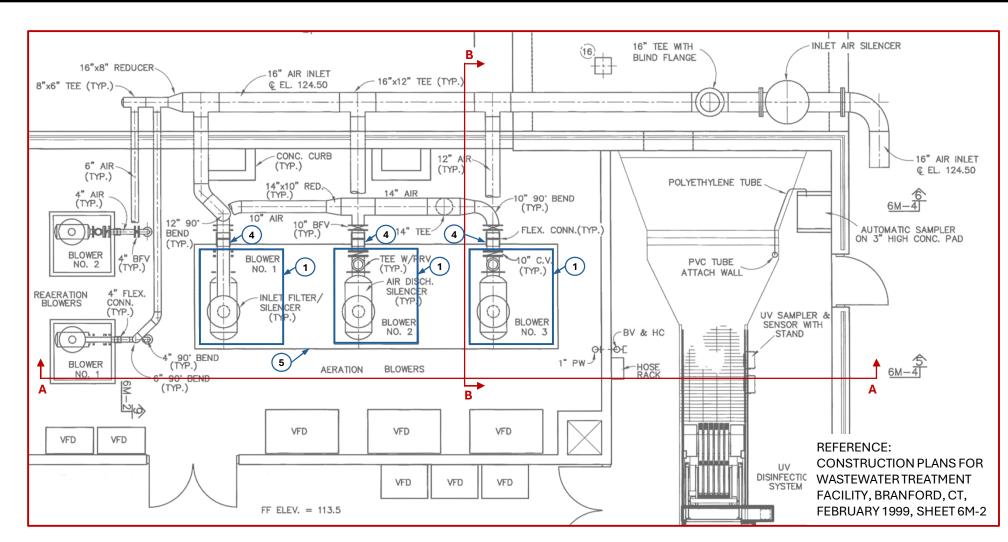
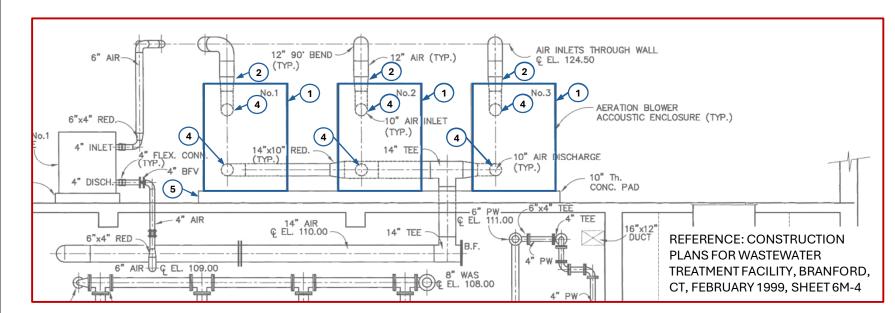
BRANFORD WATER POLLUTION CONTROL FACILITY

FIGURE M0-01



FIRST FLOOR PLAN - SECONDARY PROCESS BUILDING

SCALE: NTS



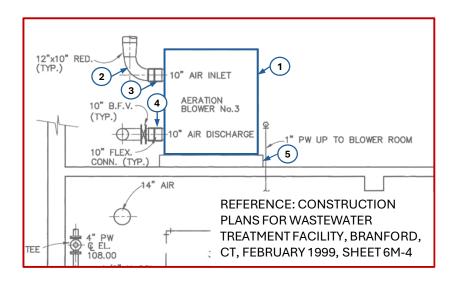
SECTION VIEW A-A

SCALE: NTS

- (1.) DEMOLISH AND REMOVE EXISTING AERATION BLOWERS PER SPEC 15210 (TYP. OF 3). FURNISH AND INSTALL PROPOSED AERATION BLOWERS PER SPEC 11375 (TYP. OF 3).
- FURNISH AND INSTALL PROPOSED INLET FILTERS PER SPEC 11375 (TYP. OF 3).
- FURNISH AND INSTALL NEW INLET AND DISCHARGE AIR PROCESS PIPING PER SPEC 15210 AS REQUIRED TO CONNECT PROPOSED AERATION BLOWERS. DEMOLISH AND REMOVE EXISTING AIR PROCESS PIPING THAT CONFLICTS WITH NEW AIR PROCESS PIPING.
- FURNISH AND INSTALL NEW EXPANSION COUPLINGS FOR BOTH AIR INLET AND DISCHARGE PIPING PER SPEC 15210 (TYP. OF 6).
- CONNECTTO EXISTING COOLING SUPPLY AND EXHAUST DUCTOWRK. SUPPLY ADDITIONAL DUCTWORK IN KIND, AS NEEDED.
- ANY DAMAGE TO EXISTING CONCRETE PAD SHALL BE REPAIRED IN ACCORDANCE WITH SPEC 03300.



