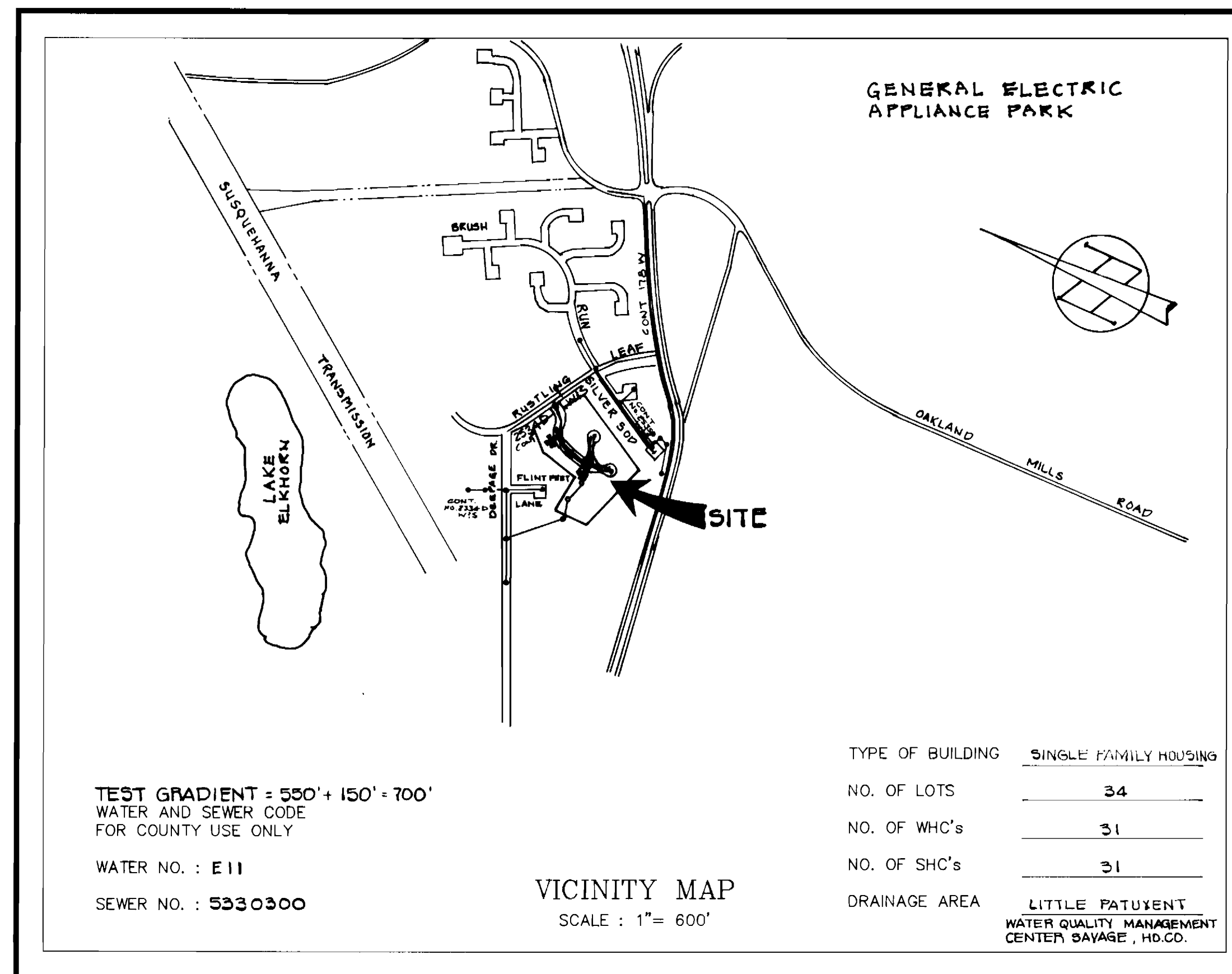


SEDIMENT CONTROL NOTES

- FOR SEDIMENT CONTROL FOR THIS CONTRACT, SEE THE APPROVED ROAD CONSTRUCTION PLANS (P-92-60)
- 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 STANDARD SPECIFICATION AND AS PER ROAD CONSTRUCTION PLANS.

