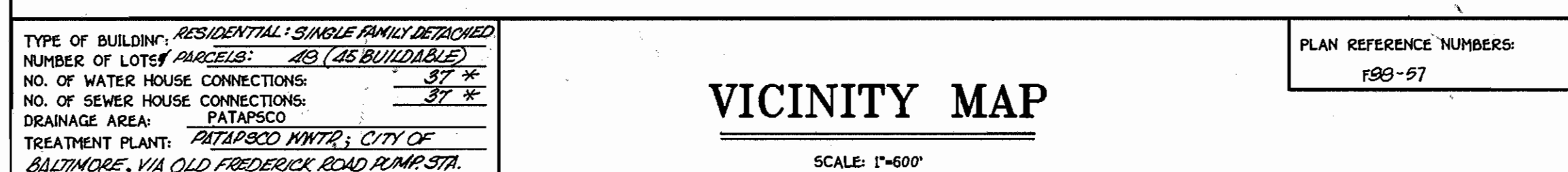
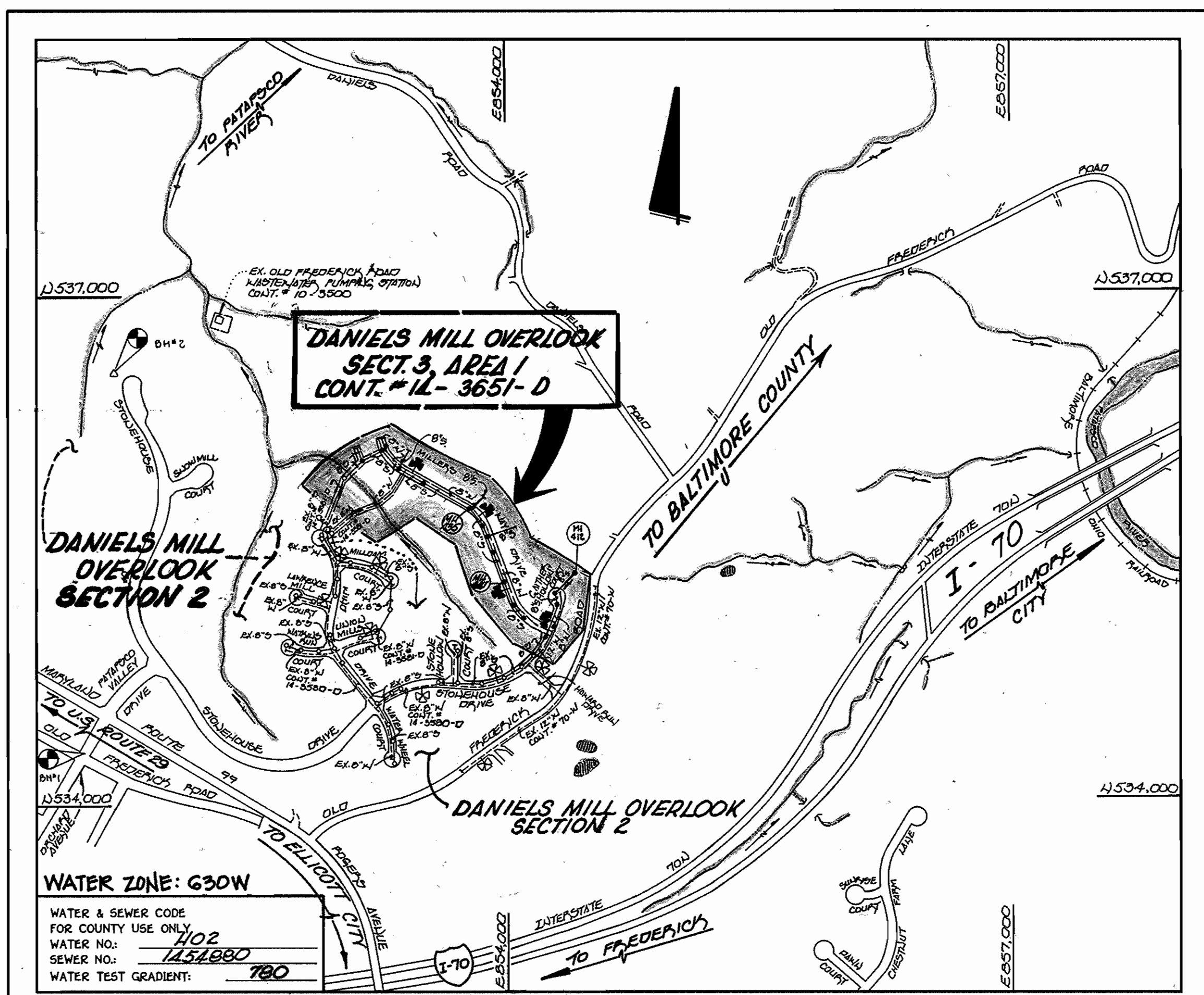


QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
8" SEWER	2,456 L.F.			
8" D.I.P. SEWER	150 L.F.			
4" SEWER	941 L.F.			
MANHOLES	16 EACH			
12" WATER	166 L.F.			
8" WATER	2,174 L.F.			
6" WATER	109 L.F.			
1" W.H.C.	278 L.F.			
3/4" W.H.C.	576 L.F.			
TWIN METER SETTINGS	1 EACH			
FIRE HYDRANTS	4 EACH			
8" - 1/2" H.B.	1 EACH			
12" x 8" TEE	1 EACH			
8" x 8" TEE	3 EACH			
12" x 8" REDUCER	1 EACH			
8" VALVE	7 EACH			
8" 1/16" H.B.	8 EACH			
8" x 6" TEE	4 EACH			
8" BOLLUS & BUTTRESSES	4 EACH			
8" 1/2" V.D.	1 EACH			
6" VALVE	4 EACH			
8" 1/16" V.D.	2 EACH			



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 COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6'. CLEAR ALL POLES BY 2'-0" MINIMUM.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (1991 AMENDMENTS) THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
- 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 NOT 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 THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9068
 - MISS UTILITY - 1-800-257-7777
 - COLONIAL PIPELINE CO. - 795-1390
 - 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 DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- T.B. DENOTES TEST BORING.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT 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 PLANS OR IN THE SPECIFICATIONS.
- HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- MANHOLES LOCATED WITHIN THE PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAMES AND COVERS, STANDARD DETAIL G5.51.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED AS TO HAVE ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- ALL WATER MAINS SHALL 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 BUSY LINE ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS (WLI) AND (W233). SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH ANWA SPECIFICATIONS C-153; DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 10.11(K) OF THE HOWARD COUNTY CODE.

