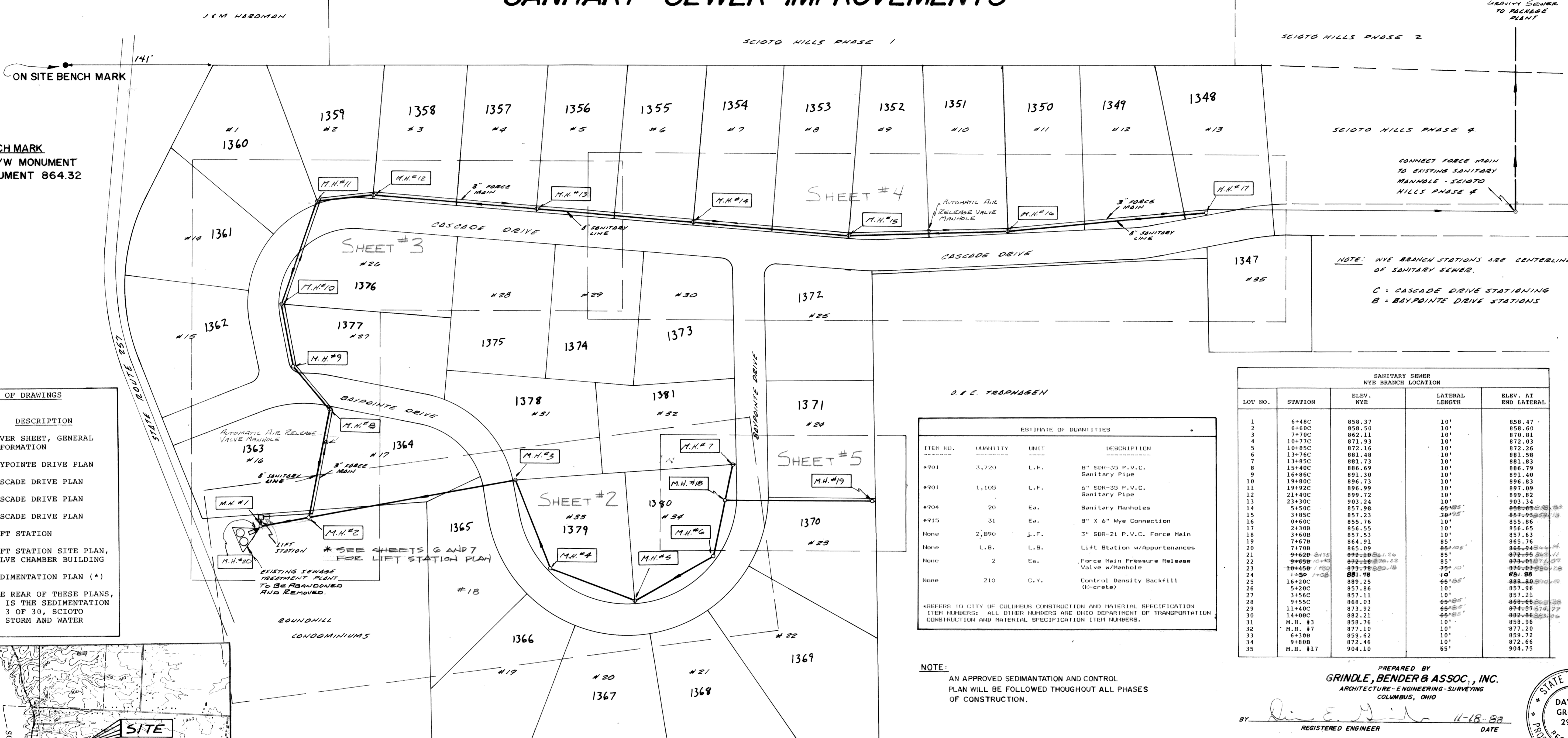
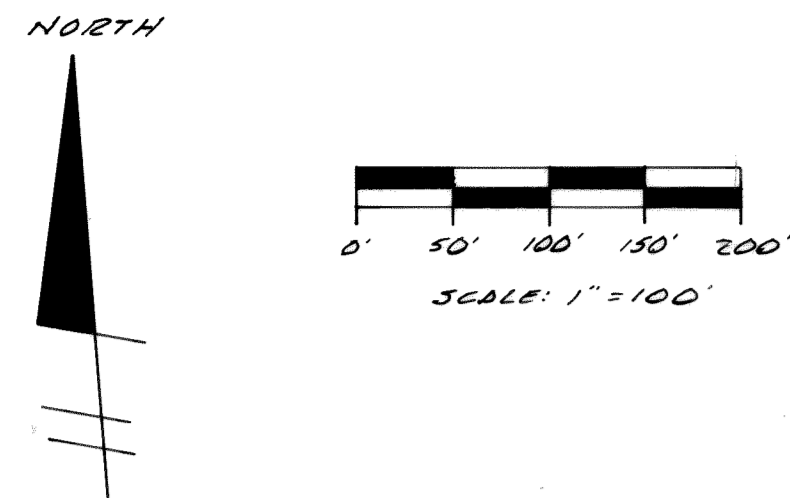