QUANTITIES				
ITEM	ESTIMATED QUANTITIES	QUANTITIES	AS-BUILT TYPE	MANUFACTURER/SUPPLIER
8" SEWER	1123 LF	1123 LF	PVC SDR 35	ETI
8" WATER	635 LF	635 LF	CL 52	GRIFFIN
6" WATER	599 LF	599 LF	D.I.P. CL 52	GRIFFIN
6" VALVE	4 EA.	4 EACH	C 509 A126	KENNEDY / M & H
FIRE HYDRANT	2 EA.	2 EACH		GRIFFIN
3" WHC	825 LF	895 LF	STD SOFT K	CAMBRIDGE LEE
4" SHC	905 LF	905 LF	SDR 35	ETI
8"x6" TEE	3 EA.	3 EACH	CL 52 / A2153	GRIFFIN
MANHOLE	12 EA.	12 EACH	4' DIA	ATLANTIC CONCRETE
8"x6" REDUCER	2 EA.	2 EACH		
6" PLUG	2 EA.	2 EACH	C 153 / A2153	GRIFFIN
11 1/4" BEND 8"	2 EA.	2 EACH	C153 / A2153	GRIFFIN
22 1/2" BEND 8"	3 EA.	3-6" / 2-8"	C153 / A2153	GRIFFIN
8" SEWER (DIP)	416 LF	416 LF	D.I.P. CL 52	GRIFFIN
NAME OF UTILITY CONTRACTOR -				
		SURVEY AND DRAWING DIV. AS-BUILT DATE		



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 ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATE.
- 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", AND ALL POLES BY A MINIMUM OF 2'-0".
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME FOUR, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME FOUR ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THIS PLANS :
 - STATE HIGHWAY ADMINISTRATION : 531-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES : 850-4620
 - UNDERGROUND DAMAGE CONTROL : 787-9068
 - TROUBLE SHOOTING : 298-9001
 - MISS UTILITY : 1-800-257-7777
 - COLONIAL PIPELINE COMPANY : 795-1390
 - C&P TELEPHONE COMPANY : 1-800-257-7777
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS : 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGE BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS 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.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 AND 1008 OF THE STANDARD SPECIFICATIONS. SEE DETAIL W-11 & W-12.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS (STD. DETAIL W 3.21)
- WATER MAINS OR WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER TIGHT FRAME AND COVERS STANDARD DETAIL G 5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., OR P.V.C. 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.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G 5.51
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153 : DUCTILE IRON COMPACT FITTINGS, 3" THROUGH 12" FOR WATER & OTHER LIQUIDS.
- All existing structures to be removed.