DEVELOPER'S CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR EROSION & SEDIMENT CONTROL & THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS HERE REEDED NECESSARY.
 Michael J. McCann for RYLAND HOMES INC. 4-15-98
 SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION & SEDIMENT CONTROL REPRESENTS A PRACTICAL & WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Terrell A. Fisher 10/29/97
 SIGNATURE OF ENGINEER DATE

CONTRACT NO. 14-3651-D
DANIELS MILL OVERLOOK
SECTION 3, AREA 1
LOT NOS. 230-276
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

BENCHMARKS

BENCHMARK No. 1	ELEV. + 481.10
EXISTING MANHOLE RIM No. 1 (CONT. #10-1952-D)	
N 534, 318.051000	E 851, 475.348000
BENCHMARK No. 2	ELEV. + 407.75
HUD WITH STAKE MARKED - TRAVELER PT. No. 12C	
N 534, 742.360000	E 851, 766.870000

REFERENCE: F 98-57
 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 Cheryl Simmond 5/19/98
 H.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE
 THIS DEVELOPMENT IS APPROVED FOR SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
 John P. Robinson 5/19/98
 HOWARD SOIL CONSERVATION DISTRICT DATE
 SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS AND UNDER F.98-57.

Michael J. McCann for RYLAND HOMES, INC. 4-15-98
 SIGNATURE OF DEVELOPER DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

5-12-98 DATE

5/22/98 DATE

Fisher, Collins & Carter, Inc.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK
 10272 Baltimore National Pike
 Ellicott City, Maryland 21042
 (410) 481-2855

9757

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 TERRELL A. FISHER

DESIGNED BY: M.J.M.
 DRAWN BY: M.J.M., J.M.M., B.L.M.
 CHECKED BY: P.W.K.
 DATE: 11/22/98

BY NO. REVISION DATE

TITLE SHEET

600' SCALE MAP NO. 17 BLOCK NO. 12

F.C.C. WORK ORDER NO. 30299

FILE NAME: DANIELS MILL OVERLOOK, 3/1

CONTRACT NO. 14-3651-D
 DANIELS MILL OVERLOOK
 SECTION 3, AREA 1
 LOT NOS. 230-276
 CONTRACT NO. 14-3651-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 6

CONTRACT NO. 14-3651-D
 DANIELS MILL OVERLOOK
 SECTION 3, AREA 1
 LOT NOS. 230-276
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

REF. NO.: F98-57

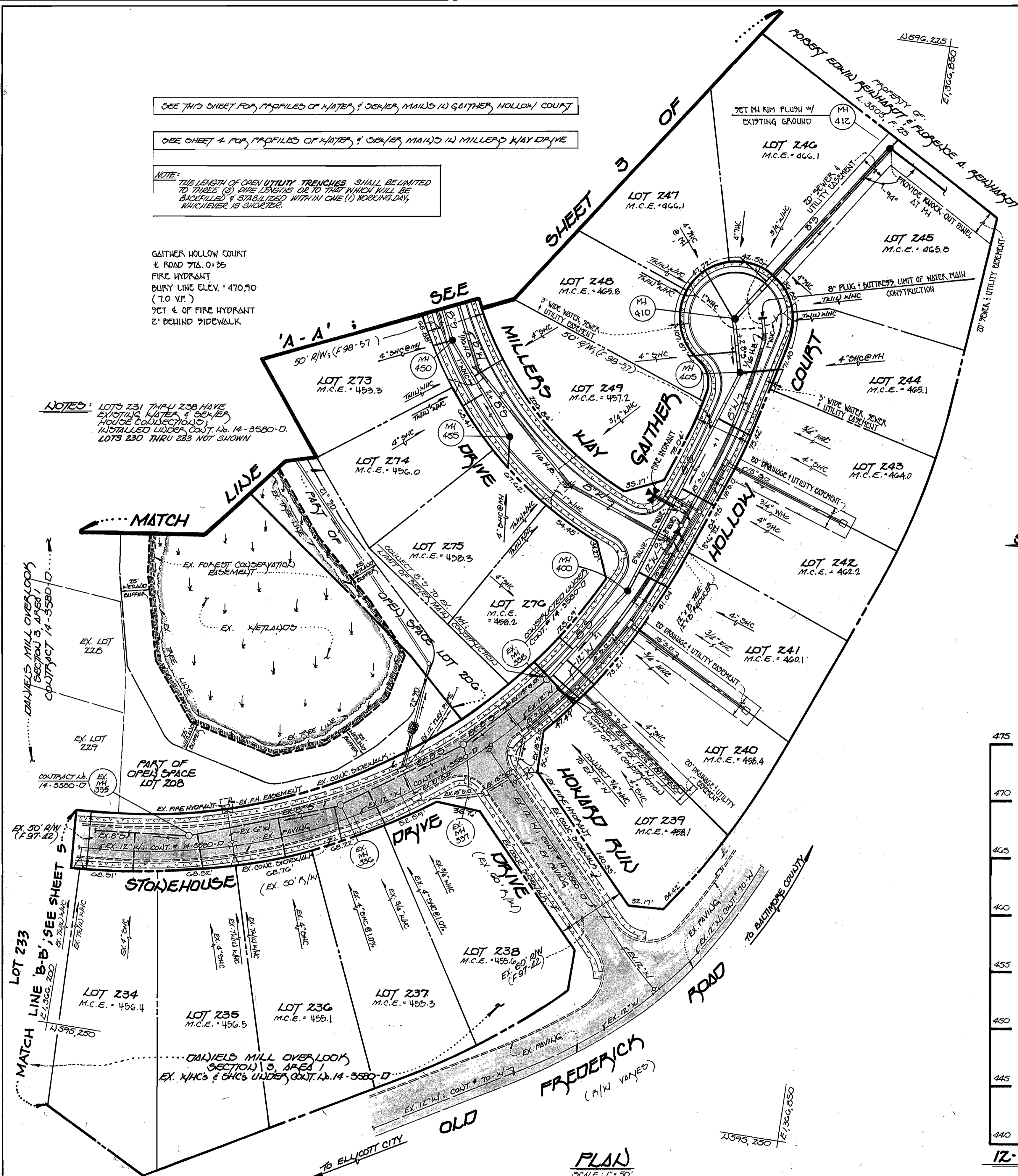
SEE THIS SHEET FOR PROFILES OF WATER & SEWER MAINS IN GAITHER HOLLOW COURT

SEE SHEET 4 FOR PROFILES OF WATER & SEWER MAINS IN MILLERS WAY DRIVE

NOTE:
THE LENGTH OF OPEN UTILITY TRENCHES SHALL BE LIMITED TO THREE (3) ONE EIGHTS OR TO THAT WHICH WILL BE QUALIFIED & ESTABLISHED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.

