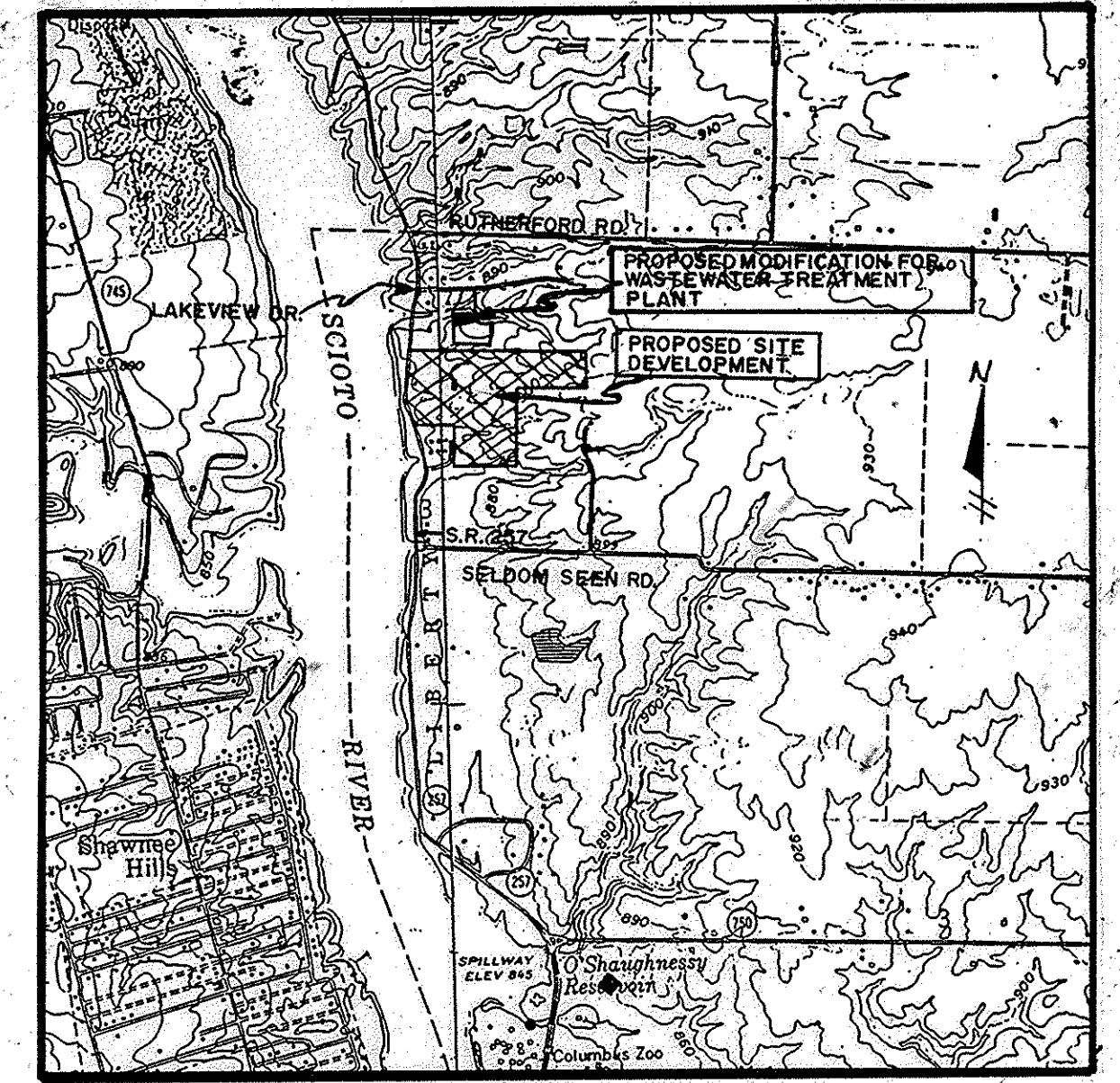
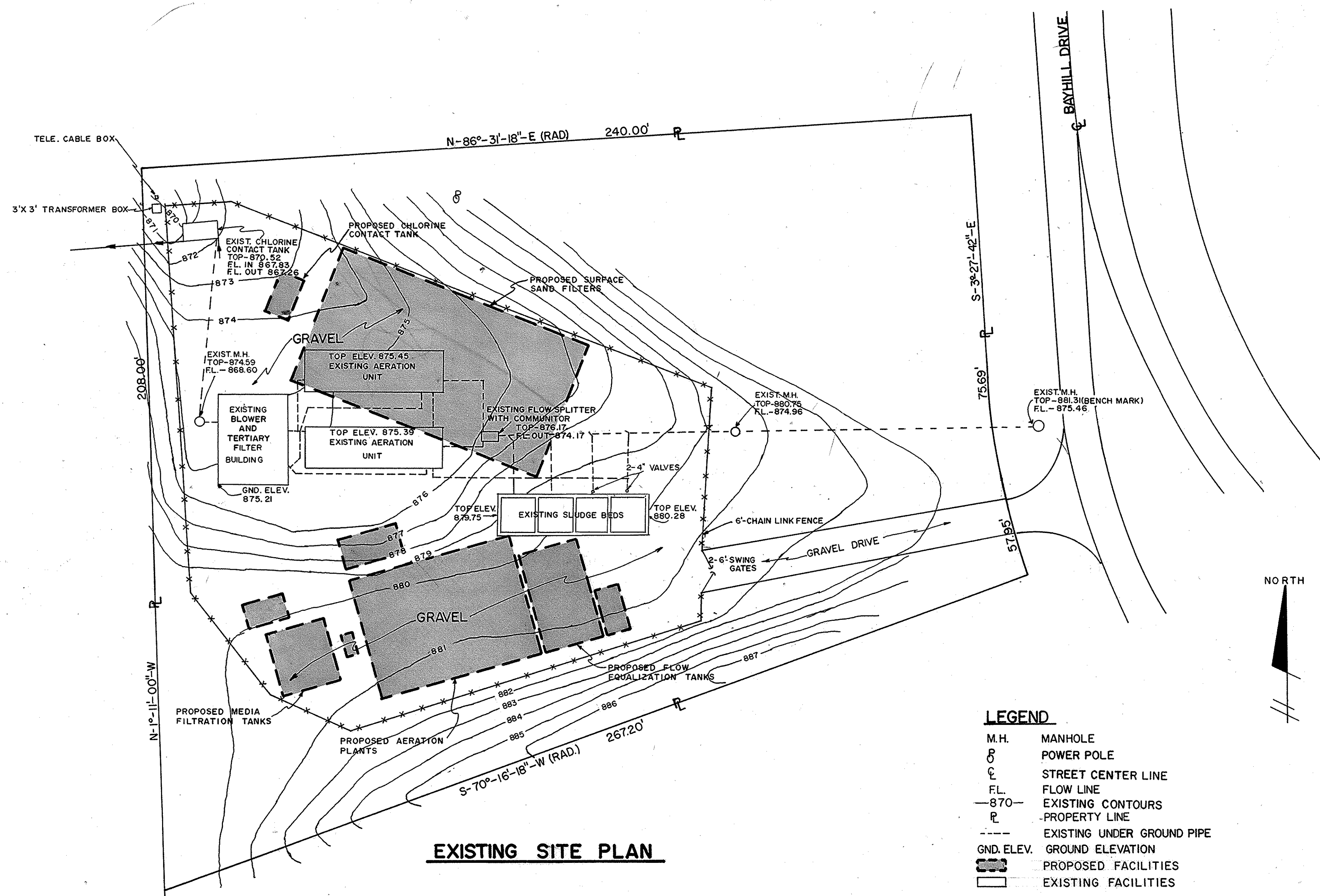


000937

# PROPOSED MODIFICATION FOR WASTE WATER TREATMENT PLANT SCIOTO HILLS, DELAWARE COUNTY, OHIO

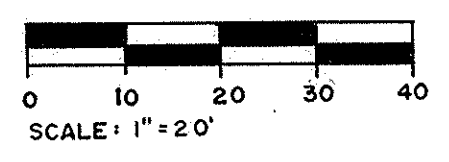


LOCATION MAP  
SCALE: 1" = 2000'



EXISTING SITE PLAN

- LEGEND**
- M.H. MANHOLE
  - P POWER POLE
  - CL STREET CENTER LINE
  - FL FLOW LINE
  - 870- EXISTING CONTOURS
  - P PROPERTY LINE
  - EXISTING UNDER GROUND PIPE
  - GND. ELEV. GROUND ELEVATION
  - ▨ PROPOSED FACILITIES
  - EXISTING FACILITIES



**INDEX OF SHEETS**

PAGE	DESCRIPTION
-	Cover Sheet
1	Site Layout 84,000 G.P.D. Wastewater Treatment Facilities
2	Hydraulic Profile
3	Trash Trap & Flow Equalization System
4	42,000 G.P.D. Extended Aeration Plant
5	Flowsplitter, Fixed Media Filtration & Dosing Tank
6	Sludge Holding Tank, Sand Filters & Chlorine Tank
7	Blower Layout & Airline Isometric
8	Existing Control & Blower Building



