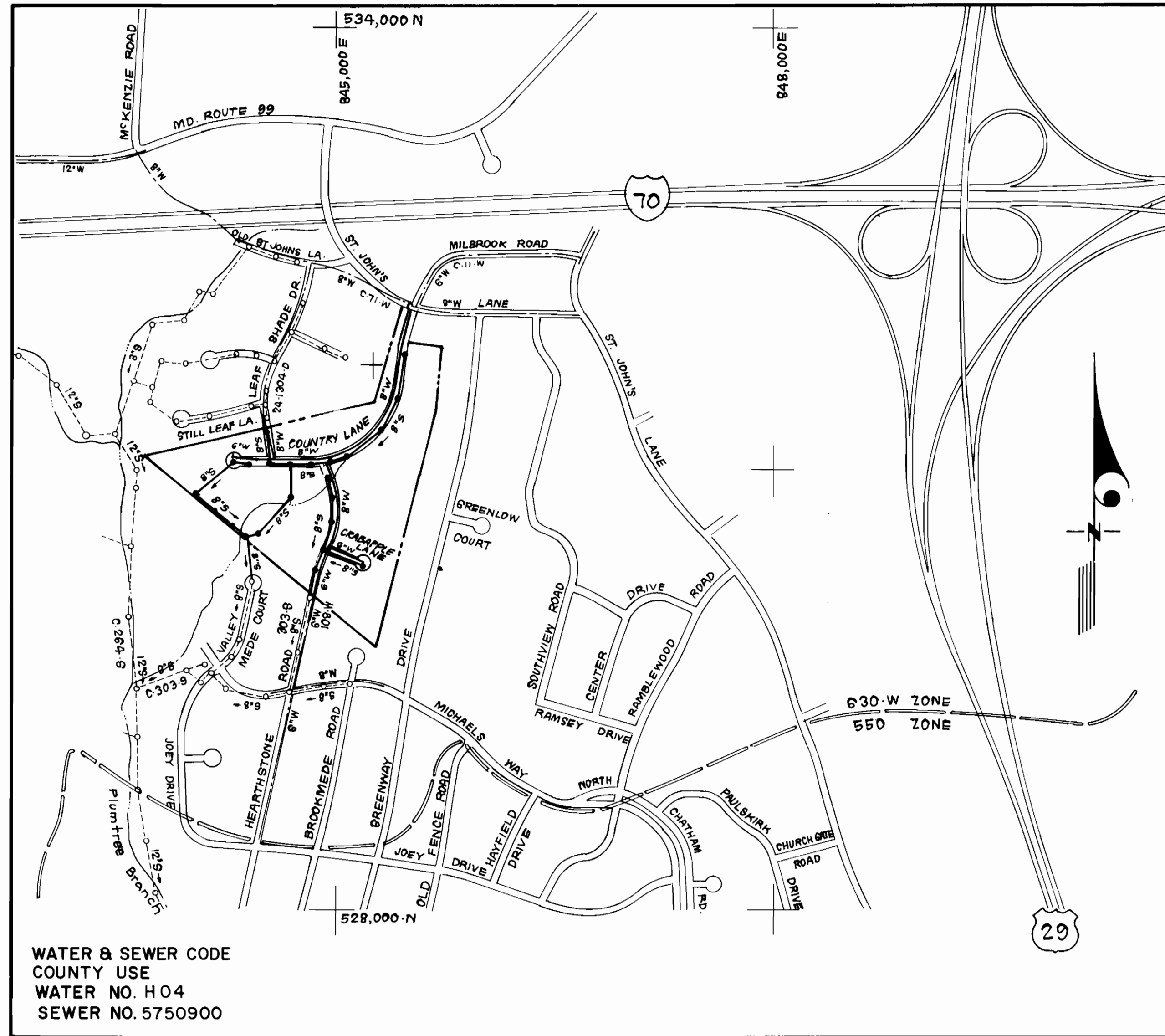


TYPE OF BUILDING	Single Family
NUMBER OF LOTS	76
NUMBER OF SHC'S	76
NUMBER OF WHC'S	76
TREATMENT PLANT	RTE 108 Pumping Station, Patapsco.



WATER & SEWER CODE
 COUNTY USE
 WATER NO. H04
 SEWER NO. 5750900

VICINITY MAP
 SCALE: 1" = 600'

GENERAL NOTES

- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Inspector, at the contractor's expense.
- All horizontal controls are based on Maryland State Coordinates.
- All vertical controls are based on U.S.G.S. Datum.
- All pipe elevations shown are invert elevations.
- Clear all utilities by a minimum of 6" clear all poles by 2'-0" minimum or tunnel as required. Any cost incurred to the contractor for tunneling or bracing at poles shall be included in unit prices bid for excavation and backfill.
- For details not shown on the drawings use Howard County Standard Details.
- For materials and construction methods use Howard County Standard Specifications & Ho. Co. Design Manual, Volume II. The Contractor shall have volume II on the job.
- Contractor shall locate existing utilities a minimum of two (2) weeks in advance of construction operations in the vicinity of proposed utilities at his own expense.
- Contractor shall notify the following utilities or agencies at least five (5) working days before starting work shown on these plans.
 State Highway Administration - 531-5533
 Baltimore Gas & Electric Company - Contractor Services - 850-4620.
 Baltimore Gas & Electric Company - Underground Damage Control - 850-9004.
 Baltimore Gas & Electric Company - Trouble Shooting - 208-0001.
 "Miss Utility" - 1-559-0100
 Chesapeake & Potomac (C & P) Telephone Company - 1-800-257-7777
 Colonial Pipeline Company - 795-1300
 Bureau of Utilities Howard County - 992-2366
- Trees are to be protected from damage to maximum extent. Trees located within the construction strip are not to be removed or damaged by the contractor.
- Contractor shall remove trees, stumps, and roots along line of excavation as directed by the Inspector. Payment for such removal shall be included in the unit price bid for excavation and backfill.
- Place regulation "Men Working" and warning signs as required to comply with Maryland State Highway Administration Manual of Traffic Control for Highway Construction and Maintenance Operations.
- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Top of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- Block all fittings with concrete.
- Bury line elevations on fire hydrants shall be set to the elevations shown on the drawings. All fire hydrants shall be strapped and buttressed with concrete in accordance with standard details. Soil around the fire hydrant to be compacted in accordance with Sections 1003 & 1008 of the Standard Specifications.
- All water house connections shall be for an inside meter setting.
- The contractor shall not operate any water main valves on the existing system.
- All sewer mains shall be C.S.P.X., V.C.P.X., P.V.C., or A.C.P. Class 2400 unless otherwise noted.
- The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
- All manholes shall be 4'-0" inside diameter, unless otherwise noted.
- Water main and water house connection lines must have a minimum of one foot separation from the sanitary sewer and sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'.
- Manholes designated thus: W.T. shall have watertight frames & covers.