GAITHER HOLLOW COURT
± ROAD 716.0125
FIRE HYDRANT
BURY LINE ELEV. ± 470.70
(7.0 VF.)
± CT ± OF FIRE HYDRANT
2' BEHIND SIDEWALK

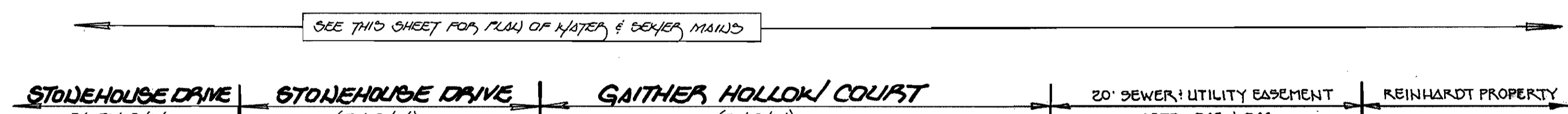
NOTES:
LOTS 231 THRU 238 HAVE EXISTING WATER & SEWER HOUSE CONNECTIONS INSTALLED UNDER COV. NO. 14-3580-D. LOTS 230 THRU 233 NOT SHOWN



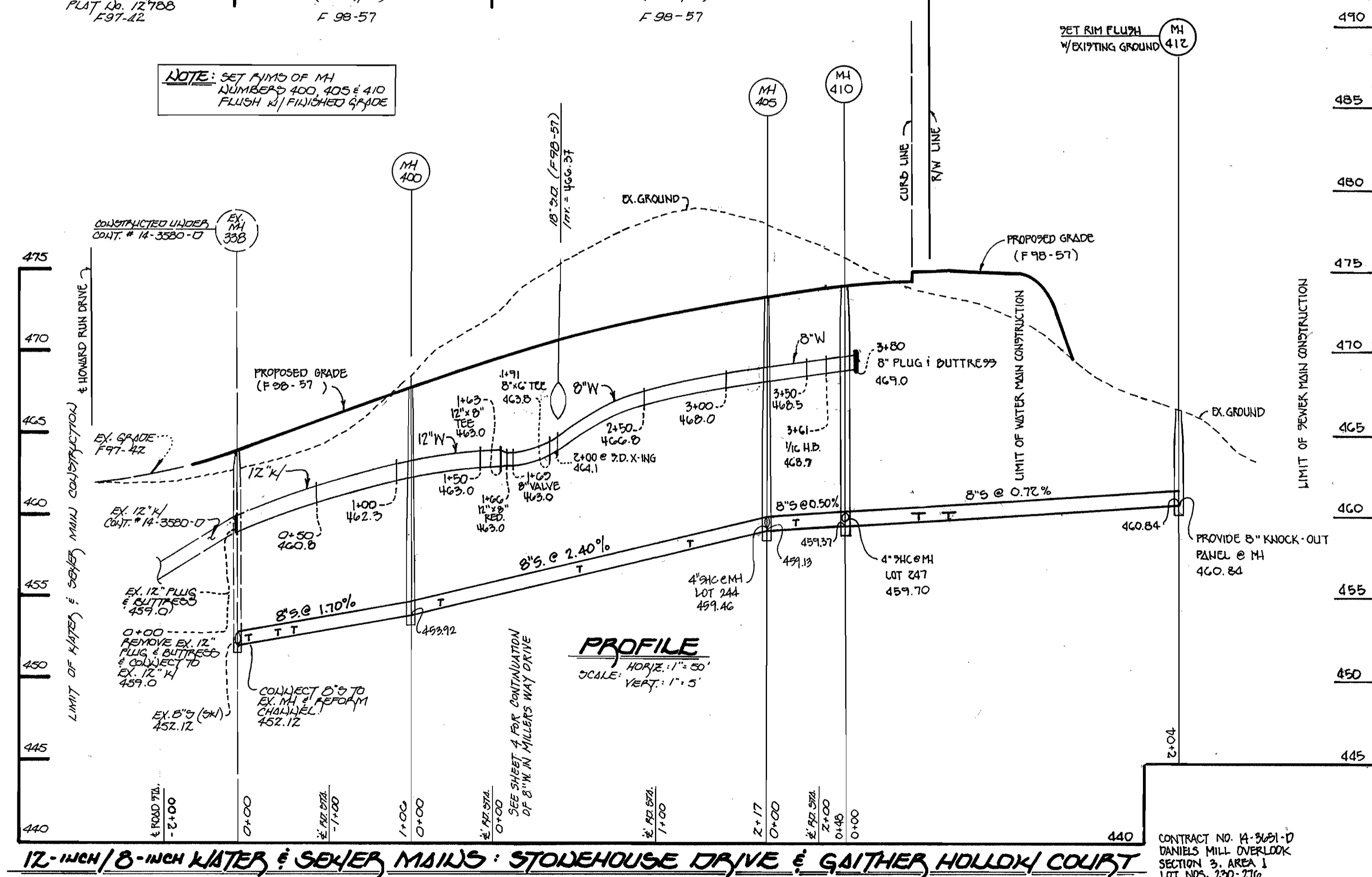
MANHOLE TABULATION CHART				
No.	± ROAD STATION	DISTANCE	SLOPE	ELEVATION
400	0+30	3' RT	3.37%	467.75
405	M CUL. DE-SAC			473.50
410	M CUL. DE-SAC			474.32
412				476.50
420	14+99	5' LT	-1.24%	424.55
425	15+67	9' LT	-4.64%	420.06
430	17+94	7' LT	-5.00%	436.71
435	19+82	3' LT	-1.88%	449.85
440	21+60	3' LT	+1.88%	449.80
445	23+92	7' LT	-0.48%	446.63
447	24+11	7' LT	-5.21%	451.76
450	24+99	7' LT	-6.00%	460.77
455	27+63	6' LT	-3.56%	465.55
462	27+70	7' LT	+1.50%	447.20
433	27+80	7' LT	-4.32%	447.22
412				466.50 **

* ± CT MH RIM FLUSH WITH PROPOSED GROUND
** ± CT MH RIM FLUSH WITH EXISTING GROUND

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
EX. MH 335 TO MH 400		
0+07 FT.	239	493.07
0+25 FT.	240	493.40
0+35 FT.	270	493.25
MH 400 TO MH 405		
0+19 FT.	241	495.17
1+03 FT.	242	497.24
1+72 FT.	243	498.88
@ MH 405 FT.	244	460.14
MH 405 TO MH 410		
0+19 FT.	248	460.18
@ MH 410 FT.	247	460.76
MH 450 TO MH 455		
@ MH 455 FT.	275	453.50
0+37 FT.	249	450.23
0+35 FT.	274	450.27
MH 410 TO MH 412		
0+44 FT.	246	460.52
0+63 FT.	245	460.19