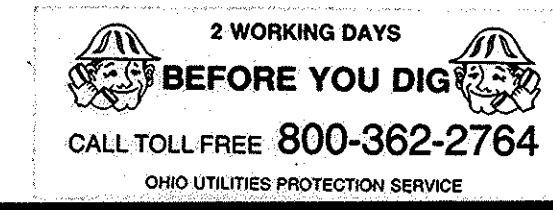
PREPARED BY  
**GRINDLE, BENDER & ASSOC., INC.**  
ARCHITECTURE-ENGINEERING-SURVEYING  
COLUMBUS, OHIO

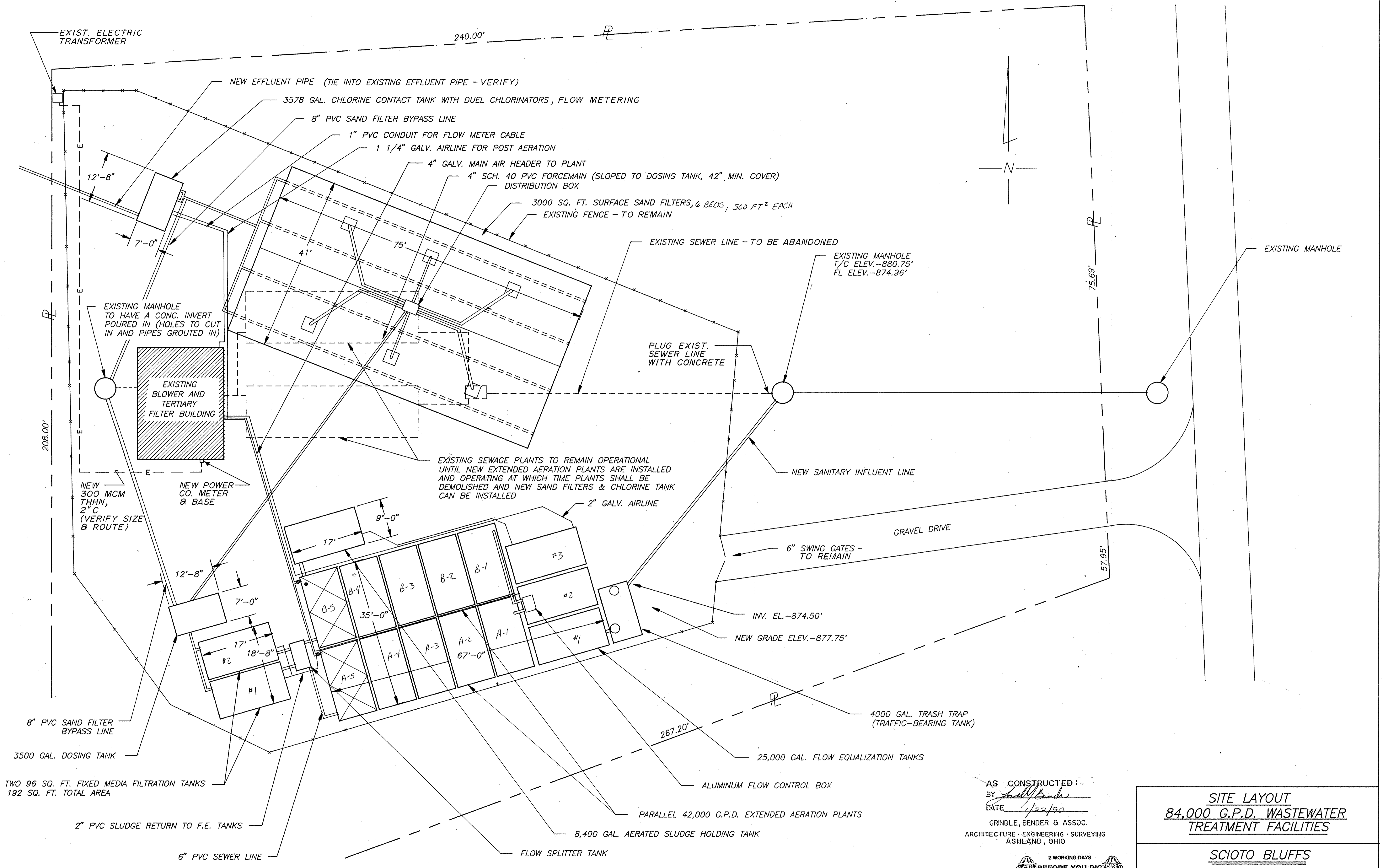
BY David E. Grindle 3-21-89  
REGISTERED ENGINEER DATE

AS CONSTRUCTED:  
BY David E. Grindle  
DATE 1/31/90  
GRINDLE, BENDER & ASSOC.  
ARCHITECTURE-ENGINEERING-SURVEYING  
ASHLAND, OHIO

APPROVED THIS 27 DAY OF March, 1989  
APPROVED THIS 27 DAY OF March, 1989  
APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1989  
APPROVED THIS 27 DAY OF March, 1989

Martin Sheet  
COUNTY COMMISSIONER  
Ray Jackson  
COUNTY COMMISSIONER  
\_\_\_\_\_  
COUNTY COMMISSIONER  
Jack Smelker  
DELAWARE COUNTY SANITARY ENGINEER





AS CONSTRUCTED:  
 BY *Samuel B. Bunker*  
 DATE *1/22/90*  
 GRINDLE, BENDER & ASSOC.  
 ARCHITECTURE · ENGINEERING · SURVEYING  
 ASHLAND, OHIO

2 WORKING DAYS  
**BEFORE YOU DIG**  
 CALL TOLL FREE 800-362-2764  
 OHIO UTILITIES PROTECTION SERVICE

<b>SITE LAYOUT</b>		
<b>84,000 G.P.D. WASTEWATER TREATMENT FACILITIES</b>		
<b>SCIOTO BLUFFS</b>		
REVISIONS		
10/22/88 AL	3/9/89 AL	3-21-89

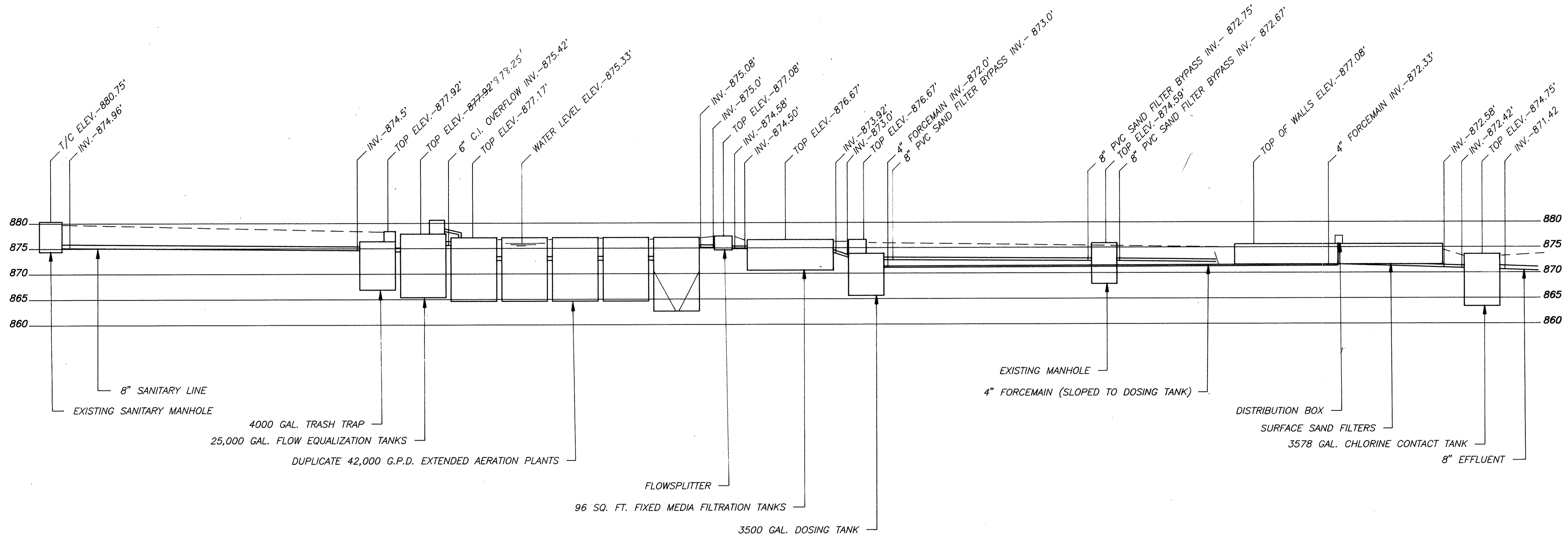
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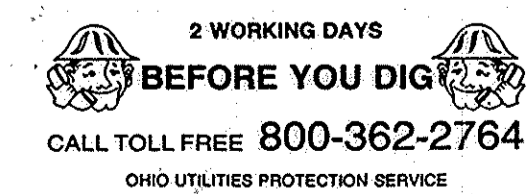
DWN. BY : AL	QUOTE NO.	1
SCALE: 1" = 10'	DRAWING NO.	8
DATE: 7/8/88	LAYOUTS\84TOPO	