CONTRACT NO. 24-3165 -D

OAK TREE

WATER AND SEWER
MAIN EXTENSIONS

HOWARD COUNTY

MARYLAND

DEPARTMENT OF PUBLIC WORKS

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

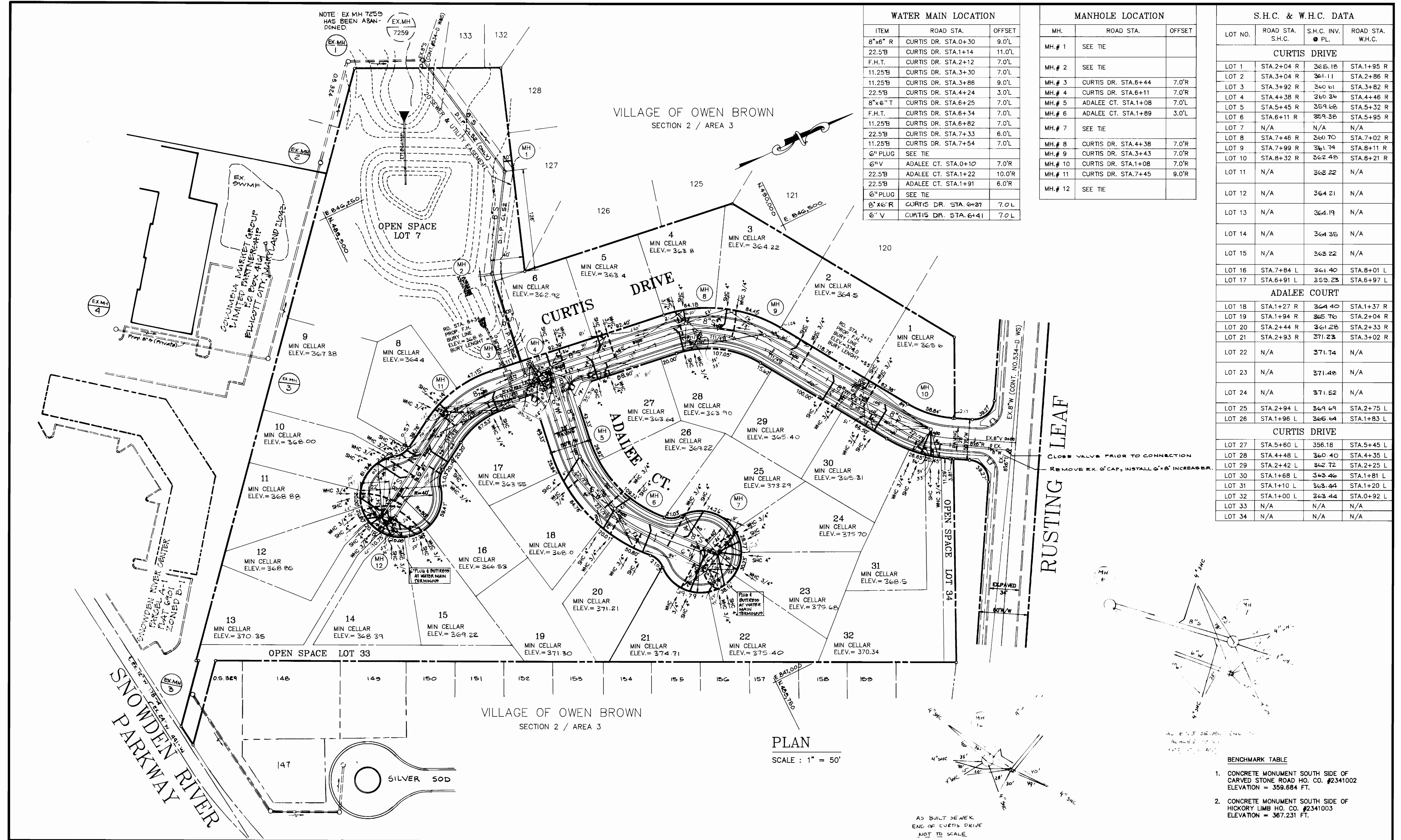
James M. Helton 3/13/92
SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.

APPROVED :
John L. Aberton 3/17/92
HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 24-3165 -D
OAK TREE
SECTION 1 / AREA 1
LOTS 1-34
WATER & SEWER MAIN EXTENSION
ELECTION DISTRICT NO.
HOWARD COUNTY, MARYLAND.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND. <i>James M. Helton</i> 3/17/92 DIRECTOR OF PUBLIC WORKS DATE <i>John L. Aberton</i> 3/17/92 CHIEF, BUREAU OF UTILITIES DATE	PREPARED BY : AMERICAN ENGINEERING, INC. CIVIL ENGINEERING CONSULTANTS AND LAND PLANNER 609 B MAIN STREET LAUREL, MD. 20707 BALTO. (301) 880-3039 WASH. (301) 953-1221	DES : DW DRN : BF CHK : DW DATE : 1/5/91	TITLE SHEET	OAK TREE SECTION 1 / AREA 1 CONTRACT NO. 24-3165 -D ELECTION DISTRICT NO. HOWARD COUNTY, MARYLAND. TAX MAP 42 BLOCK 42	SCALE AS SHOWN SHEET 1 OF 3
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WATER MAIN LOCATION		
ITEM	ROAD STA.	OFFSET
8"x6" R	CURTIS DR. STA.0+30	9.0'L
22.5"B	CURTIS DR. STA.1+14	11.0'L
F.H.T.	CURTIS DR. STA.2+12	7.0'L
11.25"B	CURTIS DR. STA.3+30	7.0'L
11.25"B	CURTIS DR. STA.3+86	9.0'L
22.5"B	CURTIS DR. STA.4+24	3.0'L
8"x6" T	CURTIS DR. STA.6+25	7.0'L
F.H.T.	CURTIS DR. STA.6+34	7.0'L
11.25"B	CURTIS DR. STA.6+82	7.0'L
22.5"B	CURTIS DR. STA.7+33	6.0'L
11.25"B	CURTIS DR. STA.7+54	7.0'L
6" PLUG	SEE TIE	
6" V	ADALEE CT. STA.0+10	7.0'R
22.5"B	ADALEE CT. STA.1+22	10.0'R
22.5"B	ADALEE CT. STA.1+91	6.0'R
6" PLUG	SEE TIE	
8"x6" R	CURTIS DR. STA.6+37	7.0'L
6" V	CURTIS DR. STA.6+41	7.0'L