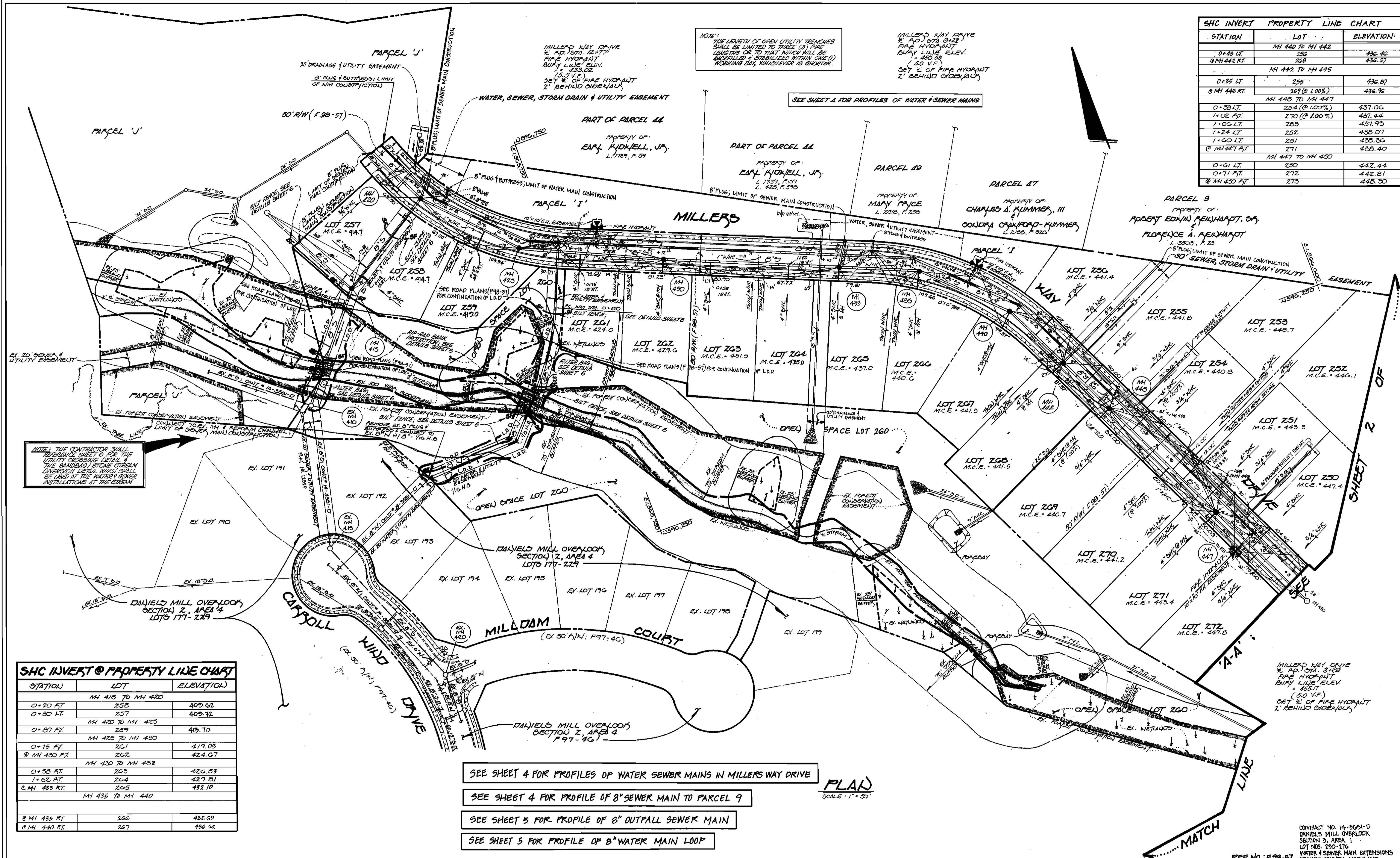
NOTE: SET RIMS OF MH NUMBERED 400, 405 & 410 FLUSH W/ FINISHED GRADE



12-INCH/8-INCH WATER & SEWER MAINS: STONEHOUSE DRIVE & GAITHER HOLLOW COURT

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 5/22/98	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND DATE: 5/22/98	Fisher, Collins & Carter, Inc. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK 10272 Baltimore National Pike Ellicott City, Maryland 21042 (410) 481-2855		DESIGNED BY: NJM	WATER & SEWER MAINS PLAN & PROFILES 600' SCALE MAP NO. 771/12, BLOCK NO. 12 F.C.C. WORK ORDER NO. 30594 FILE NAME: DANIELS MILL OVERLOOK, SECT. 3/1	DANIELS MILL OVERLOOK SECTION 3, AREA 1 LOT Nos. 230-276 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 2 OF 6
				DRAWN BY: JMC CHECKED BY: P.W.K. DATE: 1/22/98			

STATION	LOT	ELEVATION
0+45 LT	MH 440 TO MH 442	436.46
8 MH 442 RT	256	436.57
	MH 442 TO MH 445	
0+35 LT	255	436.87
8 MH 446 RT	267 (@ 100%)	436.76
	MH 445 TO MH 447	
0+38 LT	254 (@ 100%)	437.06
1+02 RT	270 (@ 100%)	437.44
1+06 LT	253	437.95
1+24 LT	252	438.07
1+00 LT	251	438.56
@ MH 447 RT	271	438.40
	MH 447 TO MH 450	
0+61 LT	250	442.44
0+71 RT	272	442.81
@ MH 450 RT	275	448.30



STATION	LOT	ELEVATION
	MH 415 TO MH 420	
0+20 RT	258	409.62
0+30 LT	257	409.72
	MH 420 TO MH 425	
0+07 RT	259	419.70
0+75 RT	261	419.05
@ MH 430 RT	262	424.67
	MH 430 TO MH 433	
0+58 RT	263	420.53
1+52 RT	264	429.81
@ MH 433 RT	265	432.10
	MH 435 TO MH 440	
@ MH 435 RT	266	435.60
@ MH 440 RT	267	436.22