AERATION BLOWER EXHAUST DUCTWORK SCALE: NTS

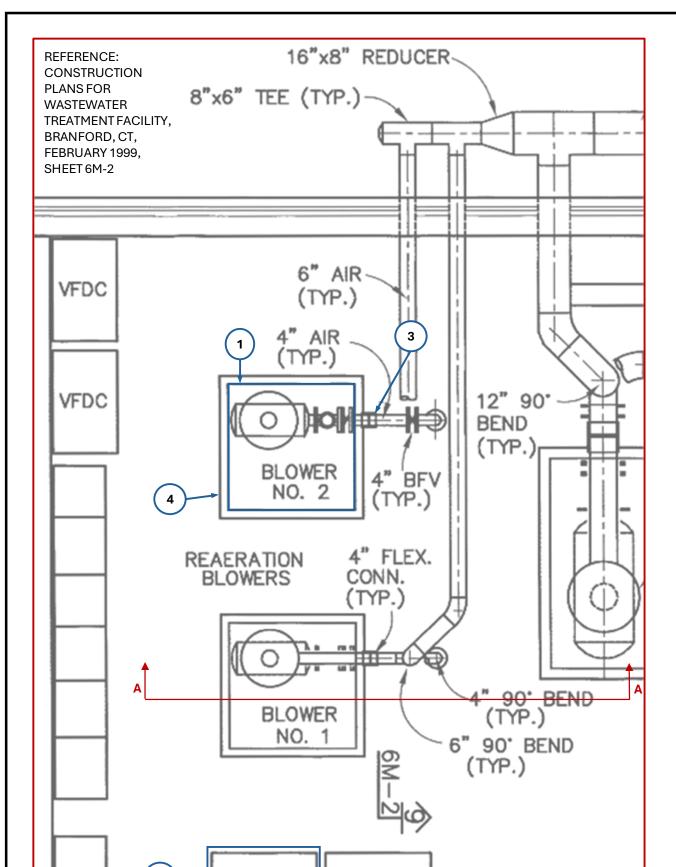


SECTION VIEW B-B SCALE: NTS

ALT

BRANFORD WATER POLLUTION CONTROL FACILITY

FIGURE **M1-01**

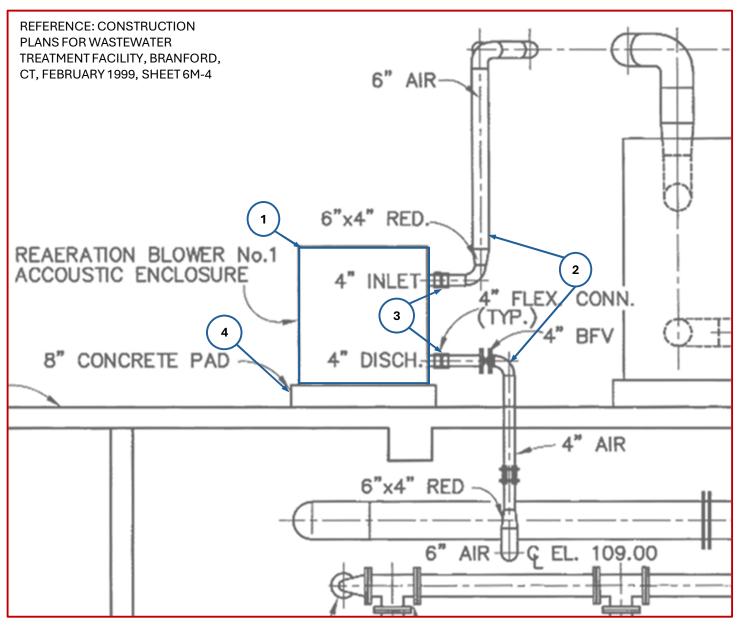


VFD

FIRST FLOOR PLAN – SECONDARY PROCESS BUILDING SCALE: NTS

5

- 1.) DEMOLISH AND REMOVE EXISTING REAERATION BLOWER NO. 2 PER SPEC 15210. FURNISH AND INSTALL PROPOSED REAERATION BLOWER PER SPEC 11305.
- 2. FURNISH AND INSTALL NEW INLET AND DISCHARGE AIR PROCESS PIPING PER SPEC 15210 AS REQUIRED TO CONNECT PROPOSED REARATION BLOWER. DEMOLISH AND REMOVE EXISTING AIR PROCESS PIPING THAT CONFLICTS WITH NEW AIR PROCESS PIPING.
- 3.) FURNISH AND INSTALL NEW EXPANSION COUPLINGS FOR BOTH AIR INLET AND DISCHARGE PIPING PER SPEC 15210 (TYP. OF 2).
- (4.) ANY DAMAGE TO EXISTING CONCRETE PAD SHALL BE REPAIRED IN ACCORDANCE WITH SPEC 03300.
- (5.) BLOWER NO. 2 VFD (VFDC NO. 30): REFER TO SHEET E1-1.