AS CONSTRUCTED:  
 BY *Lawrence*  
 DATE 1/22/90

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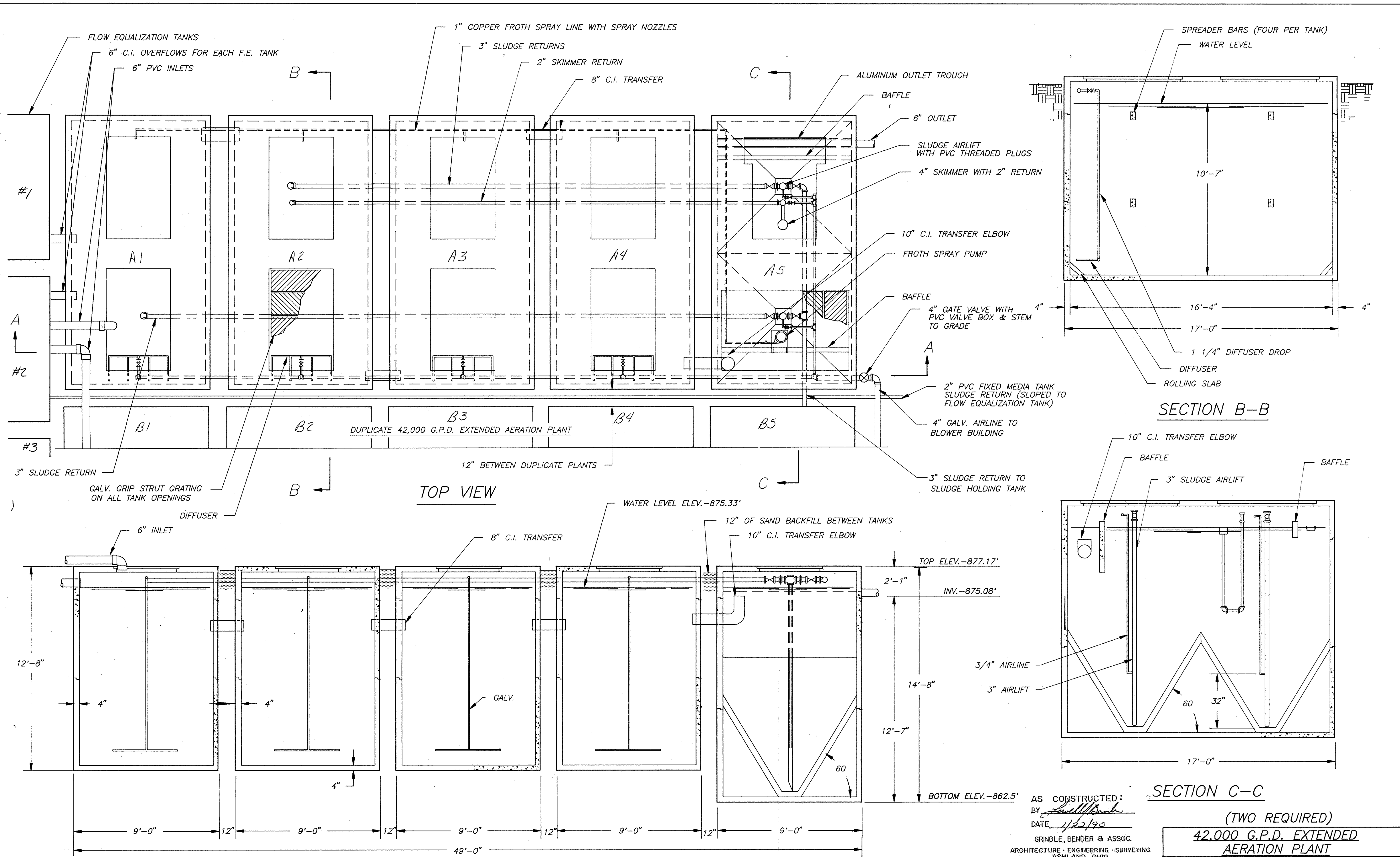
<u>HYDRAULIC PROFILE</u>		
<u>SCIOTO BLUFFS</u>		
REVISIONS		
3/9/89 AL	3-21-89	
DWN. BY : AL	QUOTE NO.	2
SCALE: NTS.	DRAWING NO.	8
DATE: 1/12/89	\LAYOUTS\G-8831E	

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TOP VIEW

SECTION A-A

SECTION B-B

SECTION C-C

NOTES:  
 1. ALL PIPING TO BE GALVANIZED, SCH. 40 UNLESS OTHERWISE NOTED.

AS CONSTRUCTED:  
 BY *[Signature]*  
 DATE 1/22/90  
 GRINDLE, BENDER & ASSOC.  
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 ASHLAND, OHIO

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 OHIO UTILITIES PROTECTION SERVICE

