LKR.	LOCKER
L.L.H.	LONG LEG HORIZONTAL
L.L.V.	LONG LEG VERTICAL
LOC.	LOCATION
L.P.	LOW POINT
LMSTN.	LIMESTONE
LT.	LIGHT
M.	MECHANICAL
MANUF.	MANUFACTURER
MATL.	MATERIAL
MAX.	MAXIMUM
M.B.	MODIFIED BITUMEN
MECH.	MECHANICAL
M.E.P.	MECHANICAL, ELECTRICAL, PLUMBING
MET.	METAL
MFD.	MANUFACTURED
MFR.	MANUFACTURER
MGR.	MANAGER
MID.	MIDDLE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MLDG.	MOLDING
MTD.	MOUNTED
M.O.	MASONRY OPENING
MOIST.	MOISTURE
M.P.E.	MECHANICAL PLUMBING ELECTRICAL
M.R.	MOISTURE RESISTANT
M.T.	METAL THRESHOLD
MTL.	METAL
M.T.P.	METAL TOILET PARTITION
MULT.	MULTIPLE
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NBS	NATIONAL BUREAU OF STANDARDS
N/C	NOT IN CONTRACT
NL	NEOPRENE LATEX
NO	NUMBER
NRCA	NATIONAL ROOFING CONTRACTORS ASSOC.
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OHD.	OVERHEAD DOOR
OPG.	OPENING
OPP.	OPPOSITE
O.W.	OBSERVATION WINDOW
O.W.S.J.	OPEN WEB STEEL JOIST
P.	PLUMBING
PAR.	PARALLEL
P.C.	POURED CONCRETE
PERP.	PERPENDICULAR
PL.	PLATE OR PLASTIC
PLAS.	PLASTIC
P.LAM.	PLASTIC LAMINATED
PLBG.	PLUMBING
PLYWD.	PLYWOOD
PNL.	PANEL
PNT	PAINT
PORT.	PORTABLE
PROJ.	PROJECTION
P.S.	PRODUCT STANDARD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT.	PRESSURE TREATED
PTD.	PAINTED
PTN.	PARTITION
P.V.C.	POLYVINYL CHLORIDE
P.W.	PASS WINDOW
QA	QUALITY ASSURANCE
Q.T.	QUARRY TILE
R	RADIUS OR RISER
(R)	RELOCATED ITEM
RBR	RUBBER BASE
R&C	RECEPTION & CONTROL
R.C.P.	REFLECTED CEILING PLAN
R.D.	ROOF DRAIN
R.D.L.	ROOF DRAIN LEADER
REC.	RECEPTION
REINF.	REINFORCED
REF.	REFRIGERATION
REG.	REGLET
REHAB.	REHABILITATION
REPRO.	REPRODUCTION
REQ.	REQUIREMENT
RESIL.	RESILIENT
RM.	ROOM
R.O.	ROUGH OPENING
R.P.	RETRACTABLE PARTITION
RST.	RESISTANCE
R.T.	RUBBER TILE
S.C.	SPECIAL COATING
SCHED.	SCHEDULE
SECT.	SECTION
S.G.F.U.	STRUCTURAL GLAZED FACING UNITS
SH.	SHELVING, SHELF
SIM.	SIMILAR
S.J.C.	SEISMIC JOINT CEILING
S.J.F.	SEISMIC JOINT FLOORING
S.J.W.	SEISMIC JOINT WALL
SPEC.	SPECIFICATIONS
SQ.	SQUARE
S&R	SHELF & ROD
S.S.	SERVICE SINK
ST.STL.	STAINLESS STEEL
STA.	STATION
STL.	STEEL
STOR.	STORAGE
STRUC.	STRUCTURE
STRUCT.	STRUCTURAL
SUB.	SUBCONTRACTOR
SUPER.	SUPERVISOR
SUSP.	SUSPEND
S.V.F.	SHEET VINYL FLOORING
SW.	SIDEWALK
SYM.	SYMMETRICAL
T.	TOILET
TECH.	TECHNICIAN
TEL.	TELEPHONE
T.GL.	TEMPERED
TEMP.	TEMPERATURE
TEMP'Y	TEMPORARY
TERR.	TERRAZZO
THK.	THICK
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
TOX.	TOXIC
TR.	TREAD
TRTD.	TREATED
TRTMT.	TREATMENT
TV.C.TV	SCREEN OR MONITOR, CEILING MOUNTED
TV.W.TV	SCREEN OR MONITOR, WALL MOUNTED
TYP.	TYPICAL
UBC	UNIFORM BUILDING CODE
UNAS.	UNASSIGNED
U.N.O.	UNLESS NOTED OTHERWISE
UNPT.	UNPAINTED
U.P.S.	UNINTERRUPTIBLE POWER SUPPLY
UR.	URINAL
UTIL.	UTILITY
V.	VACUUM
V.B.	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT.	VERTICAL
VEST.	VESTIBULE
V.H.	VINYL HOMOGENEOUS
VIN.	VINYL
V.T.R.	VENT THRU ROOF
V.W.C.	VINYL WALL COVERING
W.	WALL COVERING
W/	WITH
W.C.	WATER CLOSET
WIC	WHEEL CHAIR
WD.	WIDTH OR WOOD
W.H.TR.	WATER HEATER
W.I.	WROUGHT IRON
W.W.F.	WELDED WIRE FABRIC
W/O	WITHOUT
W.P.	WATERPROOFING
W.R.	WASTE REPLACEMENT
W.R.A.B.	WATER-RESISTIVE AIR BARRIER
WSCT.	WAINSCOT
W.T.	WALL TILE
W.V.F.	WELDED VINYL FLOORING

SYMBOL LEGEND

OFFICE
10001A — Room Designation
150 SF
A — Window Elevation Key
1 — Door Number
12'-0" — Primary Ceiling Tag
1 / A101 — Exterior Elevation
1 / A101 — Section Cut
FE — Fire Extinguisher
Brick
Acoustic Tile / Ceramic Tile
Concrete
Concrete Block
Earth
Steel
1i — Wall Type
0 — Column Grid
XX — RevisionTag
1 Title — SCALE: 1/8" = 1'-0" — Drawing Title
1'-0" A.F.F. — Secondary Ceiling Tag
A / A101 / A — Interior Elevation
1 / A101 — Detail Key
Batt Insulation
Rigid Insulation
Gypsum Board
Plywood
Wood Blocking
Wood

GENERAL NOTES

1. ALL GLAZING IN DOORS, FIXED SIDE PANELS ADJOINING DOORS, INTERIOR PARTITIONS WHERE GLAZING EXTENDS TO WITHIN 1'-6" OF FINISHED FLOOR AND GLASS PANELS GREATER THAN 50 SQ. FT. TO BE FULLY TEMPERED SAFETY GLASS PER 2020 BCNYS CODE CHAPTER 7.
2. INSTALL FIREBLOCKING IN COMBUSTIBLE CONCEALED LOCATIONS IN ACCORDANCE WITH 2020 BCNYS SECTION 718.
3. THERMAL INSULATION MATERIALS SHALL COMPLY WITH 2020 BCNYS SECTION 720.
4. THIS BUILDING IS EXEMPT FROM THE ACCESSIBILITY REQUIREMENTS OF 2020 BCNYS CHAPTER 11 PER SECTION 1103.2.9.

NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE

EXTERIOR DESIGN CONDITIONS PER TABLE C301.1

COUNTY: SUFFOLK
ZONE: 4A

BUILDING ENVELOPE REQUIREMENTS PER TABLE 402.1.3, 2020 ECCCNYS

	REQUIRED	PROPOSED
BELOW GRADE WALL	R-7.5ci	R-10.8
SLAB ON GRADE	R-10 FOR 24" BELOW	-
GARAGE DOOR < 14% GLAZING	U-0.31	U-0.13
SWINGING DOORS	U-0.61	U-0.60
ROOF ASSEMBLY	R-19 + R-11 LS	R-33
ABOVE GRADE WALL	R-13 + R-13ci	R-33

ABOVE GRADE WALL ASSEMBLY CALCULATIONS

OUTSIDE AIR FILM	0.17
EXTERIOR METAL PANEL	-
METAL GIRTS + 10" BATT INSULATION	33.0
INTERIOR LINER PANEL	-
INSIDE AIR FILM	0.68
TOTAL R-VALUE	33.85

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCC.

(2020 BCNYS, TABLE 803.13)

GROUP-U NON-SPRINKLERED	
EXIT ENCLOSURES AND EXIT PASSAGEWAYS	NO RESTRICTIONS
CORRIDORS	NO RESTRICTIONS
ROOMS AND ENCLOSED SPACES	NO RESTRICTIONS

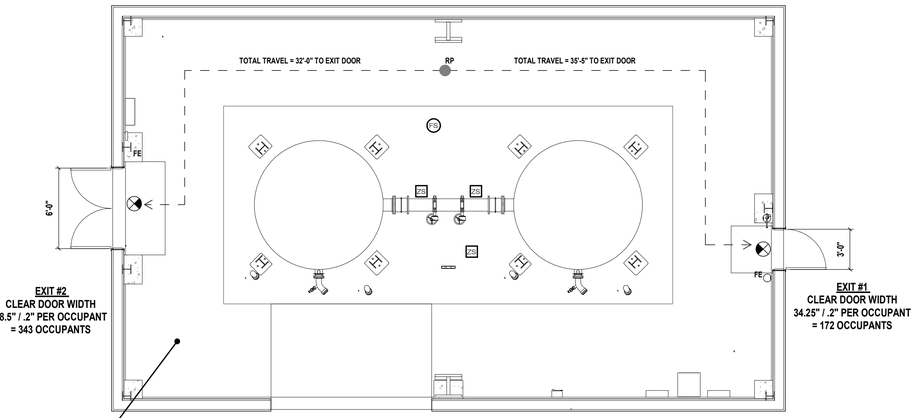
FIRE PROTECTION SYSTEMS

(2020 BCNYS, CHAPTER 9)

SPRINKLER SYSTEM (SECTION 903):	REQUIRED N	PROVIDED N
STANDPIPE SYSTEM (SECTION 905):	REQUIRED N	PROVIDED N
PORTABLE FIRE EXTINGUISHERS (SECTION 906):	REQUIRED N	PROVIDED Y
FIRE AND SMOKE DETECTION (SECTION 907):	REQUIRED N	PROVIDED Y
FIRE ALARM (SECTION 907):	REQUIRED N	PROVIDED Y
SMOKE VENTS (SECTION 910):	REQUIRED N	PROVIDED N

GENERAL NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 2020 BCNYS, LOCAL ZONING AND PLANNING CODES AND ORDINANCES, AND THE RULES AND REGULATIONS OF ALL LOCAL AGENCIES, DEPARTMENTS AND PUBLIC UTILITY COMPANIES HAVING JURISDICTION OVER ANY PORTION OF SPECIFIC PHASE OF WORK.
2. THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY. THE PROJECT SPECIFICATIONS BOUND SEPARATELY CONTAIN THE CONDITIONS OF THE CONTRACT, PROCEDURES AND TECHNICAL SPECIFICATIONS.
3. THE CONTRACTOR SHALL CHECK AND VERIFY ALL CONDITIONS AT THE SITE BEFORE STARTING WORK AND SHALL FAMILIARIZE THEMSELVES WITH THE INTENT OF THESE PLANS AND MAKE SURE WORK AGREES WITH SAME. IF DURING THE CONSTRUCTION, A CONDITION EXISTS WHICH DISAGREES WITH THAT INDICATED ON THE PLANS, THE CONTRACTOR SHALL STOP WORK AND NOTIFY ARCHITECT/ENGINEER. VERIFY EXACT LAYOUT CAPABILITY WITH ALL EXISTING CONDITIONS AND IF ANY DISCREPANCIES ARE FOUND WITH CONDITIONS ENCOUNTERED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY MEASURES, TIME LOST, CHANGES TO THE WORK SCOPE, ETC. WITHOUT ANY ADDITIONAL COMPENSATION, IF CONTRACTOR FAILS TO PROVIDE AFOREMENTIONED VERIFICATIONS AND COORDINATION PRIOR TO COMMENCING WORK. THEY SHALL ASSUME ALL RESPONSIBILITY AND LIABILITY ARISING FROM HIS ACTIONS.
4. THE DESIGN, PREPARATIONS OF NECESSARY CONSTRUCTION DOCUMENTS AND THE SECURING OF ALL REQUIRED PERMITS AND APPROVALS FROM THE APPROPRIATE ADMINISTRATIVE AUTHORITY SHALL BE COMPLETED PRIOR TO THE COMMENCEMENT OF THE WORK AND SHALL INCLUDE ALL WORK.
5. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS, CONFIRMED BY FIELD CONDITIONS, TAKE PRECEDENCE. IF A DISCREPANCY ARISES BASED ON FIELD CONDITIONS, CONSULT WITH ARCHITECT/ENGINEER BEFORE PROCEEDING WITH WORK OR ORDERING MATERIALS.
6. THE CONTRACTOR SHALL NOT MAKE DEVIATIONS FROM THE DESIGN DRAWINGS WITHOUT WRITTEN DIRECTIONS FROM THE ARCHITECT/ENGINEER. REPORT ANY ERRORS, INACCURACIES, MISSING DIMENSIONAL REQUIREMENTS OR CONFLICTS TO THE ARCHITECT/ENGINEER IN WRITING BEFORE BEGINNING ANY WORK.
7. IF THERE IS A DISCREPANCY ON THE CONSTRUCTION DOCUMENTS, THE ARCHITECT/ENGINEER SHALL BE NOTIFIED IMMEDIATELY SO THAT THE DISCREPANCIES CAN BE RESOLVED. UNLESS OTHERWISE INDICATED IN WRITING BY ARCHITECT/ENGINEER, THE MORE CONSERVATIVE INTERPRETATION OF THE CONSTRUCTION DOCUMENTS SHALL APPLY.
8. BY ENTERING INTO CONTRACT ON THE CONSTRUCTION, THE CONTRACTOR ACCEPTS THE RESPONSIBILITY TO BE KNOWLEDGEABLE AS TO THE REQUIREMENTS OF THE NEW YORK STATE GOVERNING CODES AND OTHER FEDERAL STATE AND LOCAL ORDINANCES HAVING JURISDICTION. THE REQUIREMENTS OF THE FOREGOING CODES AND ORDINANCES SHALL SUPPLEMENT THE REQUIREMENTS SHOWN ON THE DRAWINGS AND ELSEWHERE IN THE SPECIFICATIONS AND IN THE EVENT OF CONFLICT WITH THE ARCHITECTURAL SPECIFICATIONS, THE REQUIREMENTS OF THE CODE OR ORDINANCE SHALL PREVAIL UNLESS THE ARCHITECTURAL SPECIFICATION IS MORE STRINGENT. NON FAMILIARITY WITH THE REQUIREMENTS OF GOVERNING CODES OR ORDINANCES WILL NOT BE CAUSE FOR AN "EXTRA." IN THE EVENT OF NONCOMPLIANCE, THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL COSTS OF REMOVAL OR NON COMPLYING WORK AND REPLACEMENT WITH COMPLYING WORK.
9. ALL PENETRATIONS REQUIRED TO ACCOMMODATE ALL WORK DETAILED OR SPECIFIED FOR THEIR SCOPE SHALL BE LOCATED SIZED, MADE & VERIFIED BY THE CONTRACTOR. ALL PENETRATIONS SHALL BE REVIEWED BY THE ARCHITECT/ENGINEER.
10. DISTURB ONLY THE AREAS OF THE SITE AFFECTED BY NEW CONSTRUCTION, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL PROTECT ALL ADJACENT EXISTING CONSTRUCTION, ITEMS, FINISHES, ETC. AND SHALL PATCH, REPAIR AND/OR REPLACE, AND REFINISH AS REQUIRED TO RESTORE ANY AND ALL AREAS DAMAGED DURING CONSTRUCTION.
11. PROTECT ADJOINING PROPERTIES WHEN CONDUCTING WORK.
12. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE BUILDING, FIRE, PLUMBING, MECHANICAL, GAS & ENERGY CODES OF NEW YORK STATE AND WITH THE RULES AND REGULATIONS OF ALL LOCAL AGENCIES, DEPARTMENTS OR LAWS HAVING JURISDICTION OVER ANY PORTION OR SPECIFIC PHASE OF THE WORK. THE CONTRACTOR SHALL COORDINATE THE WORK WITH PUBLIC UTILITY COMPANIES HAVING JURISDICTION.
13. CONTRACTOR SHALL STRICTLY ADHERE TO MANUFACTURER'S PRINTED INSTRUCTION AND SHALL GUARANTEE TO THE OWNER THAT ALL MATERIALS AND EQUIPMENT INCORPORATED IN THE WORK WILL BE NEW UNLESS OTHERWISE SPECIFIED, AND THAT ALL WORK WILL BE OF GOOD QUALITY, FREE FROM DEFECTS AND FAULTS FOR A MIN. OF ONE (1) YEAR, U.N.O., STARTING FROM THE DATE OF COMPLETION AND ACCEPTANCE OF WORK.
14. VERIFY ALL CHANGES TO WORK IN WRITING WITH THE ARCHITECT/ENGINEER AND OWNER BEFORE BEGINNING RELATED WORK.
15. DIMENSIONS NOTED AS "EQUAL" OR "EQ" WITHIN A ROOM REFER TO A DISTANCE RELATIONSHIP CONTAINED ONLY IN THAT ROOM AT AN OPPOSING OR PARALLEL WALL UNLESS NOTED OTHERWISE.
16. VERIFY AND ADJUST APPROXIMATE DIMENSIONS (+/-) IN THE FIELD. VERIFY WITH ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION.
17. ALL ITEMS DETAILED OR SPECIFIED TO RUN WITHIN OR ATTACHED TO WALLS AND CEILINGS ARE TO BE CONCEALED OR EXPOSED U.N.O.
18. CONTRACTORS SHALL BE RESPONSIBLE FOR MAINTAINING WATER-TIGHT WEATHER PROTECTION THROUGHOUT ALL WORK AREAS & EXISTING AREAS IMMEDIATELY ADJACENT TO THOSE WORK AREAS, FOR THE DURATION OF THE ENTIRE PROJECT.
19. ALL SECTIONS AND DETAILS SHALL BE CONSIDERED TYP. AND APPLY FOR THE SAME AND SIMILAR CONDITIONS, UNLESS OTHERWISE SPECIFICALLY NOTED.
20. ANY ITEM OF WORK NECESSARY FOR PROPER COMPLETION OF CONSTRUCTION, WHICH IS NOT SPECIFICALLY COVERED ON THE DRAWINGS, SHALL BE CONSIDERED INCLUDED IN THIS WORK AND SHALL BE PERFORMED IN A MANNER DEEMED GOOD PRACTICE OF THE TRADE INVOLVED.
21. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE SAFETY OF THE PUBLIC AND THE PROPERTY DURING CONSTRUCTION OPERATIONS AND UNTIL COMPLETION OF ALL WORK.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACTS AND OMISSIONS OF ALL THEIR EMPLOYEES AND ALL SUBCONTRACTORS, THEIR AGENTS, AND ALL OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR. THE CONTRACTOR SHALL BE FULLY INSURED WITH LIABILITY AND WORKERS COMPENSATION.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTION AND MISALIGNMENT.
24. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF THE WORK OF THE GENERAL CONTRACTOR, OWNER OR ANY OTHER SUBCONTRACTORS, NOR SHALL THEY GUARANTEE THEIR PERFORMANCE.
25. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IMMEDIATELY IF HE OR SHE CANNOT COMPLY WITH ALL REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS AND THE BUILDING CODE OF NEW YORK STATE.
26. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE ARCHITECT/ENGINEER AND HIS AGENTS HARMLESS FROM AND AGAINST ALL LOSS, DAMAGE OR EXPENSE (INCLUDING REASONABLE ATTORNEY FEES) RESULTING FROM ANY CLAIM OF WHATSOEVER KIND OF NATURE.
27. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CHANGES TO THIS PROJECT MADE BY OWNER, GENERAL CONTRACTOR OR ANY SUBCONTRACTOR OR MATERIAL SUPPLIER UNLESS PROPERLY AUTHORIZED, IN WRITING, BY THE ARCHITECT/ENGINEER.
28. ALL DRAWINGS, SPECIFICATIONS, AND COPIES SHALL REMAIN THE PROPERTY OF THE ARCHITECT/ENGINEER. THEY SHALL BE USED ONLY WITH RESPECT TO THE CONTRACTORS WORK AND SHALL NOT BE USED IN ANY MANNER ON ANY OTHER PROJECT.
29. THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION, SAFETY AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS IS THE CONTRACTORS RESPONSIBILITY.
30. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE PREMISES FROM DIRT OR DAMAGE, DURING AND UNTIL COMPLETION AND FINAL ACCEPTANCE OF THE PROJECT. ALL ITEMS REMOVED FROM THE PROJECT SITE DURING THE CONSTRUCTION SHALL REMAIN THE PROPERTY OF THE OWNER EXCEPT THE DEBRIS THAT SHALL BE REMOVED FROM THE PROJECT SITE AND LEGALLY DISPOSED OF ON A DAILY BASIS.
31. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL WORK INCLUDING MECHANICAL, ELECTRICAL AND PLUMBING TRADES.
32. ALL NAILING SHALL BE IN ACCORDANCE WITH THE BUILDING CODE OF NEW YORK STATE AND THE WOOD FRAMING CONSTRUCTION MANUAL.
33. DATUM ELEVATION AT FINISHED FLOOR IS EL: +0'-0". ALL VERTICAL DIMENSIONS FOR THE FLOOR PLANS, ELEVATIONS, SECTIONS AND DETAILS ARE REFERENCED FROM THIS DATUM.
34. ALL DIMENSIONS NOTED THROUGHOUT THESE CONSTRUCTION DOCUMENTS ARE ACTUAL SIZE DIMENSIONS UNLESS NOTED OTHERWISE.



100	
FILTER ROOM	5
1356.69 SF	300 SF / PERSON

1 Emergency Egress Plan
SCALE: 3/16" = 1'-0"

LEGEND

OCCUPANCY — AREA (SF) — ROOM NUMBER — # OF PERSONS — SQUARE FOOT/PERSON

ROOM NUMBER	# OF PERSONS	SQUARE FOOT/PERSON
STORAGE	1 PERSON	150 SF
150 SF	200 SF / PERSON	

RP	REMOTE POINT		PATH OF EGRESS
FE	FIRE EXTINGUISHER & TYPE #		ILLUMINATED EXIST SIGN (ARROW INDICATES DIRECTION OF EXIT)

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CONSULTANTS:

MARK	DATE	DESCRIPTION
1	11/01/21	ADDENDUM NO. 1

REGISTERED ARCHITECT ROBERT E. IRESI JR. No. 029642 STATE OF NEW YORK

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PROJECT No:	DATE:	SCALE:
RDWD2102	OCTOBER 2021	AS SHOWN

CLIENT
Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD 1792 PAX ET PROSPERITAS PER PROGRESSUM

162 Middle Road
Riverhead, NY 11901

CONTRACT
CONTRACT M
PFAS TREATMENT SYSTEM

STATUS
FINAL BID DOCUMENT

SHEET TITLE
GENERAL NOTES AND LEGENDS

DRAWING No.
A 001.00

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LOUVER NOTES:

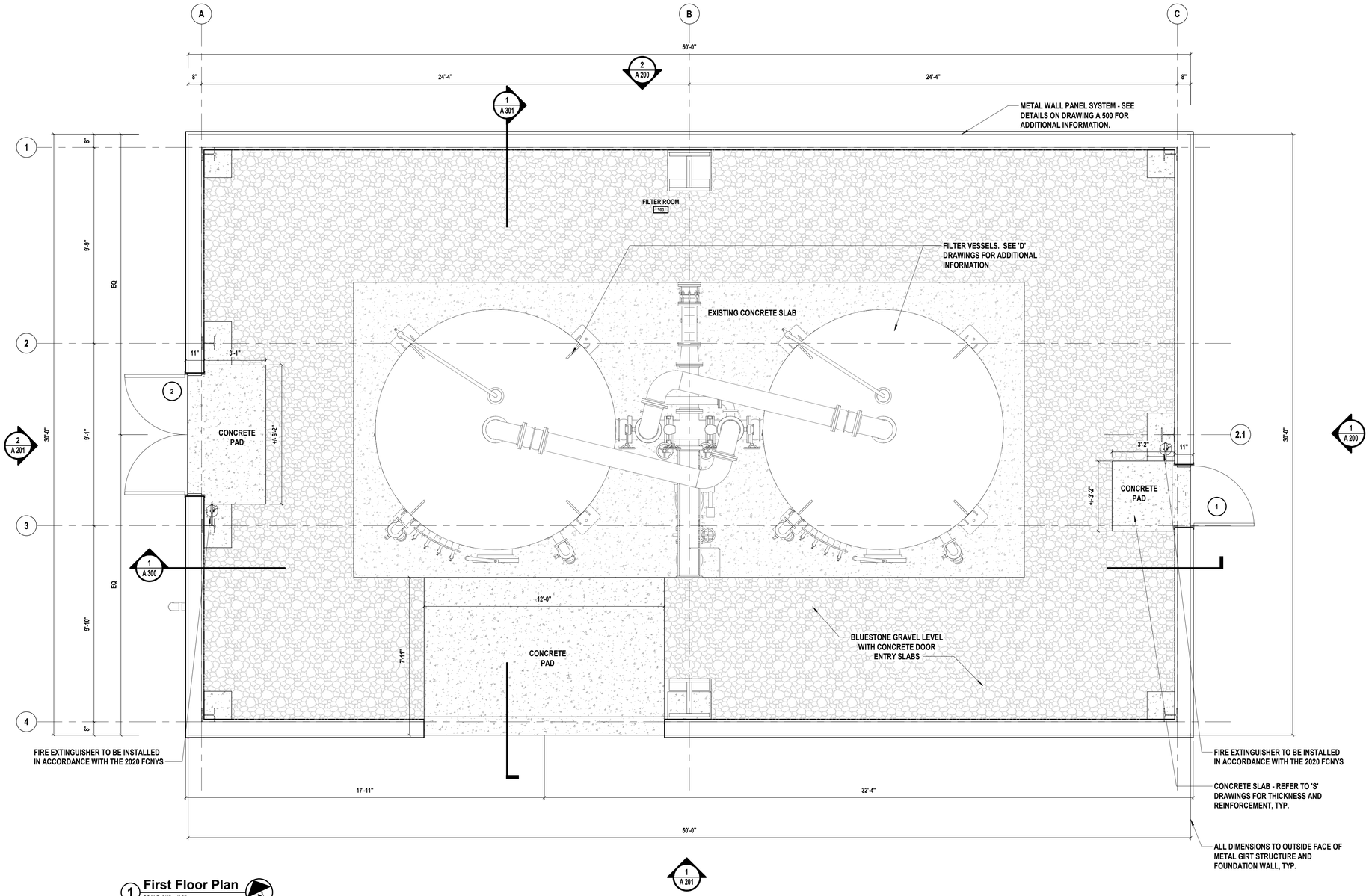
1. ALL LOUVERS TO BE FURNISHED BY AND INSTALLED BY CONTRACTOR. REFER TO 'D' DRAWINGS FOR ADDITIONAL INFORMATION.
2. SEE ELEVATIONS FOR HEAD HEIGHTS.
3. SUPPLY POWER TO THE MOTORIZED DAMPERS.
4. INTERLOCK ALL MOTORIZED DAMPERS WITH THEIR ASSOCIATED EXHAUST FAN OPERATION.
5. PROVIDE BIRD & INSECT SCREENS.
6. VERIFY ALL REQUIRED OPENINGS WITH MFR.