SECTION VIEW A-A
SCALE: NTS

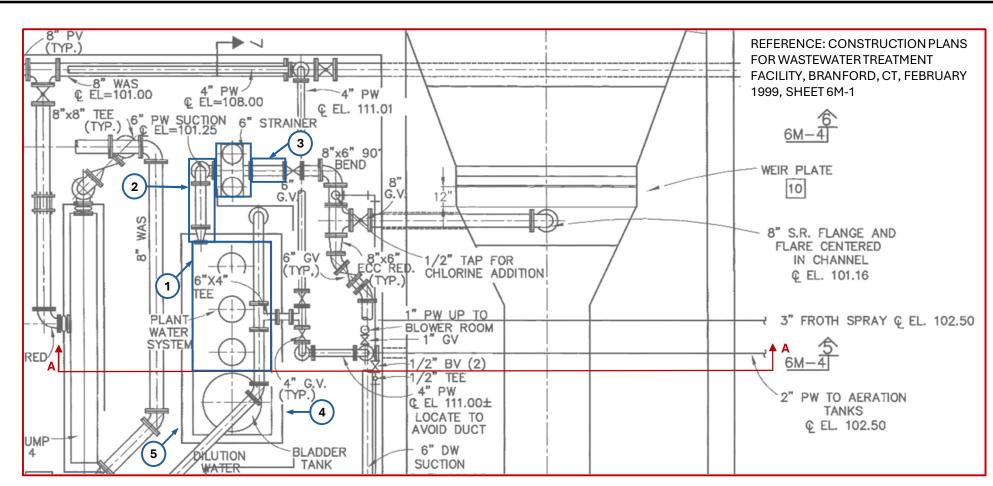
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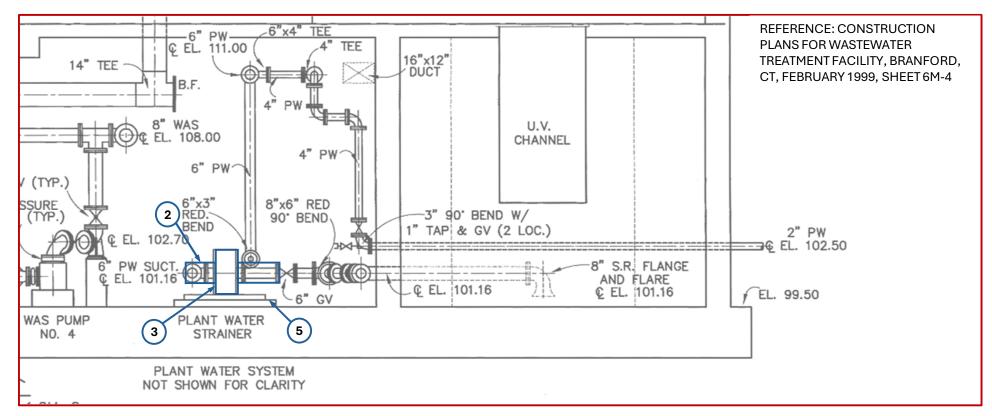
BRANFORD WATER POLLUTION CONTROL FACILITY

BRANFORD

FIGURE M2-01



BASEMENT PLAN - SECONDARY PROCESS BUILDING SCALE: NTS



SECTION VIEW A-A

SCALE: NTS

- DEMOLISH AND REMOVE EXISTING PLANT WATER PUMP SKID PER SPEC 02225. FURNISH AND INSTALL PROPOSED PLANT WATER PUMP SKID PER SPEC 11215.
- FURNISH AND INSTALL NEW SUCTION AND DISCHARGE PLANT WATER PIPING PER SPEC 15220 AS REQUIRED TO CONNECT PROPOSED PLANT WATER SYSTEM. DEMOLISH AND REMOVE EXISTING PLANT WATER PIPING THAT CONFLICTS WITH NEW PLANT WATER PIPING.
- FURNISH AND INSTALL NEW IN-KIND PLANT WATER BASKET STRAINER AND ASSOCIATED PIPING PER SPECS 15225 AND 15220, RESPECTIVELY.
- MODIFY EXISTING CONCRETE PAD TO ACCOMMODATE THE NEW SKID MOUNTED PLANT WATER PUMP SYSTEM. THIS MAY INCLUDE REMOVAL OF THE EXISTING CONCRETE PAD AND INSTALLATION OF A NEW CONCRETE PAD PER SPEC 03300.
- ANY DAMAGE TO EXISTING CONCRETE PAD SHALL BE REPAIRED IN ACCORDANCE WITH SPEC 03300.