DELAWARE COUNTY, OHIO

SCIOTO BLUFFS

SANITARY SEWER IMPROVEMENTS



ON SITE BENCH MARK
CONCRETE R/W MONUMENT
TOP OF MONUMENT 864.32

NOTE: WYE BRANCH STATIONS ARE CENTERLINE OF SANITARY SEWER.
C = CASCADE DRIVE STATIONING
B = BAYPOINTE DRIVE STATIONING

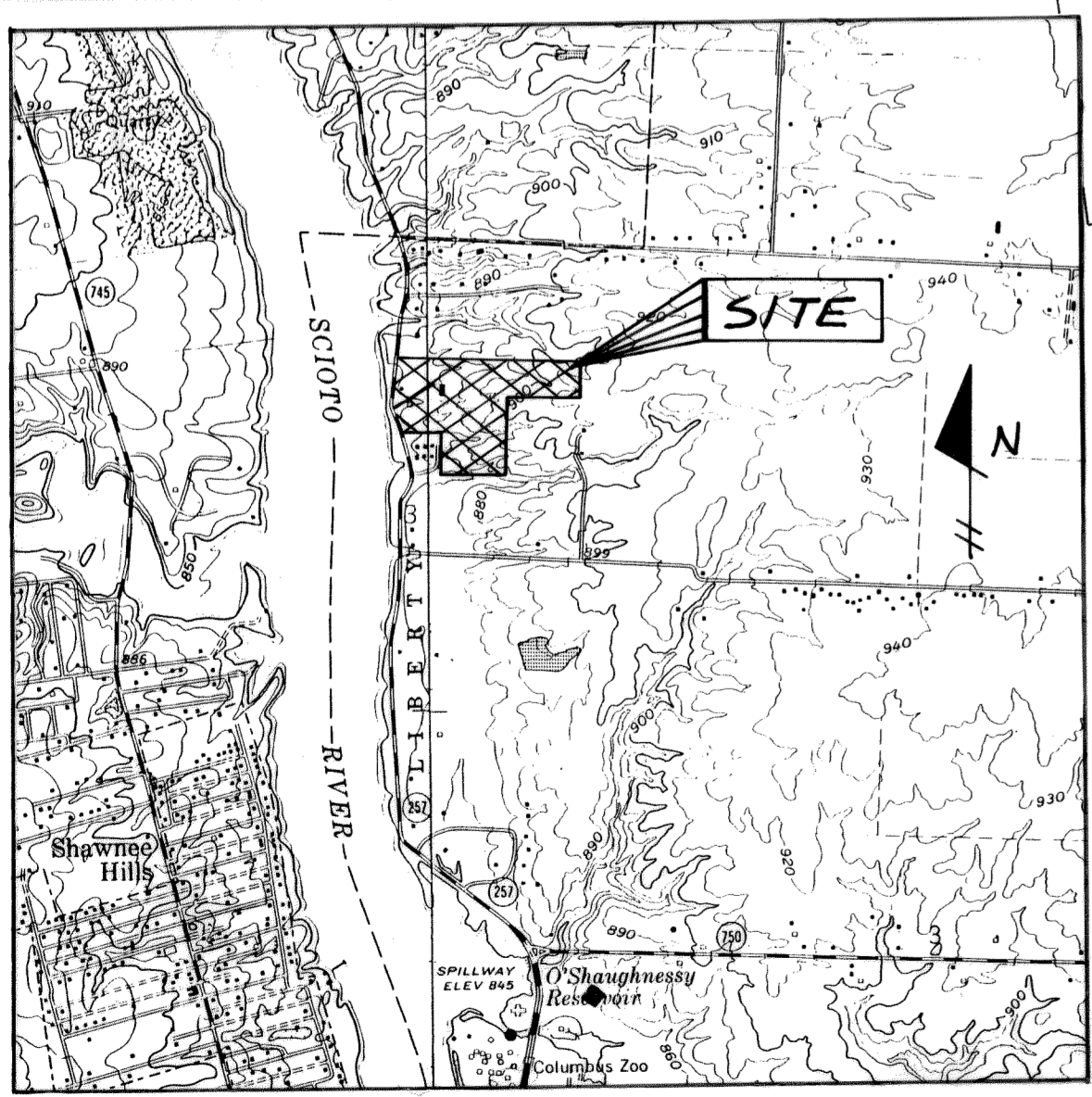
INDEX OF DRAWINGS	
SHEET NO.	DESCRIPTION
1	COVER SHEET, GENERAL INFORMATION
2	BAYPOINTE DRIVE PLAN
3	CASCADE DRIVE PLAN
4	CASCADE DRIVE PLAN
5	CASCADE DRIVE PLAN
6	LIFT STATION
7	LIFT STATION SITE PLAN, VALVE CHAMBER BUILDING
-	SEDIMENTATION PLAN (*)

(*) ATTACHED TO THE REAR OF THESE PLANS, FOR REFERENCE, IS THE SEDIMENTATION PLAN SHEET NO. 3 OF 30, SCIOTO BLUFFS STREET, STORM AND WATER LINE PLANS.

ESTIMATE OF QUANTITIES			
ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1	3,720	L.F.	8" SDR-35 P.V.C. Sanitary Pipe
2	1,105	L.F.	6" SDR-35 P.V.C. Sanitary Pipe
3	20	Ea.	Sanitary Manholes
4	31	Ea.	8" X 6" Wye Connection
5	2,890	L.F.	3" SDR-21 P.V.C. Force Main
6		L.S.	Lift Station w/Appurtenances
7	2	Ea.	Force Main Pressure Release Valve w/Hanhole
8	210	C.Y.	Control Density Backfill (K-concrete)

* REFERS TO CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION ITEM NUMBERS; ALL OTHER NUMBERS ARE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATION ITEM NUMBERS.

SANITARY SEWER WYE BRANCH LOCATION				
LOT NO.	STATION	ELEV. WYE	LATERAL LENGTH	ELEV. AT END LATERAL
1	6448C	858.37	10'	858.47
2	6460C	855.50	10'	858.60
3	7470C	862.11	10'	870.81
4	10477C	871.93	10'	872.03
5	10485C	872.16	10'	872.26
6	13476C	881.48	10'	881.58
7	13485C	881.73	10'	881.83
8	15440C	886.69	10'	886.79
9	16486C	891.30	10'	891.40
10	19480C	896.73	10'	896.83
11	19492C	896.59	10'	897.09
12	21440C	899.72	10'	899.82
13	23430C	903.24	10'	903.34
14	5450C	857.98	65'±	858.63
15	3485C	857.23	70'±	857.93
16	0460C	855.76	10'	855.86
17	2430B	856.55	10'	856.65
18	3460B	857.53	10'	857.63
19	7467B	864.91	85'	865.76
20	7470B	865.09	85'±	865.94
21	9462B-2415	872.48	85'	872.95
22	9465B-1040	872.10	85'	873.01
23	10445B-1400	873.78	75'±	876.03
24	1450-1408	881.76	10'	881.86
25	16420C	889.25	65'±	889.90
26	5420C	857.86	10'	857.96
27	3456C	857.11	10'	857.21
28	9455C	868.03	65'±	868.68
29	11440C	873.92	65'±	874.57
30	14400C	882.21	65'±	882.86
31	M.H. #1	858.76	10'	858.86
32	M.H. #7	877.10	10'	877.20
33	6430B	859.62	10'	859.72
34	9480B	872.46	10'	872.56
35	M.H. #17	904.10	65'	904.75



LOCATION MAP
SCALE: 1" = 2000'

GENERAL NOTES:

THE COUNTY OF DELAWARE REQUIREMENTS, IN CONJUNCTION WITH THE SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN.

THESE PLANS SHALL INCORPORATE ALL NECESSARY CONSTRUCTION DETAILS FOUND IN "STANDARD PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF SANITARY FACILITIES IN DELAWARE COUNTY, OHIO".

ALL SANITARY MAIN (8") AND SERVICES (6") SHALL BE PVC PIPE (ASTM D1784, SDR35).

SEWER TRENCHES SHALL BE DE-WATERED TO 2" BELOW BELL OF PIPE PRIOR TO INSTALLATION OF PIPE.

ANY FIELD TILE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED AS DIRECTED BY THE COUNTY WITH RES PIPE SPANNING THE TRENCH. THE TRENCH SHALL BE FILLED WITH COMPACTED GRANULAR BACKFILL.

ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED ON THIS PROJECT.

SANITARY SEWER LINES AND MANHOLES SHALL BE TESTED BY EXPLORATION TEST IN ACCORDANCE WITH "PRELIMINARY STANDARD PLANS & SPECIFICATIONS FOR CONSTRUCTION OF SANITARY FACILITIES IN DELAWARE COUNTY, OHIO", SECTION 5.1 "GRAVITY SEWER TESTING". SANITARY SEWER PIPE SHALL BE TESTED FOR DEFLECTION PER SECTION 5.5 "DEFLECTION TESTING".

THE CONTRACTOR SHALL COOPERATE WITH THE DELAWARE COUNTY SANITARY ENGINEER IN PROVIDING ALL NECESSARY EQUIPMENT AN PERFORMING ALL TESTING OF SANITARY SEWERS TO THE SATISFACTION OF THE SANITARY ENGINEER.

THE CONTRACTOR AND SUB-CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.

THE CONTRACTOR SHALL PROVIDE AND INSTALL WYE POLES AT ALL WYE LOCATIONS AS CONSTRUCTED. WYE POLE SHALL EXTEND ABOVE EXISTING OR PROPOSED GRADE WHICHEVER IS HIGHER A MINIMUM OF 2'-0".

COST FOR ALL COMPACTED BACKFILL OR CONTROLLED DENSITY BACKFILL SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SANITARY SEWER ITEMS.

STANDARD DRAWINGS:

STANDARD DRAWINGS LISTED BELOW, AS SHOWN IN THE "PRELIMINARY STANDARD PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF SANITARY FACILITIES IN DELAWARE COUNTY, OHIO" SHALL BE CONSIDERED A PART THEREOF.