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

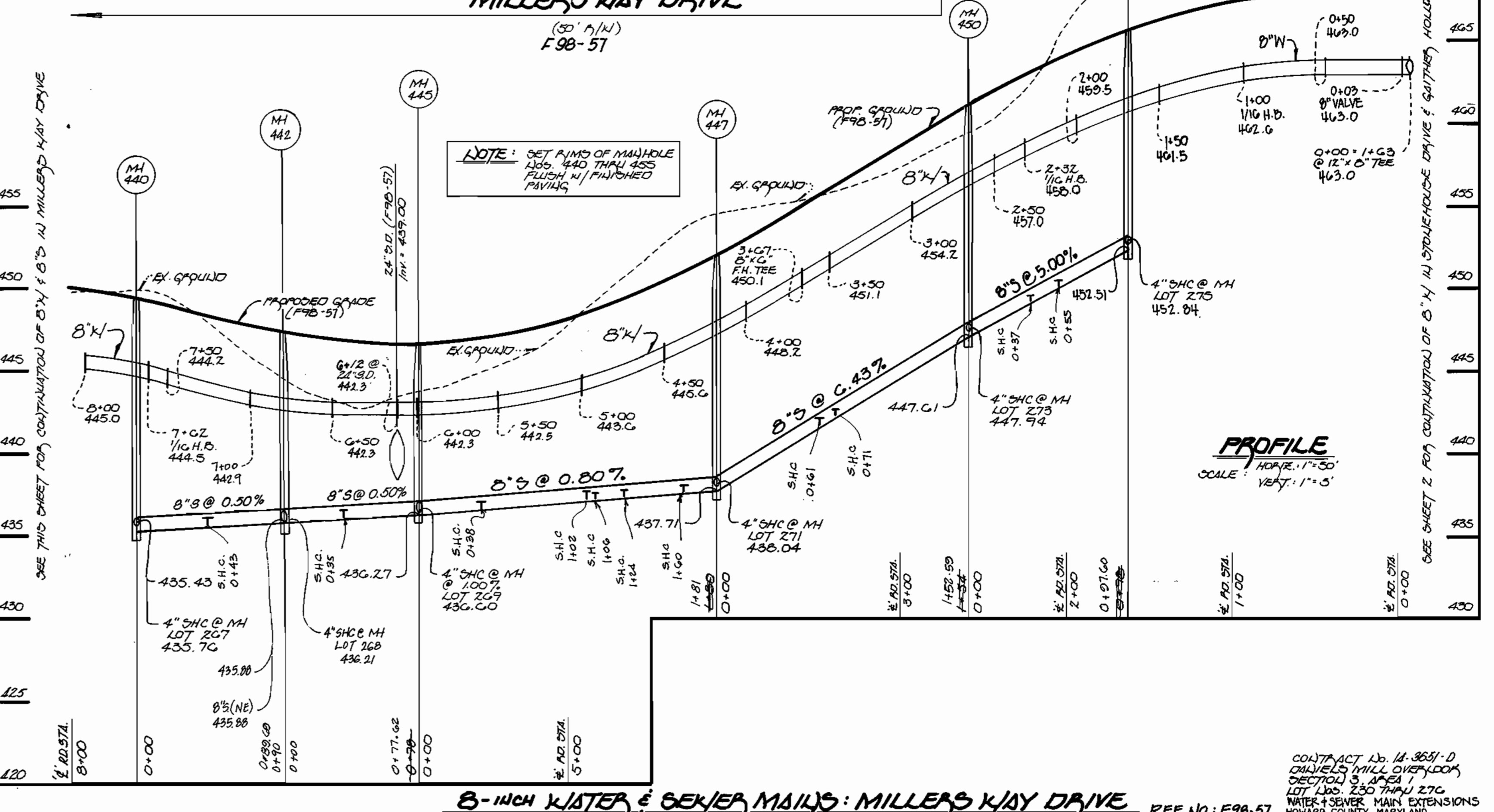
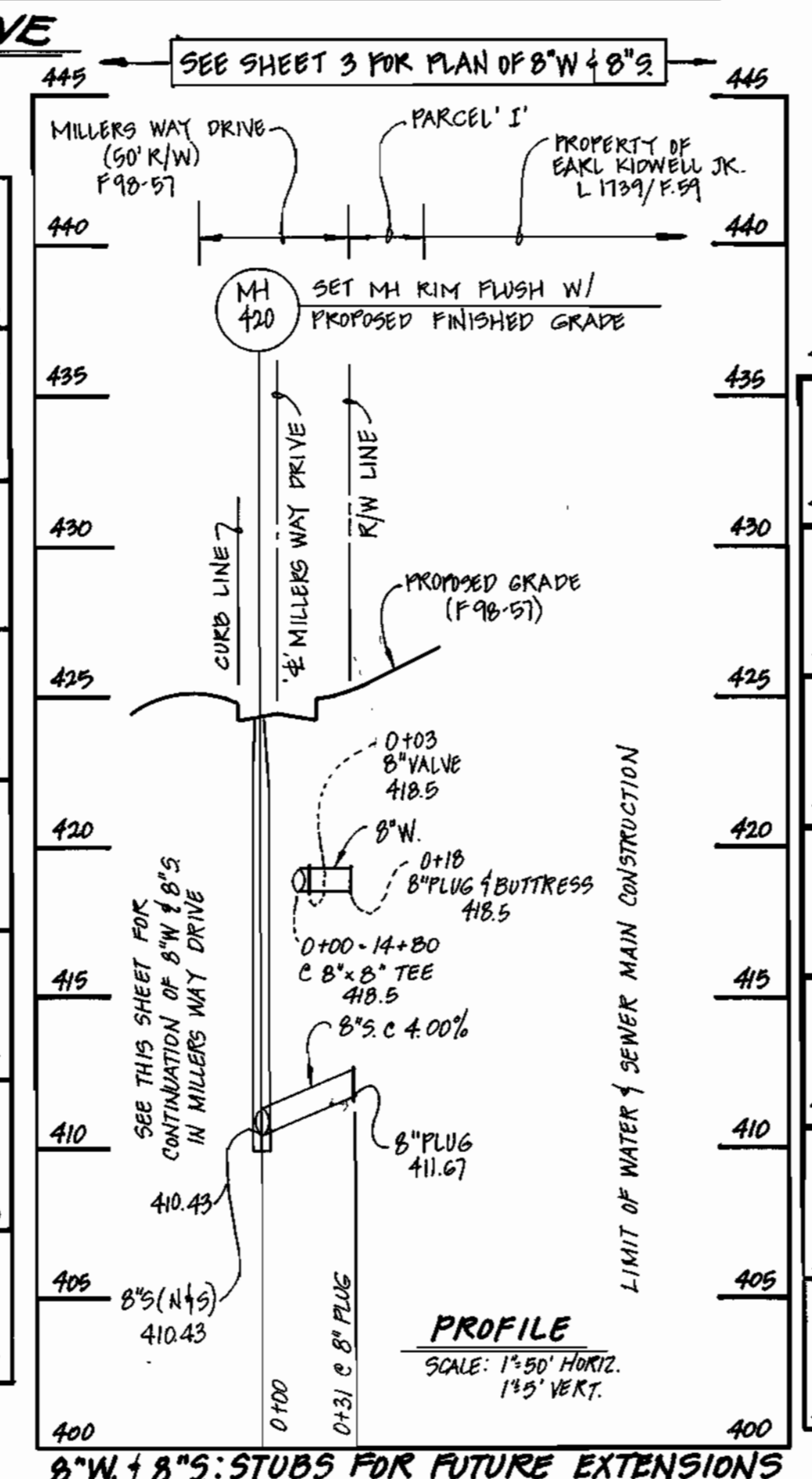
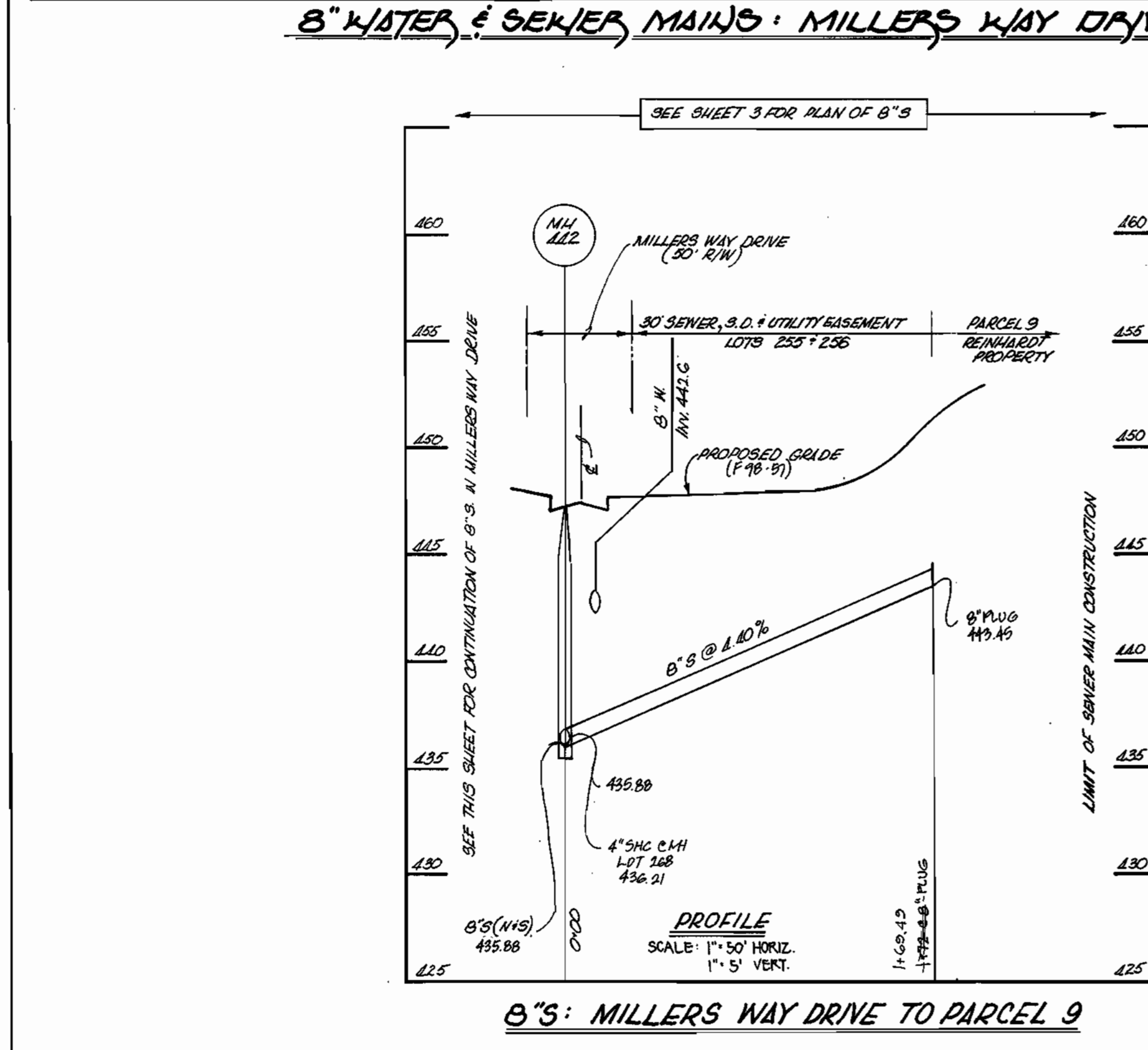
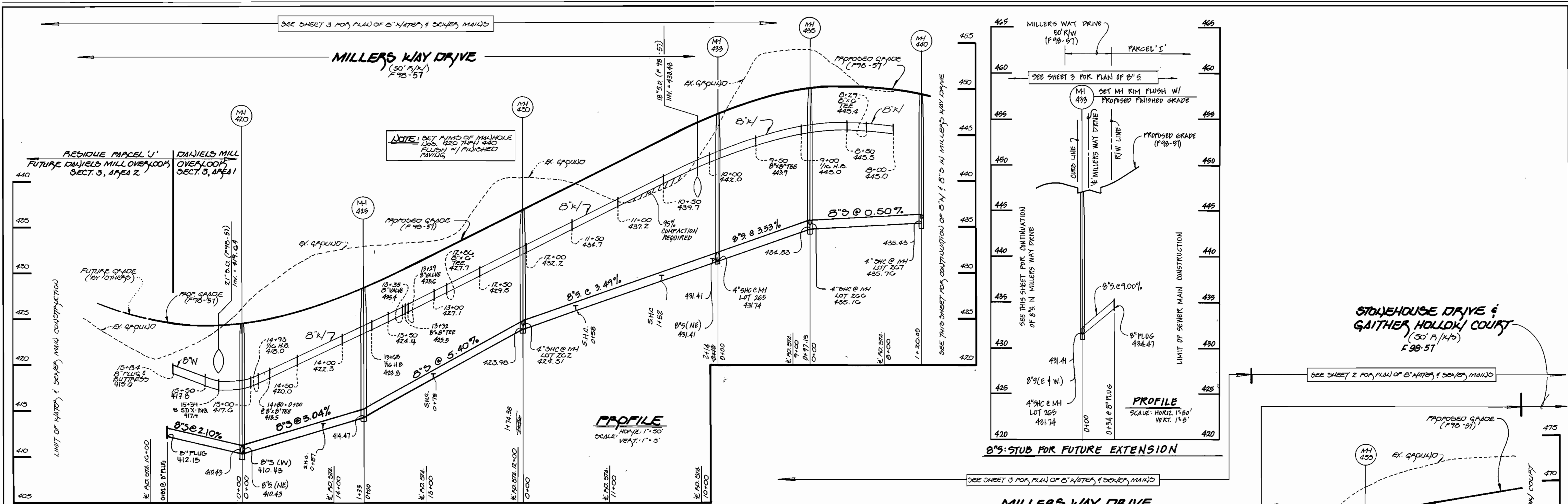
Fisher, Collins & Carter, Inc.
 CIVIL ENGINEERING CONSULTANTS &
 LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK
 10272 Baltimore National Pike
 Ellicott City, Maryland 21042
 (410) 461-2855