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BRANFORD WATER POLLUTION CONTROL FACILITY

MAY 2025

REFERENCE: CONSTRUCTION PLANS FOR $8^{"}$ INLET AIR @=122.00WASTEWATER TREATMENT FACILITY, BRANFORD, CT, FEBRUARY 1999, SHEET 7M-3 CUT EXISTING GRATING FOR PIPE PENETRATION 113.50 8" AIR KMn04 PIPING Q = 111.00 $Q = 113 \pm$ FIN. GRADE 112.00 +/-FOR PIPING DETAILS SEE SCHEMATIC ON DRAWING 7M-4 8" 90" BEND -ACCOUSTIC -8" INLET **ENCLOSURE** = 108.78CORE DRILL AND LINK SEAL 8" FLEX. WAS AIR 2" KMnO4 2 3 CONN. **BLOWER** TYP. **METERING** PUMPS -8" DISCHARGE 6" CONC. Q = 104.63**CURB** -8" 90' BEND

NOTES:

- (1.) DEMOLISH AND REMOVE EXISTING WAS BLOWER PER SPEC 02225. FURNISH AND INSTALL PROPOSED WAS BLOWER PER SPEC 11305.
- (2.) FURNISH AND INSTALL NEW SUCTION AND DISCHARGE PROCESS AIR PIPING PER SPEC 15210 AS REQUIRED TO CONNECT PROPOSED WAS BLOWER. DEMOLISH AND REMOVE EXISTING WAS BLOWER PROCESS AIR PIPING THAT CONFLICTS WITH NEW WAS BLOWER PROCESS AIR PIPING.
- (3.) FURNISH AND INSTALL NEW EXPANSION COUPLING FOR BOTH AIR INLET AND DISCHARGE PIPING PER SPEC 15210 (TYP. OF 2).

FF 115.50 ~

2

8" AIR INLET

@ EL. 111.00

(4)

8" CONC. PAD

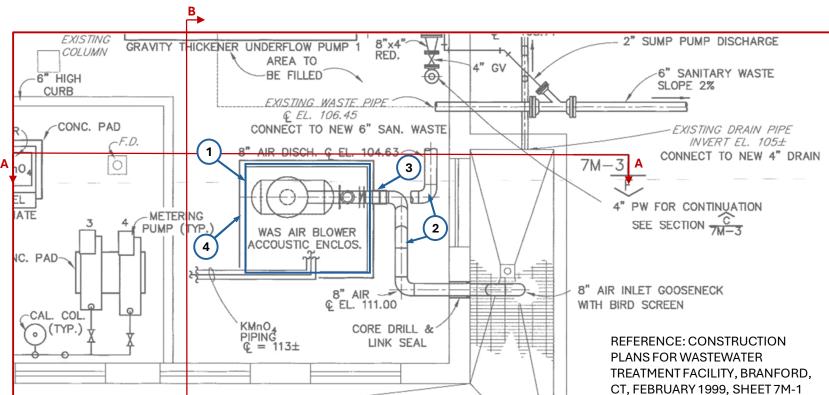
102.50

KMnO4 PIPING C = 113±

WAS AIR

BLOWER

(4.) ANY DAMAGE TO EXISTING CONCRETE PAD SHALL BE REPAIRED IN ACCORDANCE WITH SPEC 03300.





GRAVITY

THICKENER

FEED PUMP 1

8" AIR BLOWER

DISCHARGE

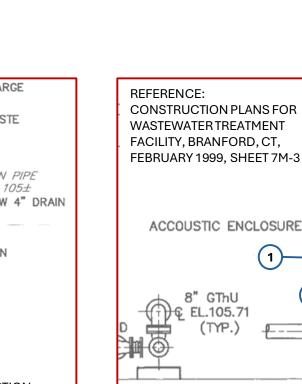
Q = 104.63

(TYP.)