1, 2, 3, 4, 5, 6, 12, 13, 14, 25

NOTE:
AN APPROVED SEDIMENTATION AND CONTROL PLAN WILL BE FOLLOWED THROUGHOUT ALL PHASES OF CONSTRUCTION.

EXISTING UTILITIES:

THE IDENTITY AND LOCATION OF THE EXISTING UNDERGROUND UTILITY FACILITIES KNOWN TO BE LOCATED IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE PLANS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE CITY OF DELAWARE AND/OR ENGINEER ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS.

THE CONTRACTOR SHALL GIVE NOTICE TO BE GIVEN TO THE REGISTERED UNDERGROUND UTILITY PROTECTION SERVICES (TELEPHONE 800-362-2764 - TOLL FREE) AND THE OWNER'S OF UNDERGROUND UTILITY FACILITIES SHOWN ON THE PLANS WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE REVISED CODE. THE ABOVE MENTIONED NOTICE SHALL BE GIVEN AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.

SOURCE BENCH MARK
CORNER OF THE FIRST BRIDGE ABUTMENT
OVER THE SCIOTO RIVER ON HOME ROAD,
USGS DATUM ELEV. 862.07

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

BY *David E. Grindle* 11-18-88
REGISTERED ENGINEER DATE

APPROVED THIS 27 DAY OF March, 1988
Michael Sheer
COUNTY COMMISSIONER

APPROVED THIS 27 DAY OF March, 1988
Roy Jackson
COUNTY COMMISSIONER

APPROVED THIS _____ DAY OF _____, 1988
COUNTY COMMISSIONER

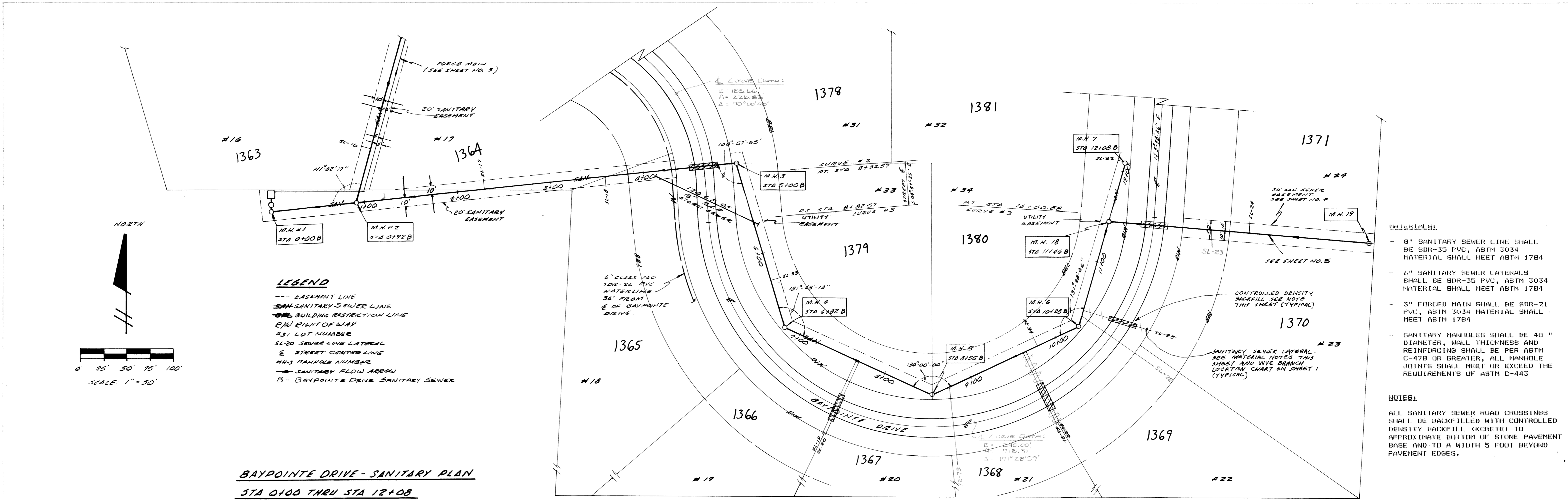
APPROVED THIS _____ DAY OF _____, 1988
COUNTY ENGINEER

APPROVED THIS 17 DAY OF March, 1988
Jack Smeller
DELAWARE COUNTY SANITARY ENGINEER

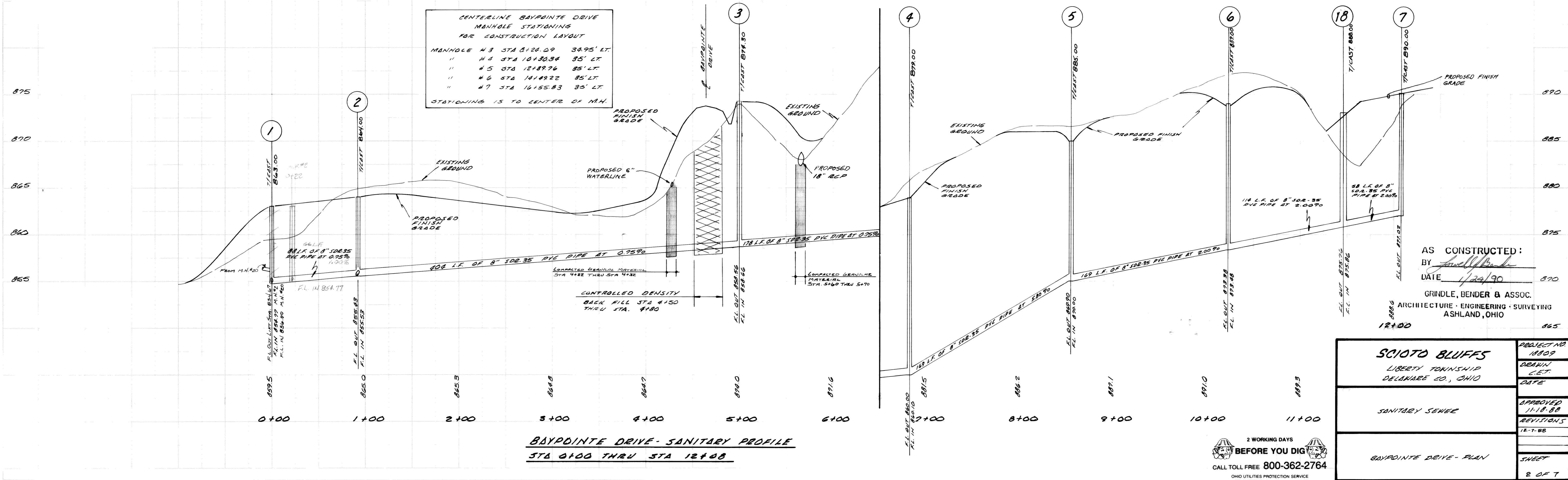
AS CONSTRUCTED:
BY *Grindle Bender*
DATE 1/24/90