GENERAL PLAN NOTES:

1. FINISH FLOOR ELEVATION (0'-0") IS ESTABLISHED AT EL. 17.00'.
2. COORDINATE THE WORK REQUIRED ON THIS DRAWINGS WITH THE WORK OF ALL OTHER TRADES AND SPECIFICATIONS.
3. ALL ITEMS DETAILED OR SPECIFIED TO RUN IN OR ATTACHED TO WALLS AND CEILING ARE TO BE EXPOSED U.N.O.
4. ACCOMMODATE THE CONSTRUCTION TO ACCEPT ALL PIPING, CONDUITS, EQUIPMENT, PANELS, ETC. SPECIFIED TO BE EXPOSED OR CONCEALED IN MASONRY AND/OR STUD WALLS, AS REQUIRED BY THIS & OTHER CONTRACTS.
5. ALL EXTERIOR EXPOSED CONC. FOUNDATION WALLS SHALL BE PARGED.

FLOOR PLAN LEGEND

- (1) DOOR TAG. REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION
- BATT INSULATION
- DOOR. REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION



1 **First Floor Plan**
SCALE: 3/8" = 1'-0"

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1	11/01/21	ADDENDUM NO. 1

REGISTERED ARCHITECT ROBERT E. IKES JR. No. 029640 STATE OF NEW YORK

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Riverhead Water District

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SHEET TITLE

FIRST FLOOR PLAN, SCHEDULE AND NOTES

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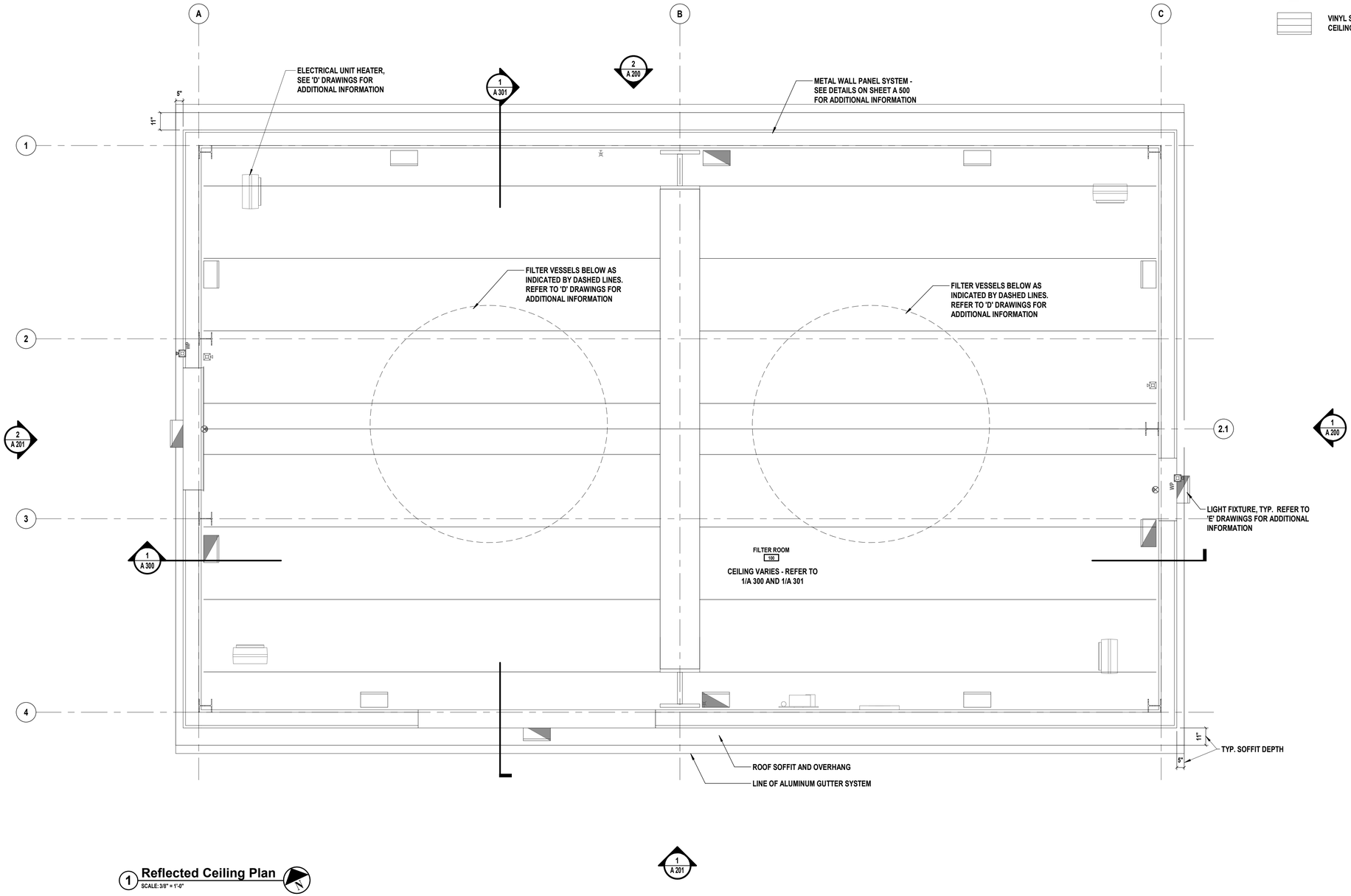
REFLECTED CEILING PLAN LEGEND

- LIGHT FIXTURES
- EMERGENCY LIGHTS w/ BATTERY BACKUP
- EMERGENCY LIGHTS w/ BATTERY BACKUP
- OS — OCCUPANCY SENSOR
- EXIT SIGN
- UNIT HEATER
- VINYL SOFFIT CEILING SYSTEM



1 Reflected Ceiling Plan
SCALE: 3/8" = 1'-0"

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REFLECTED CEILING PLAN

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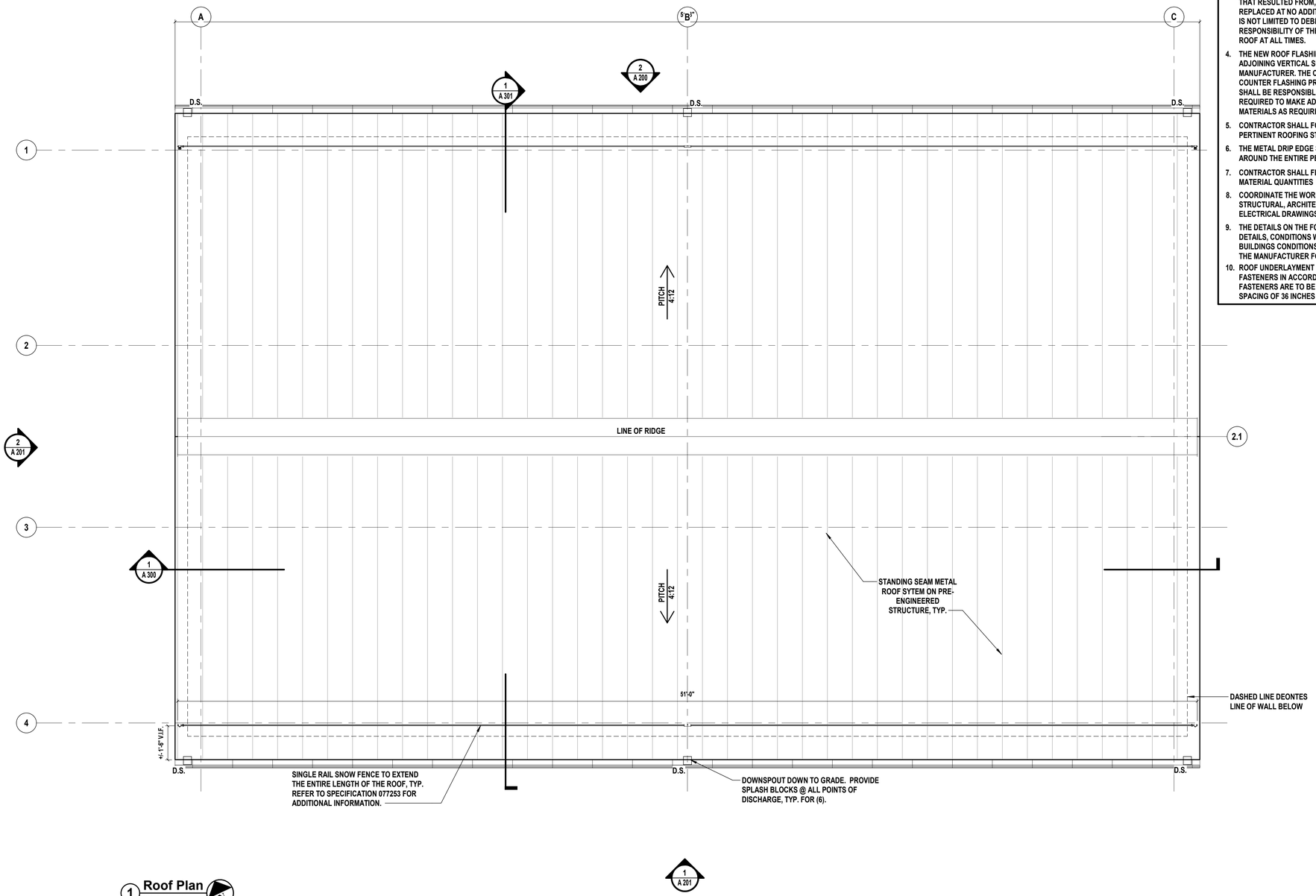
ROOF LEGEND:

ROOF SLOPE

D.S. = DOWN SPOUT LOCATIONS

GENERAL ROOFING NOTES
PITCHED ROOF

1. THESE DRAWINGS PROVIDE A GRAPHICAL REPRESENTATION OF PRINCIPAL ROOFING ITEMS IS NOT A COMPLETE LIST OF EVERY ROOFING ITEM & ACCESSORY. THE DRAWINGS MUST BE COORDINATED WITH ALL OTHER DWGS, THE SPECIFICATIONS, ROOF DETAILS & MANUFACTURER REQUIREMENTS. .
2. THE INTENDED SCOPE OF WORK INCLUDES THE COMPLETE INSTALLATION OF A STANDING SEAM METAL ROOF SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS, LABOR, ROOFING ITEMS AND ACCESSORIES REQUIRED FOR INSTALLATION & A WATER TIGHT WARRANTIED ROOF SYSTEM WHETHER INDICATED ON THE DRAWINGS OR NOT.
3. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND HEIGHTS OF ALL ROOF PENETRATIONS. THE CONTRACTOR SHALL PROTECT AT ALL TIMES THE BUILDING INTERIOR, EXTERIOR, & GROUNDS. ANY DAMAGED ITEMS THAT RESULTED FROM, AND DURING, ROOFING INSTALLATION SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER AND INCLUDES BUT IS NOT LIMITED TO DEBRIS, WATER LEAKS, ETC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN A WEATHER TIGHT ROOF AT ALL TIMES.
4. THE NEW ROOF FLASHING SHALL EXTEND A FULL 12" ALONG ALL ADJOINING VERTICAL SURFACES AS RECOMMENDED BY THE MANUFACTURER. THE CONTRACTOR SHALL VERIFY THE HEIGHTS OF COUNTER FLASHING PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL LABOR AND MATERIALS AS REQUIRED TO MAKE ADJUSTMENTS & REMOVE AND REINSTALL SIDING MATERIALS AS REQUIRED.
5. CONTRACTOR SHALL FOLLOW MANUFACTURER, NCRA, AND OTHER PERTINENT ROOFING STANDARDS FOR THIS WORK.
6. THE METAL DRIP EDGE SHALL BE OF UNIFORM LENGTH AND LEVEL AROUND THE ENTIRE PERIMETER.
7. CONTRACTOR SHALL FIELD MEASURE AND VERIFY ALL ROOFING MATERIAL QUANTITIES PRIOR TO PURCHASING ROOFING MATERIAL.
8. COORDINATE THE WORK REQUIRED ON THIS DRAWING WITH ALL STRUCTURAL, ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS, AND SPECIFICATIONS.
9. THE DETAILS ON THE FOLLOWING SHEETS ARE TYPICAL MANUFACTURER DETAILS, CONDITIONS WHICH MAY OR MAY NOT APPLY TO ALL BUILDINGS CONDITIONS. ADDITIONAL DETAILS MAY BE REQUIRED FROM THE MANUFACTURER FOR SPECIFIC FIELDS CONDITIONS.
10. ROOF UNDERLAYMENT SHALL BE APPLIED WITH CORROSION - RESISTANT FASTENERS IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. FASTENERS ARE TO BE APPLIED ALONG THE OVERLAP AT A MAXIMUM SPACING OF 36 INCHES ON CENTER AS PER IBC SECTION 1507.2.8.1



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

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD 1792 PAX ET PROSPERITAS PER PROGRESSUM

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ROOF PLAN

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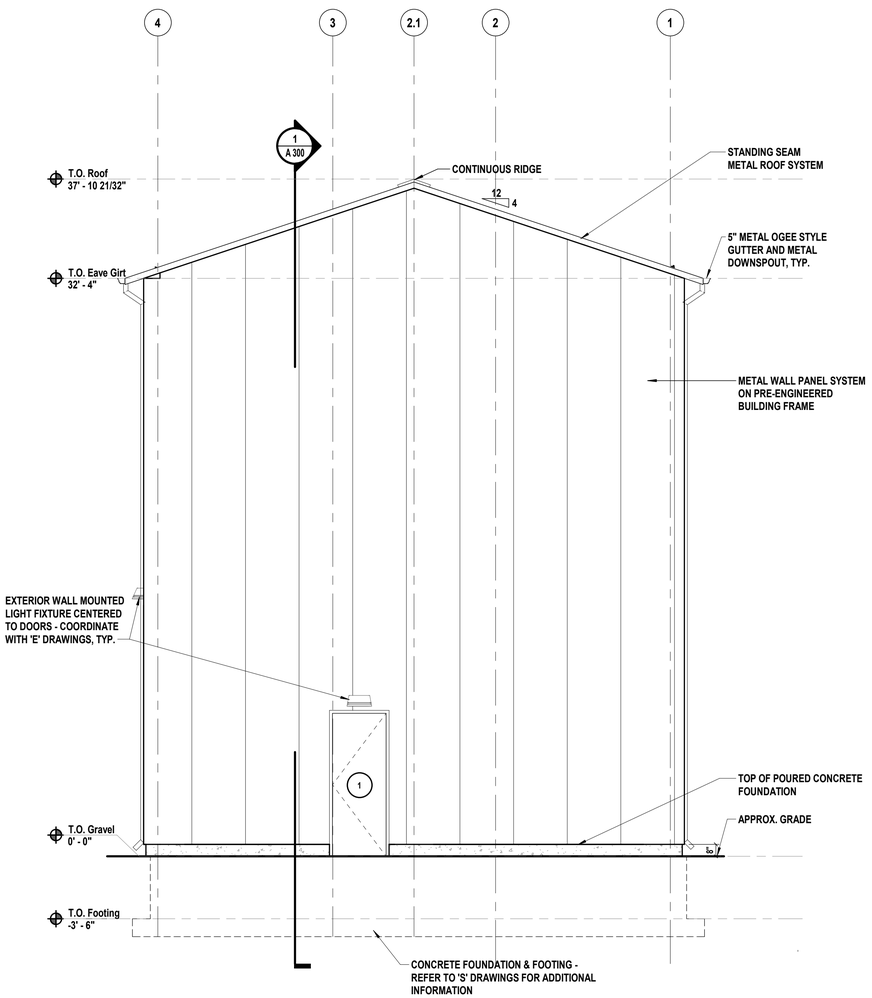
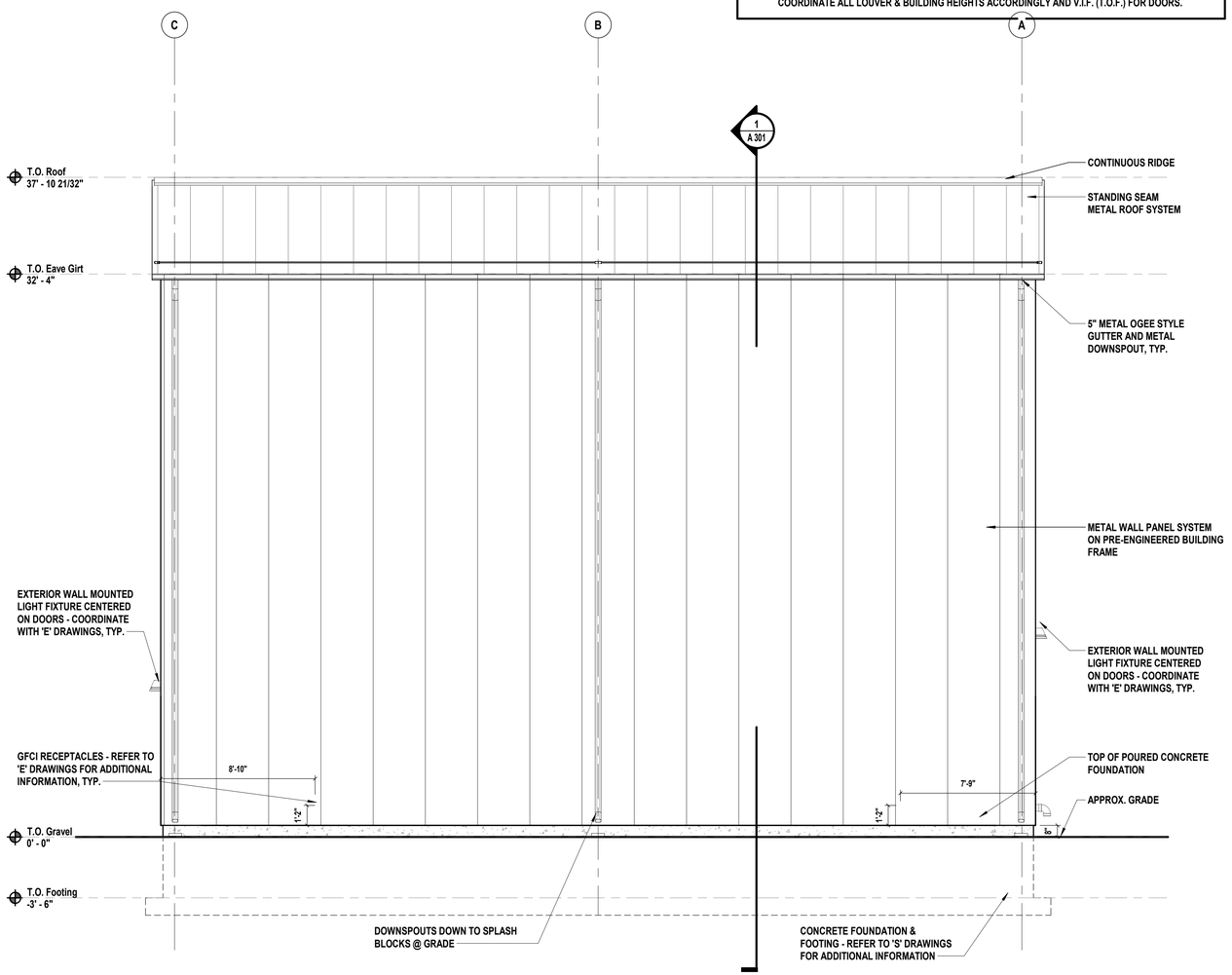
GENERAL ELEVATION NOTES:

1. FOR ALL DOORS DENOTED AS (~) SEE DOOR SCHEDULE AND DETAILS ON DRAWING A 500 AND A 600 FOR ADDITIONAL INFORMATION.
2. ALL EXTERIOR PREFABRICATED METAL PANEL WALL AND ROOF SYSTEMS SHALL BE PRE-FINISHED BY THE MANUFACTURER.
3. COORDINATE THE WORK INDICATED HERE WITH ALL CONTRACT DOCUMENTS AND SPECIFICATIONS.
4. ACCOMMODATE THE CONSTRUCTION TO ACCEPT ALL PIPING, CONDUITS, EQUIPMENT, ETC., EITHER SPECIFIED OR DETAILED TO BE RECESSED OR CONCEALED IN ALL WALL TYPES AS REQUIRED. COORDINATE THE LOCATION OF ANY RECESSED OR CONCEALED ITEMS WITH ALL TRADES.
5. COORDINATE THE WORK REQUIRED ON THIS DRAWING WITH ALL CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
6. FINISHED FIRST FLOOR ELEVATION IS 0'-0" UNLESS NOTED OTHERWISE.
7. CONTRACTOR SHALL TOUCH UP PAINT ALL PREFINISHED PREMANUFACTURED BUILDING COMPONENTS AS NECESSARY.
8. CONTRACTOR SHALL NOTE THAT TOP OF FOUNDATION (T.O.F.) IS 8" A.F.F. CONTRACTOR SHALL COORDINATE ALL LOUVER & BUILDING HEIGHTS ACCORDINGLY AND V.I.F. (T.O.F.) FOR DOORS.



1 **East Elevation**
SCALE: 1/4" = 1'-0"



2 **North Elevation**
SCALE: 1/4" = 1'-0"

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD 1792 PAX ET PROSPERITAS PER PROGRESSUM

162 Middle Road
Riverhead, NY 11901

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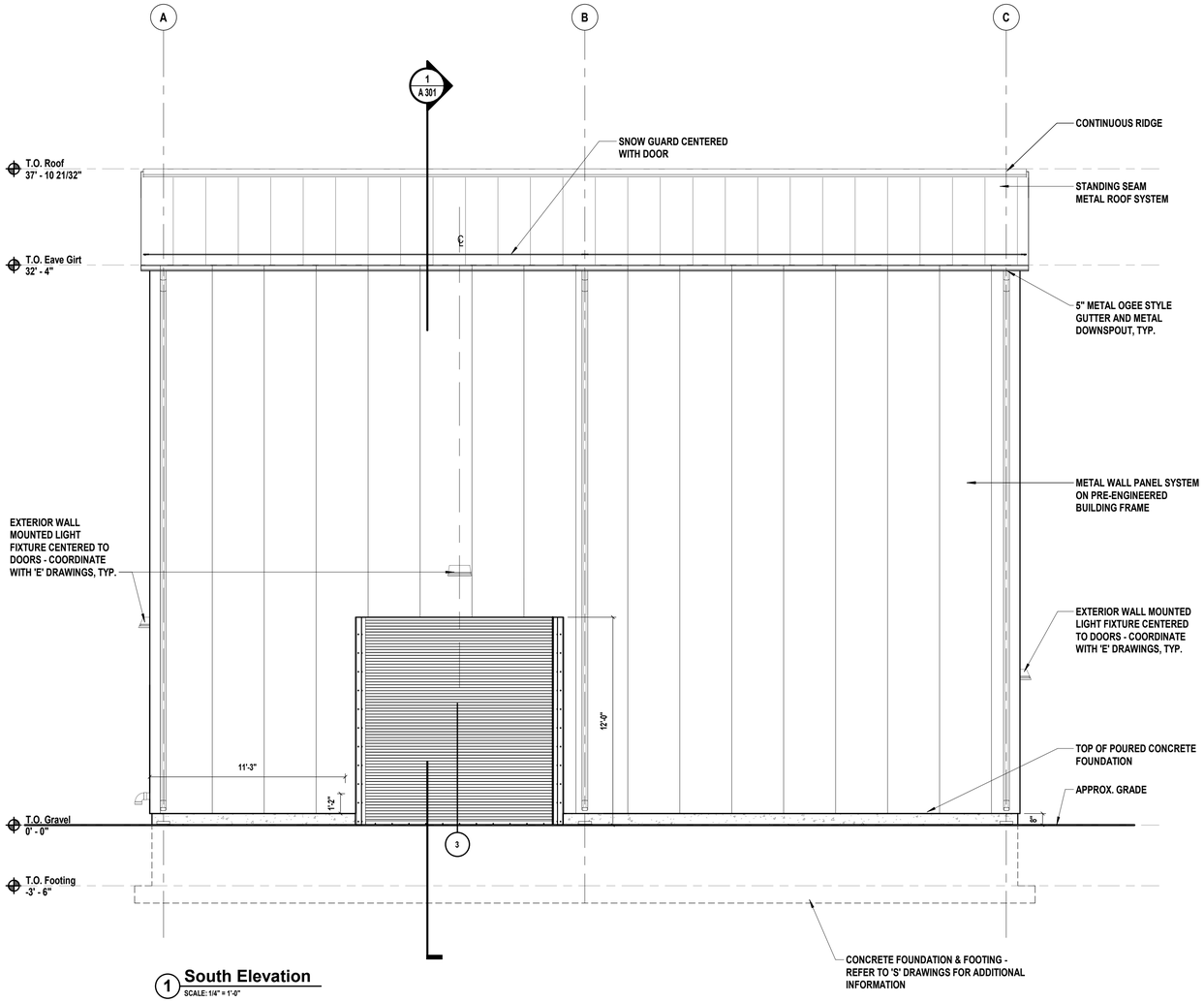
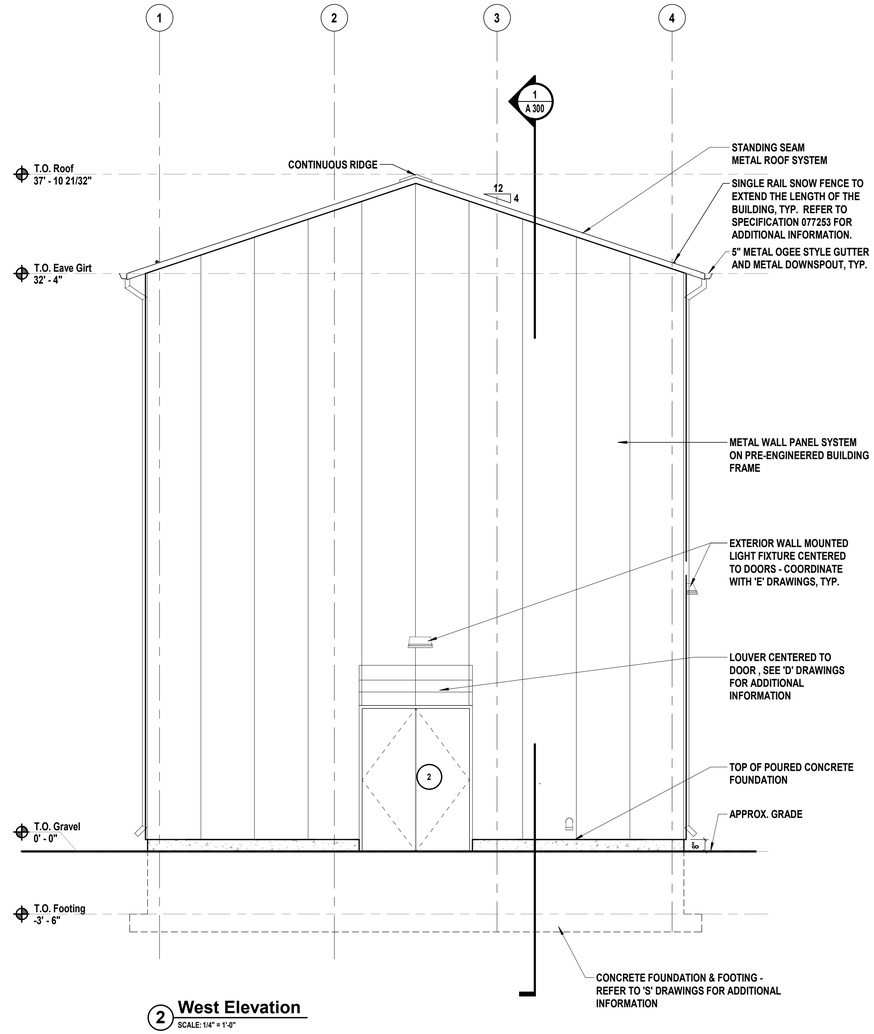
GENERAL ELEVATION NOTES:

1. FOR ALL DOORS DENOTED AS (-) SEE DOOR SCHEDULE AND DETAILS ON DRAWING A 500 AND A 600 FOR ADDITIONAL INFORMATION.
2. ALL EXTERIOR PREFABRICATED METAL PANEL WALL AND ROOF SYSTEMS SHALL BE PRE-FINISHED BY THE MANUFACTURER.
3. COORDINATE THE WORK INDICATED HERE WITH ALL CONTRACT DOCUMENTS AND SPECIFICATIONS.
4. ACCOMMODATE THE CONSTRUCTION TO ACCEPT ALL PIPING, CONDUITS, EQUIPMENT, ETC., EITHER SPECIFIED OR DETAILED TO BE RECESSED OR CONCEALED IN ALL WALL TYPES AS REQUIRED. COORDINATE THE LOCATION OF ANY RECESSED OR CONCEALED ITEMS WITH ALL TRADES.
5. COORDINATE THE WORK REQUIRED ON THIS DRAWING WITH ALL CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
6. FINISHED FIRST FLOOR ELEVATION IS 0'-0" UNLESS NOTED OTHERWISE.
7. CONTRACTOR SHALL TOUCH UP PAINT ALL PREFINISHED PREMANUFACTURED BUILDING COMPONENTS AS NECESSARY.
8. CONTRACTOR SHALL NOTE THAT TOP OF FOUNDATION (T.O.F.) IS 8" A.F.F. CONTRACTOR SHALL COORDINATE ALL LOUVER & BUILDING HEIGHTS ACCORDINGLY AND V.I.F. (T.O.F.) FOR DOORS.



