

BENCHMARKS: (SEE LOCATION MAP)

HO CO MARKER # 2540001
N 537.800 5367 E 856.174 0760
DESCRIPTION:
NAIL IN METAL DISK IN
EDGE OF ROAD
ELEV. = 505.524'
KCI BM #1
DRILL HOLE IN T.O.C.
ELEV. = 510.50

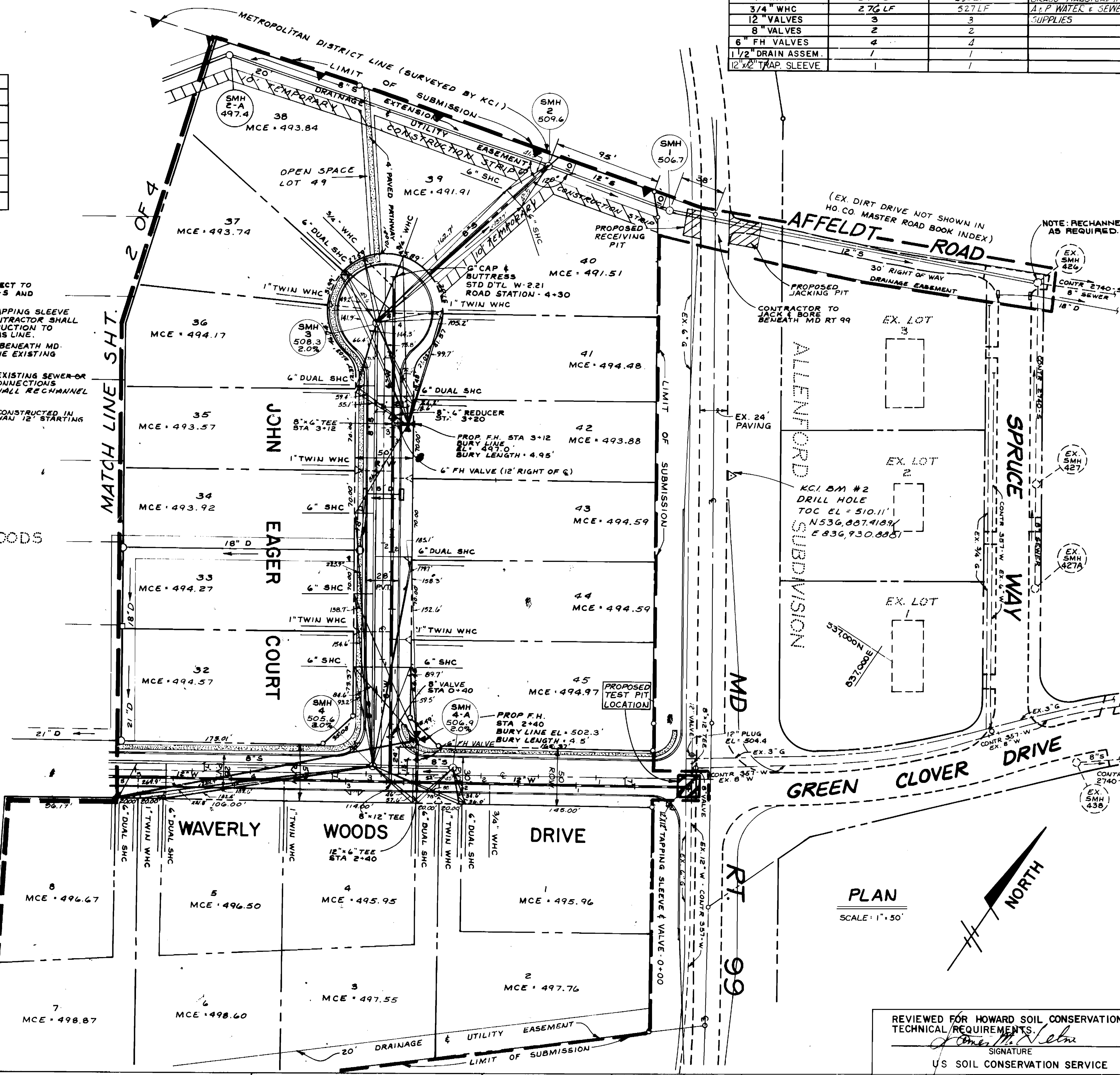
THOMAS STUART WARFIELD
& KENNARD WARFIELD, JR.
1441 / 068
P.22 ZONED: R

MANHOLE NUMBER	LOCATION	
	ROAD STA.	OFFSET
1	AS SHOWN	
2	AS SHOWN	
2-A	AS SHOWN	
3	3+90	7' R.T.
4	0+07	7' R.T.
4-A	2+24	7' R.T.