GRINDLE, BENDER & ASSOC.
ARCHITECTURE - ENGINEERING - SURVEYING
ASHLAND, OHIO





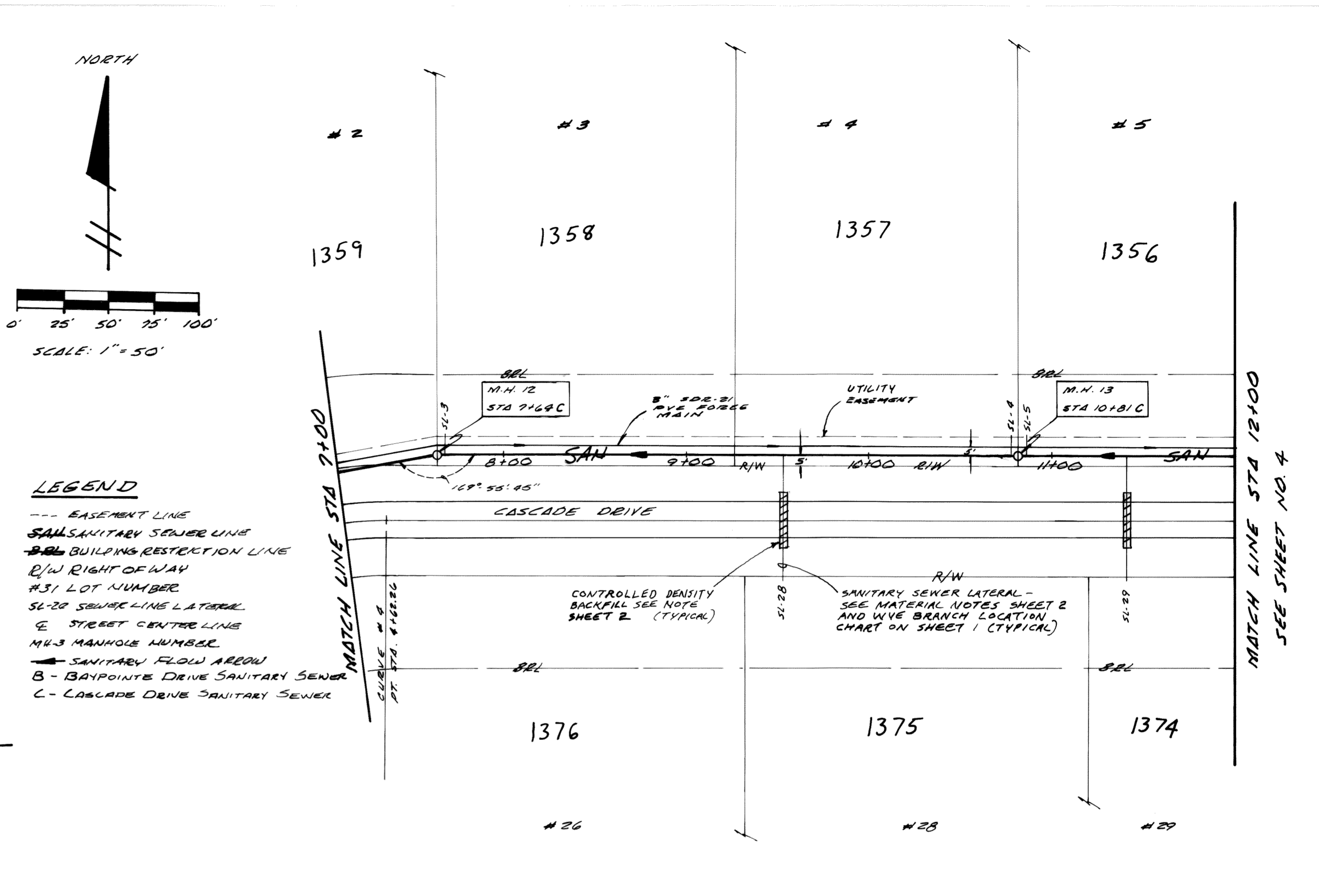
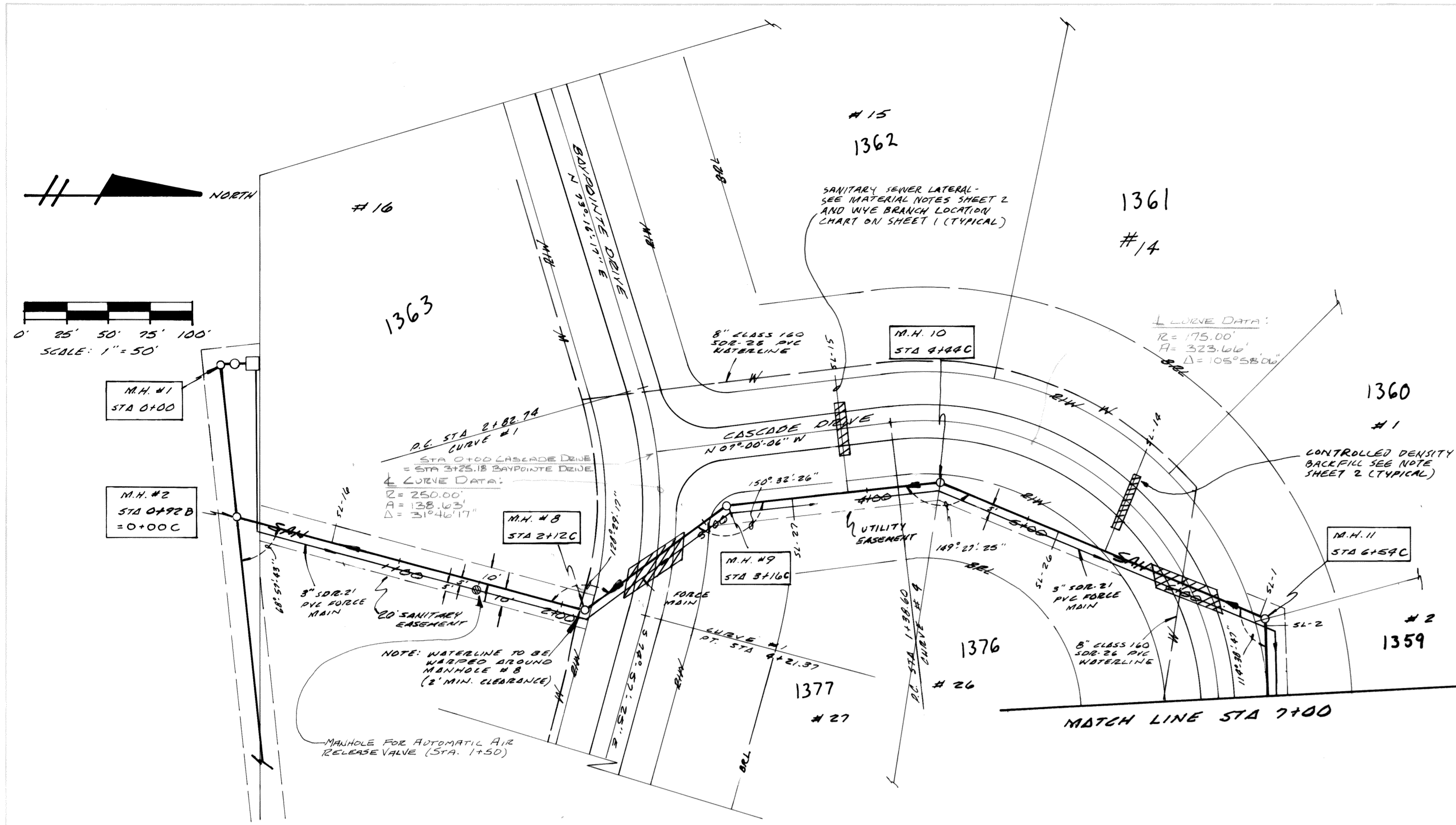
BAYPOINTE DRIVE - SANITARY PLAN
STA 0+00 THRU STA 12+08