1 **South Elevation**
SCALE: 1/4" = 1'-0"



2 **West Elevation**
SCALE: 1/4" = 1'-0"

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REGISTERED ARCHITECT ROBERT E. IKEN III STATE OF NEW YORK

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

162 Middle Road
Riverhead, NY 11901

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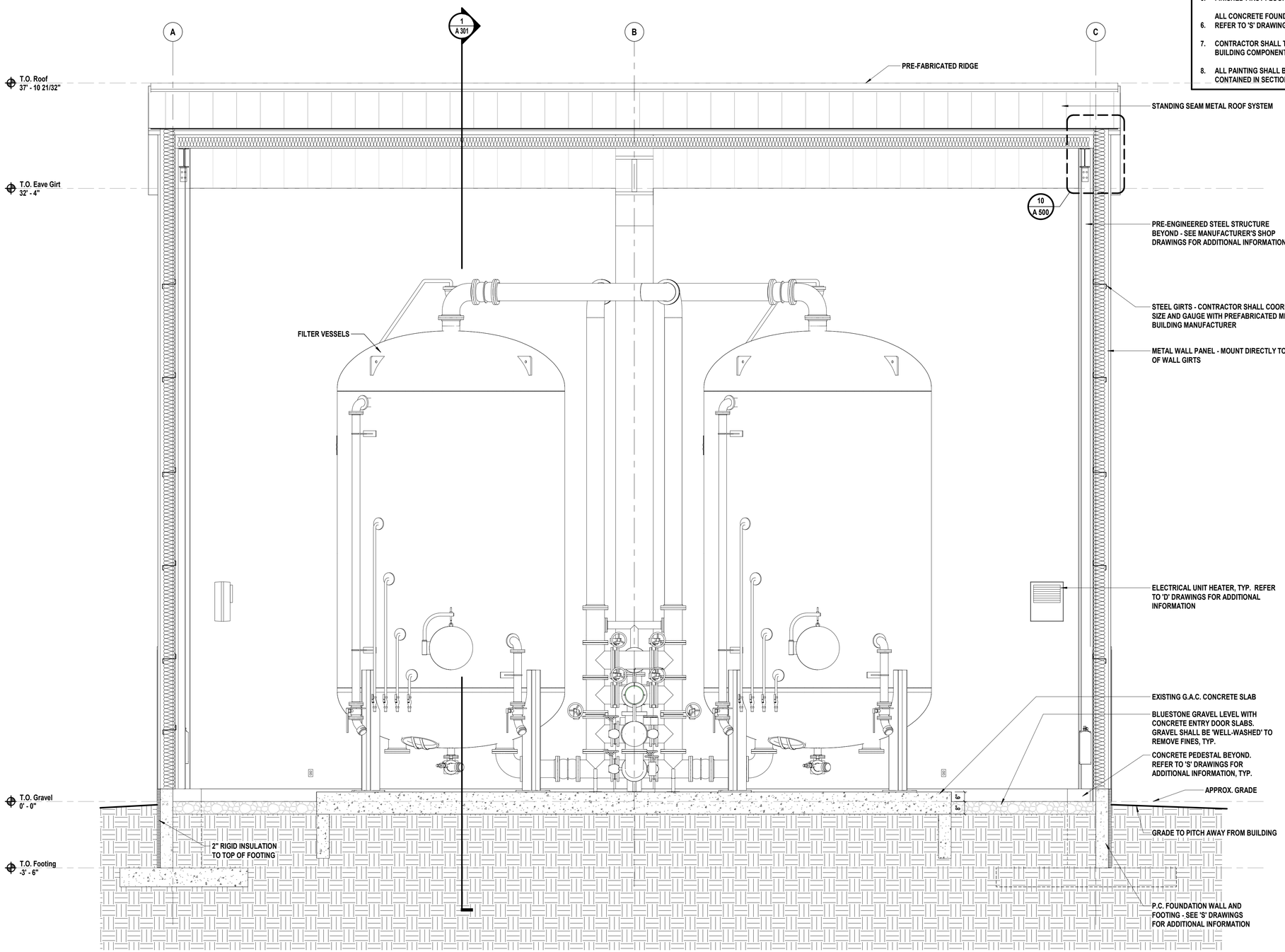

1 **Building Section - North Facing**
SCALE: 3/8" = 1'-0"

GENERAL SECTION NOTES:

1. ALL EXTERIOR PREFABRICATED METAL PANEL WALL AND ROOF SYSTEMS SHALL BE PRE-FINISHED BY THE MANUFACTURER.
2. COORDINATE THE WORK INDICATED HERE WITH ALL CONTRACT DOCUMENTS AND SPECIFICATIONS.
3. ACCOMMODATE THE CONSTRUCTION TO ACCEPT ALL PIPING, CONDUITS, EQUIPMENT, ETC., EITHER SPECIFIED OR DETAILED TO BE RECESSED OR CONCEALED IN ALL WALL TYPES AS REQUIRED. COORDINATE THE LOCATION OF ANY RECESSED OR CONCEALED ITEMS WITH ALL TRADES.
4. COORDINATE THE WORK REQUIRED ON THIS DRAWING WITH ALL CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
5. FINISHED FIRST FLOOR ELEVATION IS 0'-0" UNLESS NOTED OTHERWISE.
6. ALL CONCRETE FOUNDATIONS ARE SHOWN FOR DIAGRAMATIC PURPOSES ONLY. REFER TO 'S' DRAWINGS FOR SIZES, DEPTHS AND REINFORCING INFORMATION.
7. CONTRACTOR SHALL TOUCH UP PAINT ALL PREFINISHED PREMANUFACTURED BUILDING COMPONENTS AS NECESSARY.
8. ALL PAINTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN SECTION 099100 OF THE PROJECT MANUAL.

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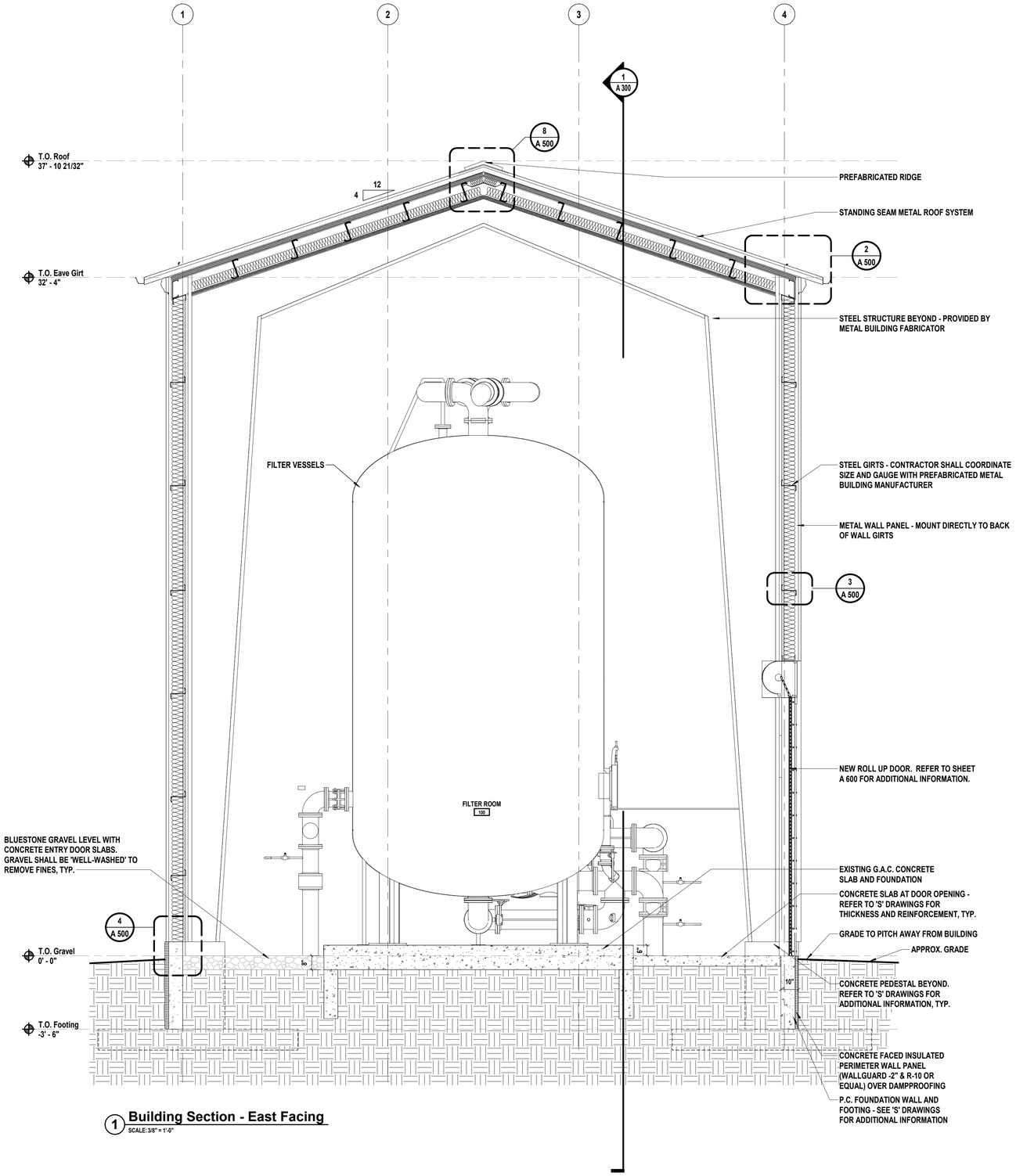

1 Building Section - East Facing
SCALE: 3/8" = 1'-0"

GENERAL SECTION NOTES:

1. ALL EXTERIOR PREFABRICATED METAL PANEL WALL AND ROOF SYSTEMS SHALL BE PRE-FINISHED BY THE MANUFACTURER.
2. COORDINATE THE WORK INDICATED HERE WITH ALL CONTRACT DOCUMENTS AND SPECIFICATIONS.
3. ACCOMMODATE THE CONSTRUCTION TO ACCEPT ALL PIPING, CONDUITS, EQUIPMENT, ETC., EITHER SPECIFIED OR DETAILED TO BE RECESSED OR CONCEALED IN ALL WALL TYPES AS REQUIRED. COORDINATE THE LOCATION OF ANY RECESSED OR CONCEALED ITEMS WITH ALL TRADES.
4. COORDINATE THE WORK REQUIRED ON THIS DRAWING WITH ALL CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
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8. ALL PAINTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN SECTION 099100 OF THE PROJECT MANUAL.

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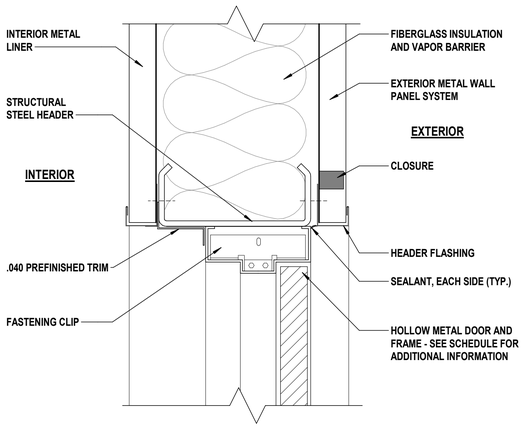
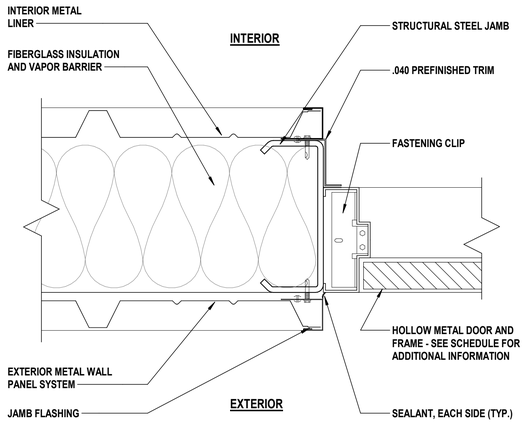
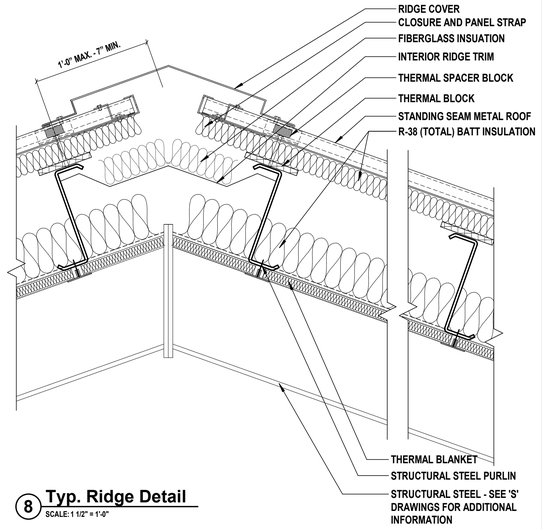


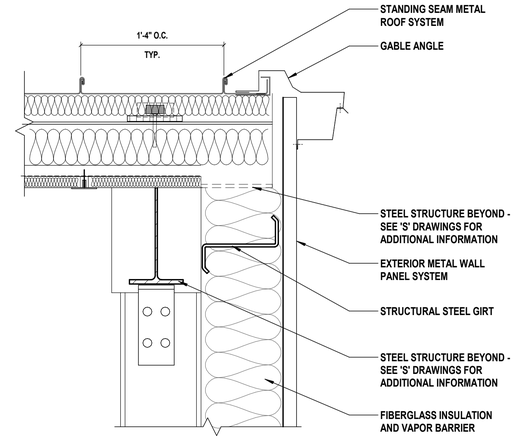
1 Door Head Detail
SCALE: 3" = 1'-0"



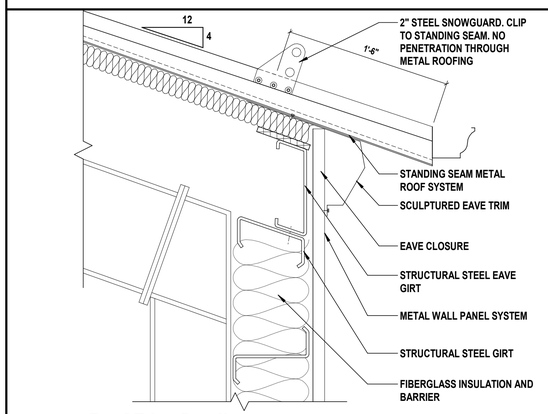
5 Door Jamb Detail
SCALE: 3" = 1'-0"



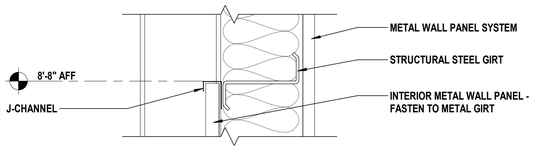
8 Typ. Ridge Detail
SCALE: 1 1/2" = 1'-0"



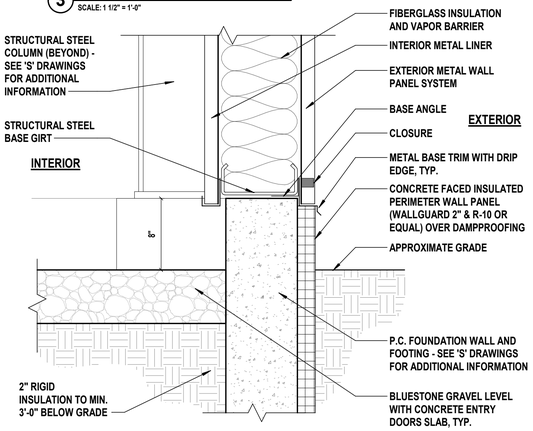
10 Gable End Detail
SCALE: 1 1/2" = 1'-0"



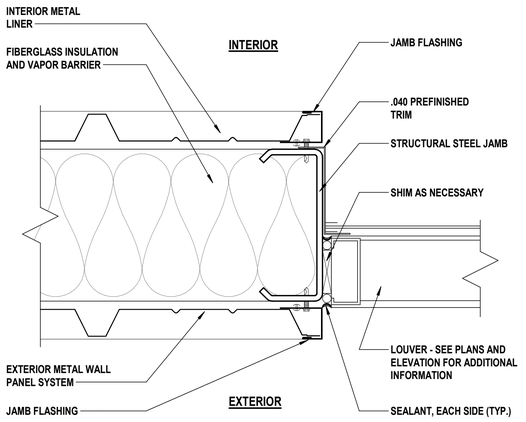
2 Roof Edge Detail
SCALE: 1 1/2" = 1'-0"



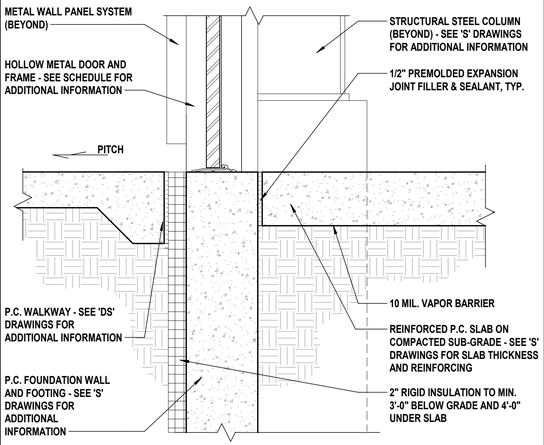
3 Interior Wall Panel Detail
SCALE: 1 1/2" = 1'-0"



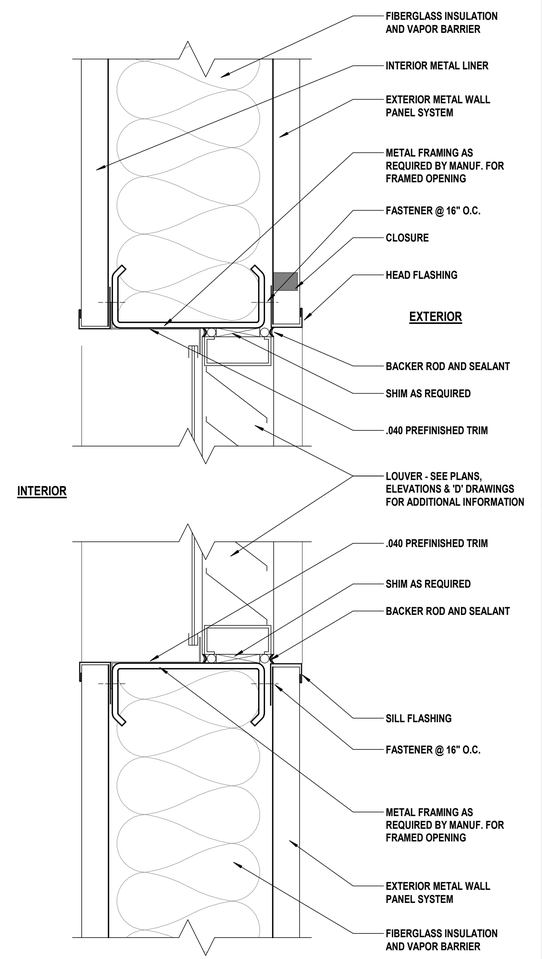
4 Typ. Wall Base Detail
SCALE: 1 1/2" = 1'-0"



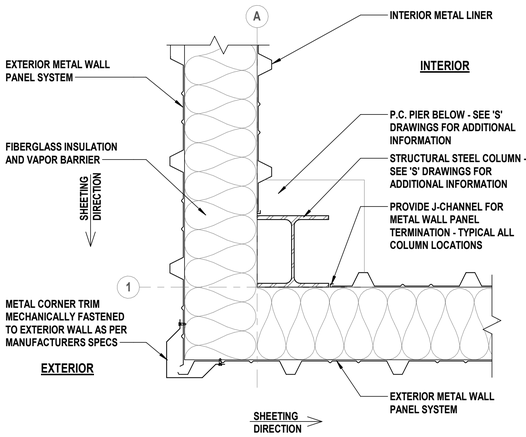
6 Louver Jamb Detail
SCALE: 3" = 1'-0"



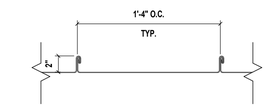
7 Door Transition Detail
SCALE: 1 1/2" = 1'-0"



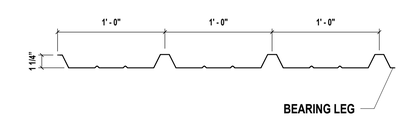
9 Louver Head & Sill Detail
SCALE: 3" = 1'-0"



11 Typ. Corner Wall Detail
SCALE: 1 1/2" = 1'-0"



12 Typical Roof Panel Detail
SCALE: 1 1/2" = 1'-0"



13 Typical Wall Panel Profile
SCALE: 1 1/2" = 1'-0"

H 2 M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION
1	11/01/21	ADDENDUM NO. 1

REGISTERED ARCHITECT ROBERT E. IKES III No. 029645 STATE OF NEW YORK

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PROJECT No:	DATE:	SCALE:
RDWD2102	OCTOBER 2021	AS SHOWN

CLIENT

Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD 1792 PAX ET PROSPERITAS PER PROGRESSUM

162 Middle Road
Riverhead, NY 11901

CONTRACT

CONTRACT M
PFAS TREATMENT SYSTEM

STATUS

FINAL BID DOCUMENT

SHEET TITLE

DETAILS

DRAWING No.

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DOOR SCHEDULE

DOOR NO.	ROOMS NAME	DOOR SIZE WIDTH X HEIGHT	DOOR SIZE THICKNESS	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	DETAILS HEAD	DETAILS JAMB	DETAILS SADDLE	FIRE RATING	HARDWARE SET	COMMENTS
1	FILTER ROOM	36"x 96"	1 3/4"	01	HM	PT.	01	HM	PT.	1/A 500	5/A 500	S-1/A 600	N/A	1	
2	FILTER ROOM	(2) 36"x 96"	1 3/4"	02	HM	PT.	02	HM	PT.	1/A 500	5/A 500	S-1/A 600	N/A	2	
3	FILTER ROOM	144"x 144"	0"	03	ALUM.	-	-	ALUM.	-	-	-	-	N/A	-	ROLL UP INSULATED WITH MOTOR AND MANUAL CHAIN OPERATION

FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR MATL.	FLOOR FIN.	WALLS NORTH MATL.	WALLS NORTH FIN.	WALLS EAST MATL.	WALLS EAST FIN.	WALLS SOUTH MATL.	WALLS SOUTH FIN.	WALLS WEST MATL.	WALLS WEST FIN.	CEILING MATL.	CEILING FIN.	COMMENTS
100	FILTER ROOM	CONC./GRAVEL	- / -	PREFAB	PRE-FIN	PREFAB	PRE-FIN	PREFAB	PRE-FIN	PREFAB	PRE-FIN	PREFAB	PRE-FIN	

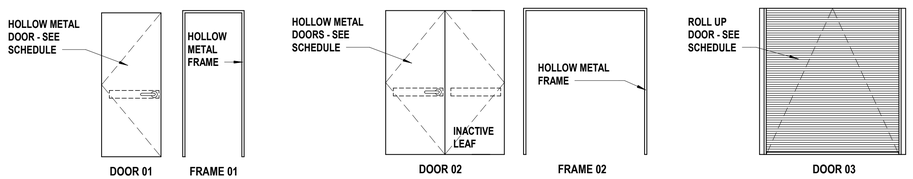
GENERAL DOOR NOTES:

1. ALL DOORS SHALL BE SET AT FINISHED FLOOR ELEVATION 0'-0".
2. ALL DOORS ARE TO BE SELF CLOSING.
3. ALL DOORS ARE TO RECEIVE PANIC DEVICE HARDWARE.
4. ALL DOORS ARE TO BE WEATHERSTRIPPED.
5. ALL DOORS ARE TO BE INSULATED.
6. PAINTING OF DOORS SHALL BE PERFORMED IN ACCORDANCE WITH OWNER PREFERENCE AND THE REQUIREMENTS CONTAINED IN SECTION 099100 OF THE PROJECT MANUAL.
7. DOOR HARDWARE SHALL BE INSTALLED IN ACCORDANCE WITH REQUIREMENTS CONTAINED IN SECTION 087100 OF THE PROJECT MANUAL.