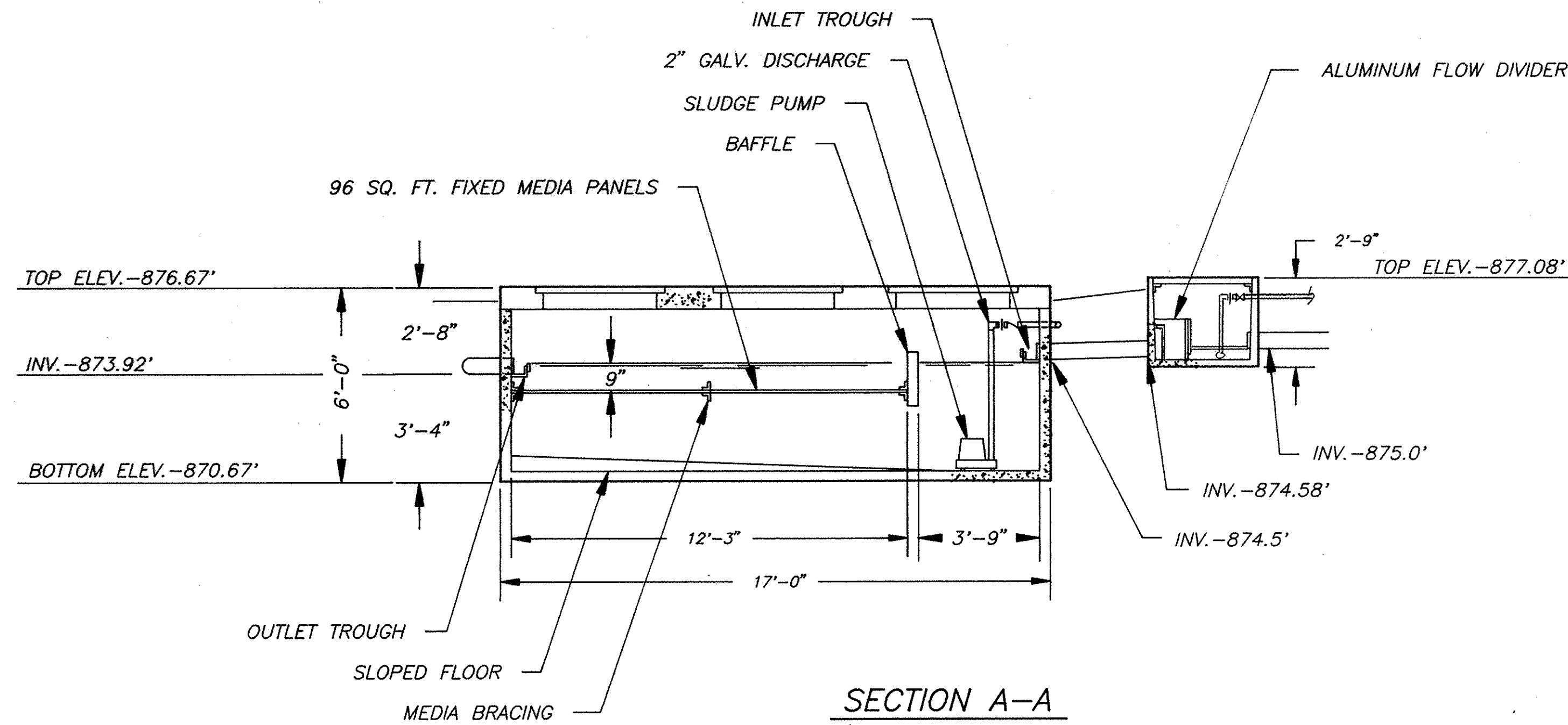
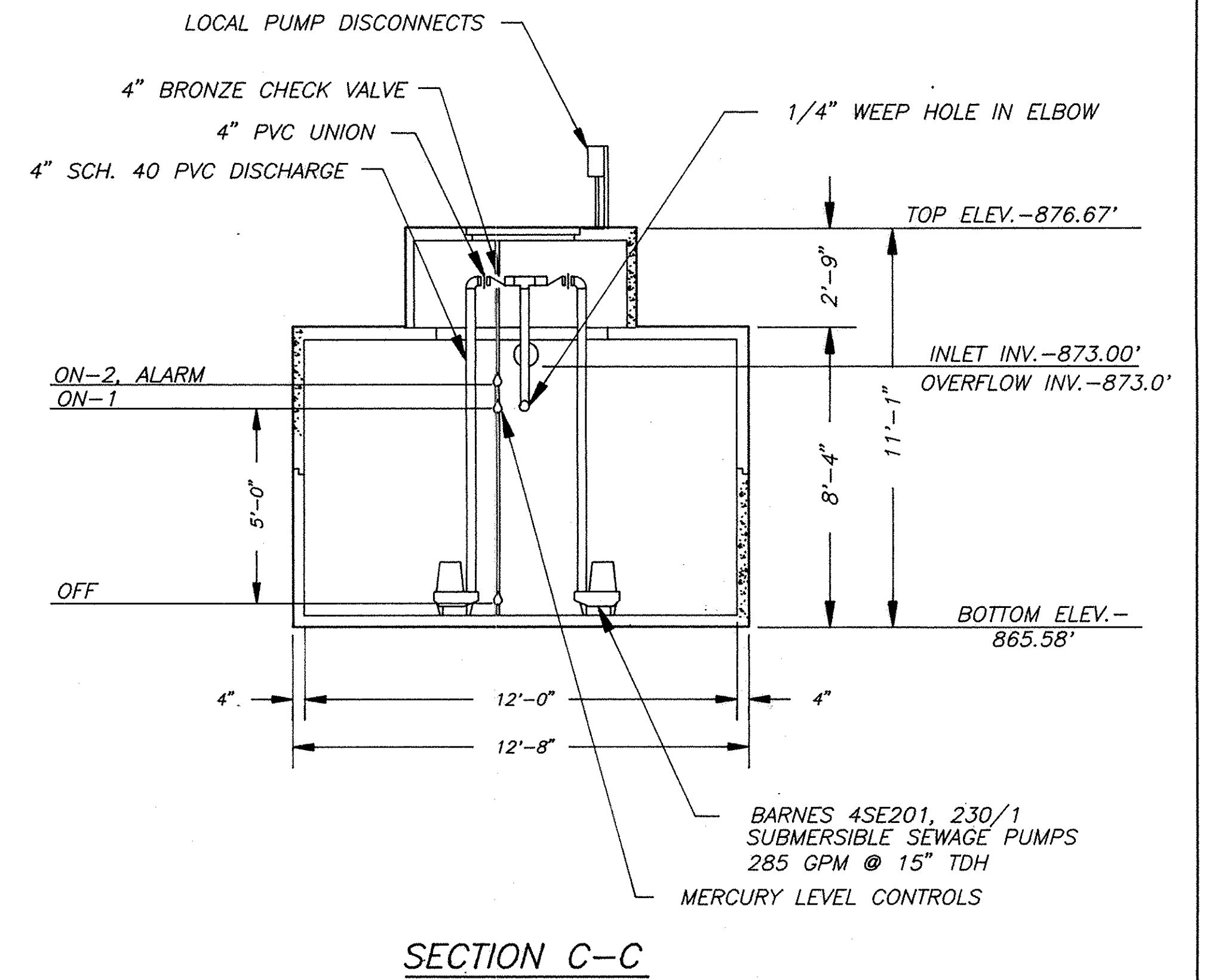
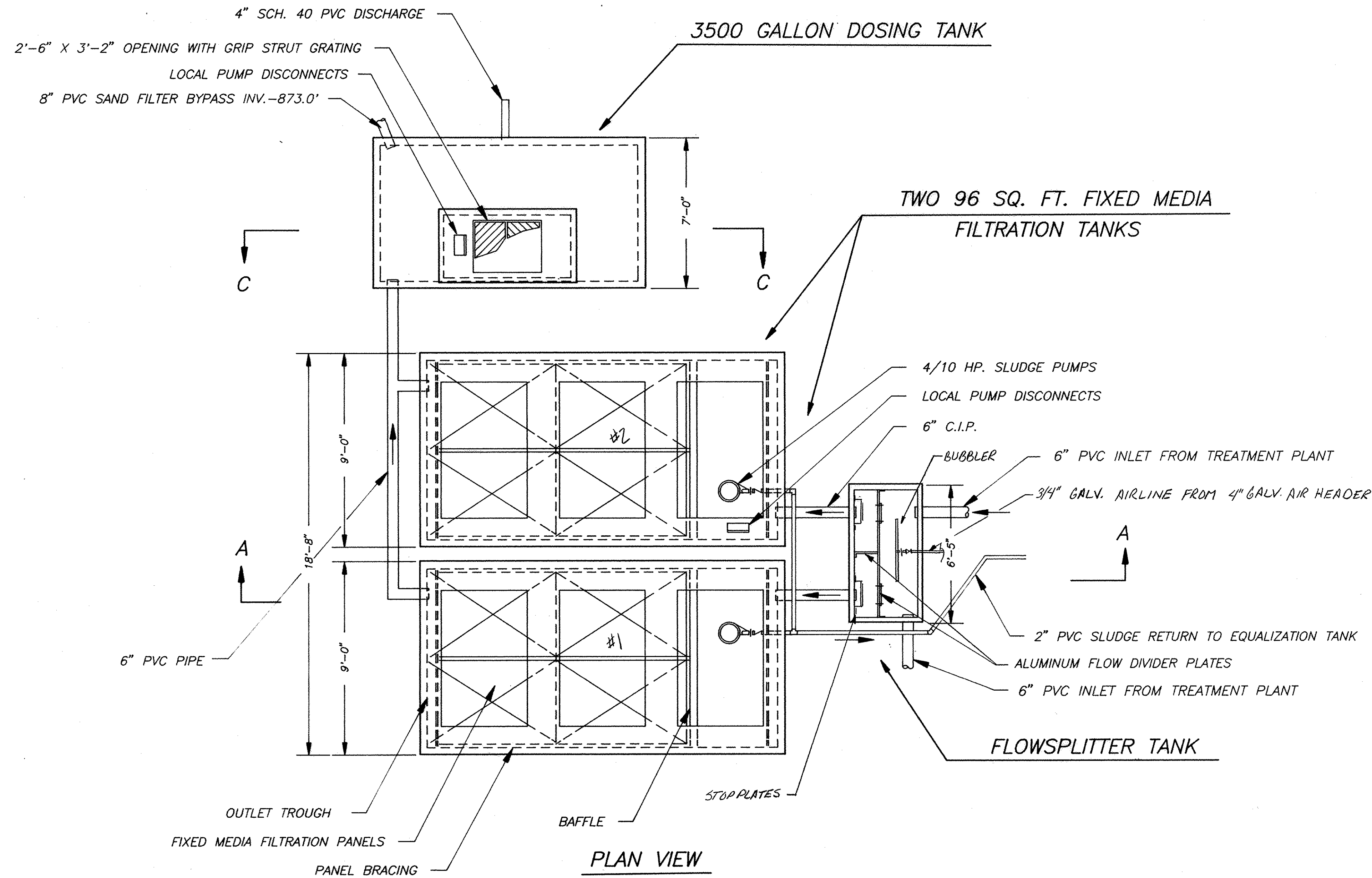
(TWO REQUIRED)	
<b>42,000 G.P.D. EXTENDED AERATION PLANT</b>	
<b>SCIOTO BLUFFS</b>	
REVISIONS	
1/11/89 AL	3-21-89
DWN. BY : AL	4
DATE: 4/7/88	DRAWING NO. 8
SCALE : 3/8" = 1'	D:\MC\G-88315B

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DATE *1/22/90*

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2 WORKING DAYS  
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CALL TOLL FREE 800-362-2764  
OHIO UTILITIES PROTECTION SERVICE