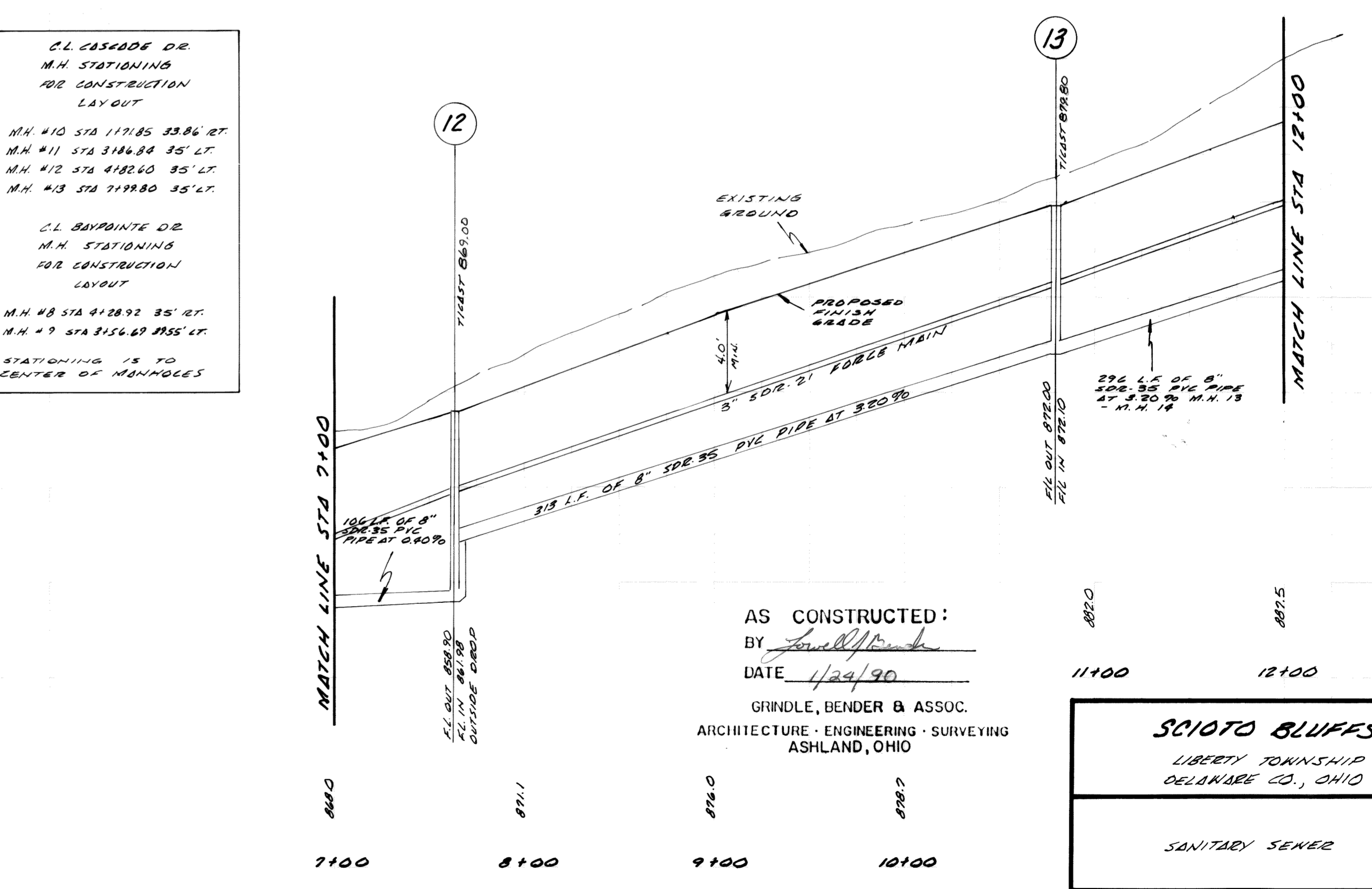
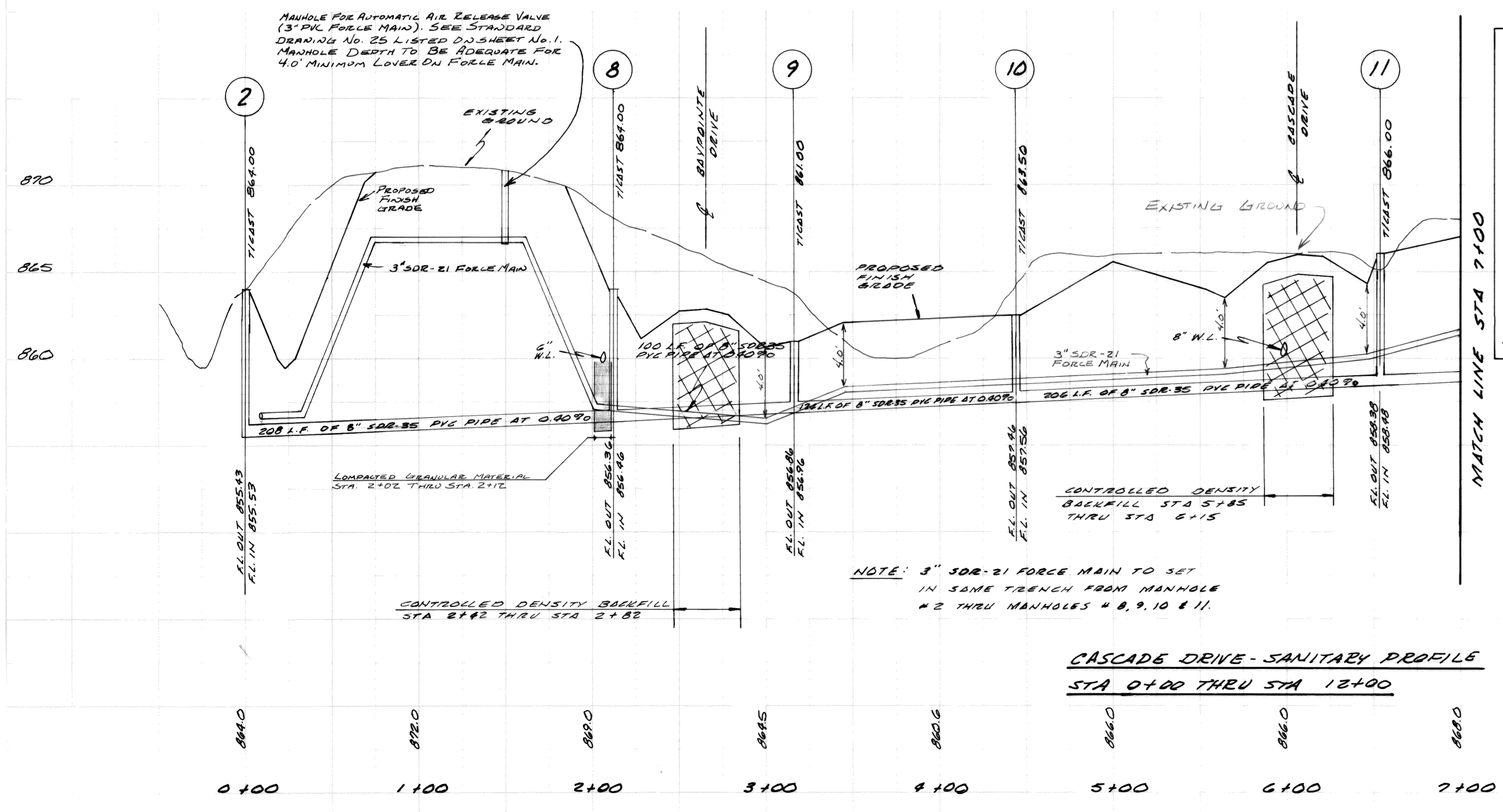
BAYPOINTE DRIVE - SANITARY PROFILE
STA 0+00 THRU STA 12+08