CONTRACT NO. 24-1607-D
 BOONE FARM
 SECTION I AREA I, LOTS 1 THRU 78
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Construction Plan F-87-213; Drawing Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.
 SIGNATURE: *[Signature]* DATE: 4/1/88

U.S. SOIL CONSERVATION SERVICE
 This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

APPROVED:
 SIGNATURE: *[Signature]* DATE: 6-1-88
 HOWARD S.C.D.

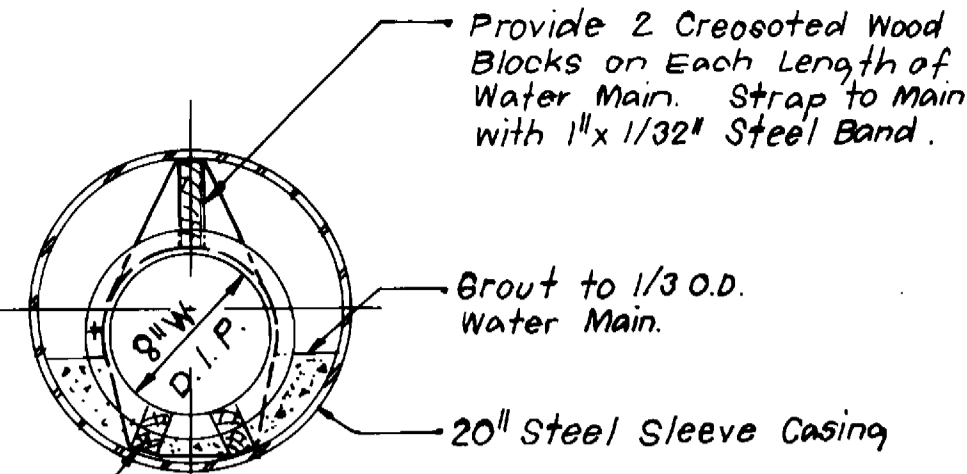
QUANTITIES			
ITEM	ESTM'D	AS-BUILT	MATERIAL / SUPPLIER
8"W	3,167 L.F.		
6"W	576 L.F.		
8"S	4,656 L.F.		
6"SHC	1,598 L.F.		
1"WHC	542 L.F.		
3/4"WHC	1,062 L.F.		
F.H.	7 EA.		
4'-0" Dia MH	24 EA.		
8"V	4 EA.		
6"V (excl. F.H.)	1 EA.		
8"x8" T.S. & V.	1 EA.		
1 1/2" Drain	1 EA.		

25. All D.I.P. fittings shall be in accordance with AWWA specification C-153 Ductile Iron Compact Fittings, 3" through 12" for water and other liquids.

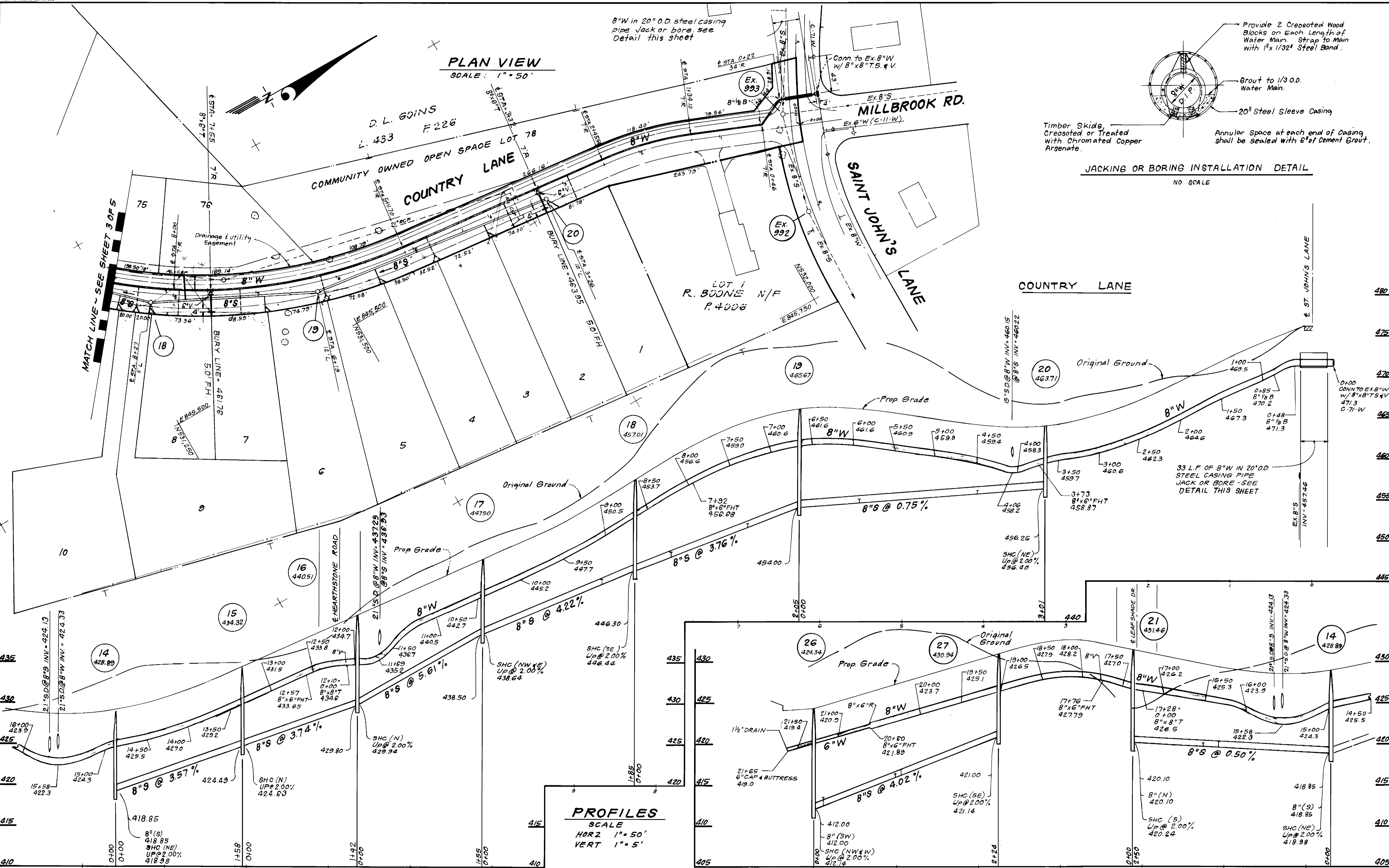
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS: <i>[Signature]</i> DATE: 6/6/88 CHIEF, BUREAU OF UTILITIES: <i>[Signature]</i> DATE: 5-27-88	CLARK - FINEPROCK & SACKETT ENGINEERS - PLANNERS - SURVEYORS 7138 MINSTREL WAY - COLUMBIA, MD. 21045 (301) 381-7500 - BALTO. (301) 621-8100 - WASH.	DES: J.R. DRN: V.L.M. CHK: J.R. DATE: 5-87	TITLE SHEET	BOONE FARM SECTION I AREA I, LOTS 1 THRU 78 2ND ELECTION DISTRICT CONTRACT NO. 24-1607-D	SCALE AS SHOWN SHEET 1 OF 5
--	--	---	-------------	---	--------------------------------