**FLOWSPPLITER, FIXED MEDIA  
FILTRATION & DOSING TANK**

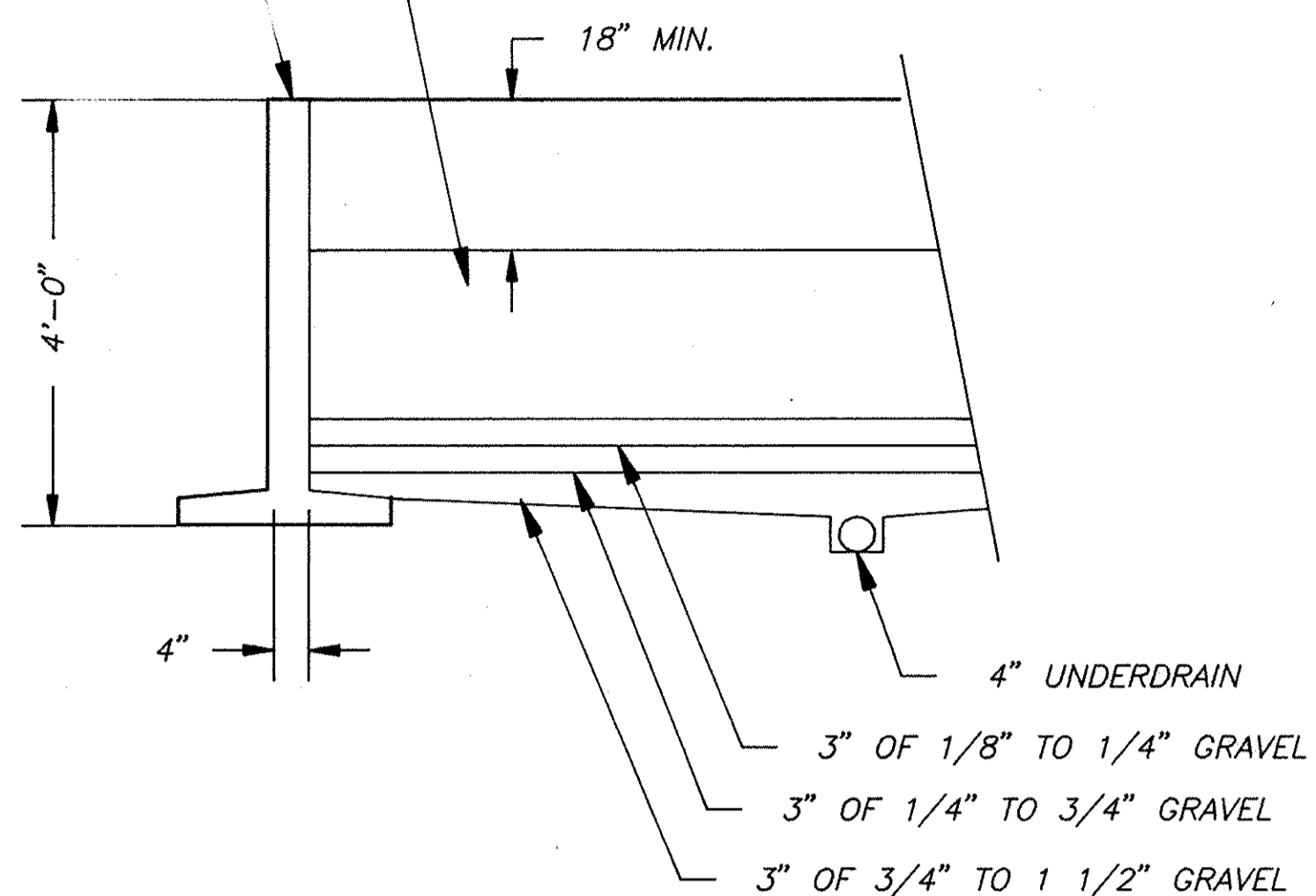
**SCIOTO BLUFFS**

REVISIONS

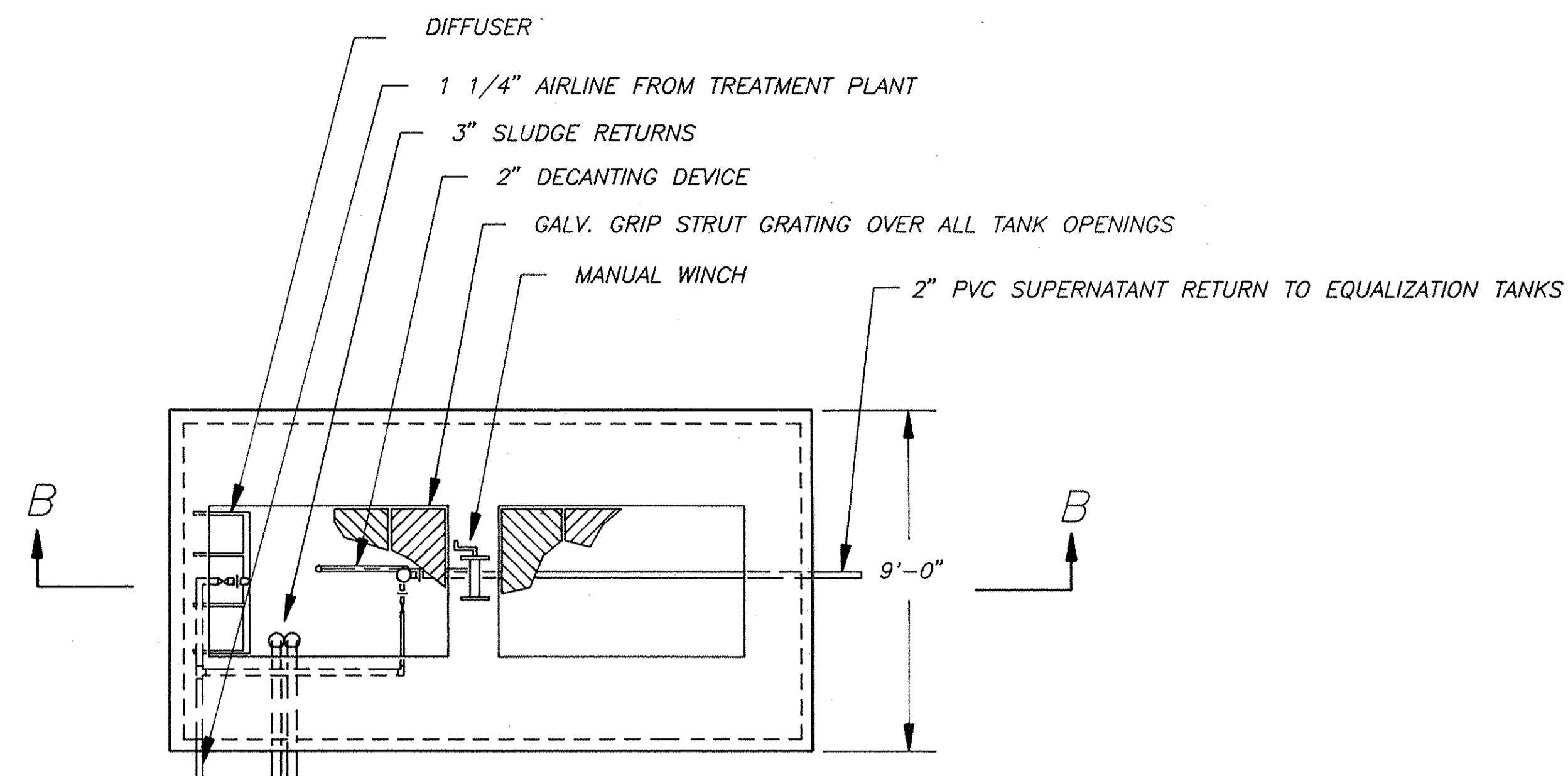
3/10/89 AL	3-21-89
DWN. BY : AL	5
SCALE: 1/4" = 1'	DRAWING NO. 8
DATE: 1/11/89	D:\MC\G-88315C

18" OF APPROVED FILTER SAND, IT SHALL BE A CLEAN COARSE SAND WITH AN EFFECTIVE SIZE OF 0.4 MM TO 0.8 MM WITH A UNIFORMITY COEFFICIENT OF 3.0 OR LESS