BASEMENT PLAN - SOLIDS PROCESSING BUILDING SCALE: NTS

SECTION VIEW A-A

SCALE: NTS



2275 SILAS DEANE HWY ROCKY HILL, CT, 06067 JKMUIR, LLC

CONNECTICUT

PROCESS SYSTEM UPGRADES **DIAGRAMS BLOCK WIRING**

BRANFORD

MAY 2025

FIGURE E0-01

CONDUIT	CONDUIT SIZE	CABLE	FROM	то	REMARKS
C101	3	3-500MCM+#3 G	Secondary Switchboard	Disconnect Switch	Connect existing Wiring to new Fused Disconnect
C101A	2	3-#2/0 + #6 G	Disconnect Switch	Aeration Blower #1	
C101B	2	3-#2/0 + #6 G	Harmonic Filter	Aeration Blower #1	
C101A	1 ½	12-#18 TSP	Harmonic Filter	Aeration Blower #1	
C102	3	3-500MCM+#3 G	Secondary Switchboard	Disconnect Switch	Connect existing Wiring to new Fused Disconnect
C102A	2	3-#2/0 + #6 G	Disconnect Switch	Aeration Blower #2	
C102B	2	3-#2/0 + #6 G	Harmonic Filter	Aeration Blower #2	
C102C	1 ½	12-#18 TSP	Harmonic Filter	Aeration Blower #2	
C103	3	3-500MCM+#3 G	Secondary Switchboard	Disconnect Switch	Connect existing Wiring to new Fused Disconnect
C103A	2	3-#2/0 + #6 G	Disconnect Switch	Aeration Blower #3	
C103B	2	3-#2/0 + #6 G	Harmonic Filter	Aeration Blower #3	
C103C	1 ½	12-#18 TSP	Harmonic Filter	Aeration Blower #3	
C104	1	4-#4 & #8 G	6PP	Disconnect Switch	Connect existing Wiring to new Fused Disconnect
C104A	1	4-#4 & #8 G	Disconnect Switch	Local Control Panel	
C104B	1	4-#4 & #8 G	Local Control Panel	Reaeration Blower #2	Drive Rated Cable
C104C	1 ½	12-#18 TSP	Re-aeration Blower #2 Local Control Panel	CP5	
C105	1	3 #4 & #10 G	MCC 6	Junction Box	Connect existing Wiring to new Fused Disconnect
C105A	1	3 #4 & #10 G	Junction Box	Plant Water System	
C106	2 1/2	3 -250MCM + #4 G	MCC 7	Disconnect Switch	Connect existing Wiring to new Fused Disconnect
C106A	2	3-#2/0 + #6 G	Disconnect Switch	Local Control Panel	
C106B	2	3-#2/0 + #6 G	Local Control Panel	WAS Blower	Drive Rated Cable
C106C	1 ½	12-#18 TSP	WAS Blower Local Control Panel	CP5	
C111	3/4	Cat 6	Aeration Blower #1	CP5	
C112	3/4	Cat 6	Aeration Blower #2	CP5	
C113	3/4	Cat 6	Aeration Blower #3	CP5	
C114	3/4	Cat 6	Re-aeration Blower #2	CP5	
C115	3/4	Cat 6	Plant Water System	CP5	
C116	3/4	Cat 6	WAS Blower VFD	CP2	