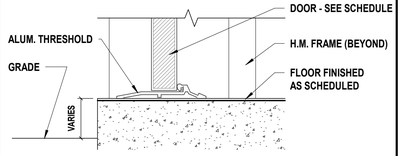
DOOR ABBREVIATIONS

HM = HOLLOW METAL PT = PAINT

DOOR AND FRAME TYPES (NOT TO SCALE)



DOOR SADDLES



S-1 Saddle Detail

GENERAL FINISH NOTES:

1. THE FINISH SCHEDULE SERVES AS A GENERAL LIST OF FINISH ITEMS AND IS NOT A LIST OF ALL FINISH ITEMS WITHIN A ROOM OR SPACE. REFER TO ALL CONTRACT DOCUMENTS, DRAWINGS AND SPECIFICATIONS TO DETERMINE ALL REQUIRED FINISHES AND FINISH ITEMS.
2. ALL STRUCTURAL STEEL SHALL BE PRE-FINISHED BY PREFABRICATED BUILDING MANUFACTURER.

FINISH ABBREVIATIONS:

CONC =	CONCRETE
PREFAB =	PREFABRICATED METAL
PRE-FIN =	PREFINISHED METAL

H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

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1	11/01/21	ADDENDUM NO. 1

REGISTERED ARCHITECT ROBERT E. IKES III 029684 STATE OF NEW YORK

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PROJECT No:	DATE:	SCALE:
RDWD2102	OCTOBER 2021	AS SHOWN

CLIENT

Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD 1792 PAX ET PROSPERITAS FER PROGRESSUM

162 Middle Road
Riverhead, NY 11901

CONTRACT

CONTRACT M
PFAS TREATMENT SYSTEM

STATUS

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SHEET TITLE

DOOR AND FINISH SCHEDULES, DETAILS AND NOTES

DRAWING No.

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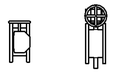
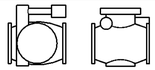
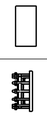
LARGE PIPING VALVE LEGEND

IMAGE	VALVE
	FLANGED MANUALLY OPERATED BUTTERFLY VALVE
	FLANGED STATIC MIXER
	FLANGED SWING ARM CHECK VALVE
	FLANGED WAFER CHECK VALVE
	FLANGED x PLAIN END (FLGxPE) PIPE COUPLING
	LUG STYLE BUTTERFLY VALVE

LARGE PIPING FITTING LEGEND

IMAGE	FITTING
	FLANGED ELBOW
	FLANGED REDUCER
	FLANGED TEE

EXHAUST FANS

EQUIPMENT NO.	LOCATION	AIR FLOW (CFM)	EXT S.P. (IN W.G.)	FAN RPM	BHP	DRIVE TYPE	FAN TYPE	MANUFACTURER	MODEL NO.	NOMINAL DIMENSIONS L x W x H (IN.)	NOMINAL OPERATING WEIGHT (LBS.)	NOMINAL WALL OPENING (IN.)	VOLTAGE/ PHASE	MOTOR HP	MOTOR RPM	INLET SOUND POWER DATA (SONES)
EF-1	GAC BUILDING	5,800	3/8"	987	0.91	BELT DRIVE	SIDEWALL PROPELLER	AMERICAN COOLAIR	CBL24K	32 x 32 x 12 5/8	93	24x24	208/1	3/4	1750	25

UNIT HEATERS

EQUIPMENT NO.	LOCATION	AIR FLOW (CFM)	MOTOR HP	THROW (FT.)	TOTAL OUTPUT CAPACITY (MBH)	INLET PRESSURE (IN W.C.)	MIN. BURNER EFFICIENCY	CONTROL STAGES	kW	MANUFACTURER	MODEL NO.	NOMINAL DIMENSIONS L x W x H (IN.)	NOMINAL OPERATING WEIGHT (LBS.)	VOLTAGE/PHASE
UH-1	GAC BUILDING	850	1/15	27	24.6	5/14	82	1	7.5	CHROMALOX	HVH-07-43-30	12-3/4 x 17-1/8 x 20-5/8	50	480/3
UH-2	GAC BUILDING	850	1/15	27	24.6	5/14	82	1	7.5	CHROMALOX	HVH-07-43-30	12-3/4 x 17-1/8 x 20-5/8	50	480/3
UH-3	GAC BUILDING	850	1/15	27	24.6	5/14	82	1	7.5	CHROMALOX	HVH-07-43-30	12-3/4 x 17-1/8 x 20-5/8	50	480/3
UH-4	GAC BUILDING	850	1/15	27	24.6	5/14	82	1	7.5	CHROMALOX	HVH-07-43-30	12-3/4 x 17-1/8 x 20-5/8	50	480/3

LOUVERS

EQUIPMENT NO.	LOCATION	AIR FLOW (CFM)	MAX. PD (IN. W.C.)	MIN. FREE AREA REQUIRED (SQ. FT.)	OVERALL NOMINAL DIMENSIONS W x H (IN.)	SERVICE	MNF	MODEL NO.
L-1	GAC BUILDING	5,800	0.09	7.38	74 x 28	INTAKE	GREENHECK	ESD-635

PROCESS NOTES:

1. THE CONTRACTOR SHALL SUPPORT AND ANCHOR ALL EXPOSED PIPING IN ACCORDANCE WITH THE SPECIFICATIONS. WHERE METHODS OF SUPPORT ARE SHOWN, SUCH METHODS SHALL BE CONSIDERED AS SUGGESTED. SUCH SUGGESTED METHODS SHALL NOT RELIEVE THE CONTRACTOR FROM INSTALLING ALL PIPING IN ACCORDANCE WITH SPECIFIED REQUIREMENTS.
2. THE CONTRACTOR SHALL PROVIDE JOINT RESTRAINT FOR ALL FLANGED ADAPTERS. EACH FLANGED ADAPTER SHALL BE TIE RODDED UTILIZING 3/4"Ø STEEL THREADED ROD. INSTALL TWO (2) RODS PER JOINT, EQUALLY SPACED, AND RODDED BACK TO THE NEAREST FLANGED JOINT. ALL NUTS SHALL BE STAINLESS STEEL. INSTALL JAM NUTS. THE CONTRACTOR'S METHOD OF INSTALLING RODS SHALL BE MECHANICALLY RESTRAINED.
3. PROCESS IDENTIFICATION SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS. VALVE DESIGNATIONS AND EQUIPMENT NAMES SHALL BE AS SHOWN ON PROCESS DRAWINGS.
4. ALL MEASUREMENT AND CONTROL PRIMARY ELEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. MAINTAIN MANUFACTURER'S REQUIRED DISTANCE UPSTREAM AND DOWNSTREAM BETWEEN FLOW METERS AND PIPING ELEMENTS SUCH AS FITTINGS AND VALVES. SHOW SEPARATION DISTANCES ON PIPING LAYOUT DRAWINGS SPECIFIED TO BE PROVIDED.
5. ALL REDUCERS ARE TO BE CONCENTRIC, UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL SUBMIT, FOR ENGINEER'S REVIEW AND APPROVAL, PIPING LAYOUT DRAWINGS TO A SCALE OF ¼"=1'-0". THE CONTRACTOR SHALL NOT INSTALL INSERTS IN CONCRETE OR BOX FOR WALL AND DECK OPENINGS UNTIL THE LOCATIONS AND ELEVATIONS OF ALL SLAB AND WALL PENETRATIONS HAVE BEEN VERIFIED AND CHECKED FOR ACCURACY BY THE CONTRACTOR. THE LOCATIONS OF WALL SLEEVES, OPENINGS AND OTHER CONCRETE INSERTS SHOWN ON THE DRAWINGS ARE BASED ON EQUIPMENT AND VALVES WHICH MAY OR MAY NOT HAVE DIMENSIONS EQUAL TO THAT BEING USED FOR THE PROJECT. LAYOUT DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE SPECIFICATIONS. THE LAYOUT DRAWINGS SHALL USE THE DIMENSIONS OF EQUIPMENT AND VALVES BEING USED FOR THE PROJECT OR PROVISIONS SHALL BE MADE TO ACCOUNT FOR DIMENSIONAL DIFFERENCES IN EQUIPMENT. THE CONTRACTOR SHALL SUBMIT THE LAYOUT DRAWINGS FAR ENOUGH IN ADVANCE SO THAT CONCRETE INSERTS CAN BE ORDERED AND INSTALLED IN SEQUENCE AND IN ACCORDANCE WITH THE CONSTRUCTION SCHEDULE. PREPARE PIPE LAYOUT DRAWINGS AND SUBMIT DETAILS OF SUPPORT FOR ALL PROCESS PIPING, BOTH BURIED AND EXPOSED, WITH A DIAMETER EQUAL TO OR GREATER THAN 6".
7. ALL MECHANICAL JOINT FITTINGS SHALL BE PROVIDED WITH THRUST BLOCKING AS DETAILED ON THE DRAWINGS. IN ADDITION TO THRUST BLOCKING, EACH MECHANICAL JOINT SHALL BE MECHANICALLY RESTRAINED.
8. CORE DRILL FLOORS AND WALLS TO INSTALL SMALL PIPING AS REQUIRED. UNLESS SPECIFICALLY DIMENSIONED ON THE DRAWINGS, VERIFY LOCATIONS OF CORE DRILLING WITH ENGINEER PRIOR TO DRILLING.
9. SINGLE LINE REPRESENTATIONS OF SMALL PIPING ARE DIAGRAMMATIC AND ARE NOT SHOWN TO SCALE.
10. CONTRACTOR SHALL PROVIDE AND COORDINATE THE INSTALLATION OF ALL ACCESS PANELS THAT ARE NEEDED TO ACCESS OR SERVICE ITEMS INSTALLED AS PART OF THEIR SCOPE OF WORK.
11. ALL PROCESS EQUIPMENT, LARGE AND SMALL PIPING, VALVES AND APPURTENANCES CALLED OUT OR SHOWN ON PROCESS DRAWINGS ARE TO BE FURNISHED AND INSTALLED NEW BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
12. CONTRACTOR SHALL FURNISH AND INSTALL NEW SPOOL PIECES AND SPACERS, WITH LENGTHS AND DIMENSIONS AS REQUIRED, TO COMPLETE PIPING SYSTEMS SHOWN ON PROCESS DRAWINGS.
13. UNUSED MANUFACTURER SUPPLIED FIELD SERVICES SHALL BE CREDITED TO THE OWNER AS SPECIFIED.
14. CONSTRUCT THRUST BLOCKS WHERE SHOWN ON THE DRAWINGS. DOWEL THRUST BLOCKS INTO SLAB AS SPECIFIED.
15. ALL NEW PIPING SHALL BE PREPARED, PRIMED AND PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL COLORS SHALL BE AS APPROVED BY THE OWNER/ENGINEER.
16. POUR CONCRETE SUPPORT PEDESTALS FOR ALL PIPING IN LOCATIONS SHOWN ON THE PLAN SHEETS. HEIGHT AS REQUIRED TO SUPPORT PIPING. PEDESTALS SHALL BE POURED USING A BAG MIX AND DOWELED INTO THE SLAB WITH FOUR (4) 5/8"Ø THREADED ROD WITH A MINIMUM PROJECTION OF 6" EQUALLY SPACED.

PIPING SCHEDULE

ABBREVIATION	DESCRIPTION	MATERIAL
BI	BACKWASH INFLUENT	CLASS 150 FLANGED C.L.D.I.
BO	BLOW-OFF	CLASS 150 FLANGED C.L.D.I.
CWP	COLD WATER (PROTECTED)	TYPE K COPPER
CWU	COLD WATER (UNPROTECTED)	TYPE K COPPER
DR	DRAIN	SCHEDULE 40 PVC
EF	PROCESS EFFLUENT	CLASS 150 FLANGED C.L.D.I.
IN	PROCESS INFLUENT	CLASS 150 FLANGED C.L.D.I.
SP	SAMPLING LINE	S.S. TUBING
WD	WELL DISCHARGE	CLASS 150 FLANGED C.L.D.I.

ABBREVIATIONS

ABBREVIATION	DEFINITION
%	PERCENT
@	AT
A.F.F.	ABOVE FINISHED FLOOR
C.L.D.I.	CEMENT-LINED DUCTILE IRON
CFM	CUBIC FEET PER MINUTE
DCV	DOUBLE CHECK VALVE
FLG	FLANGED
FPT	FEMALE PIPE THREAD
FRP	FIBERGLASS REINFORCED PLASTIC
GAC	GRANULAR ACTIVATED CARBON
GHS	GLOBALLY HARMONIZED SYSTEM
HP	HORSE POWER
I.D.	INSIDE DIAMETER
MAX.	MAXIMUM
MIN.	MINIMUM
MPT	MALE PIPE THREAD
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NO.	NUMBER
NPT	NATIONAL PIPE THREAD
O.C.	ON CENTER
O.C.E.W.	ON CENTER EACH WAY
O.D.	OUTSIDE DIAMETER
PE	PLAIN END
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RPZ	REDUCED PRESSURE ZONE DEVICE
S.S.	STAINLESS STEEL
T&B	TOP AND BOTTOM
T&C	THREADED AND COUPLED
TYP.	TYPICAL
W/	WITH
°	DEGREES
±	PLUS OR MINUS, APPROXIMATELY
Ø	DIAMETER

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Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION
1	10/28/21	ADDENDUM NO. 1

STATE OF NEW YORK · JOHN R. COLLINS · LICENSED PROFESSIONAL ENGINEER · NO. 086205

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PROJECT No:	DATE:	SCALE:
RDWD2102	OCTOBER 2021	AS SHOWN

CLIENT

Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD · 1792 · PAX ET PROSPERITAS · PER PROGRESSUM

162 Middle Road
Riverhead NY, 11901

CONTRACT

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PFAS TREATMENT SYSTEM

STATUS

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PROCESS NOTES AND LEGENDS

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PROCESS EQUIPMENT AND VALVE SYMBOLS

VALVES AND PIPE ACCESSORIES

- TAS — ANTI-SIPHON VALVE
- AV — AUTOMATIC AIR VENT/AIR RELEASE VALVE
- BALL VALVE
- TBPV — BACK PRESSURE VALVE
- ?-?? — BUTTERFLY VALVE
- ?-?? NC — BUTTERFLY VALVE (NORMALLY CLOSED)
- CHECK VALVE
- ZS — CHECK VALVE W/ LIMIT SWITCH
- CONTROL VALVE
- ZS — CONTROL VALVE W/ LIMIT SWITCH
- DOUBLE CHECK VALVE
- GATE VALVE
- ?-?? — MOTORIZED BALL VALVE
- ?-?? NC — MOTORIZED BALL VALVE (NORMALLY CLOSED)
- ?-?? — MOTORIZED BUTTERFLY VALVE
- ?-?? NC — MOTORIZED BUTTERFLY VALVE (NORMALLY CLOSED)
- PLUG VALVE
- PRESSURE REDUCING VALVE
- ZS — PRESSURE RELIEF VALVE W/ LIMIT SWITCH
- RPZ DEVICE
- SOLENOID VALVE
- WYE STRAINER
- CHEMICAL INJECTION POINT
- D — DIELECTRIC UNION
- DUPLEX STRAINER
- FILTER AND STRAINER
- PG — PRESSURE GAUGE AND COCK
- RUPTURE DISC
- ??-? — SAMPLE POINT
- SIGHT GLASS
- STATIC MIXER

DUCT AND DUCT ACCESSORIES

- AIR FILTER
- AIR — AIRFLOW MONITORING STATION
- DUCT HEATER
- DUCT TRANSITION
- DUCT WORK
- FLEXIBLE DUCT CONNECTOR
- ?-?? VD — MOTORIZED VOLUME DAMPER
- ?-?? VD NC — MOTORIZED VOLUME DAMPER (NORMALLY CLOSED)
- VD — VOLUME DAMPER

PROCESS CONTROL SYMBOLS

- CL — CHLORINE ANALYZER
- S/m — CONDUCTIVITY ANALYZER
- DPG — DIFFERENTIAL PRESSURE GAUGE
- DPS — DIFFERENTIAL PRESSURE SWITCH
- DPT — DIFFERENTIAL PRESSURE TRANSMITTER
- FS — FLOW SWITCH
- FT — FLOW TRANSMITTER
- FL — FLUORIDE ANALYZER
- H2O2 — HYDROGEN PEROXIDE ANALYZER
- HTT — HUMIDITY AND TEMPERATURE TRANSMITTER
- LS — LEVEL SWITCH
- LT — LEVEL TRANSMITTER
- ZS — LIMIT SWITCH
- NO3 — NITRATE ANALYZER
- pH — pH ANALYZER
- PO4 — PHOSPHATE ANALYZER
- PS — PRESSURE SWITCH
- PT — PRESSURE TRANSMITTER
- UVT — UV TRANSMITTANCE ANALYZER
- VOC — VOC ANALYZER

FLOW CONTROL

- MAG — ELECTROMAGNETIC FLOW METER
- ORIFICE PLATE
- TURBINE FLOW METER
- VENTURI FLOW METER

PROCESS EQUIPMENT

- AST — AIR STRIPPING TOWER
- BLOWER
- CENTRIFUGAL PUMP
- CLEARWELL ACCESS HATCH
- GAC — LIQUID PHASE CARBON ADSORPTION VESSEL
- IXP — ION EXCHANGE (PERCHLORATE) VESSEL
- OXF — OXIDATION AND FILTRATION VESSEL
- RECYCLE TANK
- BRINE TANK
- NO3 — ION EXCHANGE (NITRATE) VESSEL
- STRUCTURE
  STRUCTURE NAME
- VCA — VAPOR PHASE CARBON ADSORPTION UNIT
- WELL NO. ?? — VERTICAL LINESHAFT PUMP
- WELL NO. ?? — VERTICAL LINESHAFT PUMP (PITLESS ADAPTER)
- SUBMERSIBLE PUMP
- HYDI — CHEMICAL METERING PUMP
- GAC — DECHLORINATION UNIT
- GROUND STORAGE TANK
- VERTICAL CHEMICAL BULK STORAGE TANK
- HORIZONTAL CHEMICAL BULK STORAGE TANK
- UV/AOP REACTOR — UV/AOP REACTOR

LARGE PIPING FITTINGS

- BLIND FLANGE
- BLOW-OFF GOOSENECK
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- FLANGED CONNECTING PIPE JOINT
- FLEXIBLE CONNECTION
- PIPE PLUG
- QUICK CONNECTION COUPLING
- VENT

SERVICE ABBREVIATIONS

BO	BLOW-OFF
BI	BACKWASH INFLUENT
CA	COMPRESSED AIR CONNECTION
CF	CARBON FILL
DC	DISINFECTION CONNECTION
EF	PROCESS EFFLUENT
FC	FLUSH CONNECTION
FW	FINISHED WATER
H2O2	HYDROGEN PEROXIDE
HYDI	HYPOCHLORITE (DISINFECTION)
HYOX	HYPOCHLORITE (OXIDATION)
IN	PROCESS INFLUENT
NAOH	SODIUM HYDROXIDE
PR	PRESSURE RELIEF
PS	PRESSURE SENSING
RL	RECIRCULATION
SC	SPENT CARBON
SP	SAMPLING LINE
WD	WELL DISCHARGE
WT	WASTE WATER

NOMINAL SIZES

04	4"
06	6"
08	8"
10	10"
12	12"
14	14"
16	16"
20	20"
24	24"
30	30"
32	32"
34	34"
36	36"
38	38"
40	40"
42	42"
44	44"

PROCESS AREA ABBREVIATIONS

01	WELL DISCHARGE
02	HYPOCHLORITE TREATMENT (OXIDATION)
03	OXIDATION & FILTRATION
04	ION EXCHANGE (NITRATE)
05	PACKED TOWER AERATION
06	ION EXCHANGE (PERCHLORATE)
07	GRANULAR ACTIVATED CARBON ADSORPTION (LIQUID)
08	SODIUM HYDROXIDE TREATMENT (pH ADJUSTMENT)
09	HYPOCHLORITE TREATMENT (DISINFECTION)
10	FINISHED WATER
11	GRANULAR ACTIVATED CARBON ADSORPTION (VAPOR)
12	ADVANCED OXIDATION PROCESS (AOP)
13	HYDROGEN PEROXIDE

PROCESS DIAGRAM ANNOTATION SYMBOLS

SERVICE ABBREVIATION
PROCESS AREA
NOMINAL PIPE SIZE
06-01-BO — FLOW DIRECTION (PIPE)

SERVICE ABBREVIATION
PROCESS AREA
NOMINAL DUCT SIZE
30-11-IN — FLOW DIRECTION (CIRCULAR DUCT)

SERVICE ABBREVIATION
PROCESS AREA
DUCT HEIGHT x WIDTH
20x20-11-EF — FLOW DIRECTION (RECTANGULAR DUCT)

MATCH LINE

D 002 — TIE-IN (CONTINUED ELSEWHERE ON OTHER SHEET)

A — TIE-IN (CONTINUED ELSEWHERE ON SAME SHEET, OR OTHER SHEET IF REFERENCED)

UNCONNECTED PROCESS LINE

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Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD — 1792 — PAX ET PROSPERITAS PER PROGRESSUM

162 Middle Road
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PFAS TREATMENT SYSTEM

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PROCESS DIAGRAM LEGENDS

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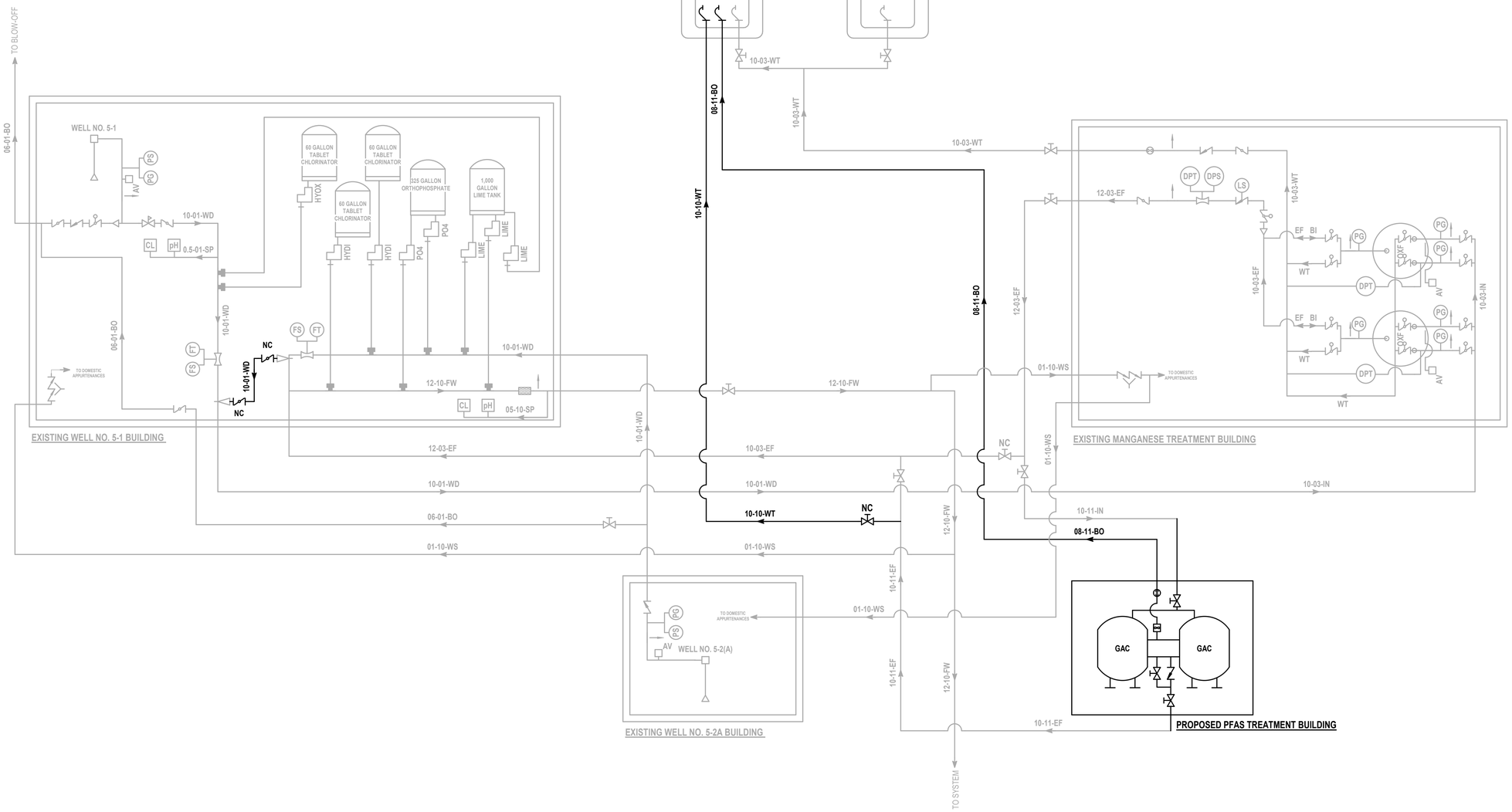