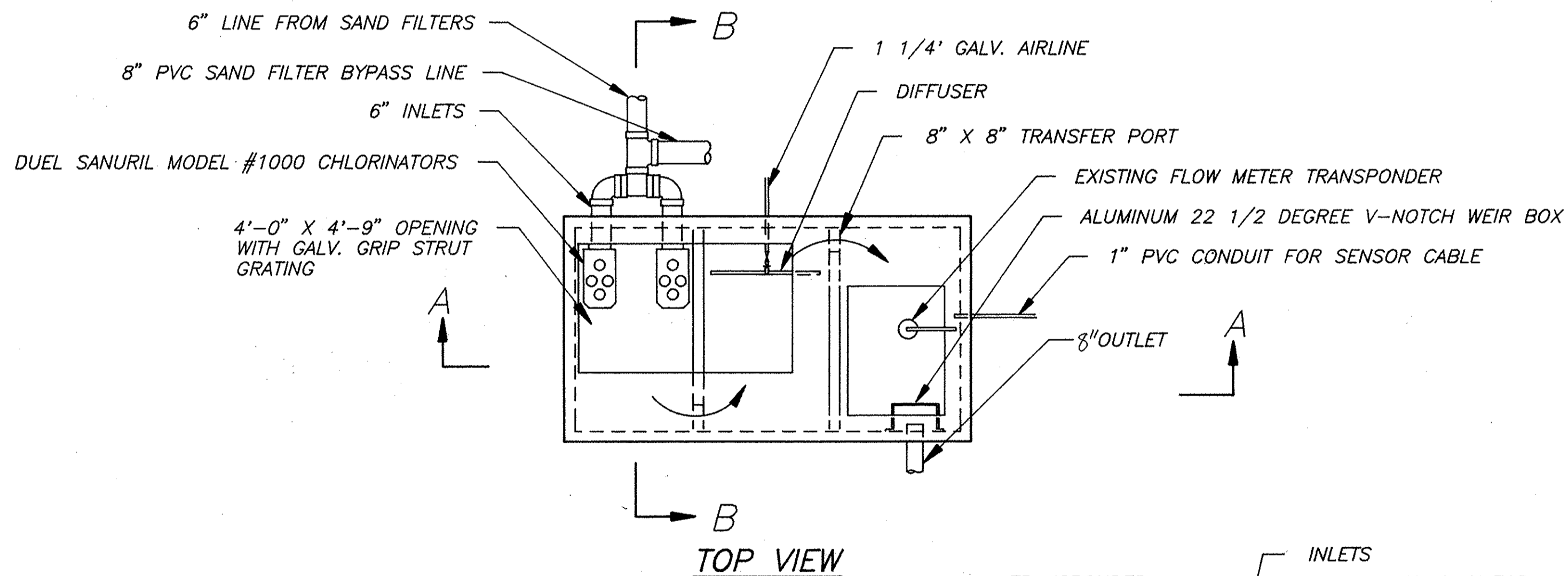
REINFORCED PRECAST CONCRETE WALL



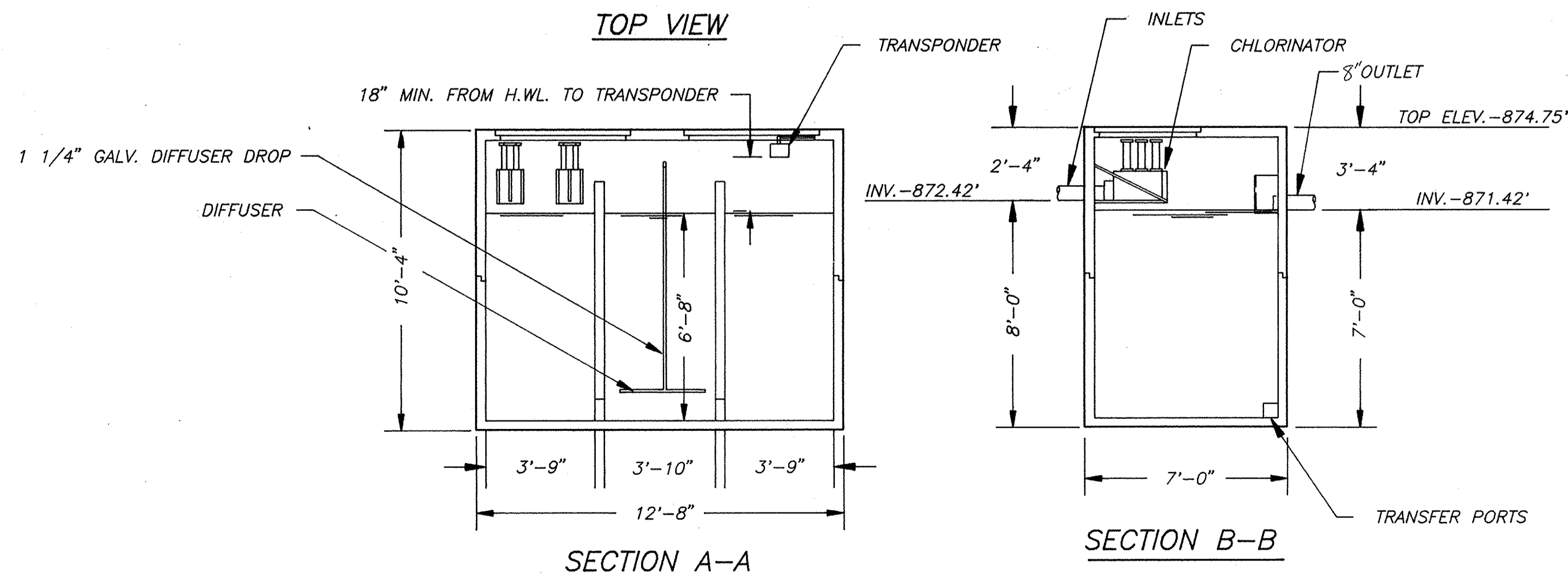
SURFACE SAND FILTER DETAIL



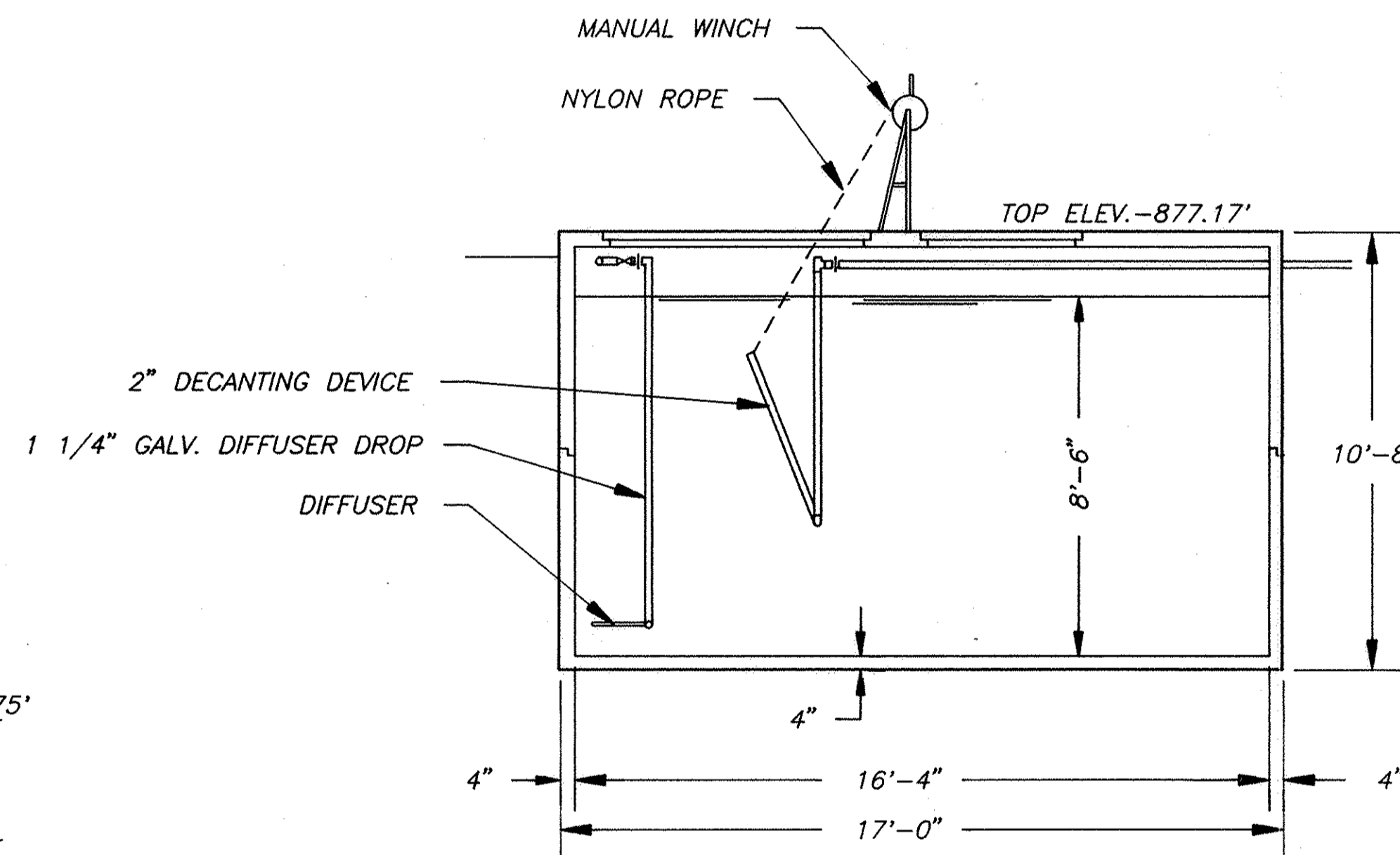
TOP VIEW



TOP VIEW



3578 GAL. CHLORINE CONTACT TANK



SECTION B-B

8400 GALLON AERATED SLUDGE HOLDING TANK

AS CONSTRUCTED:  
BY *Grindle, Bender & Assoc.*  
DATE 1/22/90  
GRINDLE, BENDER & ASSOC.  
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2 WORKING DAYS  
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OHIO UTILITIES PROTECTION SERVICE

SLUDGE HOLDING TANK, SAND FILTERS & CHLORINE TANK

SCIOTO BLUFFS

REVISIONS

3/10/89 AL	3-21-89
DWN. BY : AL	QUOTE NO. 6
SCALE: NTS	DRAWING NO. 8
DATE: 1/12/89	D:\MC\G-88315D

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201 COLUMBIA RD.  
VALLEY CITY, OHIO 44280

PROPOSED BLOWER CONTROL PANEL (VERIFY LOCATION)

NOTE:  
SEE SHEET NO. 8 FOR EXISTING BUILDING FACILITIES

- 190 CFM @ 6 PSI { EXISTING AF-55 BLOWER, 150 CFM @ 6 PSI, NEW 7 1/2 HP. MOTOR
- EXISTING AF-44 BLOWER, 40 CFM @ 6 PSI, EXISTING 3 HP. MOTOR
- 190 CFM @ 6 PSI { EXISTING AF-55 BLOWER, 150 CFM @ 6 PSI, NEW 7 1/2 HP. MOTOR
- EXISTING AF-44 BLOWER, 40 CFM @ 6 PSI, EXISTING 3 HP. MOTOR
- NEW URAI-45 BLOWER, 190 CFM @ 6 PSI, NEW 7 1/2 HP. MOTOR (VERIFY LOCATION)

NOTE:  
190 CFM IS REQUIRED TO OPERATE ONE 42,000 G.P.D. TREATMENT PLANT, AERATED SLUDGE HOLDING, AND POST AERATION.