NOTES:

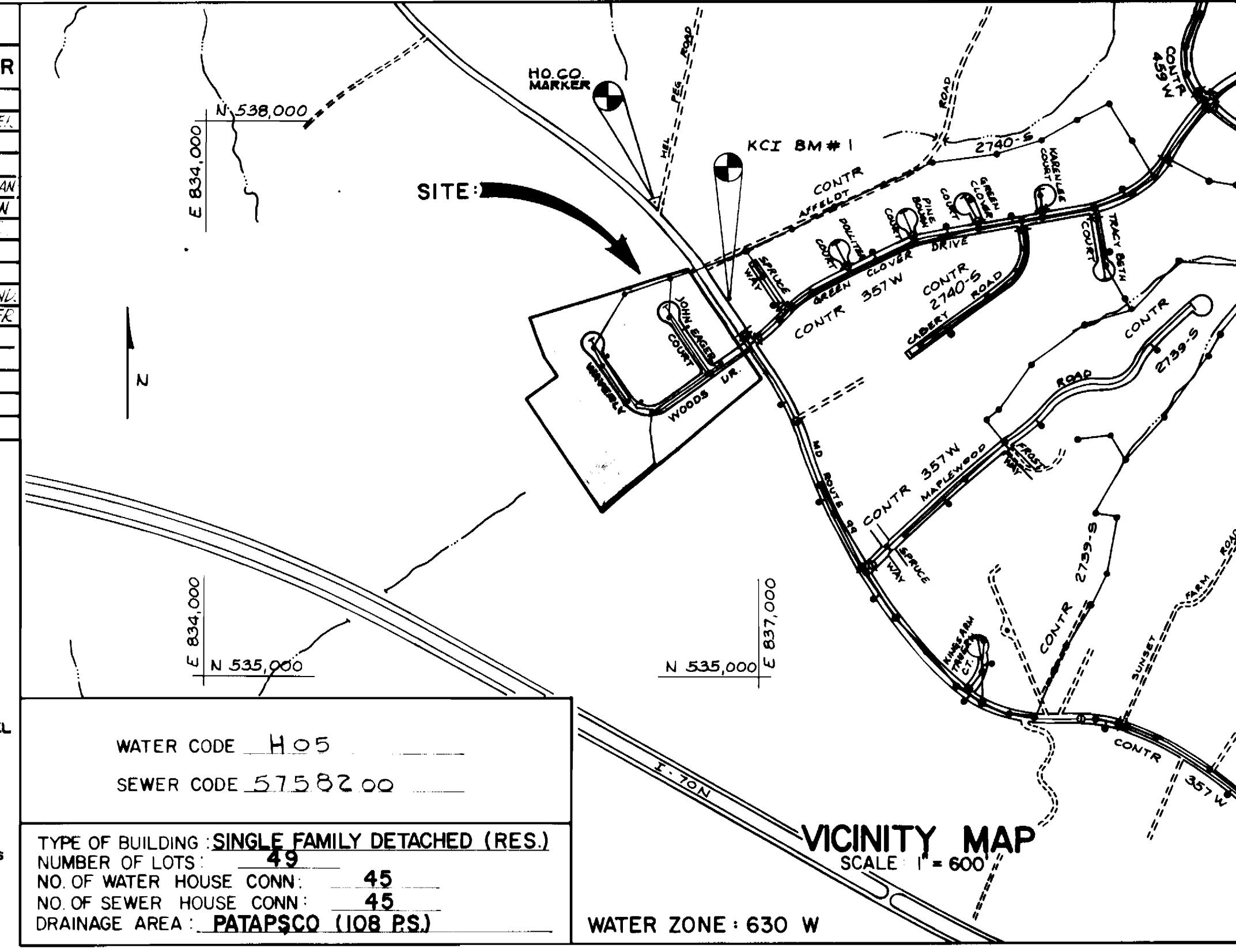
- SEWER & WATER EXTENSION TO CONNECT TO EXISTING SEWER CONTRACT # 2740-S AND WATER CONTRACT # 387-W.
- CONTRACTOR SHALL INSTALL 12" TAPPING SLEEVE & VALVE IN LOCATION SHOWN. CONTRACTOR SHALL TEST PIT AREA PRIOR TO CONSTRUCTION TO VERIFY LOCATION OF 12" W & 6" GAS LINE.
- CONTRACTOR SHALL JACK & BORE BENEATH MD RT 99 AND SHALL NOT DISTURB THE EXISTING HIGHWAY SURFACE.
- CONTRACTOR SHALL NOT DISTURB EXISTING SEWER OR WATER SERVICES WHEN MAKING CONNECTIONS INTO THE EXISTING SYSTEMS, & SHALL RECHANNEL EX. MH 426 AS REQUIRED.
- 18" THICK BRICK WALL SHALL BE CONSTRUCTED IN MANHOLES OF DEPTH GREATER THAN 12' STARTING AT THE 12' DEPTH.

WAVERLY WOODS SECTION I



QUANTITIES:

ITEM	DESIGN	AS BUILT	MAT'L/SUPPLIER
12" SEWER	113 LF	109 LF	CHARLETTE PIPE &
8" SEWER	196 LF	197 LF	FOUNDRY - A.P. WATER
6" SHC	1018 LF	917 LF	SEWER SUIT L.I.
MANHOLES	11	10	ATLANTIC CONC. FCCL.
12" SEWER (D.I.P.)	320 LF	324 LF	CHARLETTE PIPE - ATLANTIC
12" WATER	670 LF	1396 LF	TIC STATES CAST IRON
8" WATER	830 LF	862 LF	PIPE CO - A.P. WATER
6" WATER	120 LF	216 LF	SEWER SUPPLIES
FIRE HYDRANT(S)	4	2	MUELLER VINCENT
1" WHC	594 LF	430 LF	BRASS HALSTEAD/IN.
3/4" WHC	276 LF	527 LF	A.P. WATER & SEWER
12" VALVES	3	3	SUPPLIES
8" VALVES	2	2	
6" FH VALVES	4	4	
1 1/2" DRAIN ASSEM.	1	1	
12" TRAP SLEEVE	1	1	