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PROPOSED PROCESS DIAGRAM

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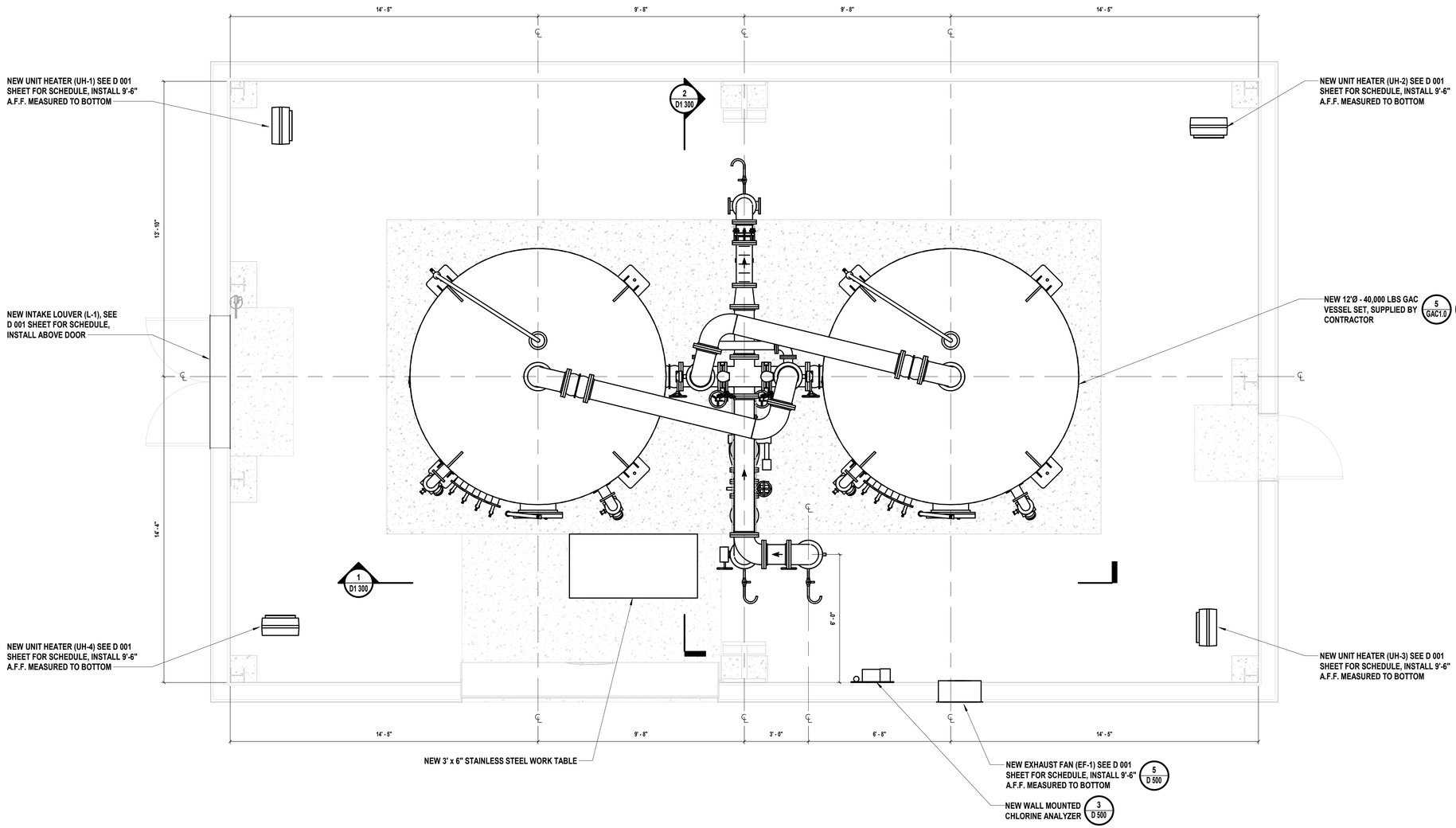

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1 GAC Building Mechanical Equipment Plan

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

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SHEET TITLE

GAC BUILDING MECHANICAL FLOOR PLAN

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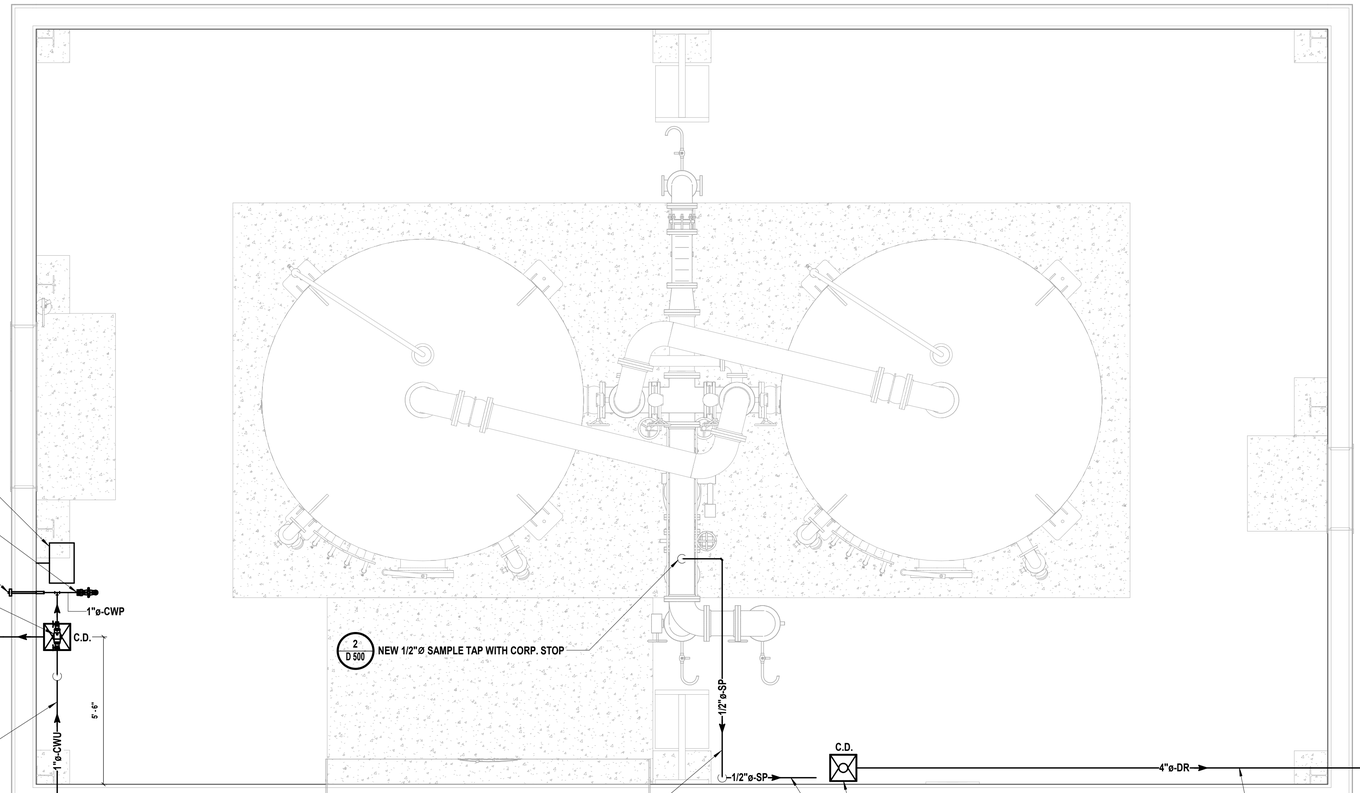

2 GAC Building Small Piping Plan

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

PROJECT NORTH

NOTES:

1. ALL DRAINAGE PIPING SHALL BE PITCHED AT A MINIMUM OF 1/4" PER FOOT PITCH IN DIRECTION SHOWN ON THE DRAWINGS.
2. 'C.D.' REFERS TO CUP DRAINS.

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GAC BUILDING SMALL PIPING FLOOR PLAN

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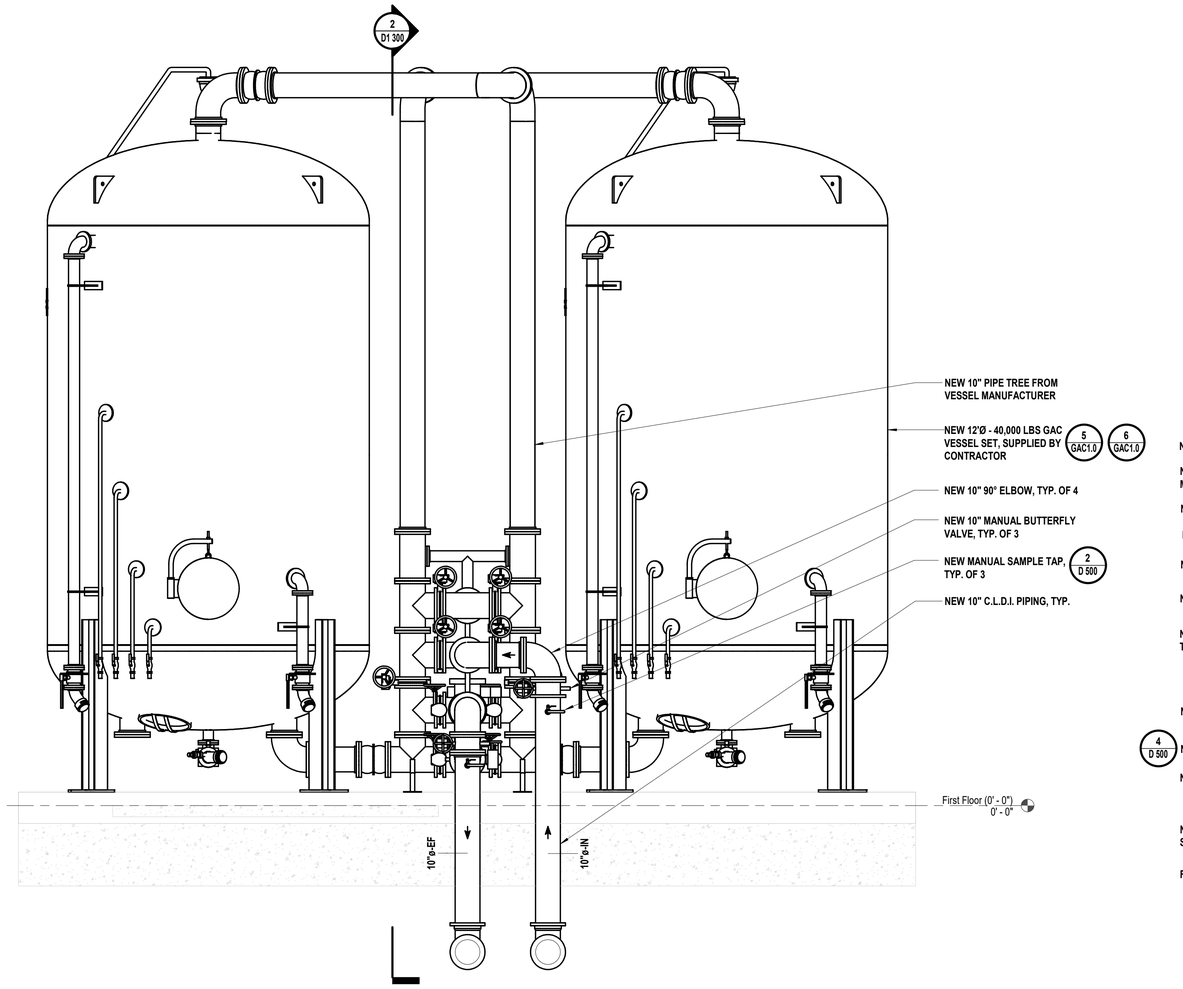
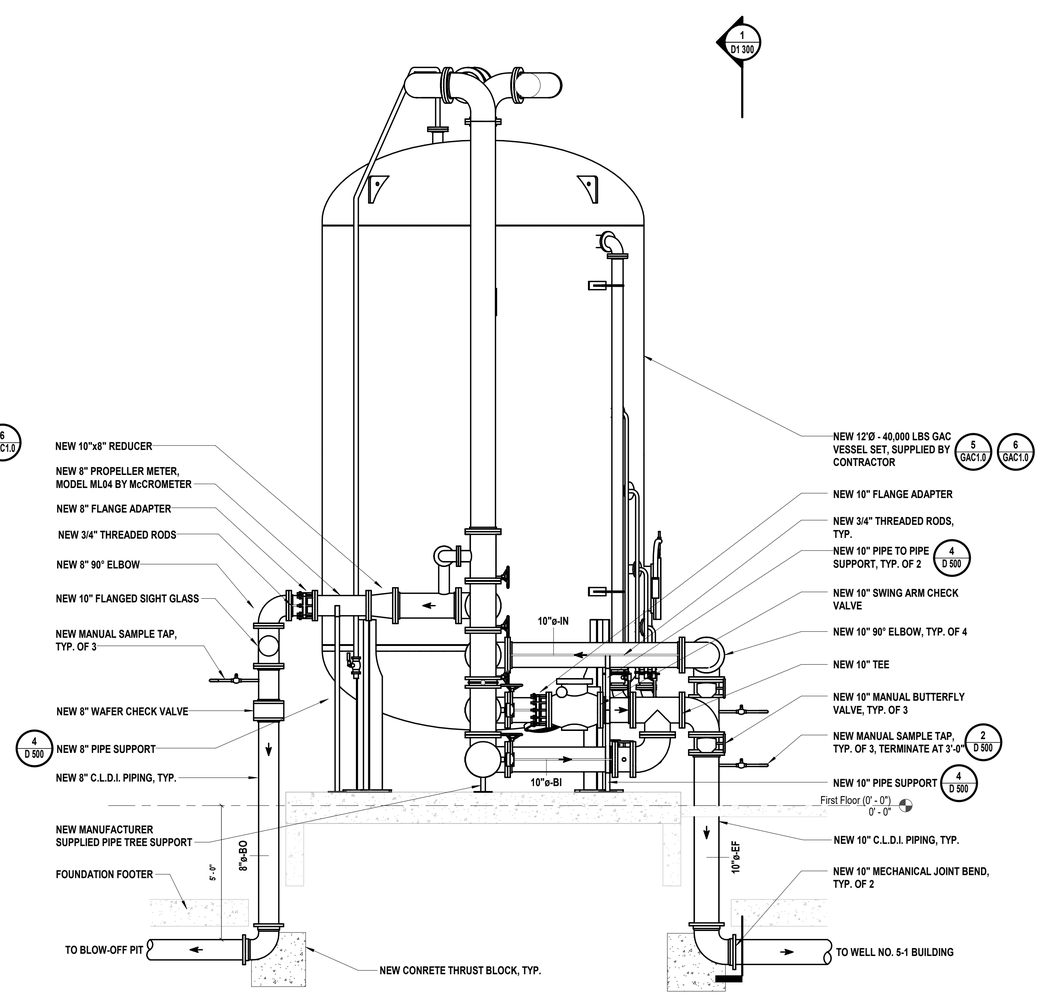


1 GAC Influent & Effluent Section

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



2 GAC Blow-off Section

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

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GAC BUILDING LARGE PIPING SECTIONS

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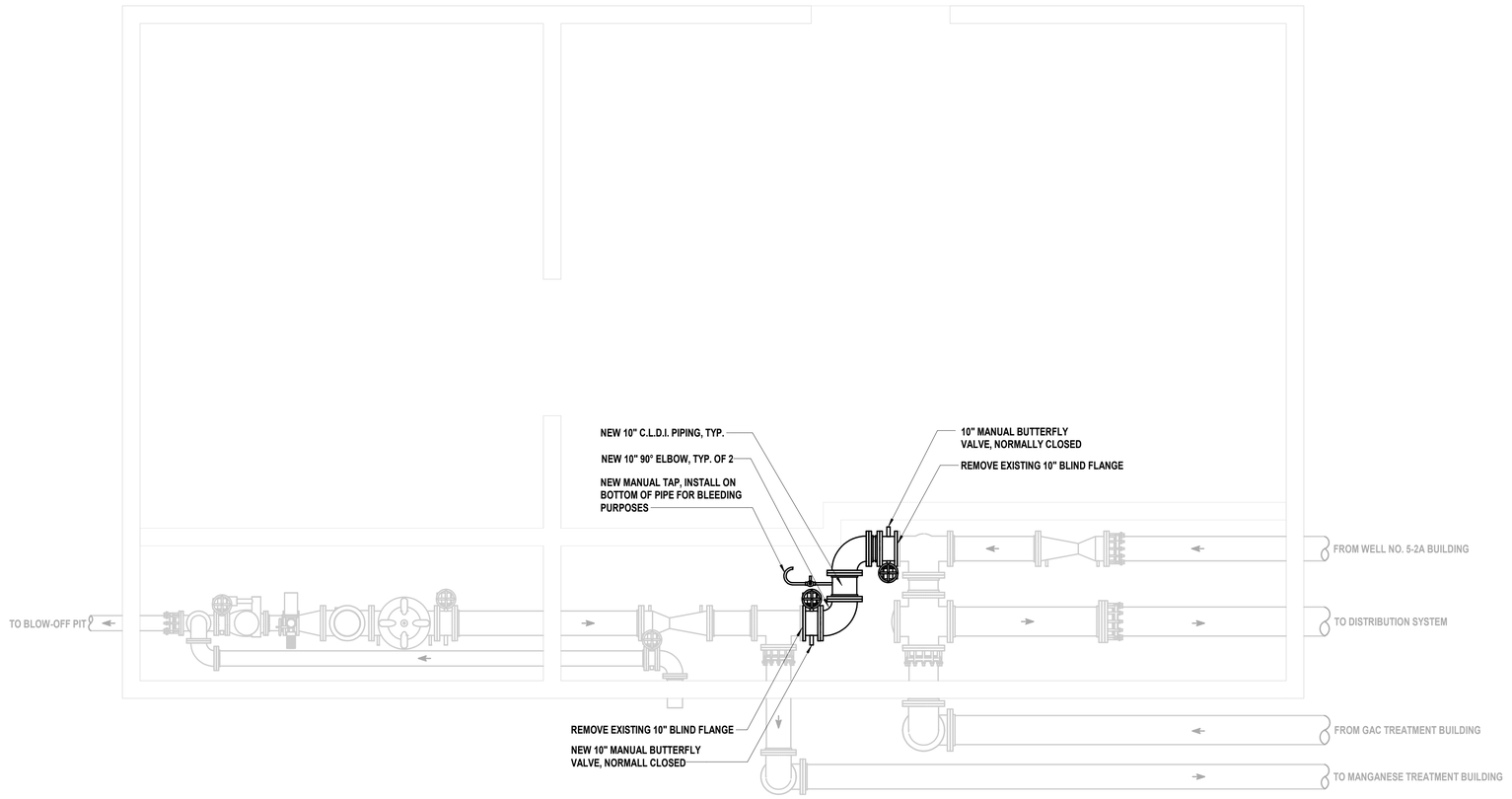

1 Well No. 5-1 Building Large Piping Plan

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

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SHEET TITLE

WELL NO. 5-1 BUILDING LARGE PIPING FLOOR PLAN

DRAWING No.

D2 110.00

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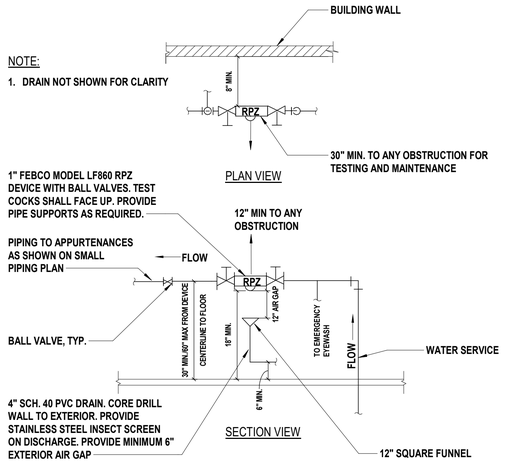
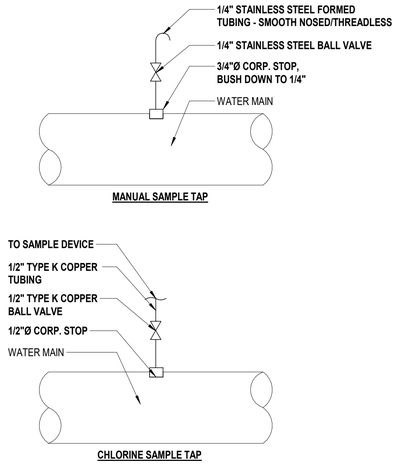


1 Backflow Prevention Device Detail

SCALENO SCALE

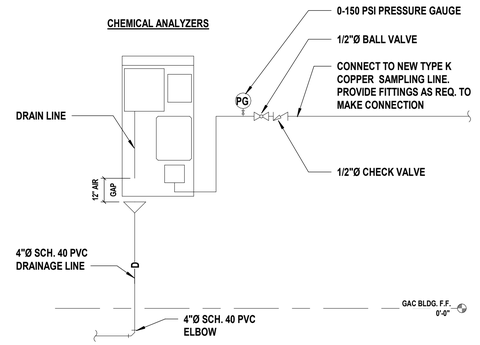
RPZ GENERAL NOTES:

1. ALL CONNECTIONS ON THE DOMESTIC WATER SHALL BE DOWNSTREAM FROM THE REDUCED PRESSURE ZONE DEVICE. BYPASSING OF A BACKFLOW PREVENTION DEVICE IS A VIOLATION OF NEW YORK STATE HEALTH DEPARTMENT RULES AND REGULATIONS.
2. INSTALLATIONS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES AND NEW YORK STATE HEALTH DEPARTMENT REGULATIONS. BACKFLOW PREVENTION DEVICES SHALL BE APPROVED BY THE USC FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH.
3. A NEW YORK STATE HEALTH DEPARTMENT CERTIFIED BACKFLOW PREVENTION DEVICE TESTER SHALL TEST THE REDUCED PRESSURE ZONE DEVICE ON INSTALLATION AND AT LEAST ANNUALLY WITH RESULTS REPORTED TO THE SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES ON NEW YORK STATE FORM DOH 1013.
4. THE PLUMBER SHALL BE LICENSED BY THE TOWN OF RIVERHEAD.
5. SHUTOFF VALVES ON DEVICES MUST BE RESILIENT SEAT AND BE BY SAME MANUFACTURER AS BACKFLOW PREVENTION DEVICE.
6. TEST COCKS SHALL BE POSITIONED TO FACILITATE TESTING.
7. DEVICES MUST BE PROTECTED AGAINST FREEZING AND FLOODING.
8. PROPER MAINTENANCE OF THE DEVICE WILL BE PERFORMED BY OWNER.
9. ALL PIPING AND BRANCHES NOT PROTECTED BY THE PREVENTION DEVICE SHALL BE STENCILED OR OTHERWISE MARKED WITH "DO NOT TAP TO THIS LINE". SMALL PIPING SHALL BE MARKED WITH WRAP AROUND PIPE MARKERS. MARKINGS SHALL BE AT 5-FOOT INTERVALS.
10. ALL PIPING AND DEVICE SHALL BE SUPPORTED AS REQUIRED. ALL TEST COCKS SHALL BE LABELED.



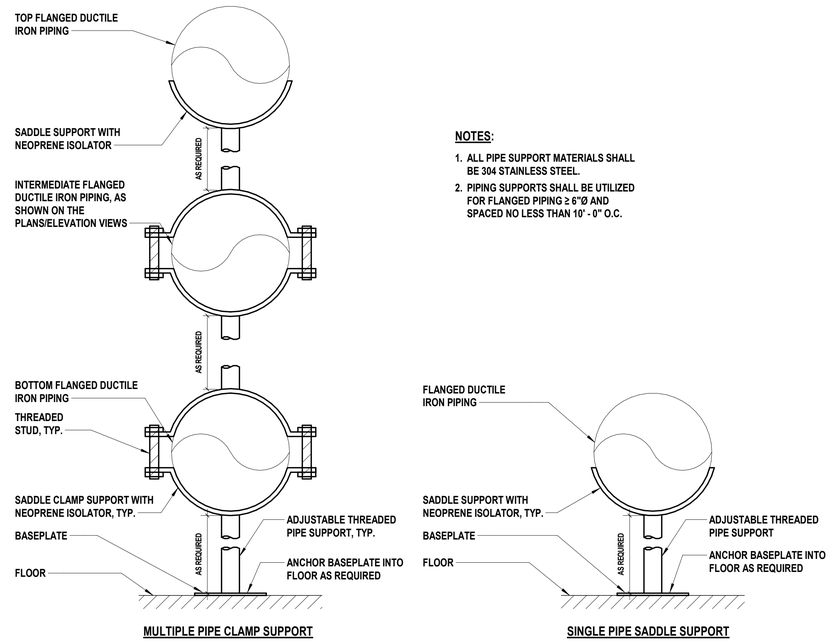
2 Sample Tap Details

SCALE:NTS



3 Chlorine Analyzer Riser Diagram

SCALENTS



NOTES:

1. ALL PIPE SUPPORT MATERIALS SHALL BE 304 STAINLESS STEEL.
2. PIPING SUPPORTS SHALL BE UTILIZED FOR FLANGED PIPING ≥ 6"Ø AND SPACED NO LESS THAN 10' - 0" O.C.

4 Pipe Saddle Support Detail

SCALE:NTS

NOTE:

1. MAINTAIN MINIMUM CLEARANCE BETWEEN FAN PROPELLER AND LOUVER AS PER MANUFACTURER'S INSTALLATION MANUAL. PROVIDE SPACERS AS NECESSARY TO MAINTAIN CLEARANCE CALLED FOR IN MANUAL. SPACERS SHALL BE PRESSURE TREATED LUMBER. FOR MASONRY WALLS, FASTENERS SHALL BE 1/4" MASONRY SCREWS WITH MAXIMUM 8" BETWEEN FASTENERS. FOR FRAMED WALLS, FASTENERS SHALL BE 16D NAILS WITH MINIMUM 2 NAILS PER STUD. ALL FASTENERS SHALL BE COATED FOR USE WITH PRESSURE TREATED LUMBER.