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

SCIO TO BLUFFS		PROJECT NO.
LIBERTY TOWNSHIP DELAWARE CO., OHIO		1809
SANITARY SEWER		DESIGN C.E.T.
BAYPOINTE DRIVE - PLAN		DATE
APPROVED		11-18-88
REVISIONS		12-T-88
SHEET		2 OF 7



CASCADE DRIVE - SANITARY PLAN
STA 0+00 THRU STA 12+00



CASCADE DRIVE - SANITARY PROFILE
STA 0+00 THRU STA 12+00

AS CONSTRUCTED:
BY *[Signature]*
DATE 1/29/90

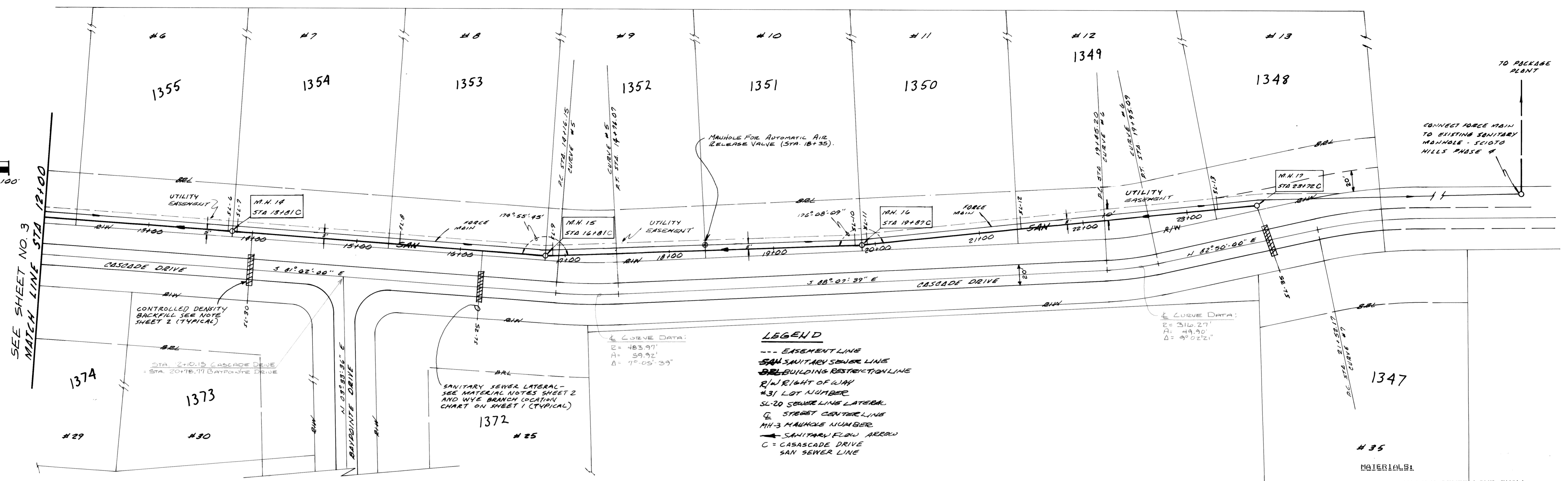
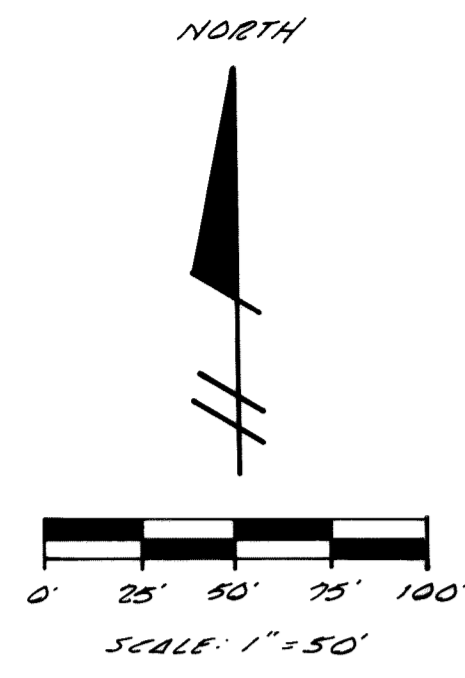
GRINDLE, BENDER & ASSOC.
ARCHITECTURE - ENGINEERING - SURVEYING
ASHLAND, OHIO

SCIOTO BLUFFS		PROJECT NO.	1889
LIBERTY TOWNSHIP DELAWARE CO., OHIO		DRAWN	GET
		DATE	11-18-88
		APPROVED	
		REVISIONS	12-7-88
		SHEET	
			3 OF 7

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

PLAN

PROFILE



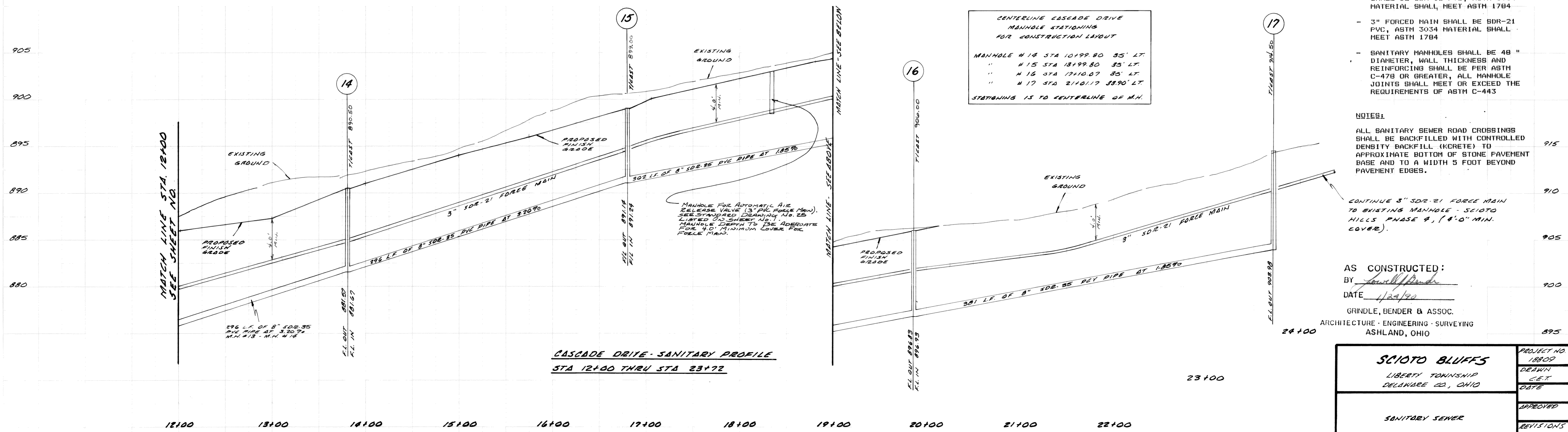
**CASCADE DRIVE SANITARY PLAN
STA 12+00 THRU STA 23+72**

LEGEND
 --- EASEMENT LINE
 SAN SANITARY SEWER LINE
 B/L BUILDING RESTRICTION LINE
 R/W RIGHT OF WAY
 #31 LOT NUMBER
 SL-20 SEWER LINE LATERAL
 C STREET CENTERLINE
 MH-3 MANHOLE NUMBER
 → SANITARY FLOW ARROW
 C = CASCADE DRIVE
 SAN SEWER LINE

Curve Data:
 E = 483.97'
 A = 59.92'
 Δ = 9° 05' 39"

Curve Data:
 E = 316.27'
 A = 49.90'
 Δ = 9° 02' 12"

**CENTERLINE CASCADE DRIVE
MANHOLE STATIONING
FOR CONSTRUCTION LAYOUT**
 MANHOLE # 14 STA 12+99.80 35' LT
 " # 15 STA 13+99.80 35' LT
 " # 16 STA 17+10.07 35' LT
 " # 17 STA 21+10.17 35' LT
 STATIONING IS TO CENTERLINE OF M.H.