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.
- 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 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 CONSTRUCTION OF THE MAIN.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- 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 CO. CONTRACTOR SERVICES-850-4620
BALTIMORE GAS & ELECTRIC CO.-UNDERGROUND DAMAGE CONTROL-859-9004
BALTIMORE GAS & ELECTRIC CO.-TROUBLE SHOOTING-298-9001
"MISS UTILITY" 1-559-0100
CHESAPEAKE & POTOMAC (C&P) TELEPHONE CO. 1-800-257-7777
AMERICAN TELEPHONE & TELEGRAPH CABLE LOCATION DIVISION 393-3553
COLONIAL PIPELINE CO. 795-1390.
BUREAU OF UTILITIES HOWARD COUNTY 992-2366
- TREES ARE TO BE PROTECTED FROM DAMAGED 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 ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- 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
- ALL WATER MAINS TO BE CLASS 52 D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" 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 SECTION 10.03 AND 10.08 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.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPE FITTINGS ONLY.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR PVC 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.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAILS G.3.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE. STANDARD DETAILS G.5.41.
- HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CAN NOT BE SERVED.
- ALL SEWERS MAINS BURIED GREATER THAN 20' DEEP SHALL BE DIP OR PVC UNLESS OTHERWISE NOTED.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
James M. Ebra
 SIGNATURE DATE 4-7-87
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
Stephen L. Felt
 APPROVED: DATE 4/7/87
 HOWARD S.C.D.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
Walter F. Newman 4-23-87
 DIRECTOR OF PUBLIC WORKS DATE
Robert M. Bennett 4-21-87
 CHIEF, BUREAU OF UTILITIES DATE