MANHOLE LOCATION		
MH.#	ROAD STA.	OFFSET
MH.# 1	SEE TIE	
MH.# 2	SEE TIE	
MH.# 3	CURTIS DR. STA.6+44	7.0'R
MH.# 4	CURTIS DR. STA.6+11	7.0'R
MH.# 5	ADALEE CT. STA.1+08	7.0'L
MH.# 6	ADALEE CT. STA.1+89	3.0'L
MH.# 7	SEE TIE	
MH.# 8	CURTIS DR. STA.4+38	7.0'R
MH.# 9	CURTIS DR. STA.3+43	7.0'R
MH.# 10	CURTIS DR. STA.1+08	7.0'R
MH.# 11	CURTIS DR. STA.7+45	9.0'R
MH.# 12	SEE TIE	

S.H.C. & W.H.C. DATA			
LOT NO.	ROAD STA. S.H.C.	S.H.C. INV. @ PL.	ROAD STA. W.H.C.
CURTIS DRIVE			
LOT 1	STA.2+04 R	365.18	STA.1+95 R
LOT 2	STA.3+04 R	361.11	STA.2+86 R
LOT 3	STA.3+92 R	360.61	STA.3+82 R
LOT 4	STA.4+38 R	360.36	STA.4+46 R
LOT 5	STA.5+45 R	359.66	STA.5+32 R
LOT 6	STA.6+11 R	359.36	STA.5+95 R
LOT 7	N/A	N/A	N/A
LOT 8	STA.7+46 R	360.70	STA.7+02 R
LOT 9	STA.7+99 R	361.74	STA.8+11 R
LOT 10	STA.8+32 R	362.48	STA.8+21 R
LOT 11	N/A	363.22	N/A
LOT 12	N/A	364.21	N/A
LOT 13	N/A	364.19	N/A
LOT 14	N/A	364.35	N/A
LOT 15	N/A	363.22	N/A
LOT 16	STA.7+84 L	361.40	STA.8+01 L
LOT 17	STA.6+91 L	359.23	STA.6+97 L
ADALEE COURT			
LOT 18	STA.1+27 R	364.40	STA.1+37 R
LOT 19	STA.1+94 R	365.76	STA.2+04 R
LOT 20	STA.2+44 R	361.28	STA.2+33 R
LOT 21	STA.2+93 R	371.23	STA.3+02 R
LOT 22	N/A	371.74	N/A
LOT 23	N/A	371.48	N/A
LOT 24	N/A	371.52	N/A
LOT 25	STA.2+94 L	369.69	STA.2+75 L
LOT 26	STA.1+96 L	366.64	STA.1+83 L
CURTIS DRIVE			
LOT 27	STA.5+80 L	356.18	STA.5+45 L
LOT 28	STA.4+48 L	360.40	STA.4+35 L
LOT 29	STA.2+42 L	362.72	STA.2+25 L
LOT 30	STA.1+68 L	363.46	STA.1+81 L
LOT 31	STA.1+10 L	363.44	STA.1+20 L
LOT 32	STA.1+00 L	363.44	STA.0+92 L
LOT 33	N/A	N/A	N/A
LOT 34	N/A	N/A	N/A

PLAN
SCALE: 1" = 50'

BENCHMARK TABLE

- CONCRETE MONUMENT SOUTH SIDE OF CARVED STONE ROAD HO. CO. #2341002 ELEVATION = 359.684 FT.
- CONCRETE MONUMENT SOUTH SIDE OF HICKORY LIMB HO. CO. #2341003 ELEVATION = 367.231 FT.

AS BUILT SEWER END OF CURTIS DRIVE NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND.