PLAN VIEW
SCALE: 1" = 50'

8" W in 20" O.D. steel casing
pipe Jack or bore. see
Detail this sheet



JACKING OR BORING INSTALLATION DETAIL
NO SCALE



PROFILES
SCALE
HORZ 1" = 50'
VERT 1" = 5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Kim 6/3/88
DIRECTOR OF PUBLIC WORKS DATE

Robert B. Brunner 5-27-89
CHIEF, BUREAU OF UTILITIES DATE

William B. Ray 6/1/88
CHIEF, BUREAU OF ENGINEERING DATE

Samuel D. ... 6/1/88
CHIEF, LAND DEVELOPMENT DIV. DATE

CLARK · FINEPROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS

7135 MINSTREL WAY · COLUMBIA, MD 21045
(301) 381-7500 · BALTO · (301) 621-8100 · WASH.



DES: J.R.					
DRN: V.L.M.					
CHK: J.R.					
DATE: 5-87					
BY NO		REVISION		DATE	

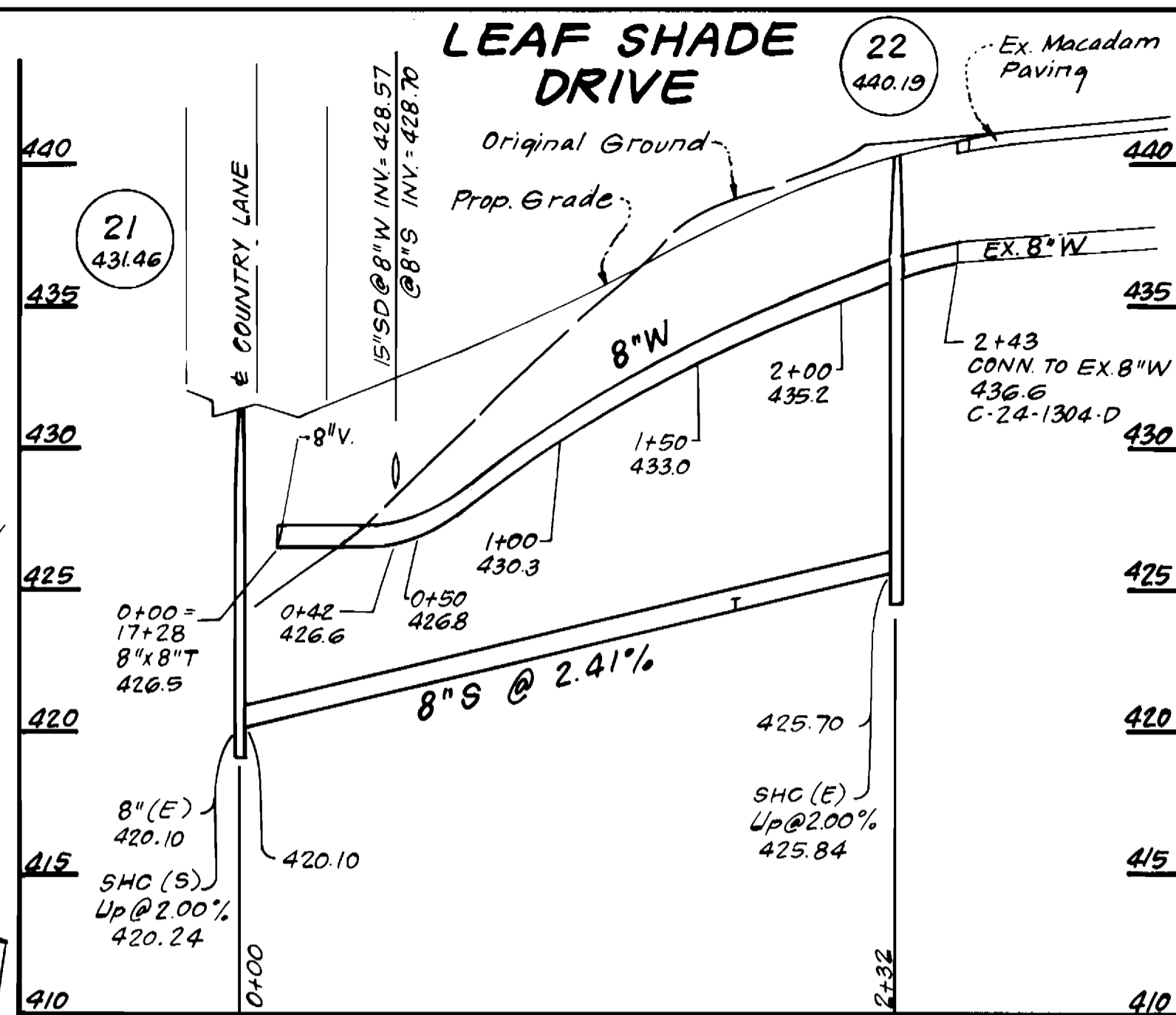
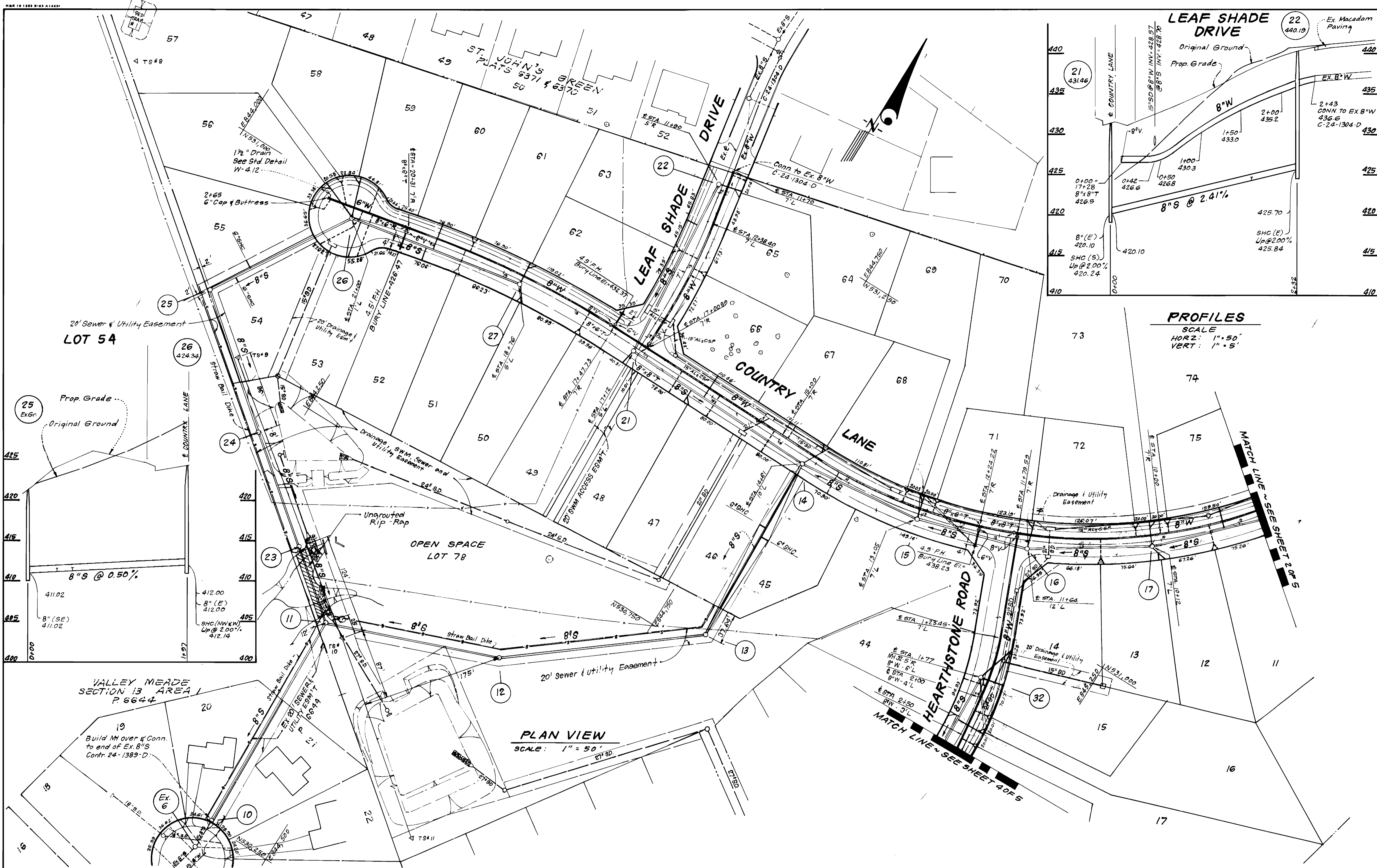
PLAN & PROFILES OF
WATER & SEWER MAINS