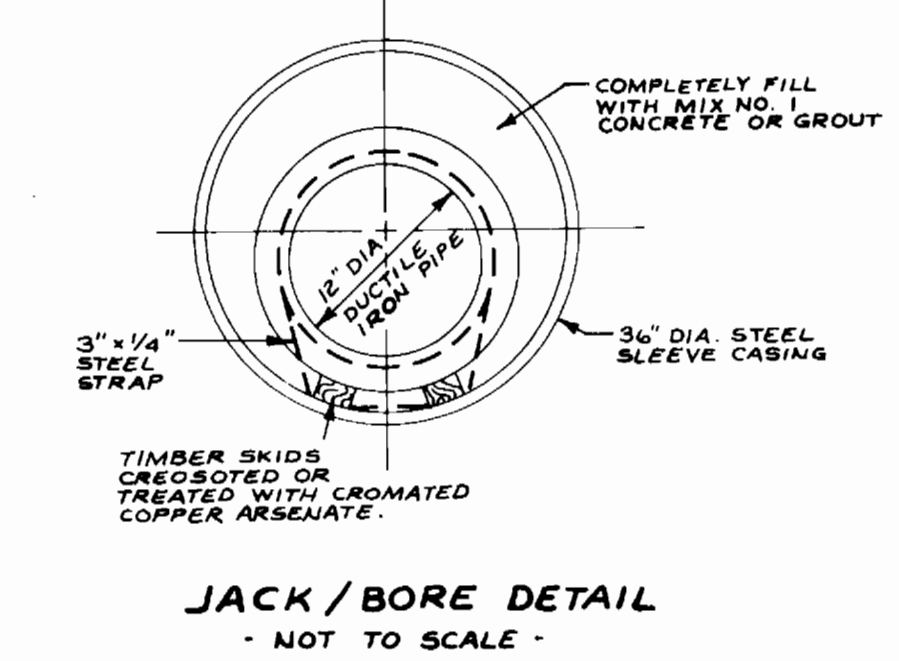
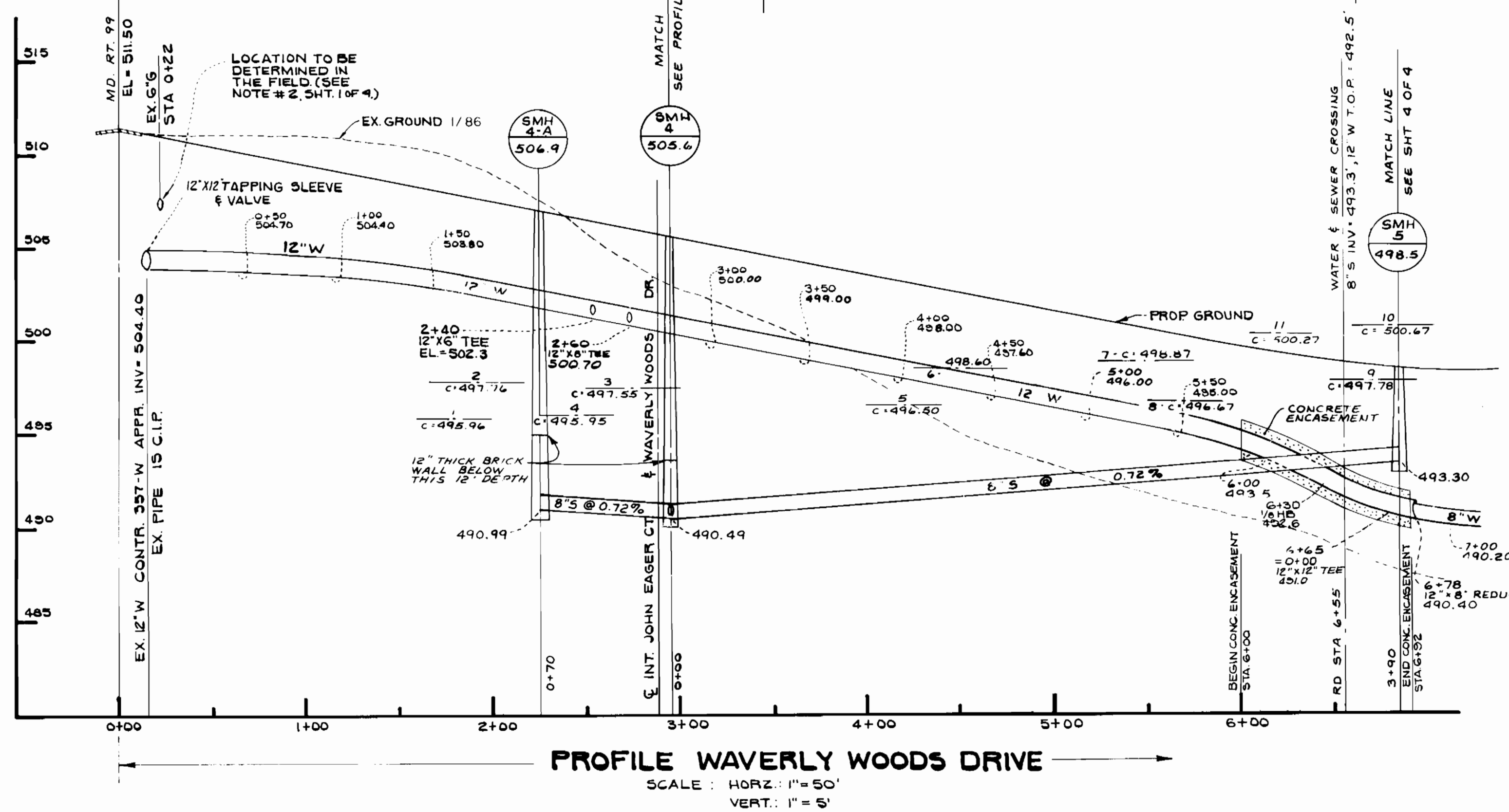
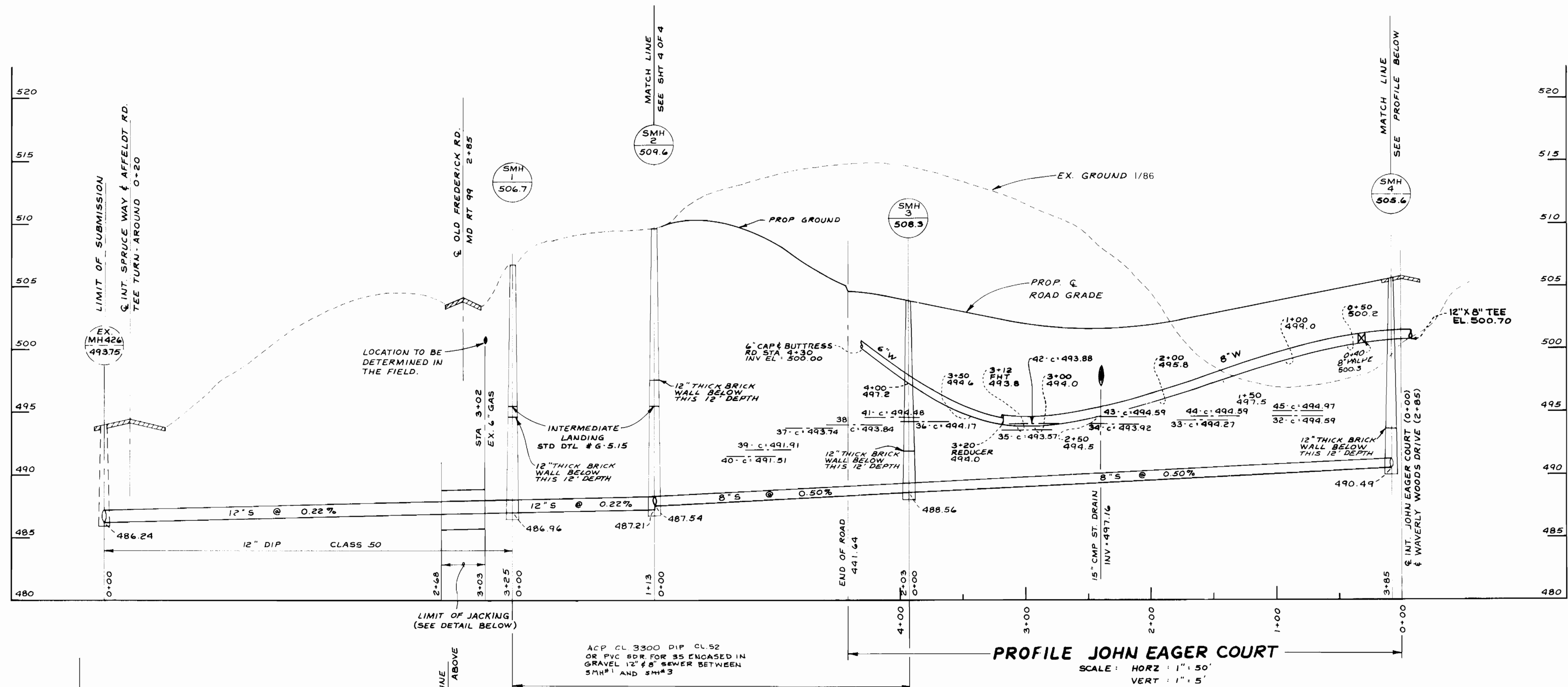
KIDDE CONSULTANTS INC.
 ENGINEERS, PLANNERS & SURVEYORS
 1100 WEST STREET / SUITE 100
 LAUREL, MD 20707
 (301) 792-8086 (301) 953-1821
 JOHN E.C. PATMORE MD P.E. NO 8978