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CONNECTICUT

PROCESS SYSTEM UPGRADES

CABLE AND CONDUIT SCHEDULE

BRANFORD WATER POLLUTION CONTROL FACILITY

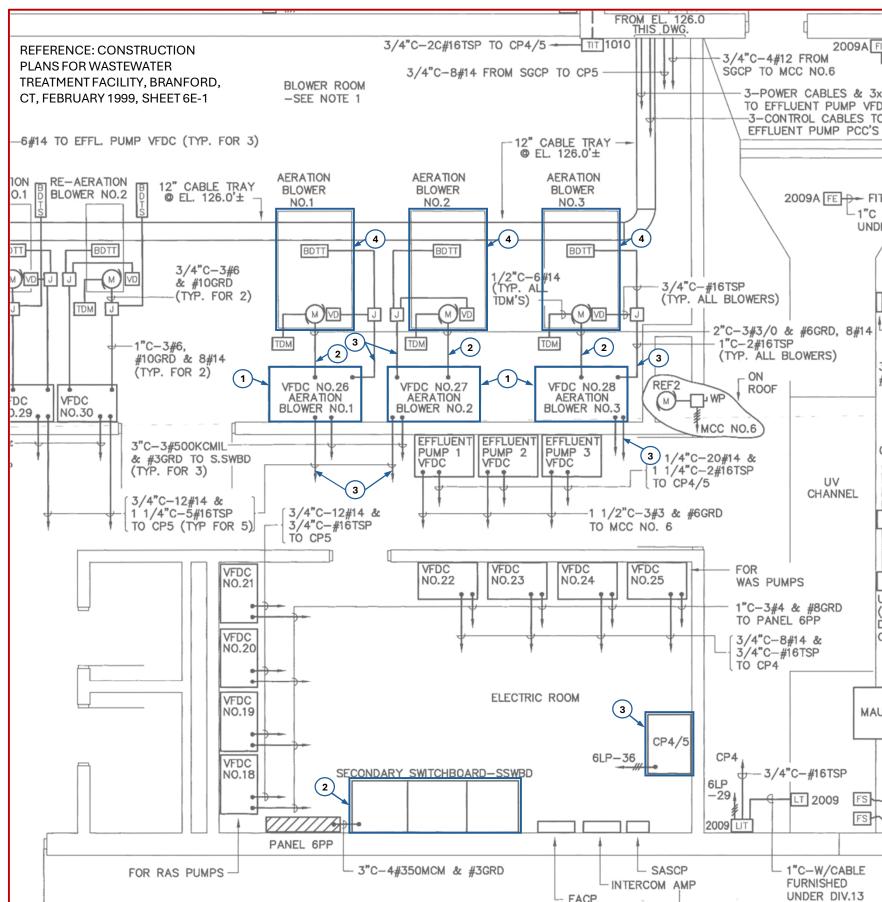
BRANFORD

MAY 2025

FIGURE **E0-02**

BRANFORD WATER POLLUTION CONTROL FACILITY

NOTES: (1.) DEMOLISH AND REMOVE EXISTING AERATION BLOWER (TYP. OF 3). INSTALL PROPOSED DISCONNECT SWITCH AND JUNCTION BOX IN PLACE OF EXISTING VFD (TYP. OF 3). (2.) CONNECT SECONDARY SWITCH BOARD POWER FROM EXISTING VFD TO PROPOSED DISONNECT SWITCH AND ROUTE TO NEW BLOWER DRIVES (TYP. OF 3). (3.) CONNECT SIGNALS FROM PROPOSED AERATION BLOWER TO CONTROL PLANEL CP5 (TYP. OF 3). -1"C (4.) REFER TO SHEET M0-01. UND