600' SCALE MAP NO. 17 BLOCK NO.

BOONE FARM
SECTION I AREA I, LOTS 1 THRU 78
2ND ELECTION DISTRICT
CONTRACT NO. 24-1607-D

SCALE
AS SHOWN

SHEET
2 OF 5



PROFILES
SCALE
HORIZ: 1" = 50'
VERT: 1" = 5'

PLAN VIEW
SCALE: 1" = 50'

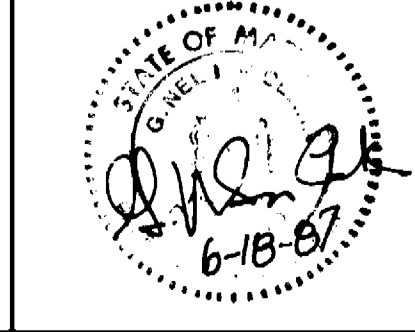
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature]
DIRECTOR OF PUBLIC WORKS
DATE: 6/1/88

[Signature]
CHIEF, BUREAU OF UTILITIES
DATE: 6/1/88

CFE CLARK · FINEPROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS

7135 MINSTREL WAY · COLUMBIA, MD 21045
(301) 381-7500 · BALTO. (301) 821-8100 · WASH.



DES: J.R.			
DRN: K.L.M.			
CHK: J.R.			
DATE: 5-87	BY: NO.	REVISION	DATE

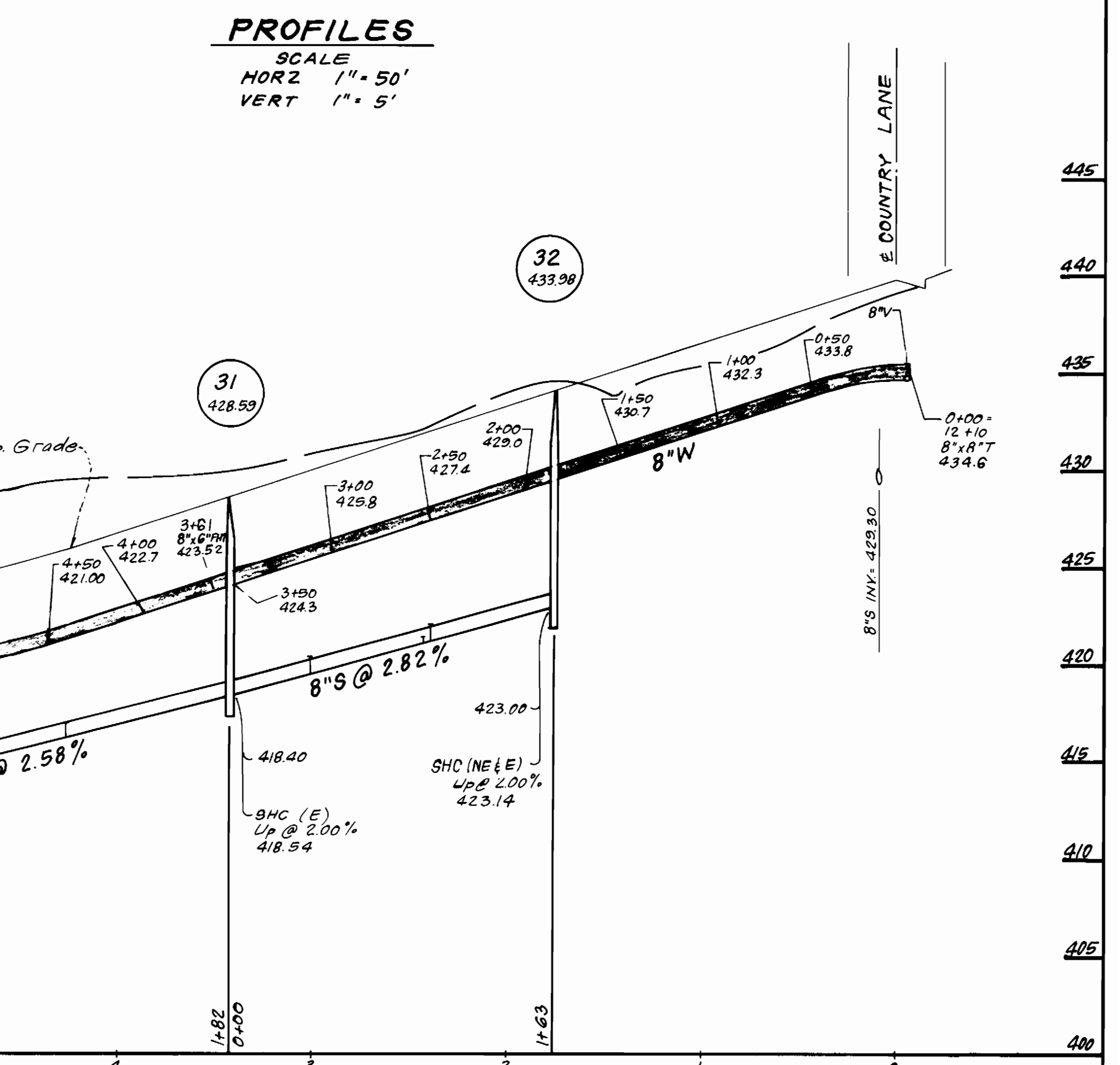
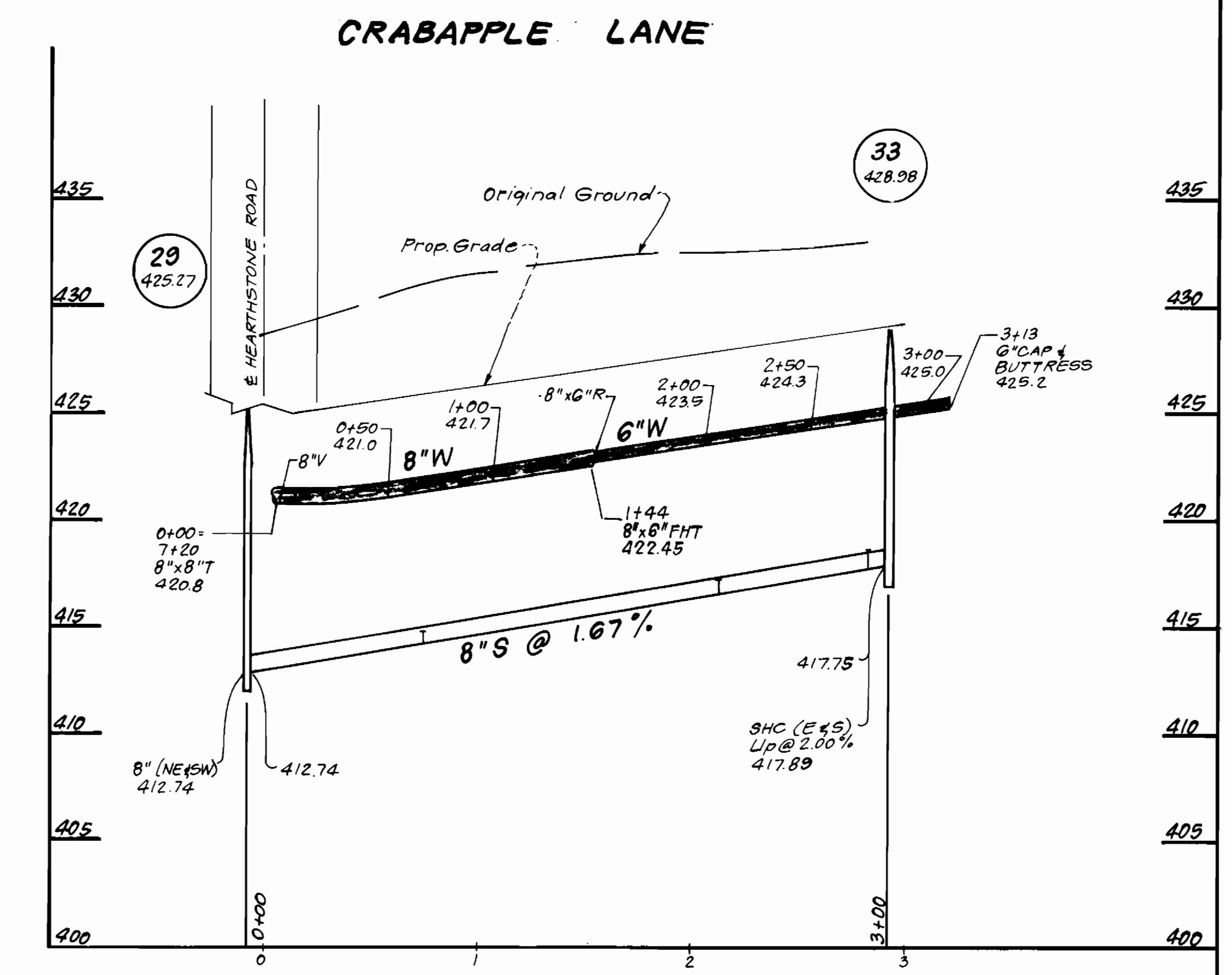
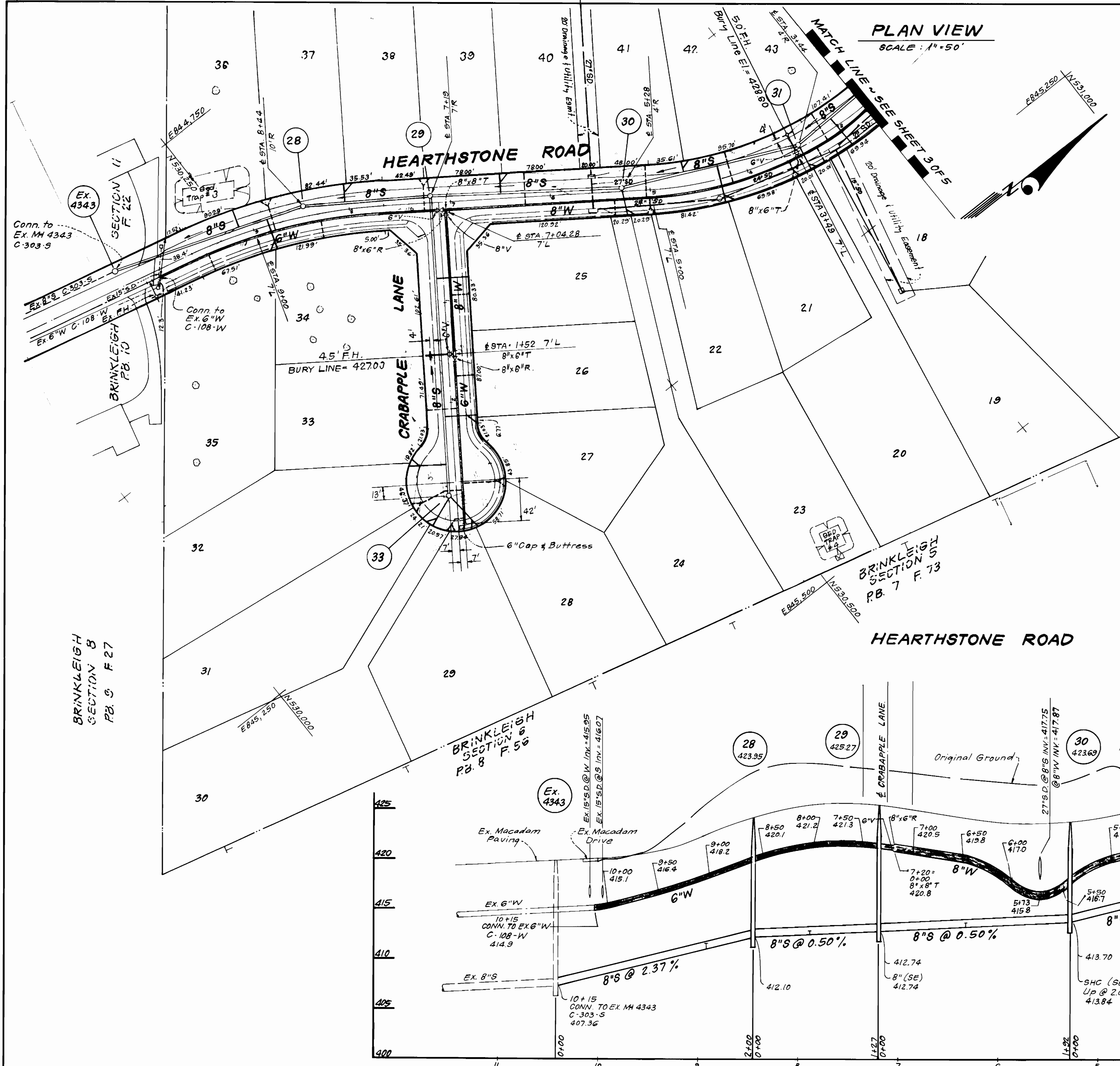
PLAN OF
WATER & SEWER MAINS