5 Exhaust Fan Detail

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PIPING DETAILS

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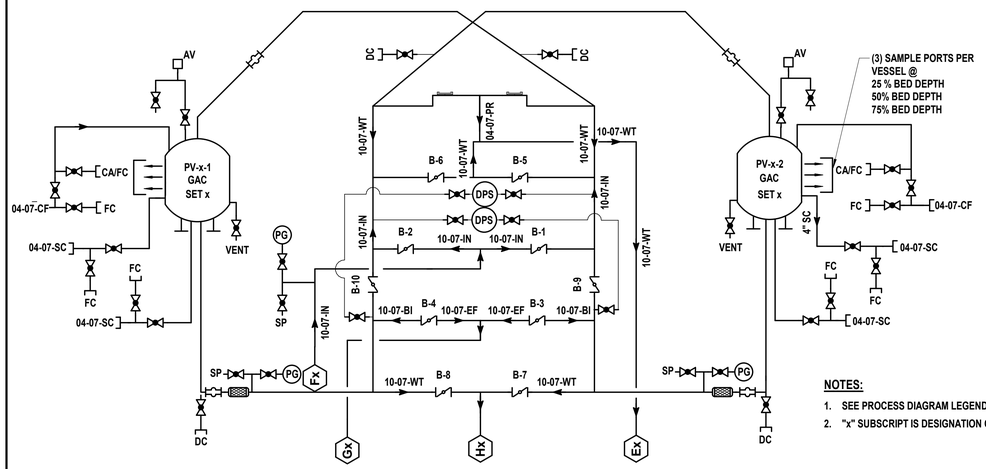


NOTES:

1. SEE PROCESS DIAGRAM LEGEND D 002.
2. "x" SUBSCRIPT IS DESIGNATION OF GAC SET NUMBER.

1 GAC Process Diagram

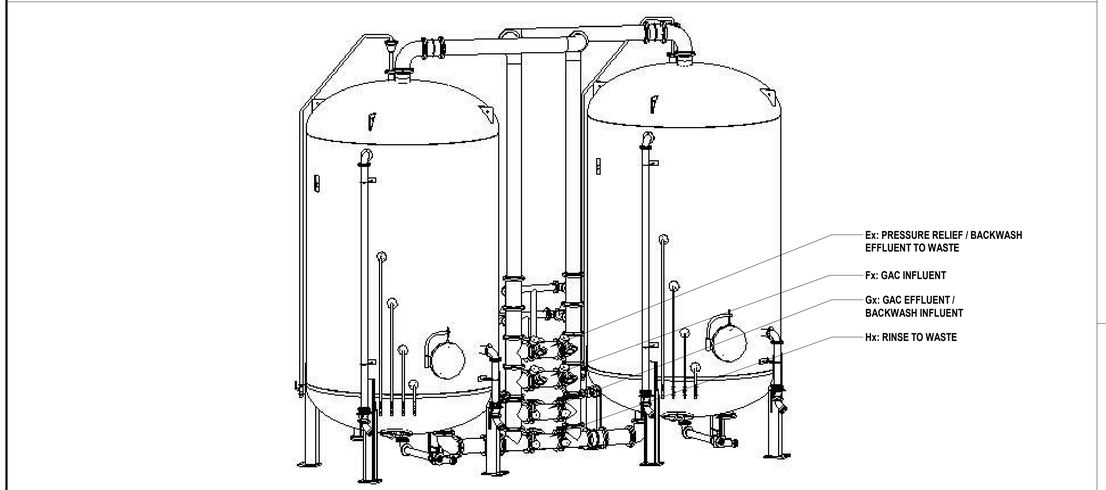
SCALE: NTS
21.04.06

VALVE SCHEDULE						
VALVE CODE	PARALLEL	SERIES OPERATION (PV-x-1 TO PV-x-2)	SERIES OPERATION (PV-x-2 TO PV-x-1)	BACKWASH (PV-x-1 FROM SYSTEM)	BACKWASH (PV-x-2 FROM SYSTEM)	RINSE
B-1	O	O	X	X	X	O
B-2	O	X	O	X	X	O
B-3	O	O	X	X	O	X
B-4	O	X	O	O	X	X
B-5	X	X	X	O	X	X
B-6	X	X	X	X	O	X
B-7	X	X	X	X	X	O
B-8	X	X	X	X	X	O
B-9	X	X	O	X	X	X
B-10	X	O	X	X	X	X

LEGEND: O = OPEN, X = CLOSED

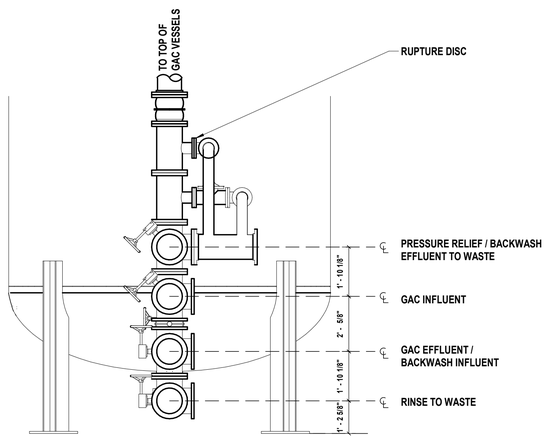
2 Valve Schedule

SCALE: NTS
20.11.02



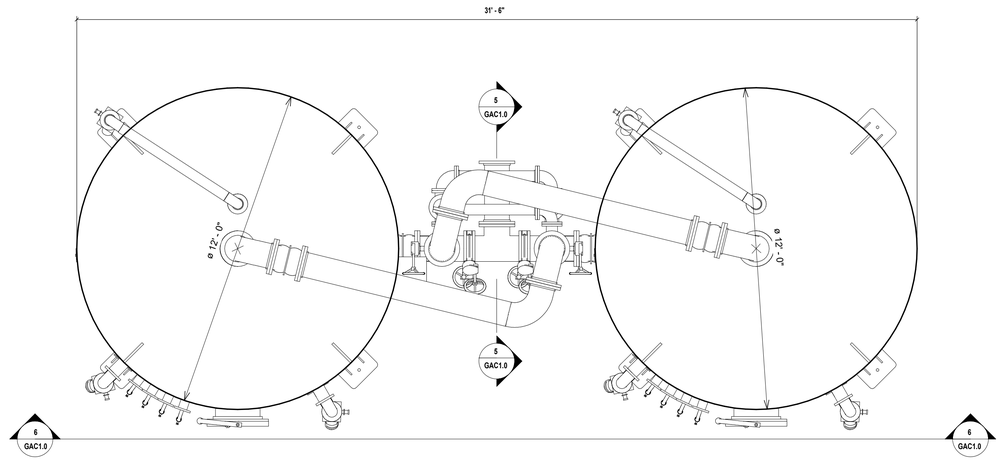
3 GAC Isometric

SCALE: 1 : 7
20.01.02



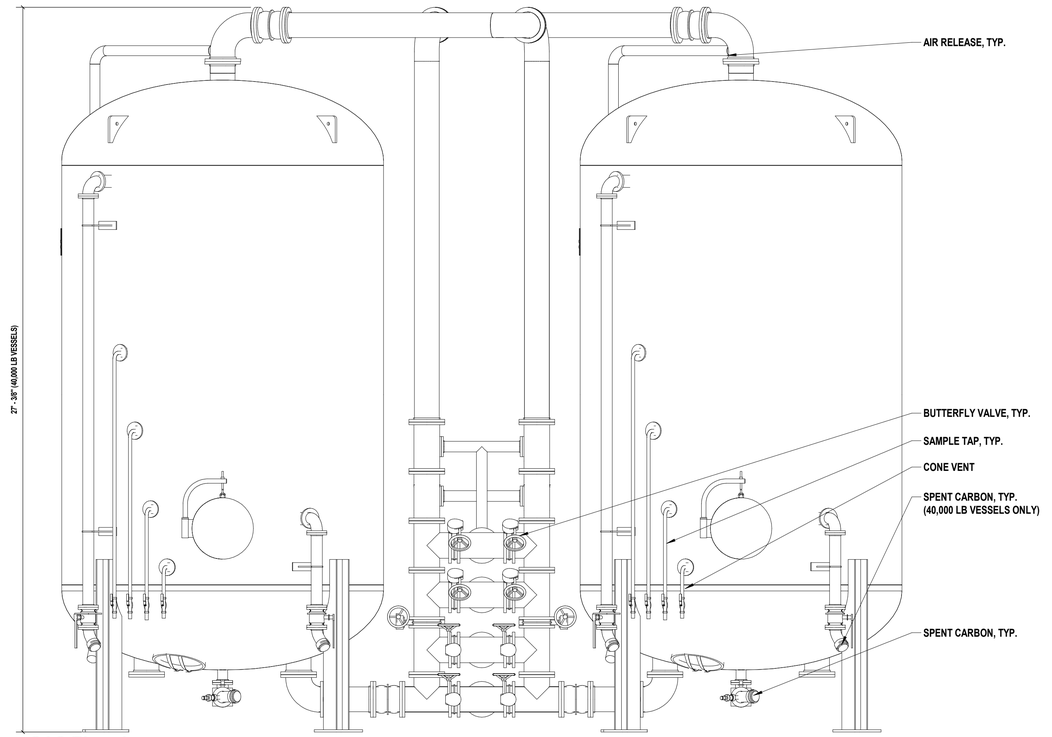
5 GAC Valve Tree Section

SCALE: NTS
20.11.02



4 GAC Plan

SCALE: 3/8" = 1'-0"
20.11.02



6 GAC Elevation

SCALE: 3/8" = 1'-0"
20.11.02

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ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	COMMENTS
S_3	THREE - WAY SWITCH	46" AFF TO CL UON
S_4	FOUR - WAY SWITCH	46" AFF TO CL UON
S_I	ILLUMINATED SWITCH	46" AFF TO CL UON
S^A	SINGLE POLE SWITCH; "A" INDICATES SWITCH CONTROL	46" AFF TO CL UON
S_D	SINGLE POLE DIMMER SWITCH	46" AFF TO CL UON
S_{3D}	THREE - WAY DIMMER SWITCH	46" AFF TO CL UON
S_K	SINGLE POLE KEYED SWITCH	46" AFF TO CL UON
S_{K3}	KEYED THREE - WAY SWITCH	46" AFF TO CL UON
S_{K4}	KEYED FOUR - WAY SWITCH	46" AFF TO CL UON
S_M	HORSEPOWER RATED SWITCH, WITH INDICATOR (CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE WITH EQUIPMENT)	46" AFF
S_P	SWITCH AND PILOT LIGHT	
S_T	SWITCH WITH THERMAL OVERLOAD PROTECTION (CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE WITH EQUIPMENT)	
S_{OS}	OCCUPANY SENSOR WITH MANUAL OVERRIDE, WALL MOUNT	
TC	TIME CLOCK	
PC	PHOTOCELL	
PB	PUSH BUTTON	
E,G	EMERGENCY SHUT OFF SWITCH; 'E' INDICATES ELECTRICAL; 'G' INDICATES GAS	
OS	OCCUPANCY SENSOR, CEILING MOUNT	
PP	OCCUPANCY SENSOR POWER PACK, MOUNTED ABOVE CEILING	
	2 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN WALL OR CEILING	
	5 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN WALL OR CEILING	
	3 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN OR BELOW SLAB	
LP1-35	DEDICATED HOME RUN TO PANEL LP1 FOR CIRCUIT NO. 35 ONLY. 2 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN WALL OR CEILING	
	SIMPLEX RECEPTACLE: 120V, 20A. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
	DUPLEX RECEPTACLE: 120V, 20A. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
	QUAD RECEPTACLE, DOUBLE DUPLEX RECEPTACLE: 120V, 20A. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
C	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "C" INDICATES CEILING MOUNT.	FLUSH
	DUPLEX RECEPTACLE: 120V, 20A; FLOOR MOUNTED.	FLUSH
IG	ISOLATED GROUND DUPLEX RECEPTACLE. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
GFI	DUPLEX RECEPTACLE: 120V, 20A; WITH GROUND FAULT INDICATOR. COORDINATE MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR TO CLEAR BASEBOARDS.	FLUSH
UC	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "UC" INDICATES UNDER COUNTER	AS PER ENGINEER
CT	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "CT" INDICATES COUNTER TOP.	AS PER ENGINEER
WP	DUPLEX RECEPTACLE: 120V, 20A; SUBSCRIPT "WP" INDICATED WEATHER PROOF	AS PER ENGINEER
40 240	SPECIAL PURPOSE OUTLET: 240V, 40A. VERIFY NEMA CONFIGURATION WITH EQUIPMENT MANUFACTURER.	AS PER ENGINEER
TL	TWISTED LOCK RECEPTACLE: 125V, 20A, 3 WIRE; UNLESS OTHERWISE NOTED.	AS PER ENGINEER
	SURFACE RACEWAY WITH 2 GROUNDED AND ISOLATED TYPE DUPLEX RECEPTACLES AND 1 DATA OUTLET PER POSITION, 18" AFF UNLESS OTHERWISE NOTED.	
	TELEPHONE/POWER POLE	
$S1_{S1}$	MAGNETIC STARTER "S1"; SEE STARTER SCHEDULE	
$DS1_{DS1}$	DISCONNECTION SWITCH "DS1"; SEE DISCONNECT SWITCH SCHEDULE.	
J	JUNCTION BOX	
J_{4X}	NEMA 4X STAINLESS STEEL JUNCTION BOX WITH GASKET COVER.	
J_S	JUNCTION BOX RECESSED IN WALL WITH BLANK COVER, PROVIDE 3/4" E.C. AND DRAG LINE TO ABOVE FINISHED CEILING. MOUNT 18" AFF, UNLESS OTHERWISE NOTED.	
J_M	FOR MONITOR, JUNCTION BOX RECESSED IN WALL WITH BLANK COVER. PROVIDE 3/4" E.C. AND DRAG LINE TO ABOVE FINISHED CEILING.	
T_{T1}	TRANSFORMER "T1"; SEE TRANSFORMER SCHEDULE.	
	ELECTRICAL PANEL "P1", RECESSED; SEE PANEL SCHEDULE.	
P1	ELECTRICAL PANEL "P1", SURFACE MOUNT; SEE PANEL SCHEDULE.	
	CONDUIT GOING UP.	
	CONDUIT GOING DOWN.	
	PULLBOX	
T	TELEPHONE. PROVIDE 3/4" E.C. WITH DRAG LINE TO AFC AND EMPTY J. BOX RECESSED IN WALL WITH BLANK COVER.	
TV	CABLE TELEVISION. PROVIDE 3/4" E.C. WITH DRAG LINE TO AFC AND EMPTY J. BOX RECESSED IN WALL WITH BLANK COVER.	
D	DATA. PROVIDE 3/4" E.C. WITH DRAG LINE TO AFC AND EMPTY J. BOX RECESSED IN WALL WITH BLANK COVER.	
DT	COMBINED DATA AND TV. PROVIDE 3/4" E.C. WITH DRAG LINE TO AFC AND EMPTY J. BOX RECESSED IN WALL WITH BLANK COVER.	
S	SECURITY CAMERA. PROVIDE 3/4" E.C. WITH DRAG LINE TO AFC AND EMPTY J. BOX RECESSED IN WALL WITH BLANK COVER.	

ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AFC	ABOVE FINISHED CEILING
AFG	ABOVE FINISHED GRADE
AMP, A	AMPERE
ATS	AUTOMATIC TRANSFER SWITCH; SEE TRANSFER SWITCH SCHEDULE
AWG	AMERICAN WIRE GUAGE
BFC	BELOW FINISHED CEILING
CL	CENTERLINE
CT	COUNTERTOP
EC	ELECTRICAL CONDUIT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INDICATOR
PSEG	PUBLIC SERVICE ELECTRIC AND GAS COMPANY (LOCAL ELECTRIC UTILITY)
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
NTS	NOT TO SCALE
UON	UNLESS OTHERWISE NOTED
UC	UNDERCOUNTER
V	VOLTS
VAC	VOLTS ALTERNATING CURRENT
VDC	VOLT DIRECT CURRENT
X-FMR	TRANSFORMER
WP	WEATHERPROOF

SECURITY/ACCESS CONTROL DEVICE JUNCTION BOX LEGEND

SYMBOL	DESCRIPTION	NOTES
J_{DS}	DOOR SWIPE	1, 2, 3
J_{DC}	DOOR CONTACT	1, 2, 3

NOTES:

1. PROVIDE 3/4" E.C. WITH DRAG LINE TO DEDICATED SECURITY WIRE TROUGH.
2. PROVIDE JUNCTION BOX RECESSED IN WALL WITH BLANK COVER.
3. CONTRACTOR SHALL COORDINATE WITH SECURITY ALARM VENDOR FOR EXACT LOCATIONS AND MOUNTING HEIGHT PRIOR TO INSTALLATION OF JUNCTION BOXES, CONDUIT, AND ACCESSORIES.

SYMBOL	DESCRIPTION	COMMENTS
T	LINE VOLTAGE THERMOSTAT, 120V, 10A.	
	CIRCUIT BREAKER WITH TRIP AND POLES AS NOTED.	
TS1	TRANSFER SWITCH TS1; SEE TRANSFER SWITCH SCHEDULE.	
M.C.B 250A/2P PANEL "P1"	DISTRIBUTION PANEL P1 WITH 30A, 2 POLE M.C.B.; SEE DISTRIBUTION PANEL SCHEDULE.	
	DISCONNECT SWITCH DS1, 100A, 3 POLES; SEE DISCONNECT SWITCH SCHEDULE.	
DS3 100A/3P	FUSED DISCONNECT SWITCH DS3, FUSED AT 100A, 3 POLES; SEE DISCONNECT SWITCH SCHEDULE.	
G1	GENERATOR SET G1	
M	ELECTRIC METER AND METER PAN AS PER PSEG REQUIREMENTS.	
5	MOTOR, NUMBER INDICATED HORSEPOWER.	
	CURRENT TRANSFORMER.	
PTS	VOLTAGE TRANSFORMER.	
T2	TRANSFORMER WITH SIZE, PRIMARY AND SECONDARY VOLTAGES AS NOTED.	
RVRM 10	REDUCED VOLTAGE SOLID STATE RAMPING MODULE, SIZED FOR 10 H.P.	
RVSS 150	REDUCED VOLTAGE SOLID STATE STARTER, SIZED FOR 150 H.P.	
VFD 25	VARIABLE FREQUENCY DRIVE, RATED FOR 25 H.P.	
FVNR 5	FULL VOLTAGE NON-REVERSING STARTER, NEMA SIZE 5	
FVR 5	FULL VOLTAGE REVERSING STARTER, NEMA SIZE 5	
JJS	FAST ACTING SOLID STATE FUSES AS PER MANUFACTURER.	
	MULTIPLE BRANCH CIRCUITS AS REQUIRED.	
	CONTROL CIRCUIT; MIN 2 #12 AWG IN 3/4" E.C.	

CONTROLS LEGEND

SYMBOL	DESCRIPTION	COMMENTS
M	MOTOR	
FM	FLOW METER	
M	MOTORIZED	
ZS	LIMIT SWITCH	
FIT	FLOW INDICATING TRANSMITTER	
FS	FLOW SWITCH	
PIT	PRESSURE INDICATING TRANSMITTER	
PS	PRESSURE SWITCH	
LIT	LEVEL INDICATING TRANSMITTER	
LE	LEVEL SENSING ELEMENT	
PDIT	PRESSURE DIFFERENTIAL INDICATING TRANSMITTER	
	SOLENOID VALVE	
	PITOT TUBE AND AIR PRESSURE SWITCH	

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD · 1792 · HAS ET PROSPERITAS PER PROGRESSUS

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ELECTRICAL LEGENDS

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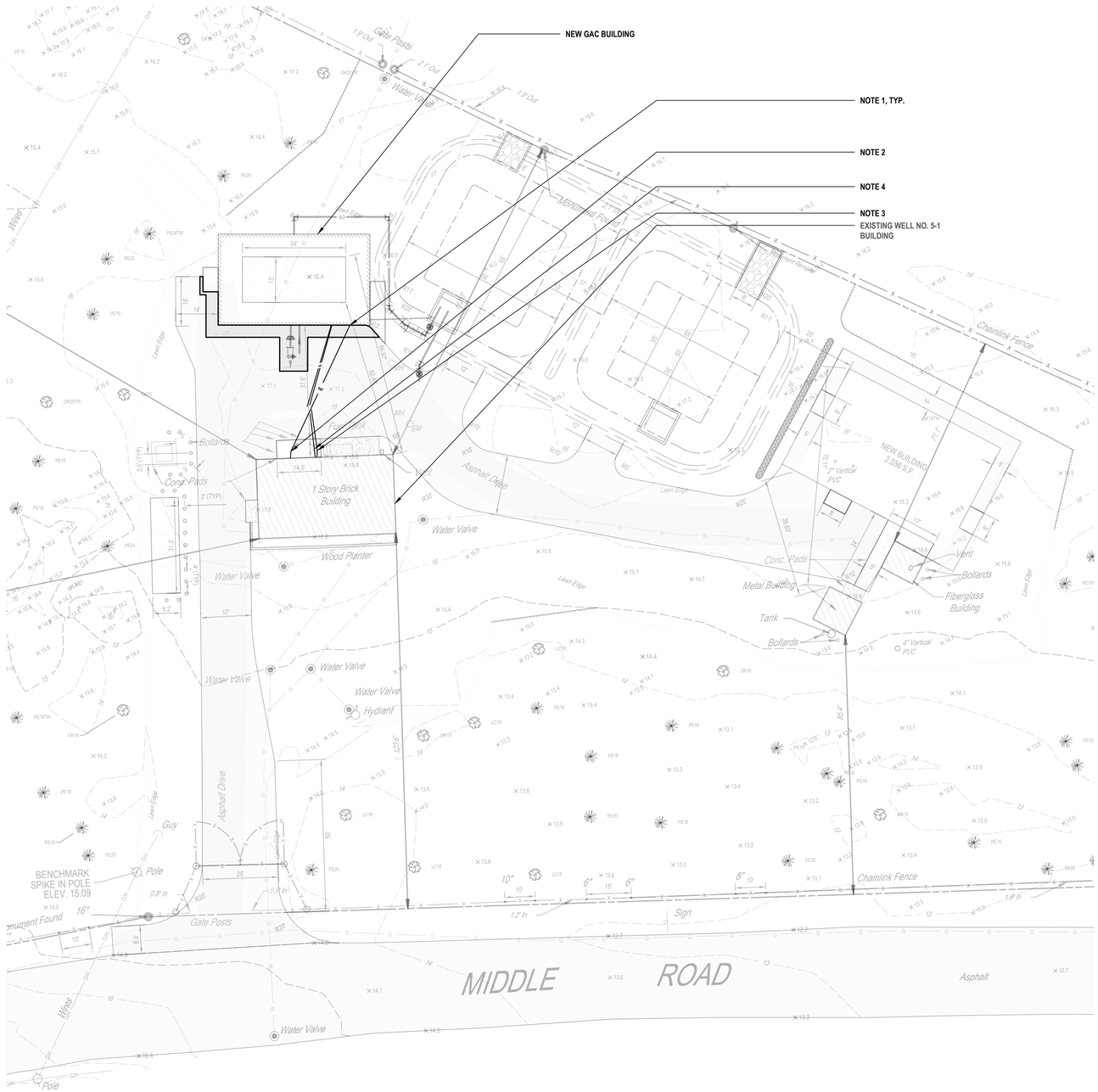

Electrical Site Plan

SCALE:1" = 20'

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GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

SITE PLAN LEGEND

	CURB
	UTILITY POWER/TELEPHONE POLE
G	EXISTING NATURAL GAS SERVICE
S	EXISTING SEWER SERVICE
W	EXISTING WATER SERVICE
T	EXISTING TELEPHONE SERVICE
T	NEW TELEPHONE SERVICE
E	EXISTING ELECTRICAL LINES
E	NEW ELECTRICAL LINES
PE	EXISTING PRIMARY ELECTRIC SERVICE
PE	NEW PRIMARY ELECTRIC SERVICE
OHE	EXISTING OVERHEAD ELECTRIC LINES
X X X X	EXISTING FENCE
	ELECTRIC PULL BOX
HH	HANDHOLE
T	TRANSFORMER

ELECTRICAL SITE PLAN GENERAL NOTES:

G1. CONTRACTOR SHALL INSPECT CONSTRUCTION SITE PRIOR TO SUBMISSION OF BIDS AND SHALL MAKE NO ADDITIONAL CLAIMS REGARDING SITE CONDITIONS THEREAFTER.

G2. LOCATION OF ALL UNDERGROUND UTILITIES BOTH PUBLIC AND CUSTOMER OWNED, WERE OBTAINED FROM EITHER MAPS, SURVEYS, DRAWINGS AND RECORDS SUPPLIED BY OTHERS. THE OWNER AND ENGINEER DO NOT GUARANTEE OR ACCEPT RESPONSIBILITY FOR ANY DAMAGE TO SUCH FACILITIES DUE TO DISCREPANCIES IN LOCATION AND SIZE SHOWN ON THE PLANS OR THOSE UTILITIES NOT SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A PRIVATE MARKOUT COMPANY FOR DETERMINING THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK. CONTRACTOR SHALL LOCATE ALL UTILITIES WITHIN PROXIMITY OF CONSTRUCTION LIMITS.

G3. CONTRACTOR SHALL COMPLETELY RESTORE ALL AREAS DISTURBED DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO GRASS AREAS, LANDSCAPING, PAVEMENTS, SIDEWALKS, CURBING AND IN-GROUND SPRINKLER SYSTEMS.

G4. THE CONTRACTOR SHALL PERFORM DAILY CLEAN-UP OPERATIONS WHICH INCLUDE REMOVAL OF DEBRIS AND EXCESS CONSTRUCTION MATERIAL TO THE SATISFACTION OF THE OWNER AND THE ENGINEER.

G5. DURING ALL NON-WORKING HOURS, THE CONTRACTOR WILL BE REQUIRED TO STORE ALL EQUIPMENT AND MATERIALS WITHIN THE AREA DESIGNATED BY THE ENGINEER AT THE PROJECT SITE.

G6. PROVIDE TEMPORARY FENCING TO PROTECT WORK AREAS.

G7. CONCRETE SIDEWALKS SHALL BE SAWCUT BACK TO EXPANSION/ CONTROL JOINTS.

ELECTRICAL SITE PLAN KEY NOTES:

1. CONTRACTOR SHALL STUB ALL CONDUITS INTO BUILDING BELOW GRADE. NO EXTERIOR CONDUITS ARE PERMITTED TO RUN EXPOSED ON EXTERIOR WALLS. SEAL INTERIOR OF CONDUIT PENETRATION WITH DUCT SEAL AND EXTERIOR OF CONDUIT WITH LINK SEAL.
2. CONTRACTOR SHALL UTILIZE AND EXTEND EXISTING DEDICATED SPARE 2" CONDUIT EXTENDED 5' - 0" OUTSIDE OF THE WELL NO. 5-1 BUILDING TO RUN FEEDERS FOR PANEL 'P1'. COORDINATE EXACT LOCATION IN FIELD.
3. CONTRACTOR SHALL UTILIZE AND EXTEND EXISTING DEDICATED SPARE 2" CONDUIT EXTENDED 5' - 0" OUTSIDE OF THE WELL NO. 5-1 BUILDING TO RUN CONTROLS WIRING TO '51CP'. COORDINATE EXACT LOCATION IN FIELD.
4. CONTRACTOR SHALL UTILIZE AND EXTEND EXISTING DEDICATED SPARE 2" CONDUIT EXTENDED 5' - 0" OUTSIDE OF THE WELL NO. 5-1 BUILDING TO RUN 2" SPARE E.C. WITH DRAG LINES. COORDINATE EXACT LOCATION IN FIELD.