DES: M.S.S. EMM #1 ADDED LOT DIMENSIONS 5/1987
 DRN: M.W.G. EMM #2 ADDED TO NOTE TO THE GENERAL NOTES 6-2587
 CHK: D.C.W.
 DATE: 12/86

AREA I PLAN OF
 8" AND 12" WATER
 8" SANITARY SEWER
 CONTRACT NO. 24-1580-D
 SCALE AS SHOWN
 SHEET 1 OF 4

WAVERLY WOODS SECTION I AREA I
 TAX MAP NO. 16 & 17 PARCEL 22
 (F-87-95)
 2ND ELECTION DISTRICT HOWARD CO., MD

SEWER HOUSE CONNECTIONS INVERT ELEV. @ PROPERTY LINES		
STATIONS	LOT	INVERT
SMH 2	-	SMH 3
0+40 R	39	488.21
0+40 L	40	488.21
1+85 R	37,38	489.74
SMH 3	-	SMH 4
0+55 R	35,36	489.47
0+63 L	41,42	489.78
1+65 R	34	490.02
2+02 L	43,44	490.49
2+35 R	33	490.37
3+00 R	32	490.69
3+00 L	45	490.97
SMH 4	-	SMH 4-1
0+35 R	3,4	491.65
SMH 4-1	-	-
0+00 R	1,2	491.86
SMH 4	-	SMH 5
1+80 L	5,6	492.30
2+05 L	7,8	492.47
3+30 R	31	493.50
3+30 L	9	493.78
SMH 5	-	-
0+00 L	10,11	493.87
0+00 R	12,13	494.37



SEDIMENT CONTROL NOTES

- FOR SEDIMENT CONTROL FOR THIS CONTRACT, SEE THE APPROVED ROAD CONSTRUCTION PLANS, F-87.
- MATERIALS FROM TRENCH EXCAVATION TO BE PLACED ON UPHILL SIDE OF TRENCH.
- CONTRACTOR TO BACKFILL, COMPACT AND STABILIZE IMMEDIATELY AFTER INSTALLATION OF PIPE. NO TRENCHES WILL BE LEFT OPEN AT THE END OF EACH DAY, EXCEPT THAT PORTION WHERE WORK HAS STOPPED.
- ANY SEDIMENT CONTROL FACILITIES ENCOUNTERED DURING PIPE CONSTRUCTION TO BE RETURNED TO ORIGINAL CONDITION IMMEDIATELY UPON COMPLETION OF THAT PORTION OF WORK.
- SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS, F-87-95.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* DATE: 4/21/87

Chief, Bureau of Engineering: *[Signature]* DATE: 4/22/87

Chief, Land Development Division: *[Signature]* DATE: _____

KIDDE CONSULTANTS, INC.
ENGINEERS, PLANNERS & SURVEYORS
1100 WEST STREET/SUITE 100
LAUREL, MD 20708
(301) 792-8086 (301) 953-1821