**CASCADE DRIVE SANITARY PROFILE
STA 12+00 THRU STA 23+72**

- MATERIALS:**
- 8" SANITARY SEWER LINE SHALL BE SDR-35 PVC, ASTM 3034 MATERIAL SHALL MEET ASTM 1784
 - 6" SANITARY SEWER LATERALS SHALL BE SDR-35 PVC, ASTM 3034 MATERIAL SHALL MEET ASTM 1784
 - 3" FORCED MAIN SHALL BE SDR-21 PVC, ASTM 3034 MATERIAL SHALL MEET ASTM 1784
 - SANITARY MANHOLES SHALL BE 48" DIAMETER, WALL THICKNESS AND REINFORCING SHALL BE PER ASTM C-478 OR GREATER, ALL MANHOLE JOINTS SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C-443

NOTES:
 ALL SANITARY SEWER ROAD CROSSINGS SHALL BE BACKFILLED WITH CONTROLLED DENSITY BACKFILL (KRETE) TO APPROXIMATE BOTTOM OF STONE PAVEMENT BASE AND TO A WIDTH 5 FOOT BEYOND PAVEMENT EDGES.

CONTINUE 3" SDR-21 FORCE MAIN TO EXISTING MANHOLE - SCIOTO HILLS PHASE 9, (8'-0" MIN. COVER).

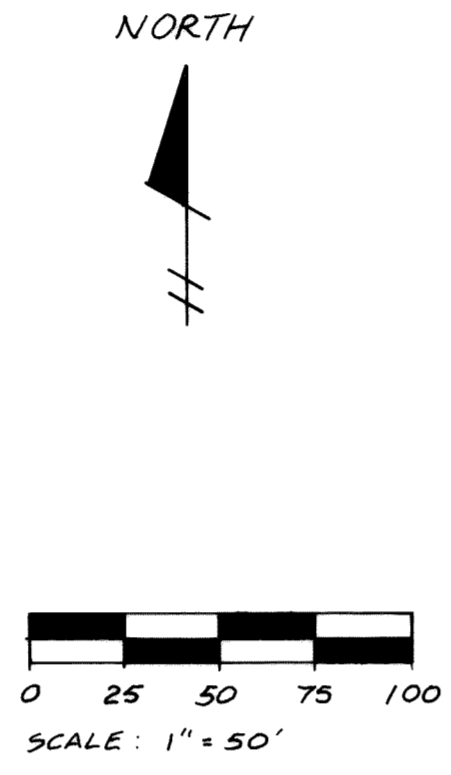
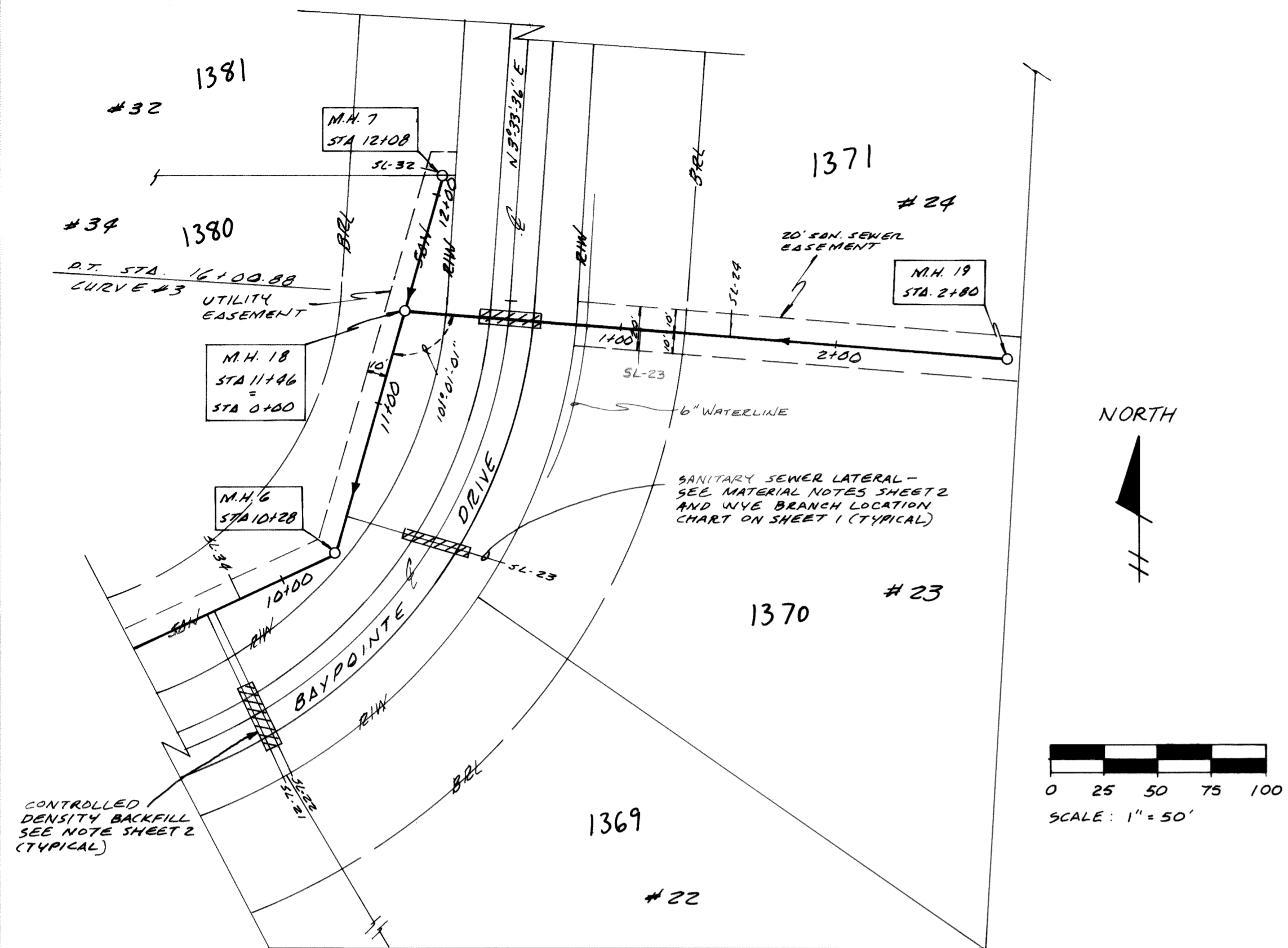
AS CONSTRUCTED:
 BY *[Signature]*
 DATE 1/29/70

GRINDLE, BENDER & ASSOC.
 ARCHITECTURE · ENGINEERING · SURVEYING
 ASHLAND, OHIO

SCIOTO BLUFFS		PROJECT NO.
LIBERTY TOWNSHIP		18809
DELAWARE CO., OHIO		DRAWN
		C.E.T.
		DATE
		APPROVED
		REVISIONS
		12-1-88
		SHEET
		4 OF 7