600' SCALE MAP NO. 17 BLOCK NO.

BOONE FARM
SECTION I AREA I, LOTS 1 THRU 78
2ND ELECTION DISTRICT
CONTRACT NO. 24-1607-D

SCALE
AS SHOWN

SHEET
3 OF 5



PROFILES
SCALE
HORIZ 1"=50'
VERT 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James H. ... 6/1/88
DIRECTOR OF PUBLIC WORKS DATE

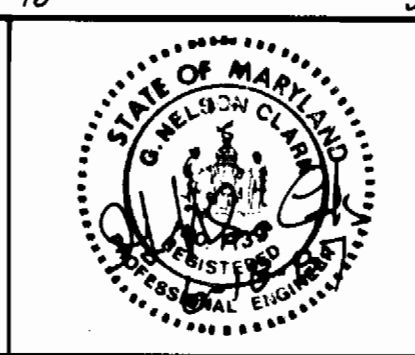
William ... 6/1/88
CHIEF, BUREAU OF ENGINEERING DATE

Richard ... 5-17-89
CHIEF, BUREAU OF UTILITIES DATE

William ... 6/1/88
CHIEF, LAND DEVELOPMENT DIV. DATE

CFE CLARK · FINEPROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS

7135 MINSTREL WAY · COLUMBIA, MD 21045
(301) 381-7500 BALTO. · (301) 821-8100 WASH.



DES: J. R.					
DRN: V. L. M.					
CHK: J. R.					
DATE: 5-87					
BY NO.					
REVISION					
DATE					

PLAN & PROFILES OF
WATER & SEWER MAINS

600' SCALE MAP NO. 17 BLOCK NO.

BOONE FARM
SECTION I AREA I, LOTS I THRU 78
2ND ELECTION DISTRICT
CONTRACT NO. 24-1607-D

SCALE
AS SHOWN

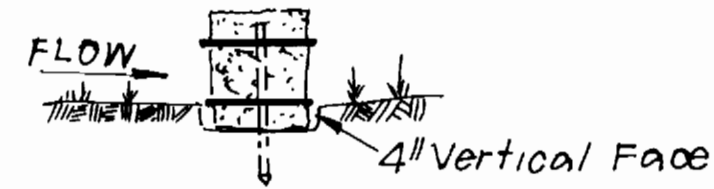
SHEET
4 OF 5

NOTES:

1. Erosion Control Fabric shall be Poly Filter-X as manufactured by Carthage Mills Inc., Erosion Control Division, 124 West 66th Street, Cincinnati, Ohio; Laurel Erosion Control Cloth as manufactured by Laurel Plastics Inc., Madison, Main, or approved equal.

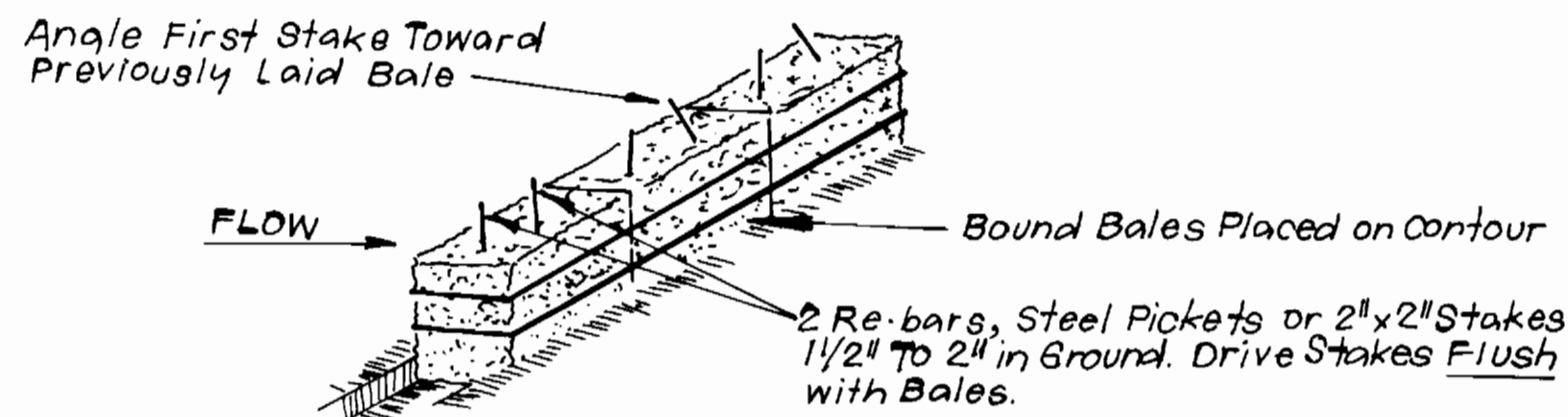
2. Rip-Rap shall be placed 6' each side of sewer or as shown. Any disturbance to stream banks beyond these limits shall be protected with Rip-Rap.