JOHN E.C. PATMORE MD PE NO 8978

DES: M.S.S.	
DRN: M.W.G.	
CHK: D.C.W.	
DATE: 1/7/86	

AREA I PROFILE OF
6" 8" AND 12" WATER
8" AND 12" SANITARY SEWER
CONTRACT NO. 24-1580-D

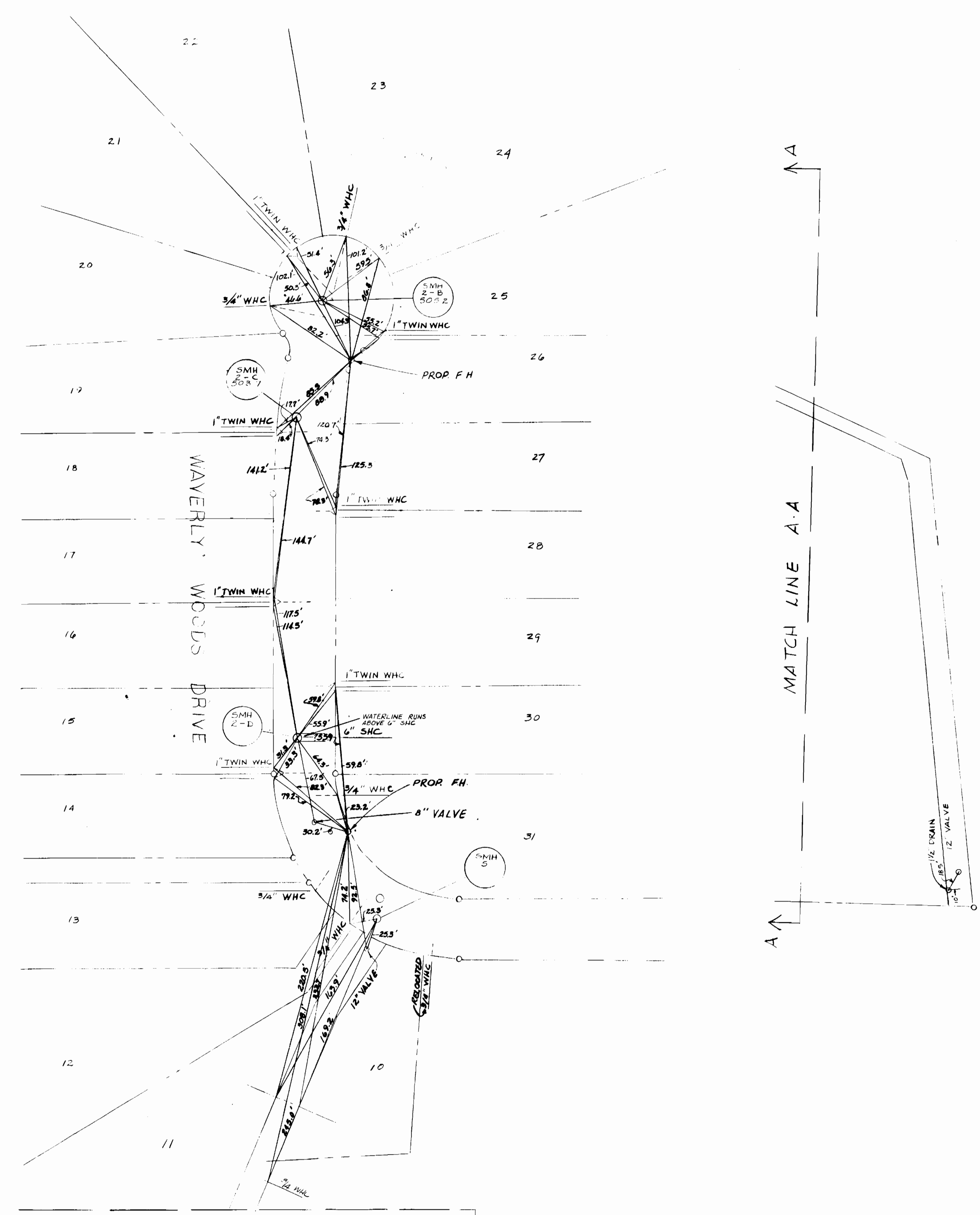
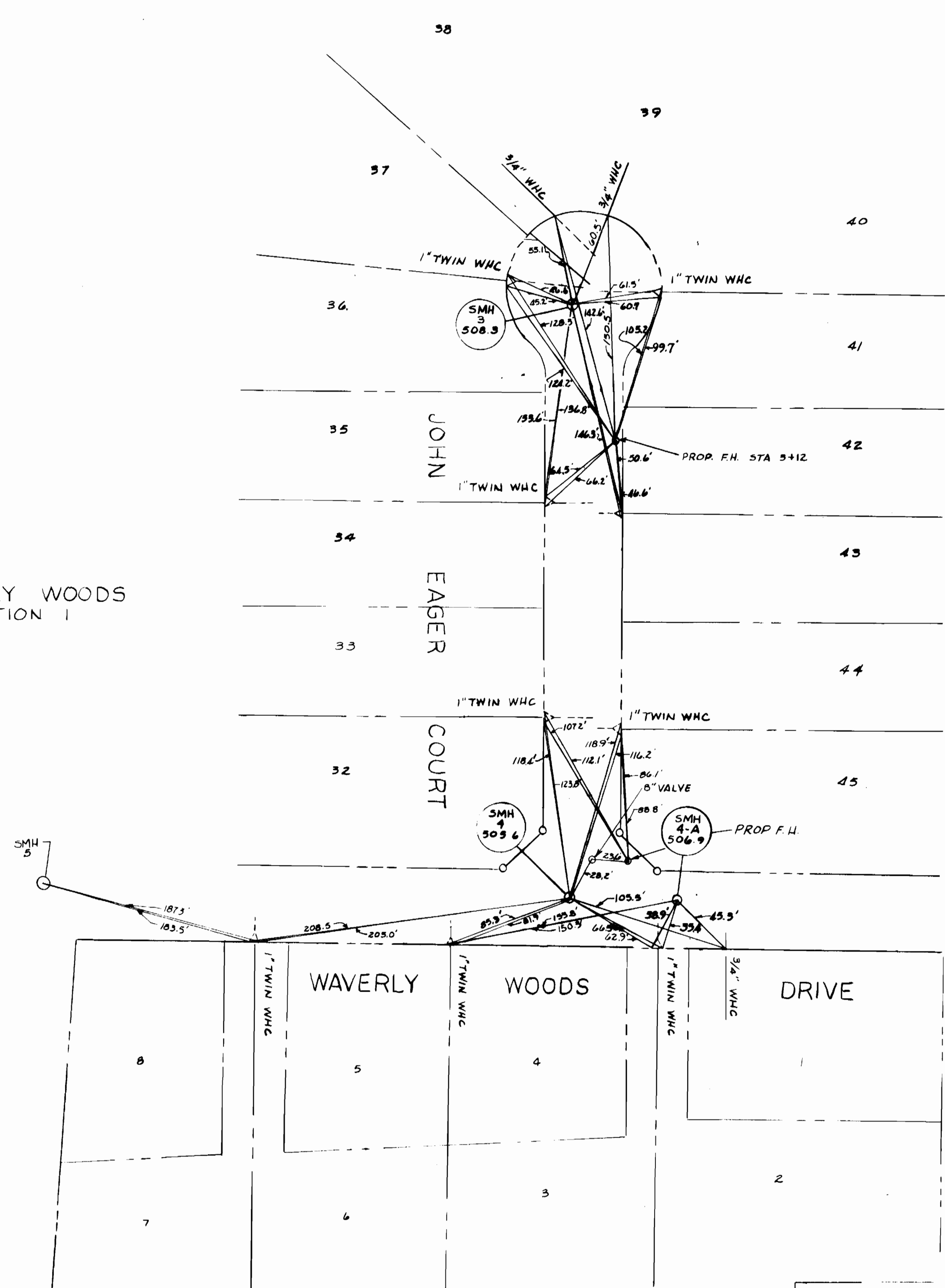
600' SCALE MAP NO. 16/17 BLOCK NO. 6/1,7