FLOW EQUALIZATION BLOWER  
NEW URAI-24 BLOWER, 50 CFM @ 4 PSI, NEW 2 HP. MOTOR (VERIFY LOCATION)

PROPOSED 300 A. POWER PANEL (SEE SHEET NO. 8)

NEMA 1 DOSING & FLOW EQUALIZATION CONTROL PANELS

5'-0" MIN. TO FILTER

- 2 1/2" GALV. TEE
- FLEXIBLE COUPLING
- BLOWER
- MOTOR
- ADJUSTABLE MOTOR BASE
- STEEL BASE

- INLET FILTER
- 2 1/2" GALV. PIPE
- BUILDING WALL
- 2 1/2" CHECK VALVE
- 2 1/2" GALV. UNION
- 4" X 4" GALV. TEE WITH 2 1/2" BUSHING
- 4" SCH. 40 GALV. PIPE
- 1 1/4" GALV. AIRLINE TO POST AERATION
- 4" MAIN AIR LINE TO TREATMENT PLANT
- 2" GALV. BACK-UP AIRLINE FOR FLOW EQUALIZATION

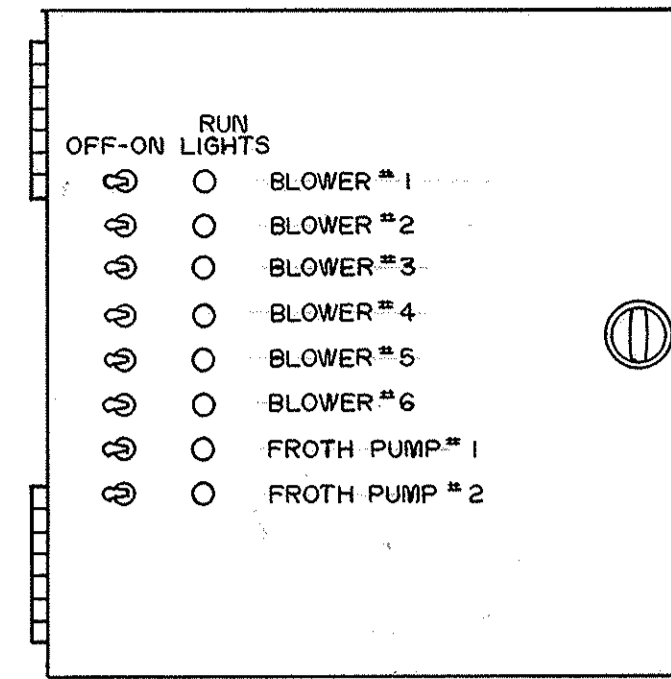
- 2" AIRLINE PIPED OVER DOORWAY
- 2" GATE VALVE
- 2" AIRLINE TO FLOW EQUALIZATION

**PLAN VIEW  
BLOWER ASSEMBLIES**

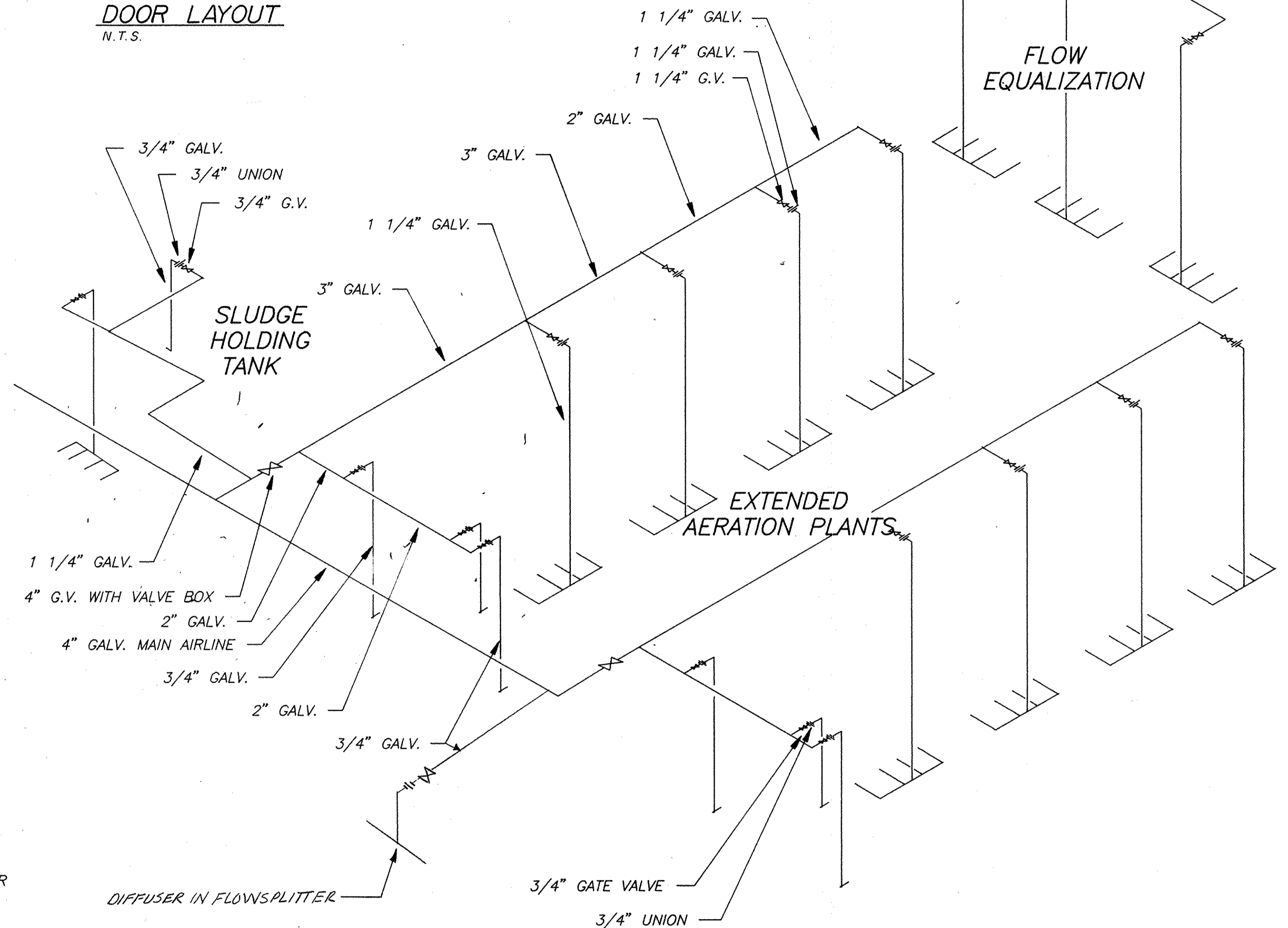
ALARMS FOR DOSING & FLOW EQUALIZATION HIGH WATER

- INLET FILTER
- 2 1/2" GALV. PIPE
- PRESSURE RELIEF VALVE FOR EACH BLOWER
- 2 1/2" CHECK VALVE
- 2 1/2" GALV. UNION
- 4" GALV. AIR MANIFOLD
- PIPE BRACES AS REQUIRED

**SIDE ELEVATION**

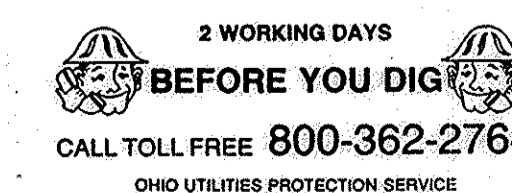


**BLOWER CONTROL PANEL  
DOOR LAYOUT**  
N.T.S.



**AIRLINE ISOMETRIC**

AS CONSTRUCTED:  
BY *J. Miller/Bender*  
DATE *1/22/90*  
GRINDLE, BENDER & ASSOC.  
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ASHLAND, OHIO