James P. Swan 3-17-92
DIRECTOR OF PUBLIC WORKS DATE

John D. ... 3-17-92
CHIEF, BUREAU OF ENGINEERING DATE

Robert ... 3-13-92
CHIEF, BUREAU OF UTILITIES DATE

... 3/17/92
CHIEF, LAND DEVELOPMENT DIVISION DATE

PREPARED BY:
AMERICAN ENGINEERING, INC.
CIVIL ENGINEERING CONSULTANTS
AND LAND PLANNER

871-A MAIN STREET BALT. (410) 880-3039
LAUREL, MD. 20707 WASH. (301) 953-1221



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

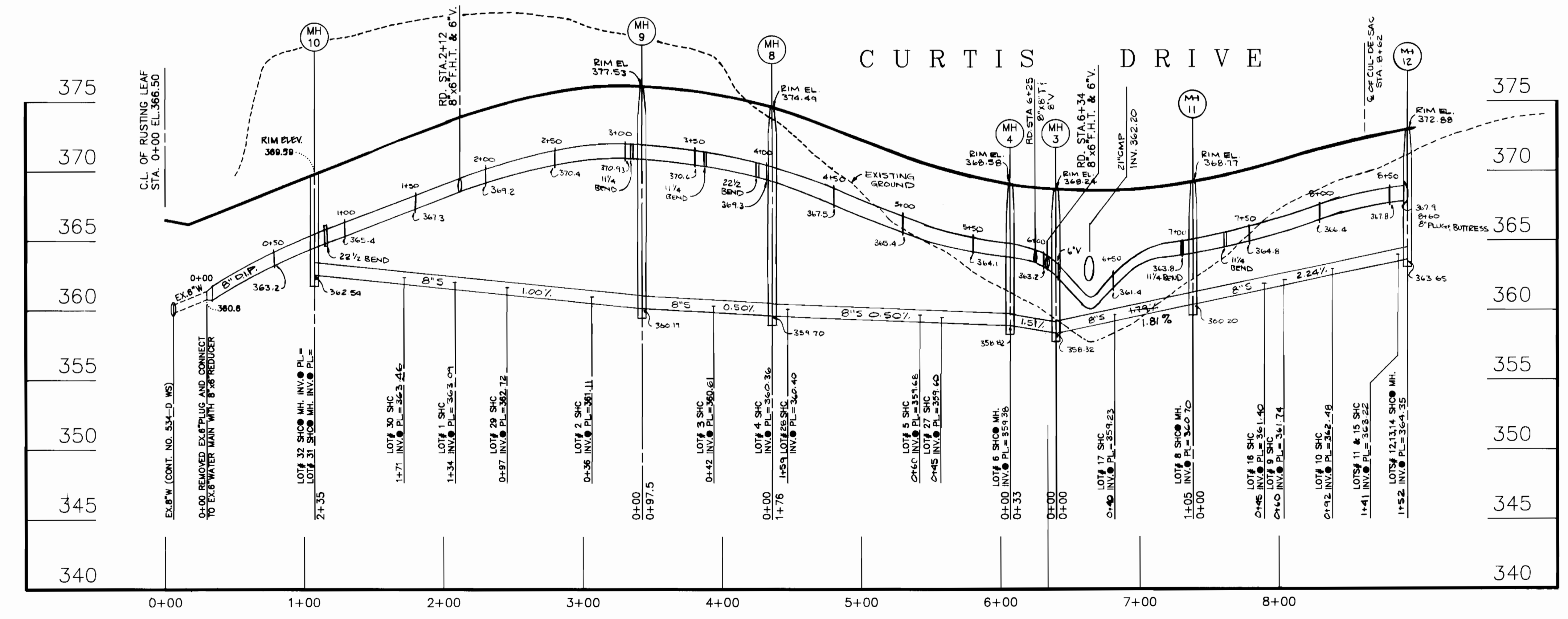
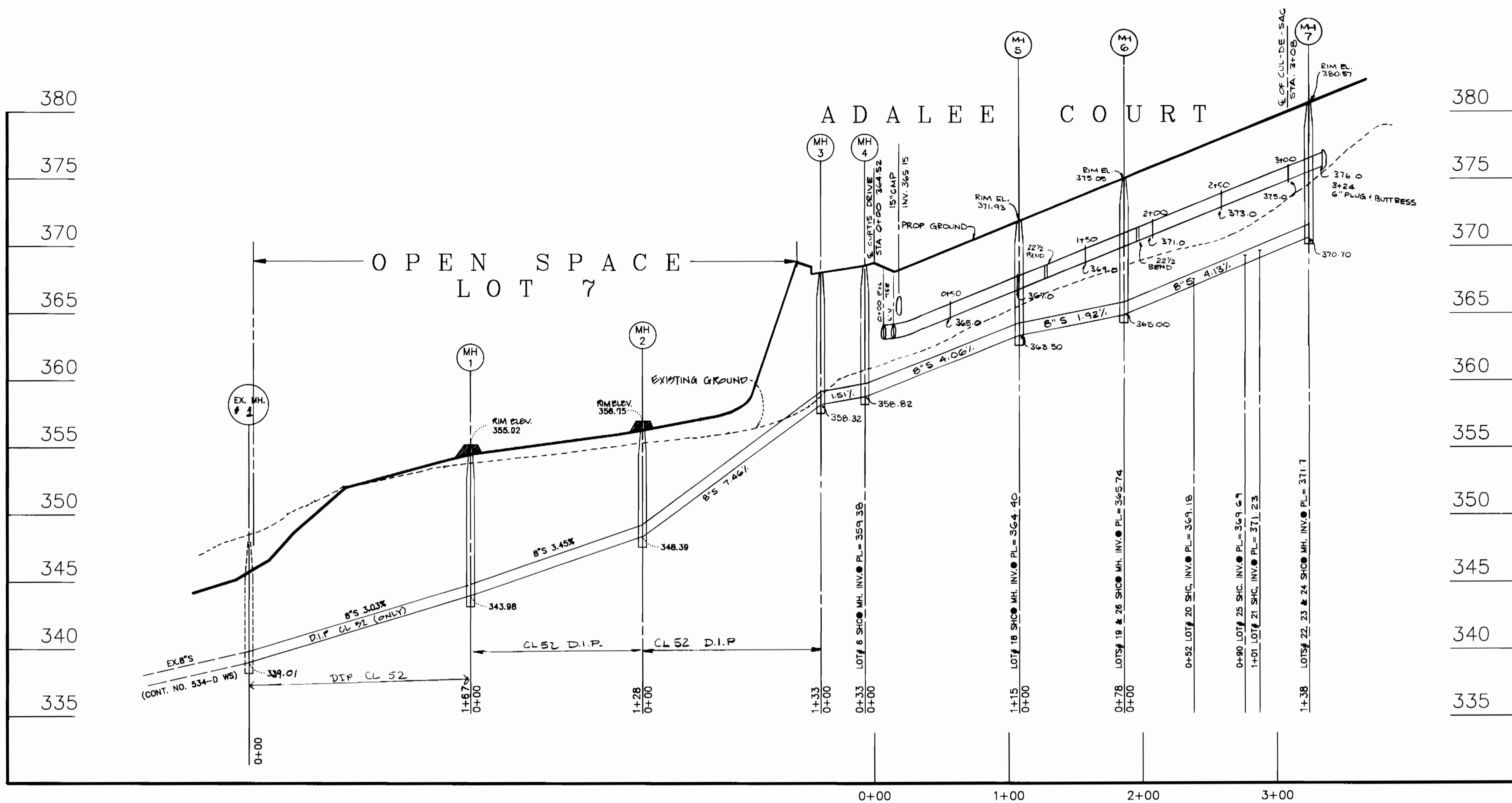
PLAN VIEW