WAVERLY WOODS SECTION I AREA I

TAX MAP NO. 16 & 17 PARCEL 22
2nd ELECTION DISTRICT HOWARD CO, MD

SCALE AS SHOWN
SHEET 3 OF 4

WAVERLY WOODS SECTION I



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE

DES:				
DRN:				
CHK:				
DATE:				
BY	NO.	REVISION	DATE	

AREA I PLAN OF
8" AND 12" WATER

WAVERLY WOODS SECTION I AREA I

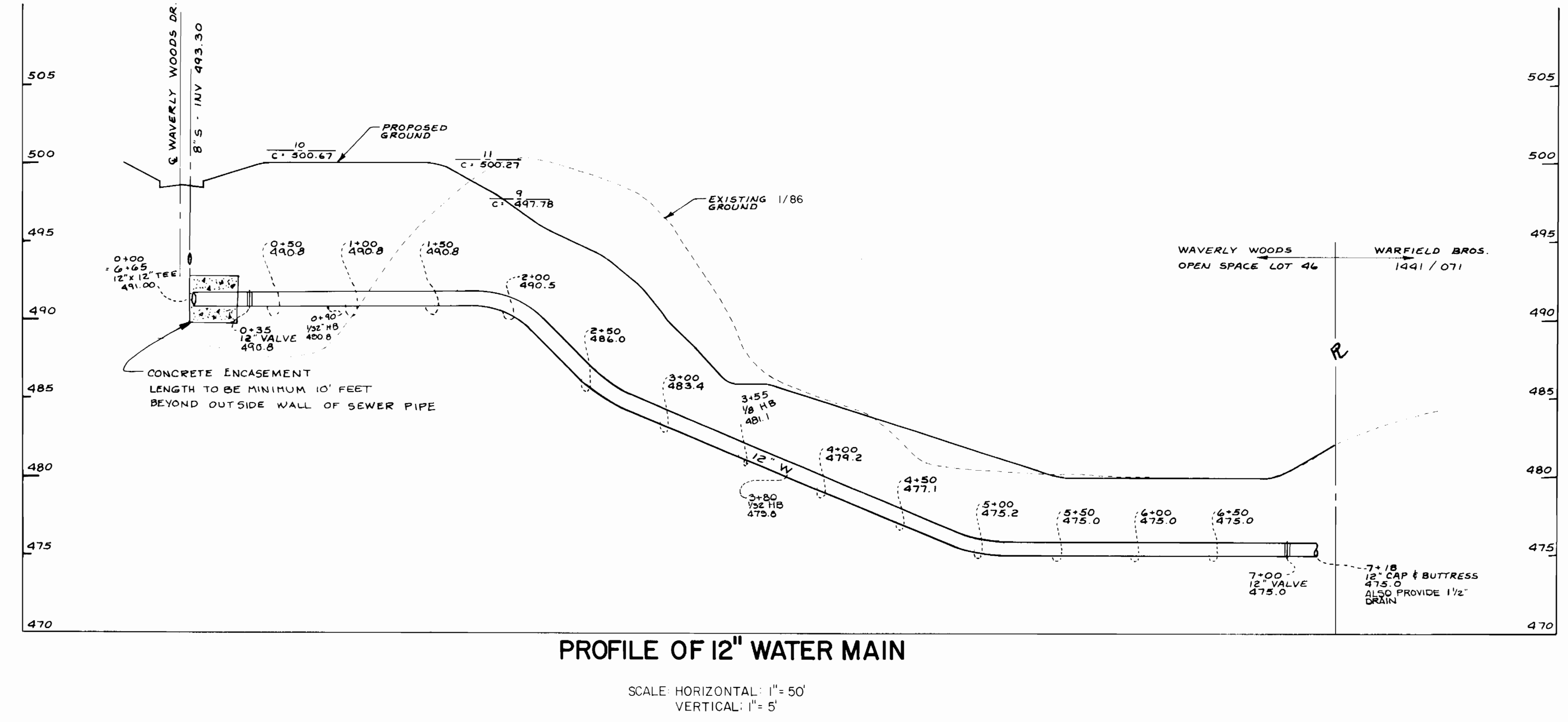
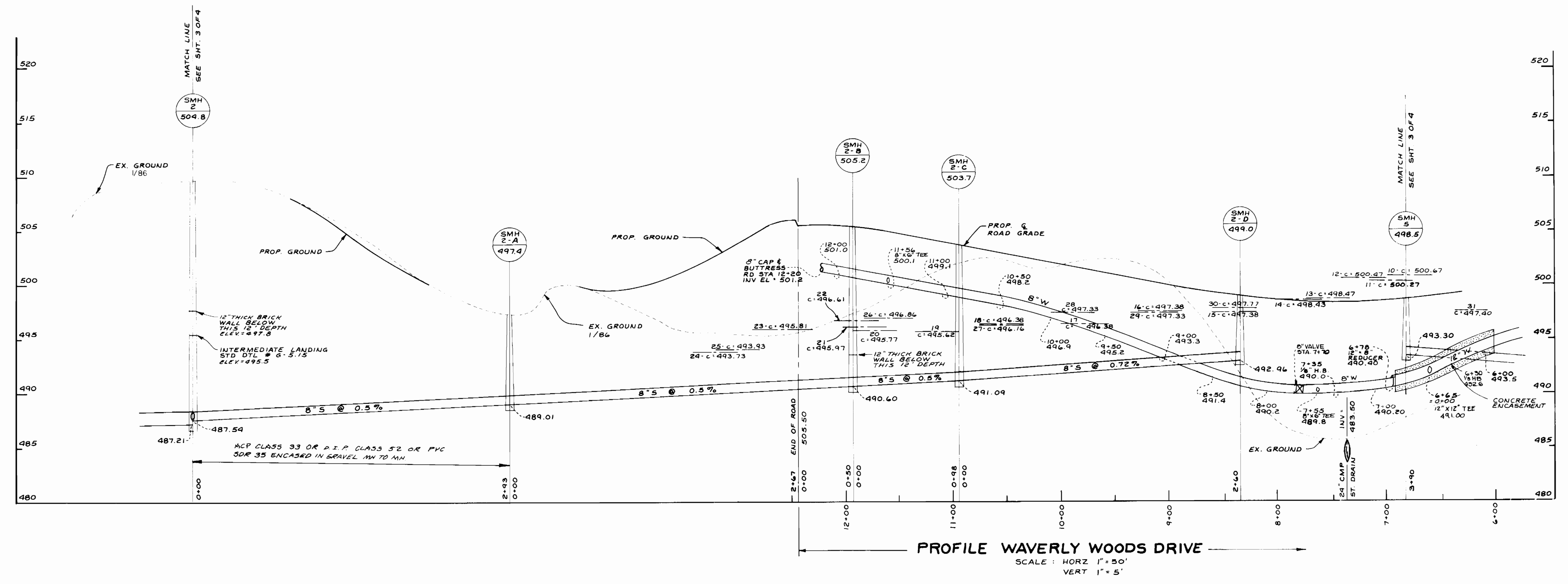
SCALE AS SHOWN