FIRST FLOOR PLAN - SECONDARY PROCESS BUILDING

SCALE: NTS

ALT

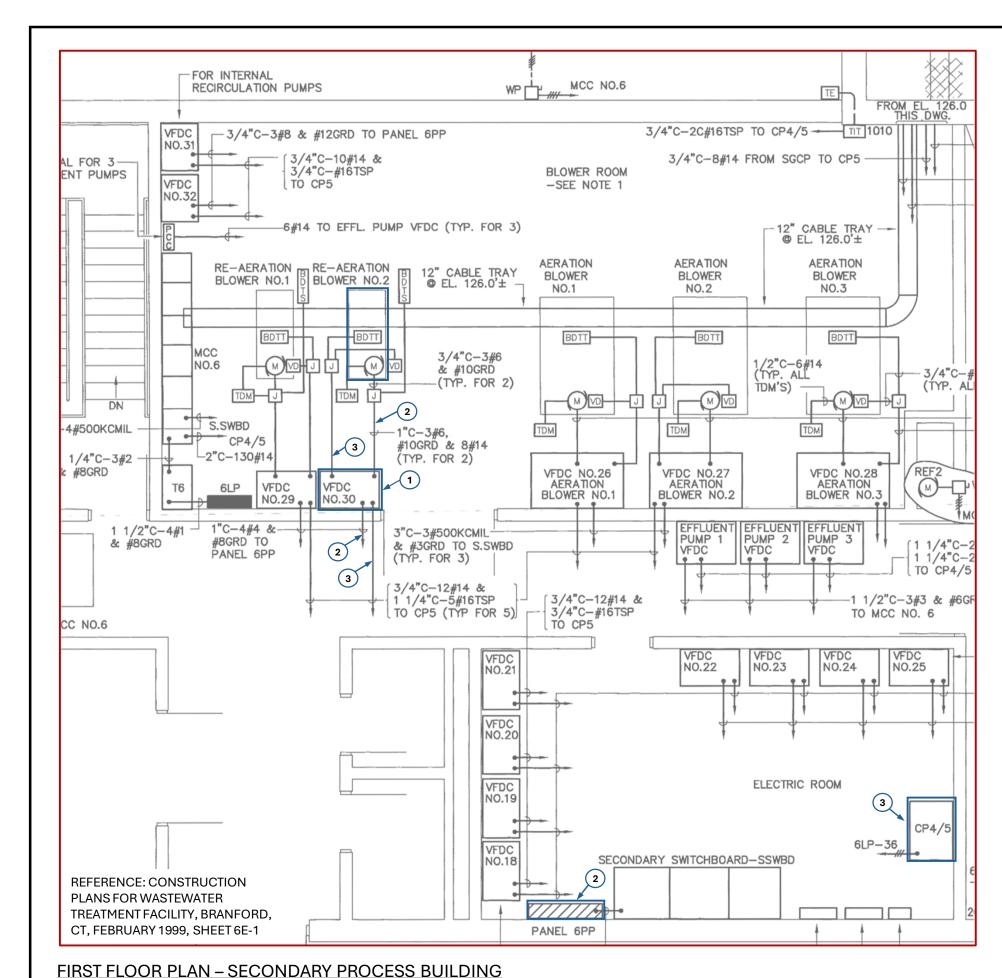
UPGRADES

SYSTEM

PROCESS

BRANFORD WATER POLLUTION CONTROL FACILITY

FIGURE E1-01



SCALE: NTS

- (1.) DEMOLISH AND REMOVE EXISTING REAERATION BLOWER VFD. REFER TO SHEET M1-01 FOR LOCATION. FURNISH AND INSTALL PROPOSED LOCAL CONTROL PANEL (LCP) DISCONNECT SWITCH.
- CONNECT PANEL 6PP POWER FROM EXISTING VFD TO PROPOSED VFD AND DISCONNECT SWITCH AND ROUTE TO NEW BLOWER DRIVE.
- CONNECT SIGNALS FROM PROPOSED REAERATION BLOWER LCP TO CONTROL PLANEL CP5.
- (4.) REFER TO SHEET M1-01.

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BRANFORD WATER POLLUTION CONTROL FACILITY

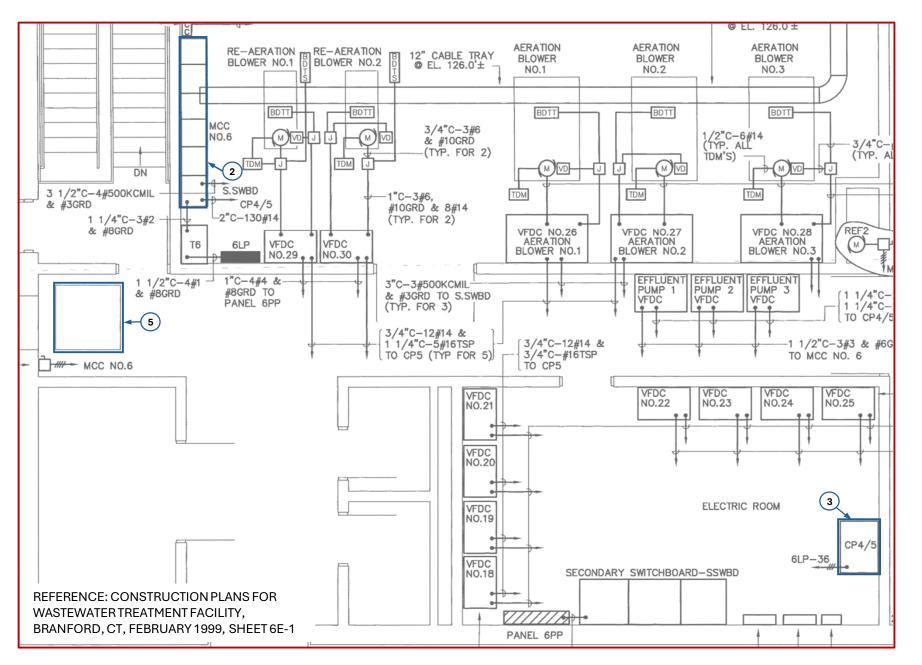
BRANFORD

FIGURE E2-01

REFERENCE: CONSTRUCTION PLANS FOR WASTEWATER TREATMENT FACILITY, BRANFORD, CT, FEBRUARY 1999, SHEET 6E-2 CP4 3 PW 3/4°C-12#14 SYSTEM MCC NO.6 1"C-3#4 & #10GRD 1 VFDC NO.25

BASEMENT PLAN - SECONDARY PROCESS BUILDING SCALE: NTS

- DEMOLISH AND REMOVE EXISTING PLANT WATER SYSTEM CONTROL PANEL FURNISH AND INSTALL PROPOSED LOCAL CONTROL PANEL IN PLACE OF EXISTING LOCAL CONTROL PANEL.
- CONNECT MCC NO. 6 POWER FROM PROPOSED LOCAL CONTROL PANEL TO PROPOSED DISCONNECT SWITCH AND ROUTE TO NEW PLANT WATER PUMP DRIVES. DISCONNECT SWITCH SHALL BE MOUNTED TO THE WALL. LOCATION SHOWN IS APPROXIMATE.
- CONNECT SIGNALS FROM PROPOSED PLANT WATER SYSTEM TO PROPOSED JUNCTION BOX AND ROUTE TO CONTROL PLANEL CP5. JUNCTION BOX SHALL BE MOUNTED TO THE WALL, LOCATION SHOWN IS APPROXIMATE.
- (4.)REFER TO SHEET M2-01.
- HATCH TO SECONDARY PROCESS BUILDING BASEMENT.