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Wellhead Treatment for PFAS at Plant No. 5

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ELECTRICAL SITE PLAN

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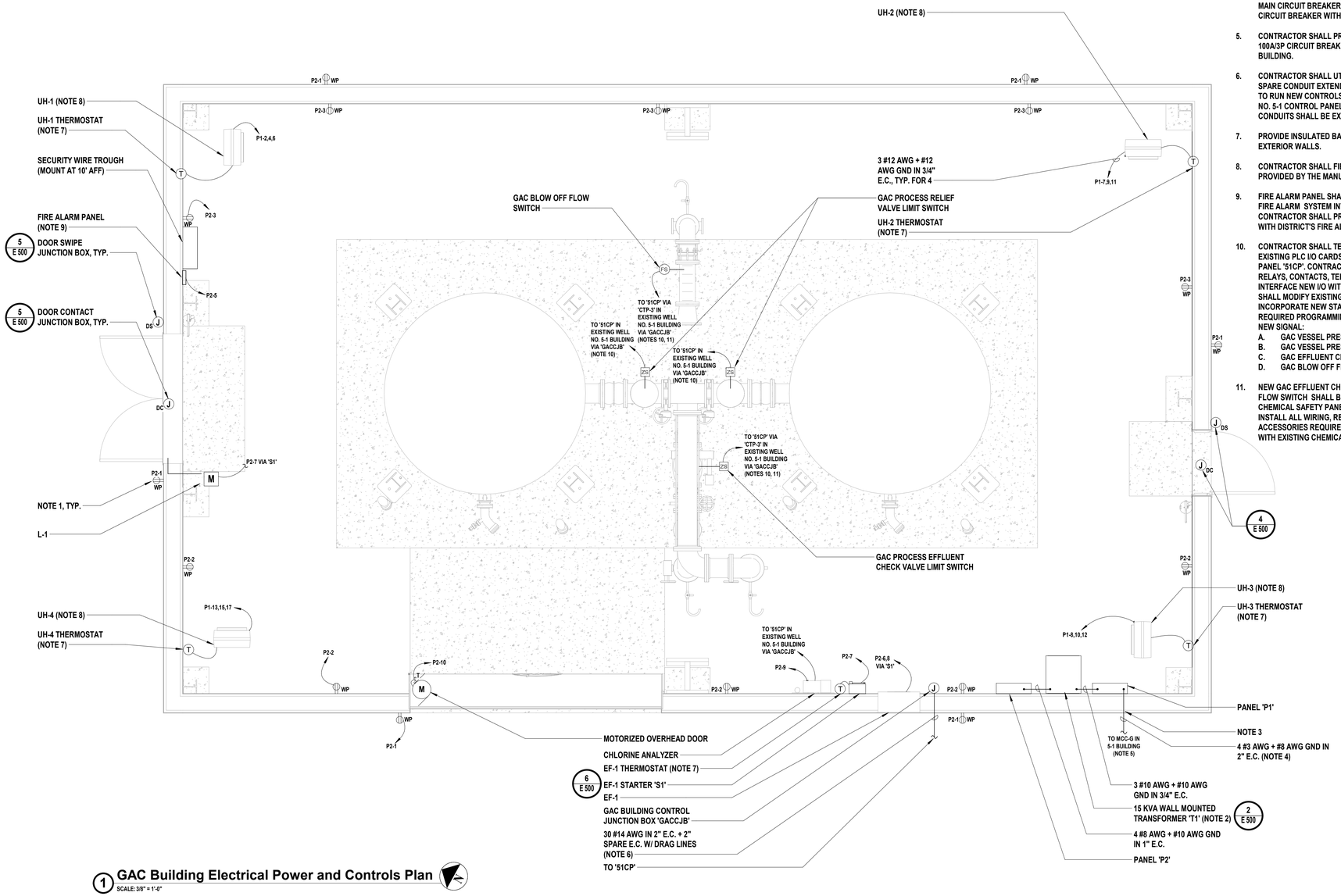

1 GAC Building Electrical Power and Controls Plan

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

ELECTRICAL GENERAL NOTE:

G1. CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL EQUIPMENT INSTALLER FOR EXACT LOCATION AND MOUNTING HEIGHT OF MECHANICAL EQUIPMENT.

NOTES:

1. ALL RECEPTACLES MARKED 'WP' SHALL INCLUDE WEATHERPROOF IN-USE ENCLOSURE.
2. CONTRACTOR SHALL COORDINATE WITH THE BUILDING MANUFACTURER FOR EXACT MOUNTING REQUIREMENT FOR THE NEW 15 KVA TRANSFORMER. PROVIDE ALL HARDWARE AND ACCESSORIES AS REQUIRED TO SECURELY WALL MOUNT THE EQUIPMENT.
3. CONTRACTOR SHALL STUB ALL CONDUITS INTO BUILDING BELOW GRADE. NO EXTERIOR CONDUITS ARE PERMITTED TO RUN EXPOSED ON EXTERIOR WALLS. SEAL INTERIOR OF CONDUIT PENETRATION WITH DUCT SEAL AND EXTERIOR OF CONDUIT WITH LINK SEAL.
4. CONTRACTOR SHALL UTILIZE AND EXTEND EXISTING DEDICATED 2" SPARE CONDUIT EXTENDED 5' - 0" OUTSIDE OF THE WELL NO. 5-1 BUILDING TO RUN NEW FEEDERS FOR PANEL 'P1'. PULL NEW FEEDERS AND TERMINATE AT MAIN CIRCUIT BREAKER IN PANEL 'P1' AND EXISTING SPARE 100A/3P CIRCUIT BREAKER WITHIN THE 5-1 BUILDING MCC, RESPECTIVELY.
5. CONTRACTOR SHALL PROVIDE POWER TO PANEL 'P1' VIA DEDICATED 100A/3P CIRCUIT BREAKER FROM MCC-G IN EXISTING WELL NO. 5-1 BUILDING.
6. CONTRACTOR SHALL UTILIZE AND EXTEND EXISTING TWO (2) DEDICATED 2" SPARE CONDUIT EXTENDED 5' - 0" OUTSIDE OF THE WELL NO. 5-1 BUILDING TO RUN NEW CONTROLS WIRING FROM THE NEW GAC BUILDING TO WELL NO. 5-1 CONTROL PANEL '51CP'. ONE (1) OF THE TWO (2) 2" SPARE CONDUITS SHALL BE EXTENDED WITH DRAG LINE AND REMAIN AS SPARE.
7. PROVIDE INSULATED BACKPLATE FOR ALL THERMOSTATS LOCATED ON EXTERIOR WALLS.
8. CONTRACTOR SHALL FIELD WIRE AND INSTALL DISCONNECT SWITCH PROVIDED BY THE MANUFACTURER.
9. FIRE ALARM PANEL SHALL BE PROVIDED AND INSTALLED BY DISTRICT'S FIRE ALARM SYSTEM INTEGRATOR UNDER ALLOWANCE ITEM. CONTRACTOR SHALL PROVIDE POWER FEED AS INDICATED. COORDINATE WITH DISTRICT'S FIRE ALARM SYSTEM INTEGRATOR AS REQUIRED.
10. CONTRACTOR SHALL TERMINATE THE FOLLOWING NEW SIGNALS TO THE EXISTING PLC I/O CARDS WITHIN THE WELL NO. 5-1 BUILDING CONTROL PANEL '51CP'. CONTRACTOR SHALL PROVIDE AND INSTALL ALL CARDS, RELAYS, CONTACTS, TERMINAL BLOCKS, AND ACCESSORIES REQUIRED TO INTERFACE NEW I/O WITH EXISTING PLC AND SCADA SYSTEM. CONTRACTOR SHALL MODIFY EXISTING LOCAL AND REMOTE SCADA SCREENS TO INCORPORATE NEW STATUS AND ALARM INDICATIONS, INCLUDING ALL REQUIRED PROGRAMMING TO GENERATE AN OIT/SCADA ALARM FOR EACH NEW SIGNAL:
    A. GAC VESSEL PRESSURE RELIEF VALVE NO. 1 LIMIT SWITCH
    B. GAC VESSEL PRESSURE RELIEF VALVE NO. 2 LIMIT SWITCH
    C. GAC EFFLUENT CHECK VALVE LIMIT SWITCH
    D. GAC BLOW OFF FLOW SWITCH
11. NEW GAC EFFLUENT CHECK VALVE LIMIT SWITCH AND GAC BLOW OFF FLOW SWITCH SHALL BE INTEGRATED WITHIN EXISTING POST TREATMENT CHEMICAL SAFETY PANEL 'CTP-3'. CONTRACTOR SHALL PROVIDE AND INSTALL ALL WIRING, RELAYS, CONTACTS, TERMINAL BLOCKS AND ACCESSORIES REQUIRED TO INTERFACE NEW CHEMICAL SAFETY SIGNAL WITH EXISTING CHEMICAL SAFETY TREATMENT PANEL(S).

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Wellhead Treatment for PFAS at Plant No. 5

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ELECTRICAL POWER AND CONTROLS PLAN GAC BUILDING

DRAWING No.

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LIGHTING GENERAL NOTES:

G1. PROVIDE ALL REQUIRED WIRING NECESSARY BETWEEN SWITCHES, CONTROLLERS AND/OR OCCUPANCY SENSORS FOR COMPLETE LIGHTING CONTROL. WHERE 3 OR 4 WAY SWITCHES ARE USED, PROVIDE ALL REQUIRED WIRING BETWEEN SWITCHES. WIRE SIZE SHALL EQUAL POWER FEED SIZE.

G2. CONTRACTORS SHALL LOCATE AND INSTALL ALL LIGHT FIXTURES TO PROVIDE CLEARANCE FROM ALL MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLING FIXTURES, SWITCHES, CONDUIT, AND WIRING.

G3. FIXTURES INDICATED WITH CIRCUIT DESIGNATIONS SHALL BE CONNECTED TO LINE SIDE OF CIRCUIT.

G4. FIXTURES INDICATED WITH LETTER DESIGNATIONS SHALL BE CONNECTED TO THE SWITCH, OCCUPANCY SENSOR AND/OR POWER PACK WITH CORRESPONDING LETTER DESIGNATION.

G5. PROVIDE AND INSTALL A DEDICATED NEUTRAL FOR EACH CIRCUIT. CONTRACTOR IS NOT PERMITTED TO USE COMMON NEUTRALS.

G6. PROVIDE BOX AND ACCESSORIES AS PER MANUFACTURER'S RECOMMENDATION FOR ALL SWITCHES, OCCUPANCY SENSORS, AND/OR POWER PACKS.

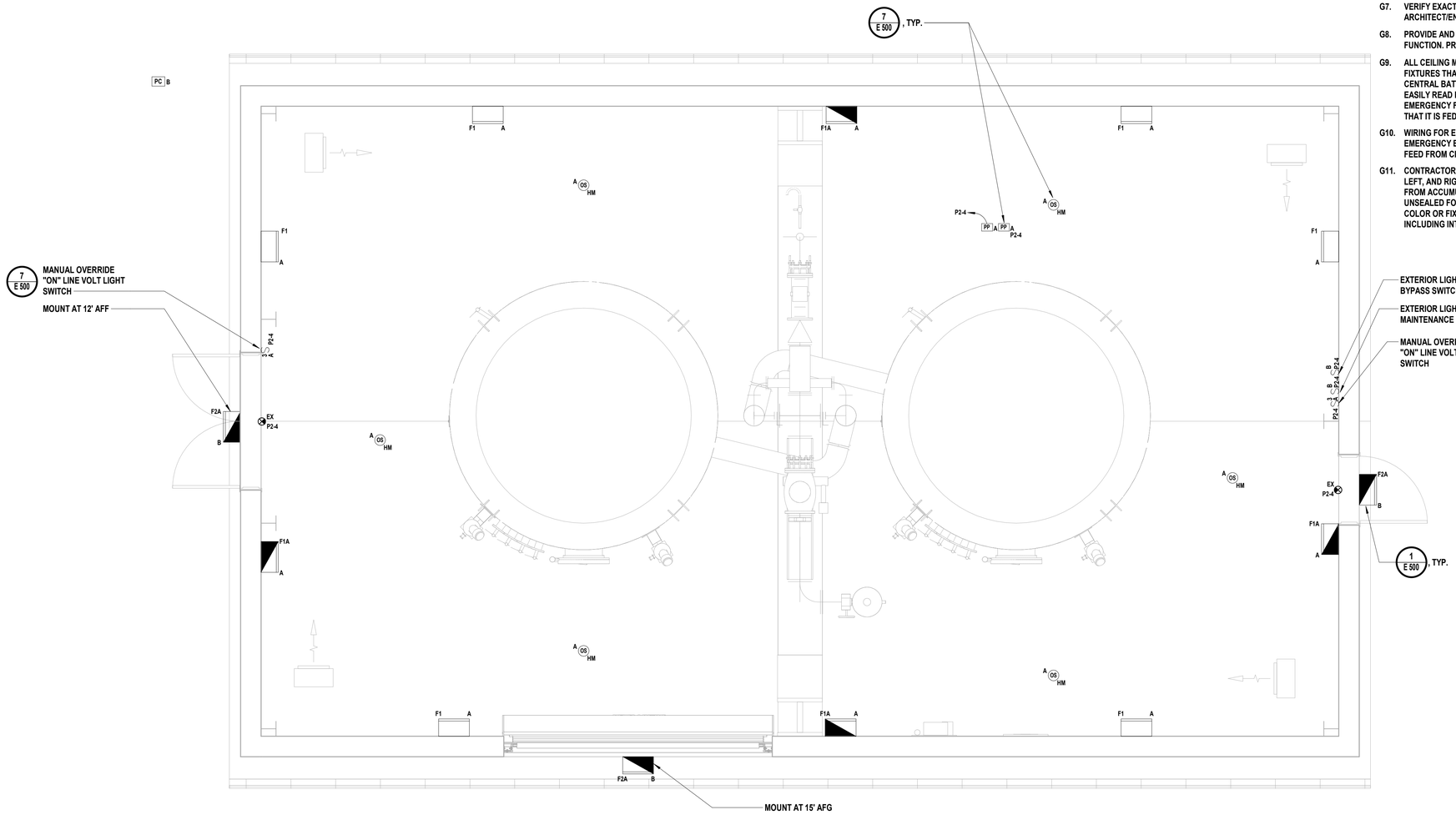
G7. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECT/ENGINEER IN FIELD.

G8. PROVIDE AND INSTALL 10" x 8" PHENOLIC NAMEPLATE DESCRIBING SWITCH FUNCTION. PROVIDE ON/OFF LOCK FOR MAINTANENCE SWITCH.

G9. ALL CEILING MOUNTED FIXTURES WITH EMERGENCY BALLASTS AND ALL FIXTURES THAT ARE PART OF AN EMERGENCY LIGHTING SYSTEM, FED FROM CENTRAL BATTERY SYSTEM SHALL BE LABELED. THESE LABELS SHALL BE EASILY READ FROM THE FLOOR LEVEL AND STATE THAT THE FIXTURE IS AN EMERGENCY FIXTURE AND CONTAIN THE PANEL NAME AND CIRCUIT NUMBER THAT IT IS FED FROM.

G10. WIRING FOR EMERGENCY BALLAST IS NOT SHOWN ON PLANS. FIXTURES WITH EMERGENCY BALLASTS SHALL BE PROVIDED WITH AN UNSWITCHED POWER FEED FROM CIRCUIT FEEDING LIGHT POLE FIXTURE.

G11. CONTRACTOR SHALL USE SILICONE WATER PROOF SEALANT TO SEAL TOP, LEFT, AND RIGHT EDGES OF LIGHT FIXTURES TO WALL TO PREVENT MOISTURE FROM ACCUMULATING BEHING FIXTURE. BOTTOM EDGE SHALL BE LEFT UNSEALED FOR DRAINAGE. COLOR OF SILICONE SHALL MATCH EITHER WALL COLOR OR FIXTURE COLOR. (TYP. OF ALL WALL MOUNTED FIXTURES INCLUDING INTERIOR, EXTERIOR, EXIT AND EMERGENCY LIGHTING).



1 **GAC Building Lighting Plan**
SCALE: 3/8" = 1'-0"

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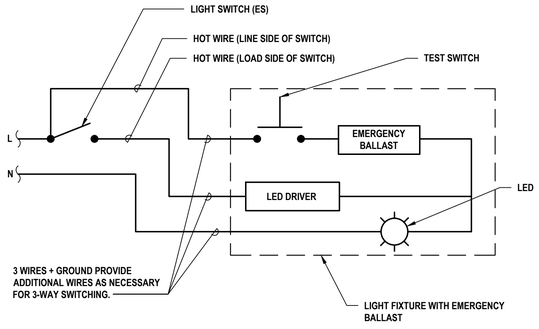
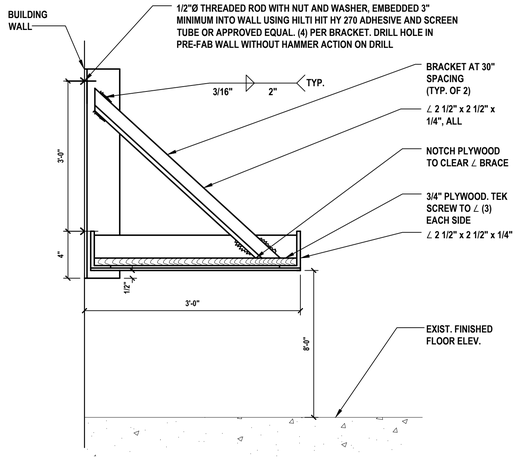
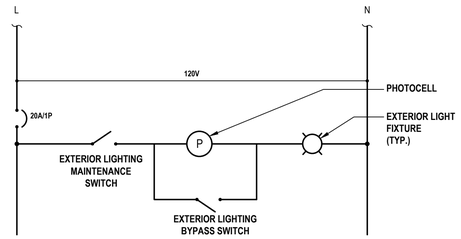


1 Typical Detail of Light Fixture with Emergency Ballast
SCALE:NTS



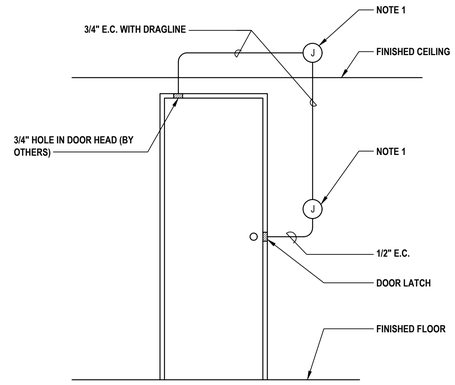
2 Transformer Wall Bracket Detail
SCALE:NTS



3 Exterior Lighting Control Schematic
SCALE:NTS

NOTES:

1. FUNCTION NAMEPLATE DISCRIPTION:
   MAINTENANCE SWITCH - TURN TO "ON" POSITION FOR NORMAL OPERATION. TURN TO "OFF" POSITION TO PREVENT LIGHTS FROM TURNING ON.
   BYPASS SWITCH - TURN TO "OFF" POSITION FOR NORMAL OPERATION. TURN TO "ON" POSITION TO TURN ON LIGHT FIXTURES. (MAINTENANCE SWITCH MUST BE IN "ON" POSITION).



4 Security System Conduit Detail (Single Door)
SCALE:NTS

NOTE:

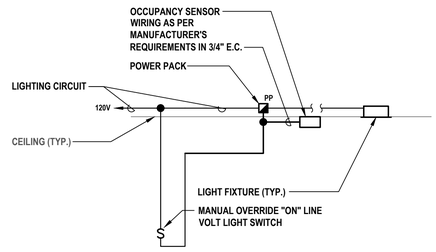
1. COORDINATE INSTALLATION AND EXACT MOUNTING HEIGHT AND LOCATION WITH THE DISTRICT'S SECURITY ALARM VENDOR.

5 Security System Conduit Detail (Double Door)
SCALE:NTS

NOTE:

1. COORDINATE INSTALLATION AND EXACT MOUNTING HEIGHT AND LOCATION WITH THE DISTRICT'S SECURITY ALARM VENDOR.

6 Exhaust Fan EF-1 Control Schematic
SCALE:NTS



7 Typical Detail of Light Fixture with Occupancy Control Sensor
SCALE:NTS

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

TOWN OF RIVERHEAD · PAX ET PROSPERITAS · PER PROGRESSUM · 1792

162 Middle Road
Riverhead NY, 11901

CONTRACT

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PFAS TREATMENT SYSTEM

STATUS

FINAL BID DOCUMENT

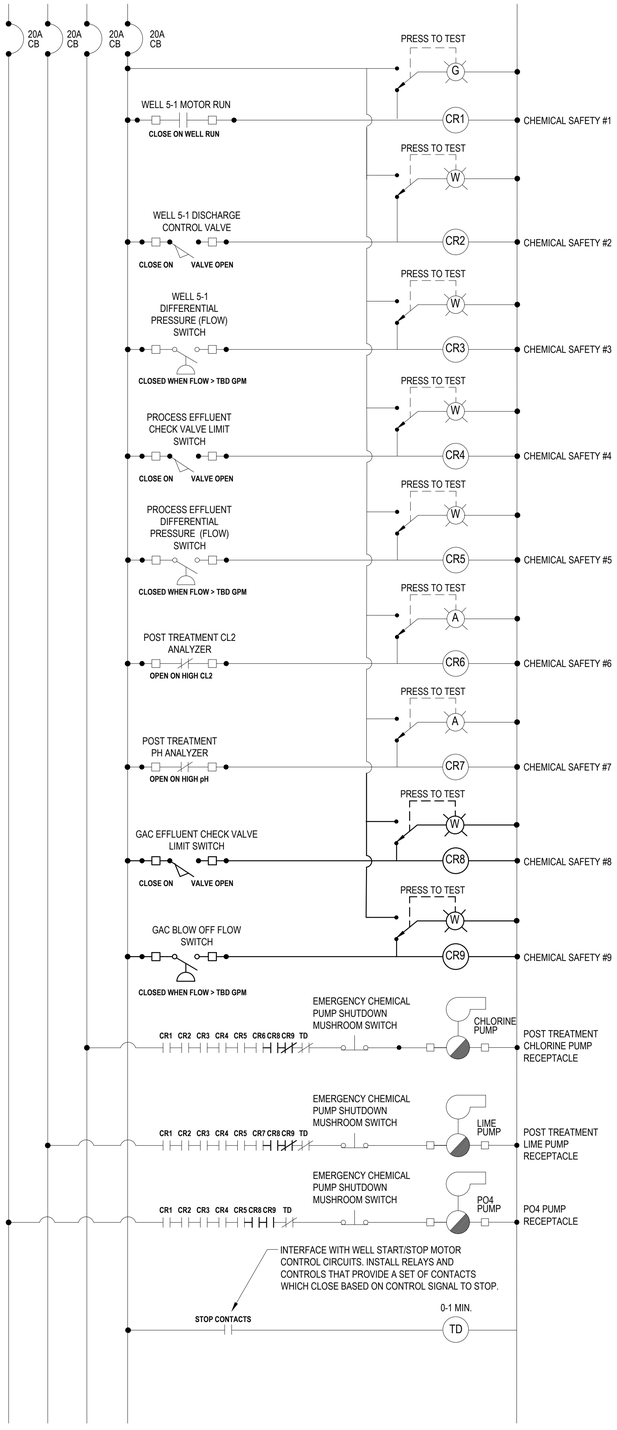
SHEET TITLE

ELECTRICAL DETAILS
SHEET NO. 1

DRAWING No.

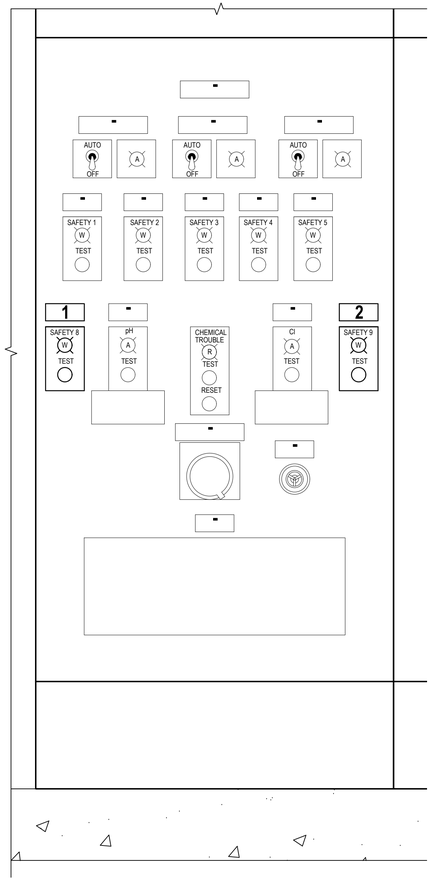
E 500.00

X:\RDWD\Riverhead Water District\ - 10810\RDWD2102 - Wellhead Treatment for PFAS at Plant No. 5\00.BIM-CADD\Con-Docs\dwg\E 500.00 - Electrical Details.dwg Last Modified: Oct 28, 2021 - 3:14pm Plotted on: Oct 28, 2021 - 3:24pm By fislam



1 Well No 5-1 Post-Treatment Safety (CTP-3) Control Diagram

SCALE:NTS



2 Well No 5-1 Post-Treatment Safety (CTP-3) Elevation

SCALE:3" = 1' - 0"

NOTE:

1. CONTRACTOR SHALL MODIFY EXISTING WELL NO. 5-1 POST-TREATMENT SAFETY PANEL 'CTP-3' AS SHOWN. PROVIDE ALL HARDWARE AND ACCESSORIES AS REQUIRED.

CONTROL ELEVATION SCHEDULE

ITEM	DESCRIPTION	COLOR/TYPE
1	GAC PROCESS EFFLUENT CHECK VALVE LIMIT SWITCH	AMBER
2	GAC BLOW OFF FLOW SWITCH	AMBER

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SHEET TITLE

ELECTRICAL DETAILS SHEET NO. 2

DRAWING No.