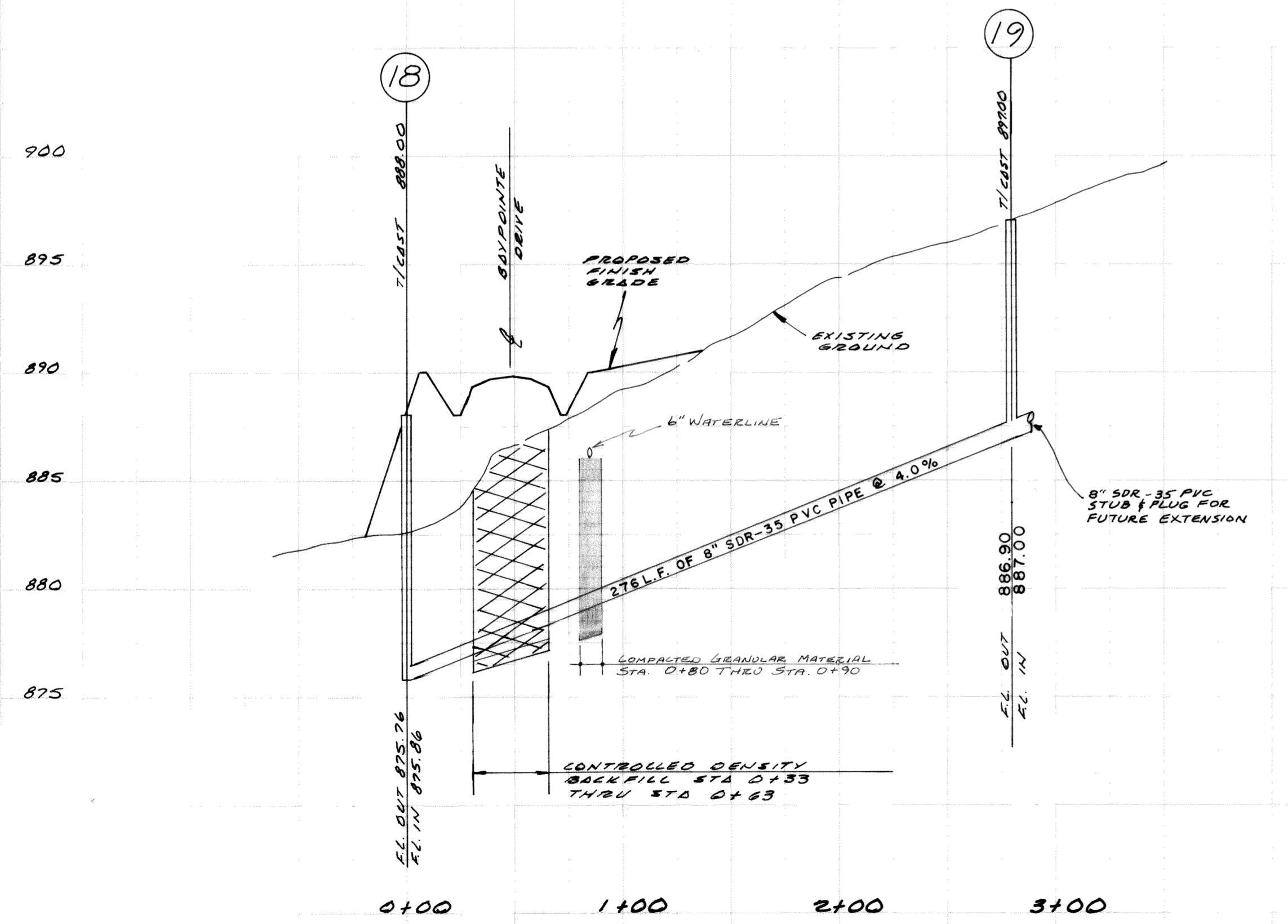
2 WORKING DAYS
BEFORE YOU DIG
 CALL TOLL FREE 800-362-2764
 OHIO UTILITIES PROTECTION SERVICE

PLAN
 NOTE BOOK
 No.

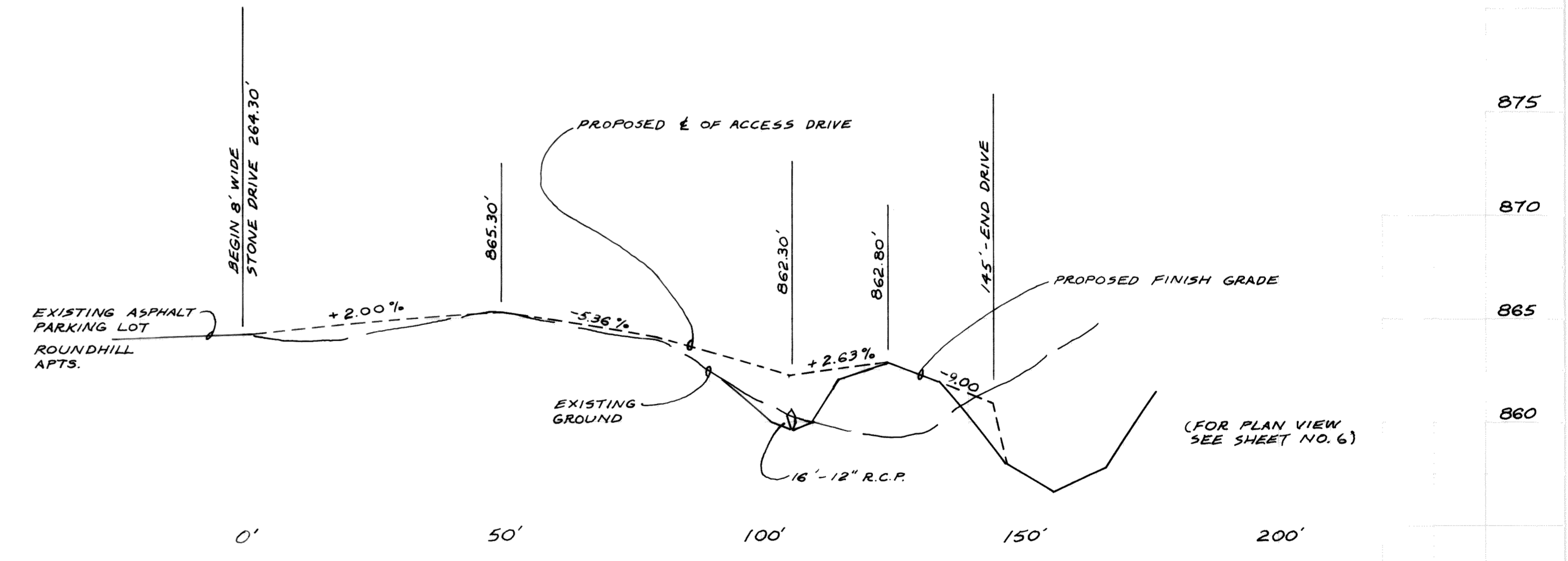


FUTURE EXTENSION - SANITARY PLAN
STA. 0+00 THRU STA. 2+80

PROFILE
 NOTE BOOK
 No.



FUTURE EXTENSION - SANITARY PROFILE
STA. 0+00 THRU STA. 2+80



LIFT STATION - ACCESS DRIVE PROFILE
 SCALE: 1" = 20' VERT.
 1" = 5' HORIZ.

AS CONSTRUCTED:
 BY *[Signature]*
 DATE 1/24/88
 GRINDLE, BENDER & ASSOC.
 ARCHITECTURE · ENGINEERING · SURVEYING
 ASHLAND, OHIO

SCIOTO BLUFFS LIBERTY TOWNSHIP DELAWARE CO., OHIO	PROJECT NO. 18809
	DRAWN C.E.T.
SANITARY SEWER	DATE 11-18-88
	APPROVED
CASCADE DRIVE - PLAN	REVISIONS 7/2-7-88
	SHEET 5 OF 7