DESIGNED BY: H.J.M.
 DRAWN BY: J.M.H.
 CHECKED BY: P.W.K.
 DATE: 1/22/98

WATER & SEWER MAINS
 PLAN VIEW

DANIELS MILL OVERLOOK
 SECTION 3, AREA 1
 LOT Nos. 230-276
 CONTRACT No. 14-3661-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 3 OF 6



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

DESIGNED BY: HJM
DRAWN BY: JHM, BLM
CHECKED BY: P.W.K.
DATE: 1/22/98

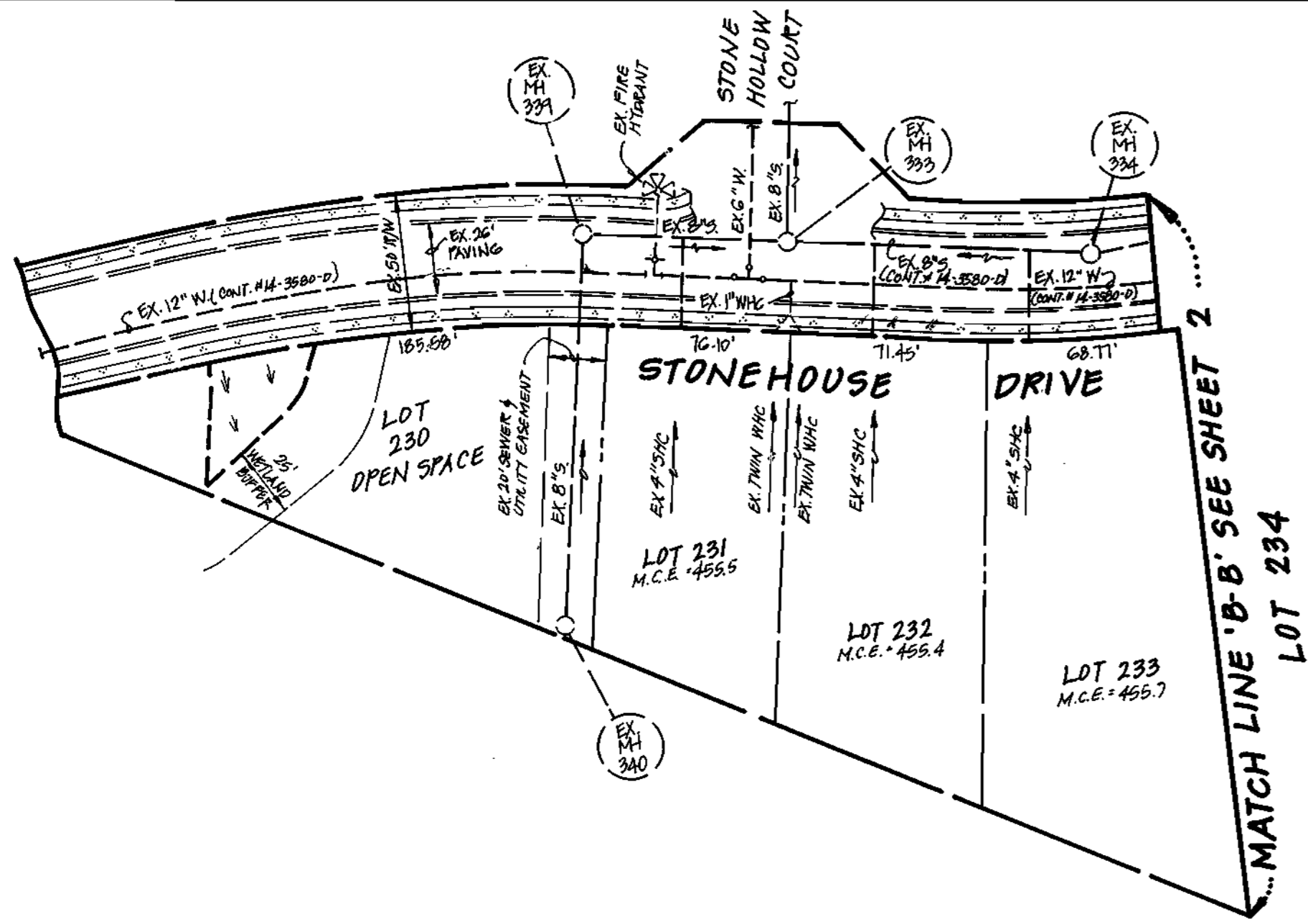