SHEET 3A OF 4

AS-BUILT 11-13-87

PBL/ING 44-132 891 50

SEWER HOUSE CONNECTIONS		
INVERT ELEV. @ PROPERTY LINES		
STATIONS	LOT	INVERT
SMH 2-1	-	SMH 2-2
1+50 R	24	490.23
1+50 L	25	490.23
3+05 R	22,23	491.81
SMH 2-2	-	-
0+00 R	20,21	491.77
SMH 2-2	-	SMH 2-3
0+60 R	19	491.52
SMH 2-3	-	-
0+00 L	26,27	492.06
SMH 2-3	-	SMH 2-4
0+75 R	17,18	492.28
1+45 L	28,29	493.23
2+15 R	15,16	493.28
SMH 2-4	-	-
0+00 L	30	493.87
0+00 R	14	494.43



SEDIMENT CONTROL NOTES

- 1- FOR SEDIMENT CONTROL FOR THIS CONTRACT, SEE THE APPROVED ROAD CONSTRUCTION PLANS, F-87-
- 2- MATERIALS FROM TRENCH EXCAVATION TO BE PLACED ON UPHILL SIDE OF TRENCH.
- 3- CONTRACTOR TO BACKFILL, COMPACT AND STABILIZE IMMEDIATELY AFTER INSTALLATION OF PIPE. NO TRENCHES WILL BE LEFT OPEN AT THE END OF EACH DAY, EXCEPT THAT PORTION WHERE WORK HAS STOPPED.
- 4- ANY SEDIMENT CONTROL FACILITIES ENCOUNTERED DURING PIPE CONSTRUCTION TO BE RETURNED TO ORIGINAL CONDITION IMMEDIATELY UPON COMPLETION OF THAT PORTION OF WORK.
- 5- SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS, F-87-95.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert R. Brey
CHIEF, BUREAU OF UTILITIES
DATE: 4-21-87

William S. Remy
CHIEF, BUREAU OF ENGINEERING
DATE: 4-22-87

John E. Patmore
CHIEF, LAND DEVELOPMENT DIVISION
DATE:

KIDDE CONSULTANTS, INC.
ENGINEERS, PLANNERS & SURVEYORS
1100 WEST STREET/SUITE 100
LAUREL, MD 20708
(301) 792-8086 (301) 953-1821

JOHN E.C. PATMORE MD PE NO 8978



DES: M.S.S.	
DRN: M.W.G.	
CHK: D.C.W.	
DATE: 12/84	
BY: NO	
REVISION	

AREA 1 PROFILE OF
6", 8" AND 12" WATER
8" AND 12" SANITARY SEWER
CONTRACT NO. 24-1580-D

DATE: 6/00 SCALE MAP NO. 16 / 17 BLOCK NO. 6 / 1,7

WAVERLY WOODS SECTION I AREA I

TAX MAP NO. 16 & 17 PARCEL 22
2nd ELECTION DISTRICT HOWARD CO., MD.

SCALE AS SHOWN
SHEET 4 OF 4

BRUNING 44132 6/9/150

11-15-87