E 501.00

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LIGHTING SCHEDULE

DESIGNATION	SYMBOL	MANUFACTURER	MODEL NUMBER	TYPE	WATTS	COLOR TEMPERATURE	VOLTAGE	LUMENS	MOUNTING	REMARKS	MOUNTING HEIGHT
F1		ORACLE LIGHTING	OWP-NC-201-LED-6000L-MVOLT-40K-BZ	LED	56W	4000K	UNV	6000	WALL		12' - 0"
F1A		ORACLE LIGHTING	OWP-NC-201-LED-6000L-MVOLT-40K-BZ-0-EMG-LED	LED	56W	4000K	UNV	6000	WALL	W/ 90 MINUTES BATTERY BACKUP	12' - 0" AFF
F2A		HUBBELL OUTDOOR LIGHTING	TRP2-24L-50-4K7-3-120-E	LED	50W	4000K	120V	5819	WALL	W/ 90 MINUTES BATTERY BACKUP	9' - 0" AFF UON
EX		COMPASS	CER		2W		120V		WALL	W/ 90 MINUTES BATTERY BACKUP	0' - 6" ABOVE DOOR

LIGHTING CONTROLS SCHEDULE

TYPE	MANUFACTURER	MODEL NUMBER	VOLTAGE	MOUNTING	MOUNTING HEIGHT
PC	INTERMATIC	K4321C	LINE	WALL	PER MANUFACTURER'S RECOMMENDATION
PP	HUBBELL	UVPP	LINE	SURFACE	CEILING
OS / HM	HUBBELL	WSP-SM-24V + WSP-L360-WH	24V	SURFACE	CEILING

Name

Panelboard: P1 | Voltage: 480Y/277 | Phase: 3 | Wire 4 | A.I.C. Rating: 42,000
Manufacturer: SIEMENS | Mains: 100 A MCB | Mains Rating: 100 A
Panel Type: P1 | Mounting: SURFACE | Options: | Notes:
NEMA Type Enclosure: NEMA 3R

Load Description	Breaker Option	Trip	Poles	Circ No.	A	B	C	A	B	C	Circ No.	Poles	Trip	Breaker Option	Load Description
				1	3370 VA			2500 VA			2				
TRANSFORMER T1		25 A	3	3		3792 VA			2500 VA		4	3	15 A	HACR	UH-1
				5			1790 VA			2500 VA	6				
				7	2500 VA			2500 VA			8				
UH-2	HACR	15 A	3	9		2500 VA			2500 VA		10	3	15 A	HACR	UH-3
				11			2500 VA			2500 VA	12				
				13	2500 VA			0 VA			14				
UH-4		15 A	3	15		2500 VA			0 VA		16	3	20 A	--	SPARE
				17			2500 VA			0 VA	18				
				19	0 VA			0 VA			20				
SPARE	--	20 A	3	21		0 VA			0 VA		22	3	20 A	--	SPARE
				23			0 VA			0 VA	24				
				25	0 VA			0 VA			26				
SPARE	--	20 A	3	27		0 VA			0 VA		28	3	20 A	--	SPARE
				29			0 VA			0 VA	30				

Connected Totals: A 13.4 kVA; B 13.8 kVA; C 11.8 kVA; Total: 39.0 kVA; Amps: 47 A

(All Phases to be balanced to within 7% Actual Load Totals)

Breaker Option

AS - Powerlink AS Breaker
LO - Handle Lock-off Device
ST - Shunt Trip Type
AUX - Auxillary Contacts
PA - Handle Padlock Attchment
GFCI - Ground Fault Circuit Interrupter
HACR - Heating, A/C & Refrigeration
SF - Subfeed
TC - Time Clock Control

MOTOR STARTER SCHEDULE

IDENTIFICATION	NEMA SIZE	VOLTS / PHASE	ENCLOSURE TYPE	DISCONNECT AMPS / POLE	ACCESSORIES
S1	0	208 / 1Ø	NEMA 3R	15 / 2	H-O-A SWITCH, RUN AND OVERLOAD LIGHT

TRANSFORMER SCHEDULE

TRANSFORMER IDENTIFICATION	SIZE	PRIMARY VOLTAGE / PHASE	SECONDARY VOLTAGE / PHASE / WIRE	TYPE	ENCLOSURE	MOUTING LOCATION
T1	15KVA	480V / 3Ø	208/120V / 3Ø / 4W	DRY	NEMA 3R	WALL MOUNT

Name

Panelboard: P2 | Voltage: 208Y/120 | Phase: 3 | Wire 4 | A.I.C. Rating: 22,000
Manufacturer: SIEMENS | Mains: 50 A MCB | Mains Rating: 100 A
Panel Type: P1 | Mounting: SURFACE | Options: | Notes:
NEMA Type Enclosure: NEMA 3R

Load Description	Breaker Option	Trip	Poles	Circ No.	A	B	C	A	B	C	Circ No.	Poles	Trip	Breaker Option	Load Description
EXTERIOR RECEPTACLES	GFCI	20 A	1	1	1080 VA			900 VA			2	1	20 A	GFCI	INTERIOR RECEPTACLES
INTERIOR RECEPTACLES	GFCI	20 A	1	3		900 VA			716 VA		4	1	20 A		BUILDING LIGHTING
FIRE ALARM REMOTE...		20 A	1	5			1000 VA			790 VA	6	2	15 A		EF-1
EF-1 STARTER, THERMOSTAT, L-1		20 A	1	7	600 VA			790 VA			8				
CHLORINE ANALYZER		20 A	1	9		1000 VA			1176 VA		10	1	20 A		OVERHEAD DOOR
SPARE	--	20 A	1	11			0 VA			0 VA	12	1	20 A	--	SPARE
SPARE	--	20 A	1	13	0 VA			0 VA			14	1	20 A	--	SPARE
SPARE	--	20 A	1	15		0 VA			0 VA		16	1	20 A	--	SPARE
SPARE	--	20 A	1	17			0 VA			0 VA	18	1	20 A	--	SPARE
SPARE	--	20 A	1	19	0 VA			0 VA			20	1	20 A	--	SPARE
SPARE	--	20 A	1	21		0 VA			0 VA		22	1	20 A	--	SPARE
SPARE	--	20 A	1	23			0 VA			0 VA	24	1	20 A	--	SPARE
SPARE	--	20 A	1	25	0 VA			0 VA			26	1	20 A	--	SPARE
SPARE	--	20 A	1	27		0 VA			0 VA		28	1	20 A	--	SPARE
SPARE	--	20 A	1	29			0 VA			0 VA	30	1	20 A	--	SPARE

Connected Totals: A 3.4 kVA; B 3.8 kVA; C 1.8 kVA; Total: 9.0 kVA; Amps: 25 A

(All Phases to be balanced to within 7% Actual Load Totals)

Breaker Option

AS - Powerlink AS Breaker
LO - Handle Lock-off Device
ST - Shunt Trip Type
AUX - Auxillary Contacts
PA - Handle Padlock Attchment
GFCI - Ground Fault Circuit Interrupter
HACR - Heating, A/C & Refrigeration
SF - Subfeed
TC - Time Clock Control

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

162 Middle Road
Riverhead NY, 11901

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PFAS TREATMENT SYSTEM

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SHEET TITLE

ELECTRICAL SCHEDULES

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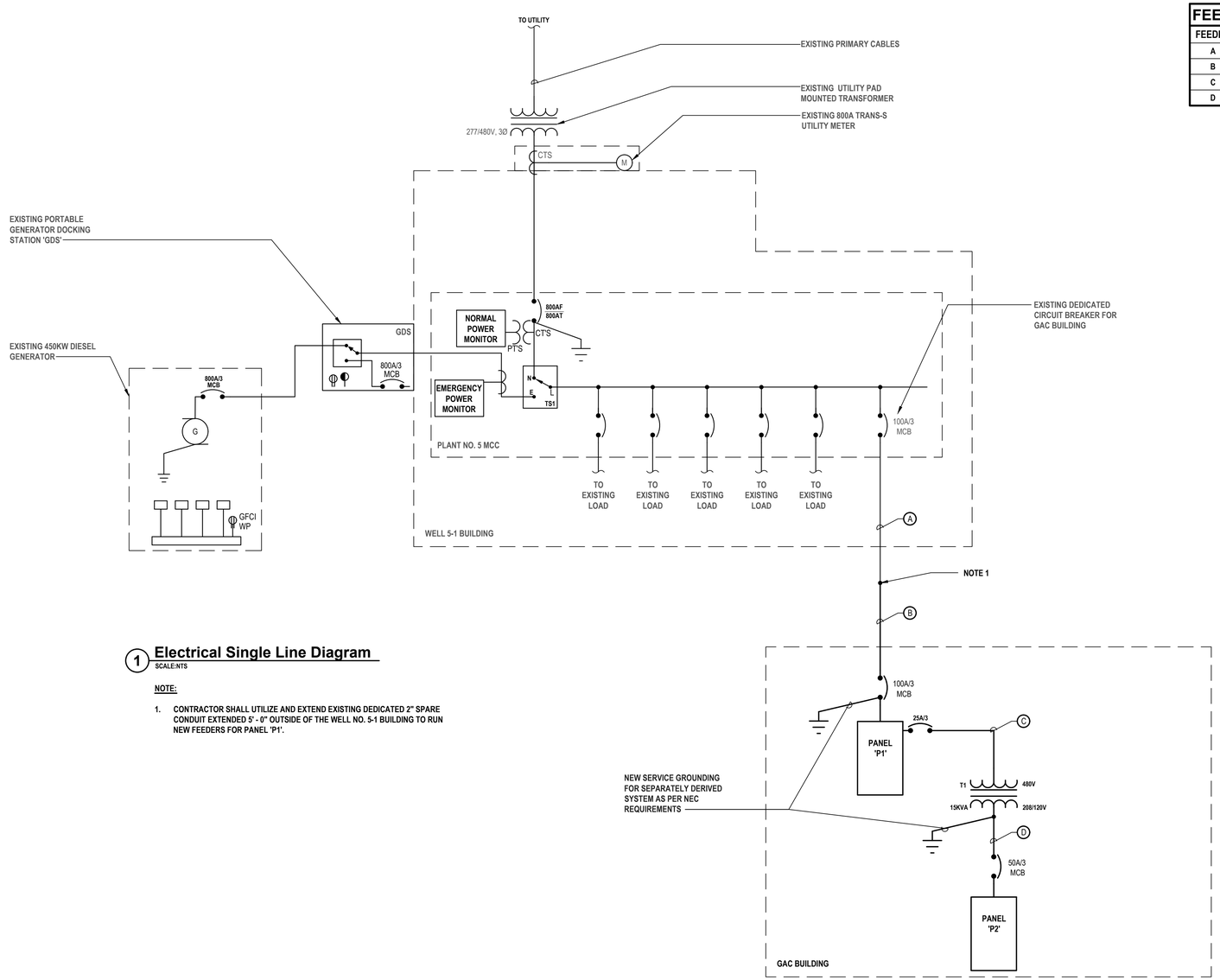

1 Electrical Single Line Diagram

SCALE:NTS

NOTE:

1. CONTRACTOR SHALL UTILIZE AND EXTEND EXISTING DEDICATED 2" SPARE CONDUIT EXTENDED 5' - 0" OUTSIDE OF THE WELL NO. 5-1 BUILDING TO RUN NEW FEEDERS FOR PANEL 'P1'.

FEEDER SCHEDULE

FEEDER	CONDUTOR AND CONDUITS FEEDER SCHEDULE
A	4 #3 AWG + #8 AWG GND IN EXISTING 2" E.C.
B	4 #3 AWG + #8 AWG GND IN 2" E.C.
C	3 #10 AWG + #10 AWG GND IN 3/4" E.C.
D	4 #8 AWG + #10 AWG GND IN 1" E.C.

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ELECTRICAL SINGLE LINE DIAGRAM

DRAWING No.

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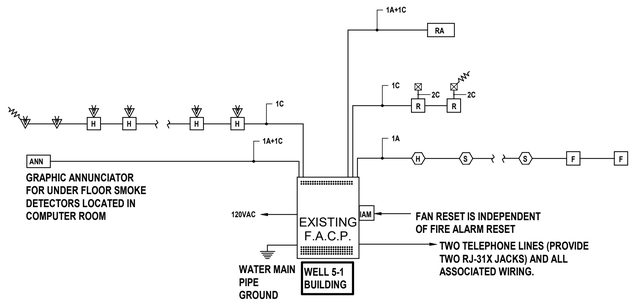
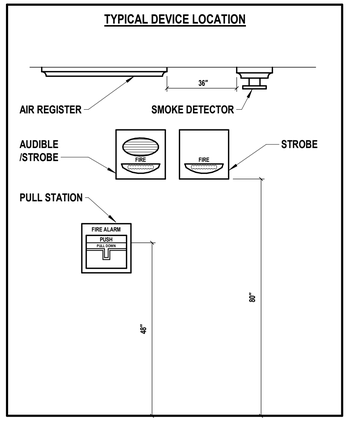
FIRE ALARM LEGEND

SYMBOL	DESCRIPTION	COMMENTS
FACP	FIRE ALARM CONTROL PANEL.	
RA	REMOTE ANNUNCIATOR WITH BACKBOX.	
S	SMOKE DETECTOR.	
S CO	SMOKE DETECTOR WITH CARBON MONOXIDE AND LOCAL TEMPORAL '4' SOUNDER BASE.	
S CO/SB	SMOKE DETECTOR WITH CARBON MONOXIDE AND INTEGRAL SOUNDER BASE.	
CO	CARBON MONOXIDE DETECTOR.	
FAIL S	ABOVE CEILING SMOKE DETECTOR WITH REMOTE ALARM LAMP.	
FAIL S RT	DUCT DETECTOR WITH REMOTE ALARM LAMP; "S" DENOTES SUPPLY, "R" DENOTES RETURN.	
H	HEAT DETECTOR.	
HT	HEAT DETECTOR 200°.	
H HORN/STROBE	HORN/STROBE COMBO.	
H WP	WEATHER PROOF HORN/STOBE COMBO WITH BACKBOX.	
AM	ADAPTER MODULE WITH MOUNTING PLATE.	
SH	SMOKE HATCH (F.B.O.).	
ST	STROBE.	
DH	MAGNETIC DOOR HOLDER.	
DR	DOOR RELEASE RELAY.	
F	MANUAL PULL STATION WITH BACKBOX.	
R	RELAY.	
IAM	INDIVIDUAL ADDRESSABLE MODULE.	
CM	CONTROL MODULE.	
AES	AUTOMATIC EXTINGUISHING SYSTEM.	
	MOTOR STARTER.	
	END OF LINE RESISTOR.	
BT	BEAM DETECTOR TRANSMITTER.	
BR	BEAM DETECTOR RECEIVER.	
SP	SURGE PROTECTOR.	
	BELL/STROBE.	
SF	SMOKE DETECTOR FOR ELEVATOR RECALL.	
SRP	SUPPRESSION RELEASING PANEL.	
MS	MAINTENANCE SWITCH.	
SOL	SOLENOID (F.B.O.).	
PS	PRESSURE SWITCH.	
TS	TAMPER SWITCH.	
FS	FLOW SWITCH.	
CS	COIL SUPERVISORY (F.B.O.).	
CL	AIR COMPRESSOR, LOW PRESSURE (F.B.O.).	
CH	AIR COMPRESSOR, HIGH PRESSURE (F.B.O.).	
HORN S	STAGE 2 BELL.	



1 Fire Alarm Riser Diagram (Note 17)
SCALENTS

WIRE LEGEND			
	WIRE DESCRIPTION	TYPE	NOTES
A	1 PAIR TWISTED SHIELDED #18 AWG	FPLP	-
B	1 PAIR #18 AWG. NON-SHIELDED	FPLP	-
C	1 PAIR #14 AWG. NON SHIELDED	FPLP	-
D	#12 AWG. NON SHIELDED	THHN	*
E	#14 AWG. NON SHIELDED	THHN	-
F	1 PAIR TWISTED SHIELDED #16 AWG.	FPLP	-



2 Typical Fire Alarm Device Location
SCALENTS

	CONTROL UNIT ANNUNCIATION								NOTIFICATION		SUPPLIMENTARY	
	ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE VISUAL ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE COMMON TROUBLE SIGNAL	ACTUATE ZONE INDICATION	ACTUATE FULL BUILDING EVACUATION SIGNAL	DISPLAY CHANGE OF STATUS	TRANSMIT FIRE ALARM SIGNAL TO SUPERVISING STATION	TRANSMIT SUPERVISION SIGNAL TO SUPERVISING STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	HVAC FAN SHUTDOWN	INITIAITE EXTERIOR STROBE
MANUAL PULL STATION	●	●			●	●	●	●			●	●
SMOKE DETECTOR	●	●			●	●	●	●			●	●
HEAT DETECTOR	●	●			●	●	●	●			●	●
DUCT DETECTOR	●	●			●	●	●	●			●	●
CARBON MONOXIDE DETECTOR					●		●		●			
FIRE PANEL AC POWER FAILURE			●						●			
FA SYSTEM LOW BATTERY				●						●		
OPEN CIRCUIT				●						●		
GROUND FAULT				●						●		
NOTIFICATION APPLIANCE CIRCUIT SHORT				●						●		
AIR ASPIRATION DETECTOR	●	●			●	●	●				●	●

3 Fire Alarm Sequence of Operations
SCALENTS

NOTES:

1. ALL WIRING TO BE SUPPLIED AND INSTALLED ACCORDING TO THE LATEST REVISION OF THE NATIONAL ELECTRIC CODE OR AS DICTATED CONTRACT SPECIFICATIONS, AND THE 2007 EDITION OF N.F.P.A 72 OR AS REQUIRED BY LOCAL ORDINANCE.
2. ALL CONDUCTORS MUST BE TEST FREE OF OPENS, SHORTS AND GROUNDS.
3. GROUNDING MUST COMPLY WITH THE NATIONAL ELECTRIC CODE. GROUNDING MUST BE NO. 12 A.W.G.
4. ALL PANEL TERMINATIONS TO BE SUPERVISED BY A FACTORY AUTHORIZED TECHNICIAN PRIOR TO POWERING EQUIPMENT.
5. FOR COMPONENT WIRING AND INSTALLATION INFORMATION REFER TO MANUFACTURERS REQUIREMENTS.
6. REFER TO CONTRACT DRAWINGS FOR APPROXIMATE DEVICE LOCATIONS. DRAWINGS REPRESENT DEVICE QUANTITIES. SHOP DRAWINGS SHALL BE SUBMITTED SHOWING SCALED LOCATIONS. CONTRACTOR TO SUBMIT PLANS STAMPED BY LICENSED NEW YORK PROFESSIONAL ENGINEER ONLY. SHOP DRAWINGS WITHOUT P.E STAMP WILL BE AUTOMATICALLY REJECTED.
7. CONTRACTOR IS RESPONSIBLE TO PATCH & PAINT ALL OPENINGS AS A RESULT OF REMOVAL OF EXISTING EQUIPMENT.
8. INSTALL DETECTORS A MINIMUM OF 3'-0" FROM ANY SUPPLY OR RETURN AIR REGISTERS. COORDINATE EXACT LOCATIONS OF SUPPLY/RETURNS REGISTERS WITH MECHANICAL CONTRACTOR
9. WHEN INSTALLING SHIELDED CABLE THE FOLLOWING MUST BE OBSERVED:
   A. METALLIC CONTINUITY MUST BE MAINTAINED THROUGHOUT THE CABLE RUN.
   B. THE CABLE SHIELD MUST BE ISOLATED FROM GROUND AND TERMINATED ONLY IN THE ASSOCIATED CONTROL PANEL AT THE TERMINAL INDICATED ON THE CONTROL PANEL DRAWINGS. THE REMOTE END OF THE SHIELD (AT LAST DEVICE) MUST BE TAPED AND ISOLATED FROM GROUND.
10. ALL STROBE APPLIANCES SHALL BE SYNCHRONIZED. ALL ALARM INDICATING APPLIANCES SHALL SOUND A 'TEMPORAL 3' CODE PATTERN, UNLESS SYSTEM IS VOICE ACTIVATED.
11. AFTER ALARM INDICATION, ALL FANS SHALL BE MANUALLY RESET INDEPENDENT FROM F.A.C.P. SYSTEM RESET. PROVIDE ALL REQUIRED HARDWARE ACCESSORIES, MOTOR STARTERS, CONTROLS, POWER AND CONTROL WIRING AND CONDUITS TO PROVIDE INDEPENDENT RESET OF ALL FANS AFTER ALARM INDICATION.
12. INSTALL ALL DEVICES IN ACCORDANCE WITH A.D.A REQUIREMENTS. ALL DEVICES SHALL BE MOUNTED AS FOLLOWS:
   A. MANUAL PULL STATIONS 48" O.C.
   B. ALARM INDICATING APPLIANCE 80" A.F.F.
   C. VERIFY WITH CONTRACT SPECIFICATIONS FOR ANY DEVIATIONS.
13. STROBES SHALL BE WIRED TO REMAIN ACTIVE AFTER SILENCE FUNCTION IS PERFORMED.
14. PROVIDE AND INSTALL ALL NECESSARY CONTROL MODULES, SYNCHRONIZATION MODULES AND MONITOR MODULES AS REQUIRED BY MANUFACTURER.
15. CONTRACTOR SHALL PROVIDE TWO TELEPHONE LINES AND TELEPHONE JACKS. PROVIDE ALL REQUIRED WIRING/CONDUIT TO LOCATE NEW TELEPHONE JACKS ADJACENT TO FACP.
16. FIRE ALARM RISER DIAGRAM IS SCHEMATIC. REFER TO FLOOR PLANS FOR DEVICE TYPES AND QUANTITIES.
17. ALL HVAC EQUIPMENT WITH A CFM RATING OF 1000 CFM OR GREATER SHALL BE INTERCONNECTED TO THE FIRE ALARM SYSTEM AND SHUT DOWN UPON FIRE ALARM SYSTEM ALARM ACTIVATION.
18. IN ADDITION TO DEVICES SHOWN ON THE DRAWINGS CONTRACTOR TO PROVIDE FIVE SMOKE DETECTORS, FIVE HEAT DETECTORS, FIVE PULL STATIONS, FIVE HORN STROBES, AND FIVE STROBES. EACH DEVICE SHALL BE INCLUDED WITH 100' OF WIRING AND CONDUIT.
19. CONDUIT MUST BE USED IN ALL AREAS.
20. ALL EQUIPMENT TO BE RECESSED MOUNTED AND ALL WIRING AND CONDUIT TO BE RUN CONCEALED.
21. UPON COMPLETION OF INSTALLATION ALL DEVICES SHALL BE TESTED FOR PROPER OPERATION; ANY DEVICES THAT FAIL TESTING SHALL BE REPLACED AT NO COST.

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Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

162 Middle Road
Riverhead NY, 11901

CONTRACT
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PFAS TREATMENT SYSTEM

STATUS
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SHEET TITLE
FIRE ALARM LEGENDS

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FA 001.00

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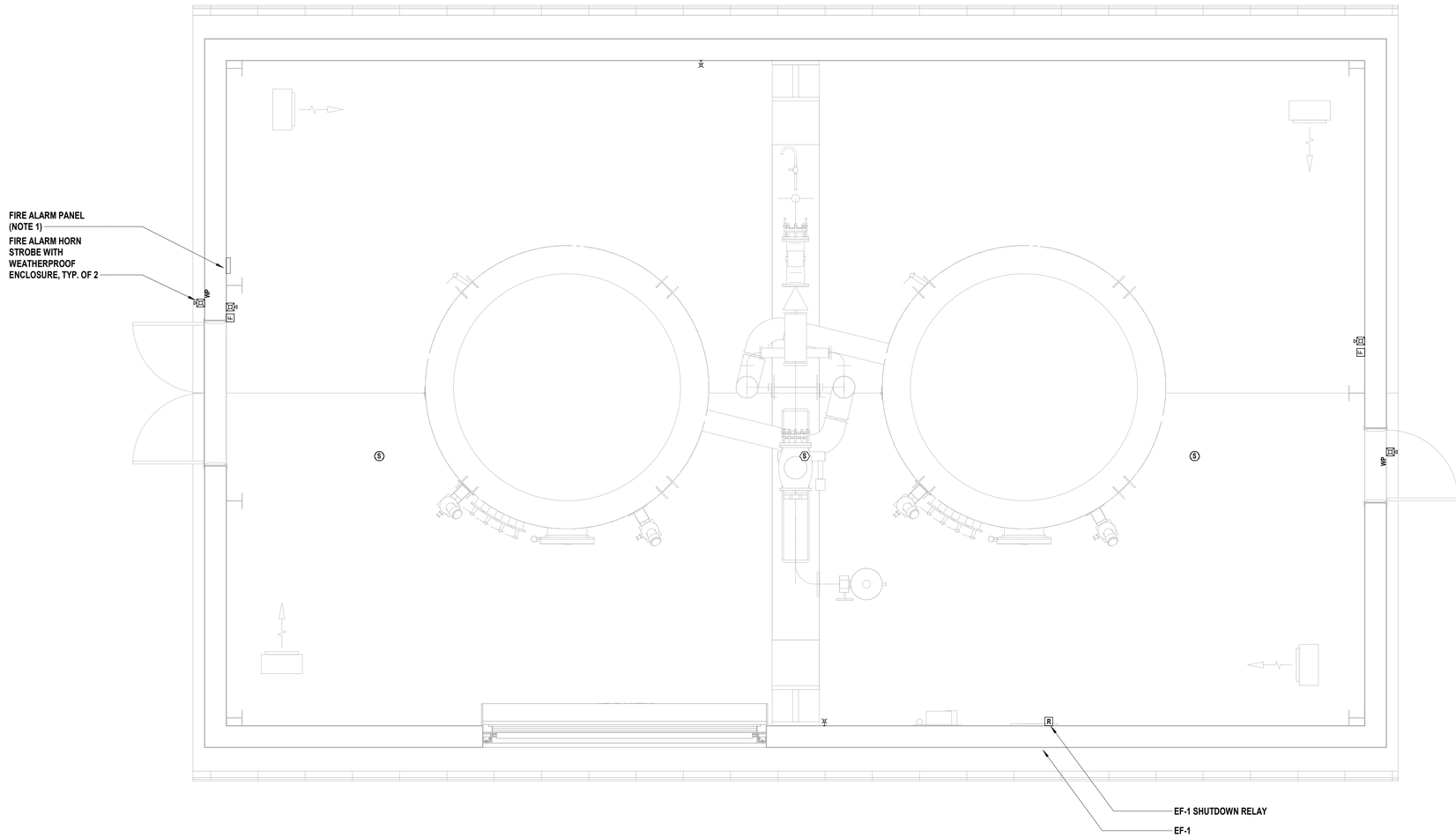

1 GAC Building Fire Alarm Plan

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

FIRE ALARM KEY NOTE:

1. FIRE ALARM PANEL AND DEVICES SHALL BE PROVIDED AND INSTALLED BY DISTRICT'S FIRE ALARM SYSTEM INTEGRATOR UNDER ALLOWANCE ITEM. COORDINATE WITH DISTRICT'S FIRE ALARM SYSTEM INTEGRATOR AS REQUIRED.

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MARK	DATE	DESCRIPTION
1	10/28/21	ADDENDUM NO. 1

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DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
CJS	FI		

PROJECT No:	DATE:	SCALE:
RDWD2102	OCTOBER 2021	AS SHOWN

CLIENT

Riverhead Water District

Wellhead Treatment for PFAS at Plant No. 5

162 Middle Road
Riverhead NY, 11901

CONTRACT

CONTRACT M
PFAS TREATMENT SYSTEM

STATUS

FINAL BID DOCUMENT

SHEET TITLE

FIRE ALARM PLAN GAC BUILDING

DRAWING No.

FA 100.00

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