Rip-Rap shall consist of dense rocks of random shapes and sizes, resistant to the action of air and water and suitable for bank protection. All rocks shall weigh a minimum of 150 pounds.



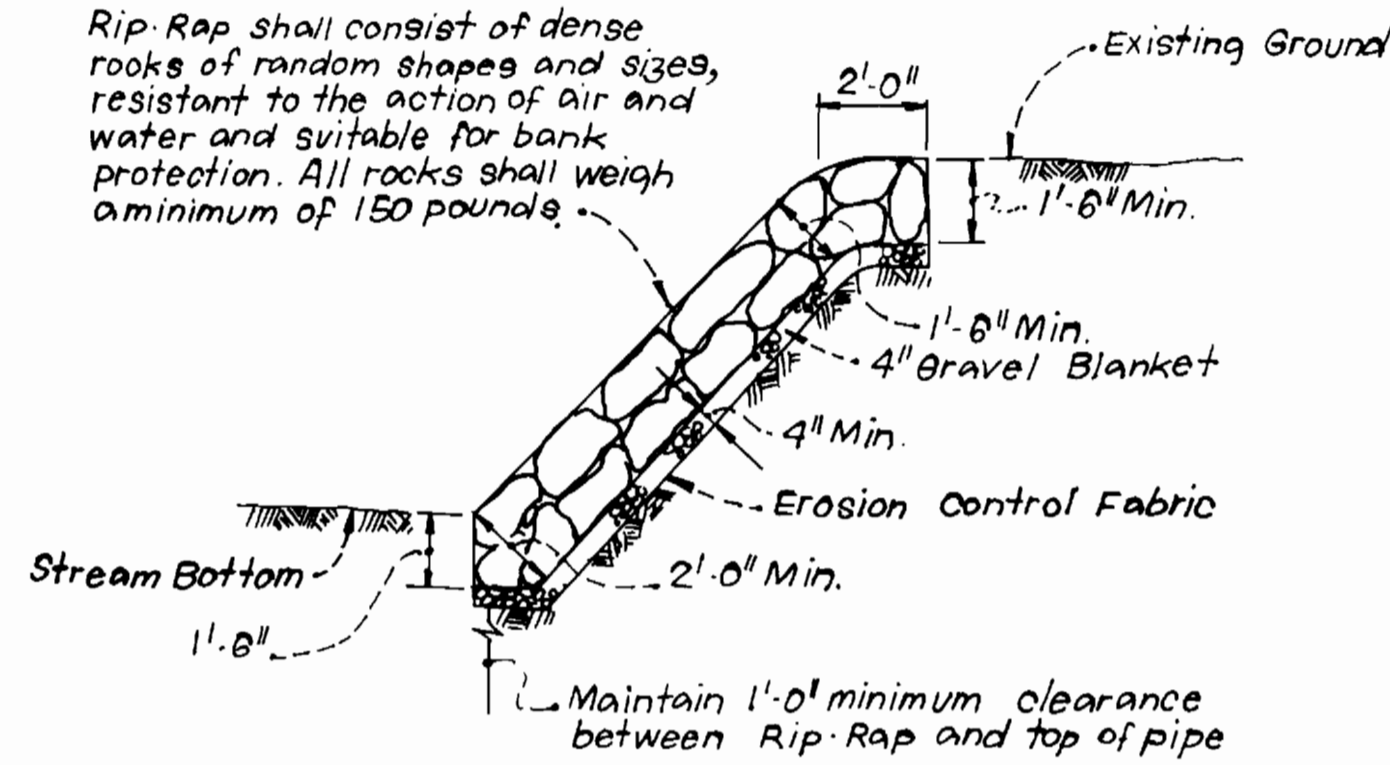
BEDDING DETAIL

STANDARD SYMBOL
S.B.D.