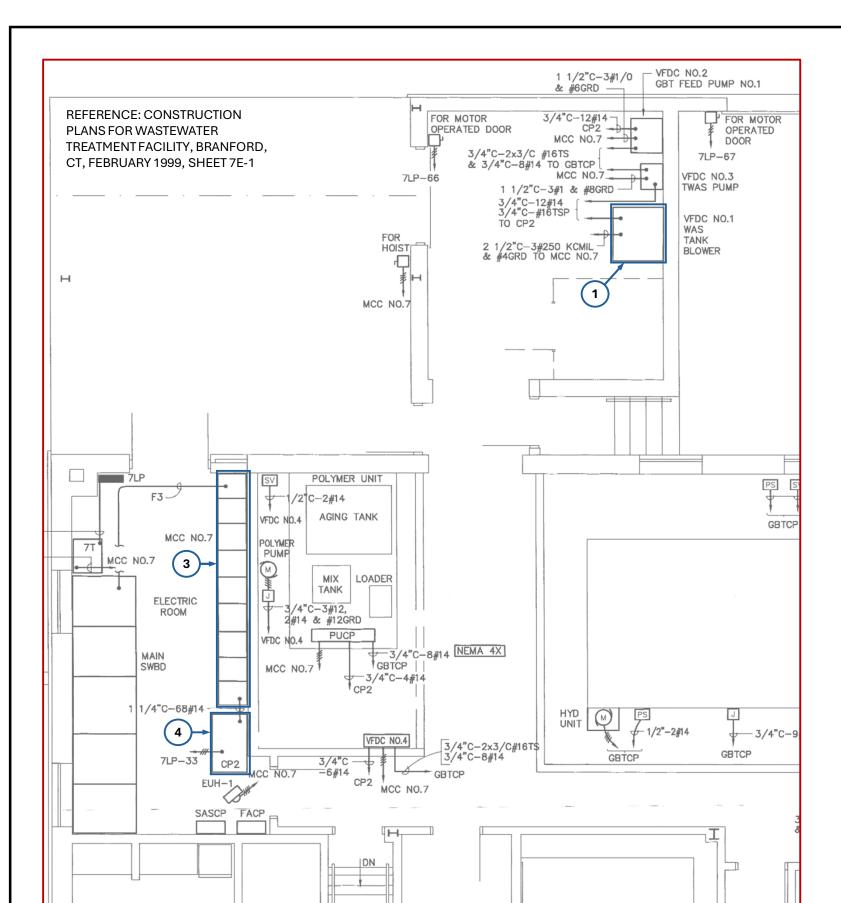


FIRST FLOOR PLAN - SECONDARY PROCESS BUILDING SCALE: NTS

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BRANFORD WATER POLLUTION CONTROL FACILITY

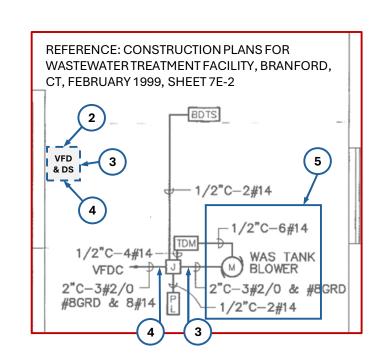
FIGURE E3-01



FIRST FLOOR PLAN - SOLIDS PROCESSING BUILDING

SCALE: NTS

- DEMOLISH AND REMOVE EXISTING WAS BLOWER VFD.
- FURNISH AND INSTALL PROPOSED LOCAL CONTROL PANEL (LCP) AND DISCONNECT SWITCH. LCP SHALL BE MOUNTED TO THE WALL. LOCATION SHOWN IS APPROXIMATE.
- CONNECT MCC NO. 7 POWER TO PROPOSED DISCONNECT SWITCH AND TO NEW WAS BLOWER LCP.
- (4.) CONNECT SIGNALS FROM PROPOSED WAS BLOWER LCP TO CONTROL PLANEL CP2.
- (5.) REFER TO SHEET M3-01.
- INSTALL CONDUIT FOR ELECTRICAL AND CONTROLS WIRING.



BASEMENT PLAN - SOLIDS PROCESSING BUILDING SCALE: NTS