**BLOWER LAYOUT &  
AIRLINE ISOMETRIC**

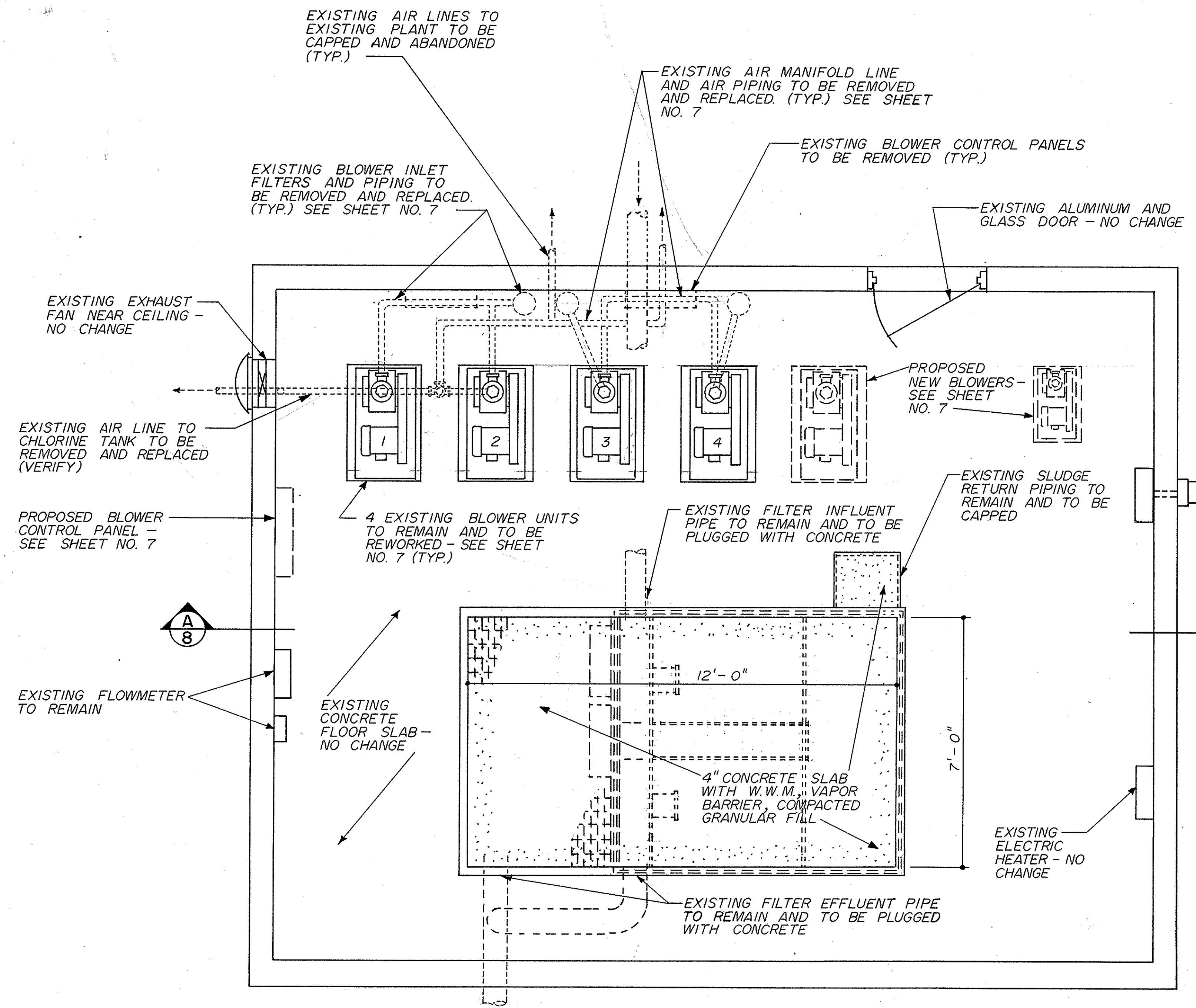
**SCIOTO BLUFFS**

REVISIONS	

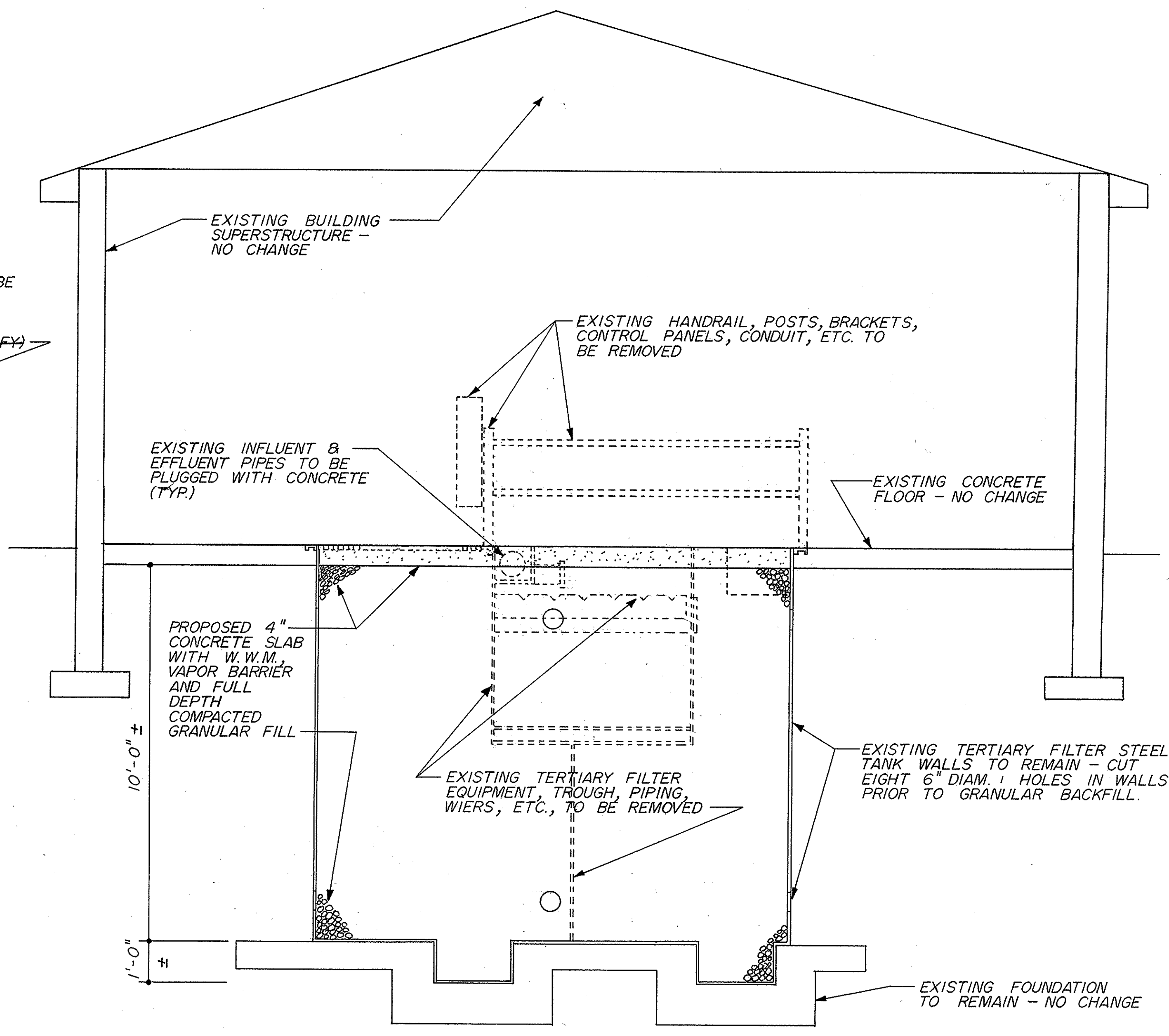
3-21-89

DWN. BY : AL	QUOTE NO.	7
SCALE: 1/2" = 1'	DRAWING NO.	8
DATE: 3/10/89	C:\PIPING\G-88315F	



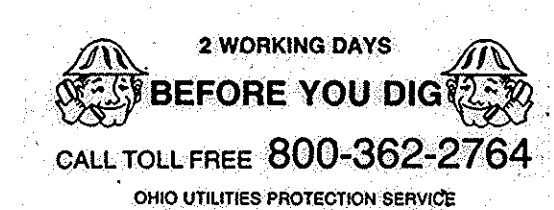


EXISTING FLOOR PLAN  
SCALE: 1/2" = 1'-0"



EXISTING SECTION  
SCALE: 1/2" = 1'-0"

AS CONSTRUCTED:  
BY *South Bend*  
DATE 1/22/90  
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<b>SCIOTO BLUFFS</b> LIBERTY TOWNSHIP    DELAWARE COUNTY		DATE 3-21-89
<b>WASTEWATER TREATMENT FACILITIES</b>		DRAWN MDS
<b>EXISTING CONTROL AND BLOWER BUILDING</b>		APPROVED
		REVISIONS
		SHEET 8 OF 8