600'SCALE MAP NO. 42 BLOCK NO. 3

OAK TREE
SECTION 1 / AREA 1 LOTS 1-34
CONTRACT NO. 24-3165-D
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND.

SCALE AS SHOWN

SHEET 2 OF 3



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND.

James P. Blum 3-17-92
DIRECTOR OF PUBLIC WORKS DATE

Robert D. Bann 3-17-92
CHIEF, BUREAU OF UTILITIES DATE

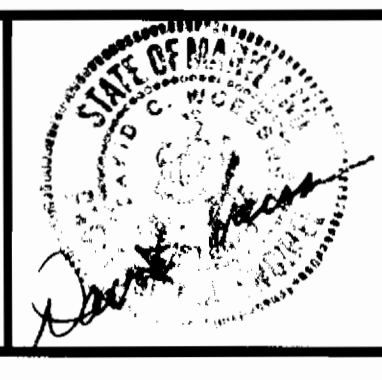
Robert D. Bann 3-17-92
CHIEF, BUREAU OF ENGINEERING DATE

Robert D. Bann 3-17-92
CHIEF, LAND DEVELOPMENT DIVISION DATE

PREPARED BY:
AMERICAN ENGINEERING, INC.
CIVIL ENGINEERING CONSULTANTS
AND LAND PLANNER

671-A MAIN STREET
LAUREL, MD. 20707

BALT. (410) 880-3039
WASH. (301) 953-1221



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

PROFILES
SCALE : VERT. : 1" = 5'
HOR. : 1" = 50'

600' SCALE MAP NO. 42 BLOCK NO. 3

OAK TREE
SECTION 1 / AREA 1 LOTS 1-34
CONTRACT NO. 24-3165-D
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND.

SCALE AS SHOWN

SHEET **3** OF 3

AS-BUILT 1/22/93