ANCHORING DETAIL

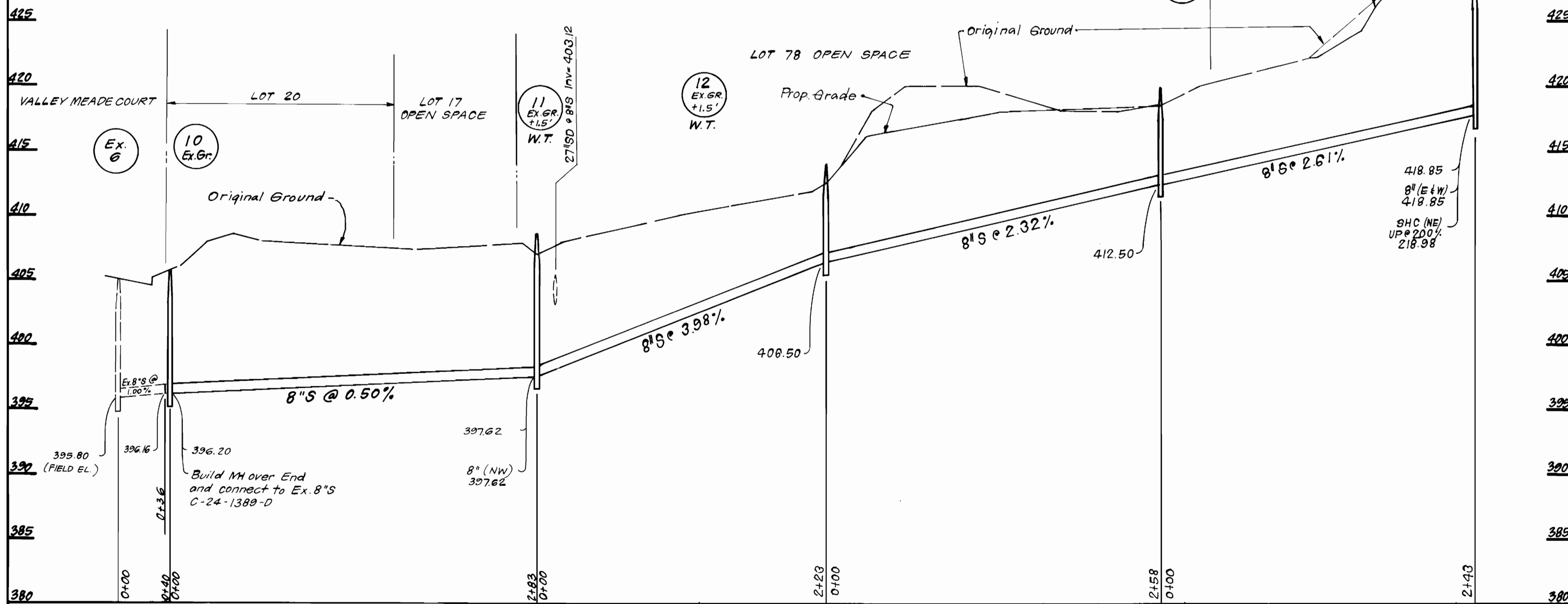
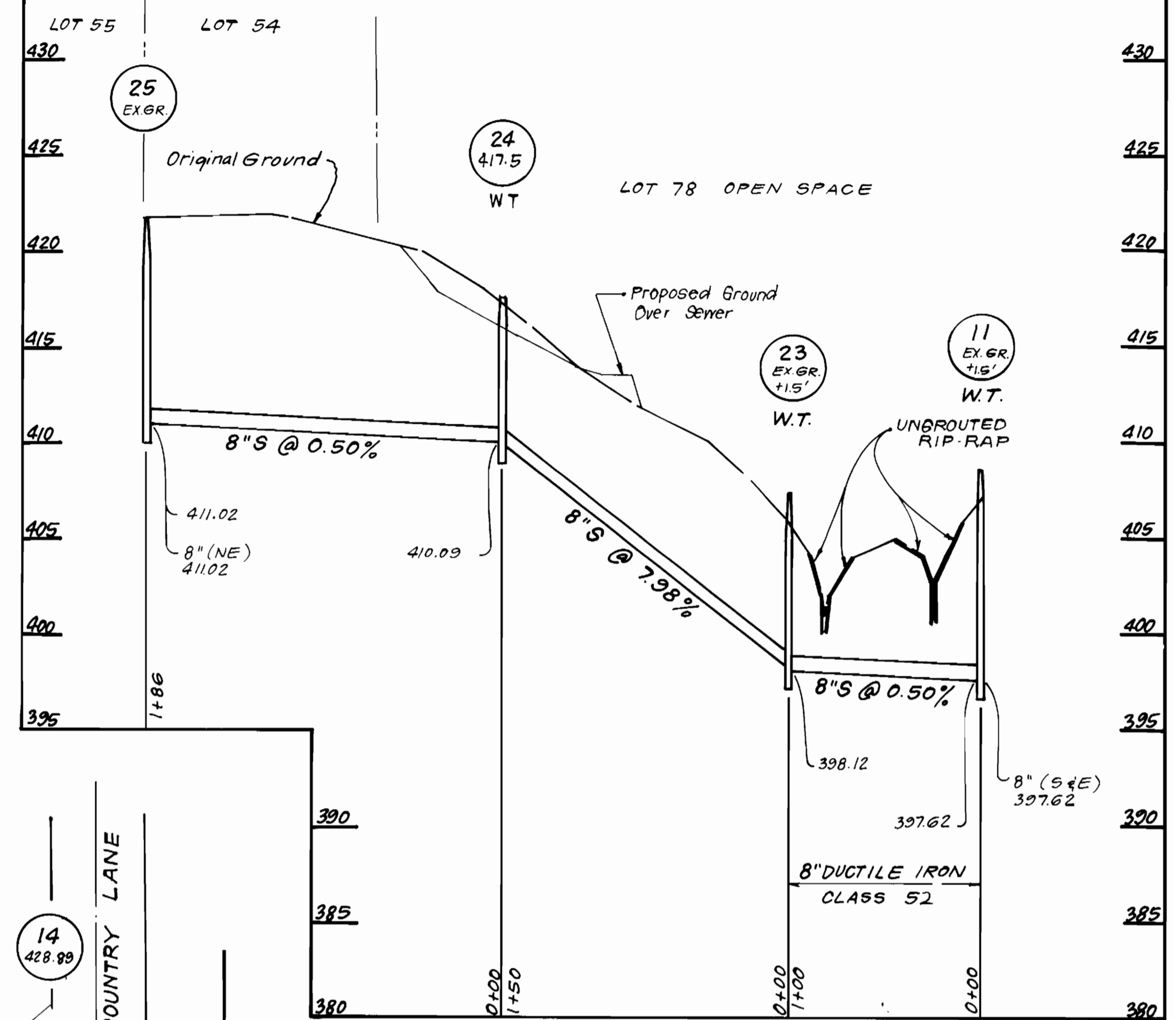
STRAW BALE DIKE
NO SCALE



RIP-RAP DETAIL
NO SCALE

PROFILES

SCALE
HORZ. 1" = 50'
VERT. 1" = 5'



SHC ELEVATIONS

LOT Nos.	INV. @ R.	MIN. CELLAR	LOT Nos.	INV. @ R.	MIN. CELLAR
1	456.8	460.8	43/44	421.8	426.2/426.0
2/3	456.0	460.0/460.2	45	416.1	419.3
4/5	455.0	458.9/459.2	46	416.4	419.4
6/7	452.0	456.1	47/48	420.1	424.4/424.0
8/9	446.7	450.8/454.5	49	420.6	424.5
10/11	445.2	453.0/449.4	50/51	421.7	425.7/425.9
12/13	439.1	443.1/443.3	52	417.0	421.0
14/15	424.0	428.4/428.1	53	412.9	416.9
16/17	422.2	430.3/430.2	54	411.4	414.7
18	420.5	424.3	55	411.6	415.1
19/20	419.1	426.9	56/57	413.3	417.5/420.9
21/22	417.2	421.2	58/59	413.2	417.4/417.1
23/24	414.4	423.4	60	417.0	421.0
25	414.8	418.5	61/62	421.8	425.8/426.2
26/27	417.2	421.4/421.6	63	424.7	428.5
28/29	418.7	423.3	64/65	426.4	432.3/430.9
30/31	418.5	425.8/424.5	66	420.3	423.9
32/33	418.2	422.6	67/68	419.9	423.9
34/35	411.9	416.5	69/70	425.3	432.7/432.0
36	410.9	415.1	71/72	430.7	435.0/434.8
37/38	412.9	416.9	73/74	439.3	446.2/445.9
39/40	413.7	417.7	75	443.0	447.3
41/42	415.7	419.7/419.9	76	448.6	452.6

NOTE: Minimum Cellar Elevations were computed using a typical house location on lot. Sewerability should be checked with actual house location at time of site plan preparation.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ... DIRECTOR OF PUBLIC WORKS
DATE 6/28/88

Clark Fineprock & Sackett
CHIEF, BUREAU OF ENGINEERING
DATE 6/1/88

Clark Fineprock & Sackett
CHIEF, LAND DEVELOPMENT DIV.
DATE 6/1/88

CFS CLARK FINEPROCK & SACKETT
ENGINEERS - PLANNERS - SURVEYORS
7135 MINSTREL WAY - COLUMBIA, MD. 21045
(301) 381-7500 - BALTO. (301) 621-8100 - WASH.



DES: J.R.					
DRN: K.L.M.					
CHK: J.R.					
DATE: 5-87	BY: NO.	REVISION	DATE	600'S SCALE	MAP NO. 17 BLOCK NO.

PROFILES OF
WATER & SEWER MAINS

BOONE FARM
SECTION I AREA I, LOTS 1 THRU 78
2ND ELECTION DISTRICT
CONTRACT NO. 24-1607-D

SCALE
AS SHOWN

SHEET
5 OF 5