BY	NO.	REVISION	DATE

WATER AND SEWER MAINS PROFILES

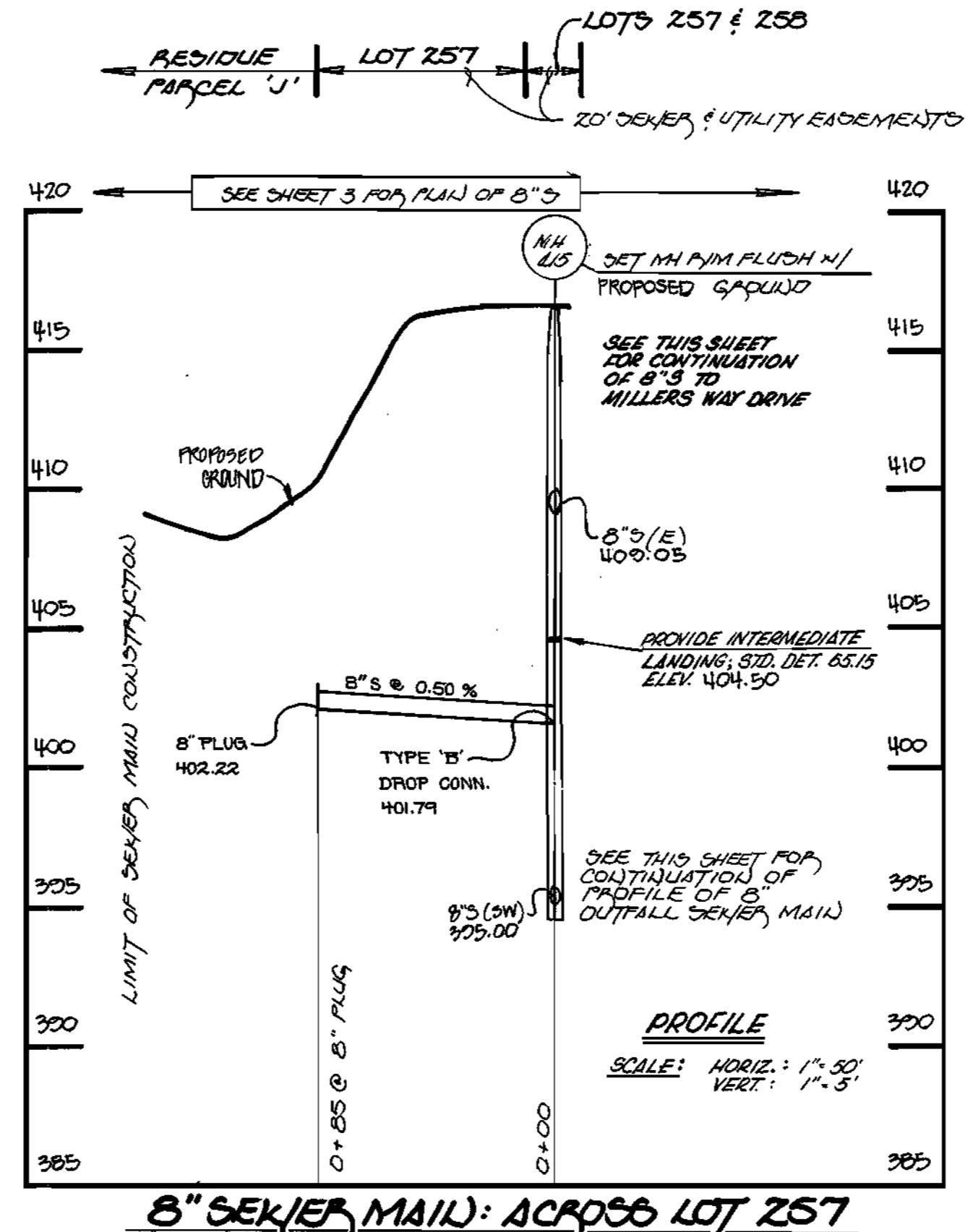
600' SCALE MAP NO. 1797B BLOCK NO. 12
F.C.C. WORK ORDER NO. 3037E
FILE NAME: DANIELS MILL OVERLOOK 3/1

DANIELS MILL OVERLOOK
SECTION 3, AREA 1
LOT Nos. 230 - 270
CONTRACT NO. 14-3651-D
RECORD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 6

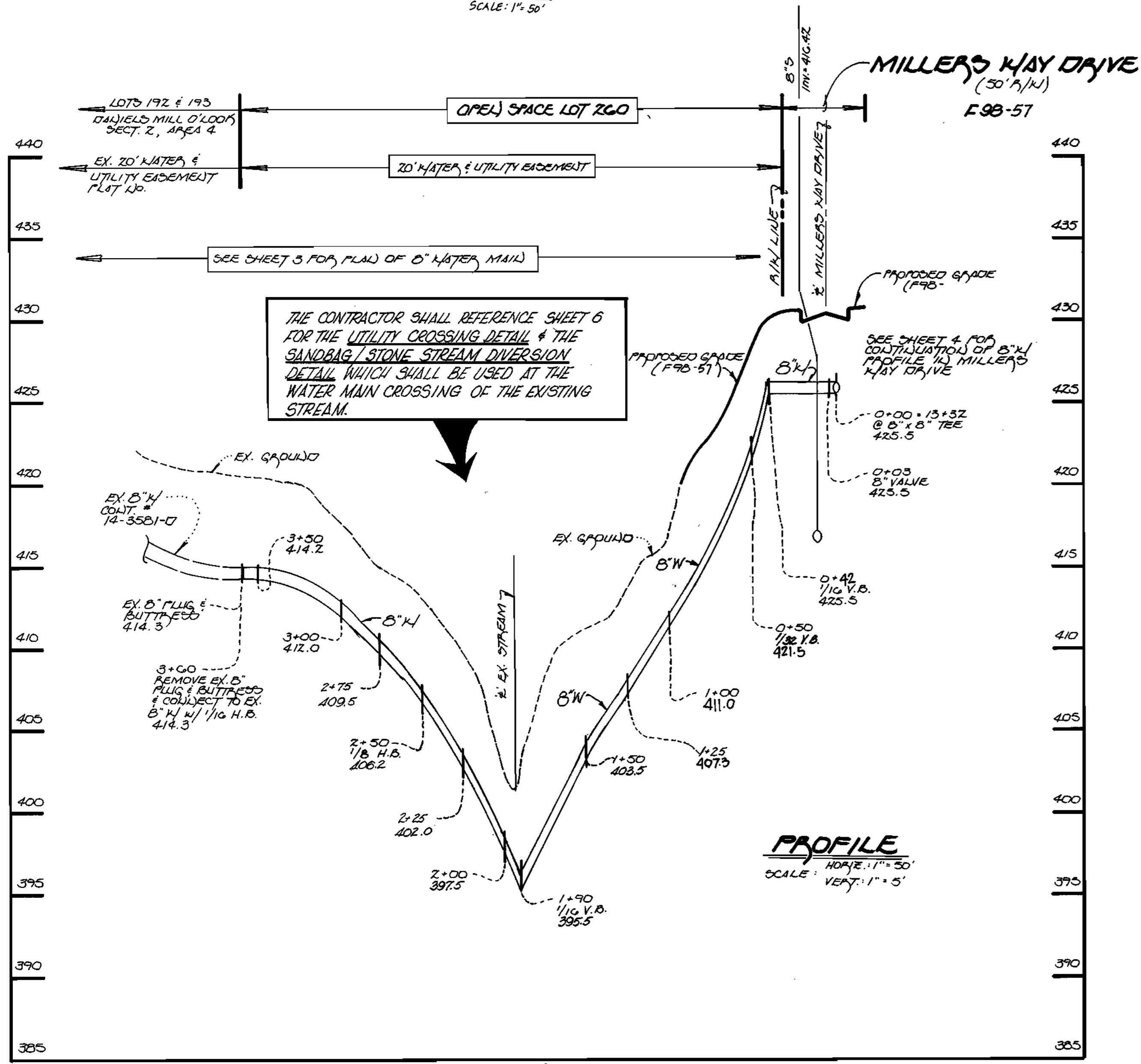


PLAN
SCALE: 1" = 50'

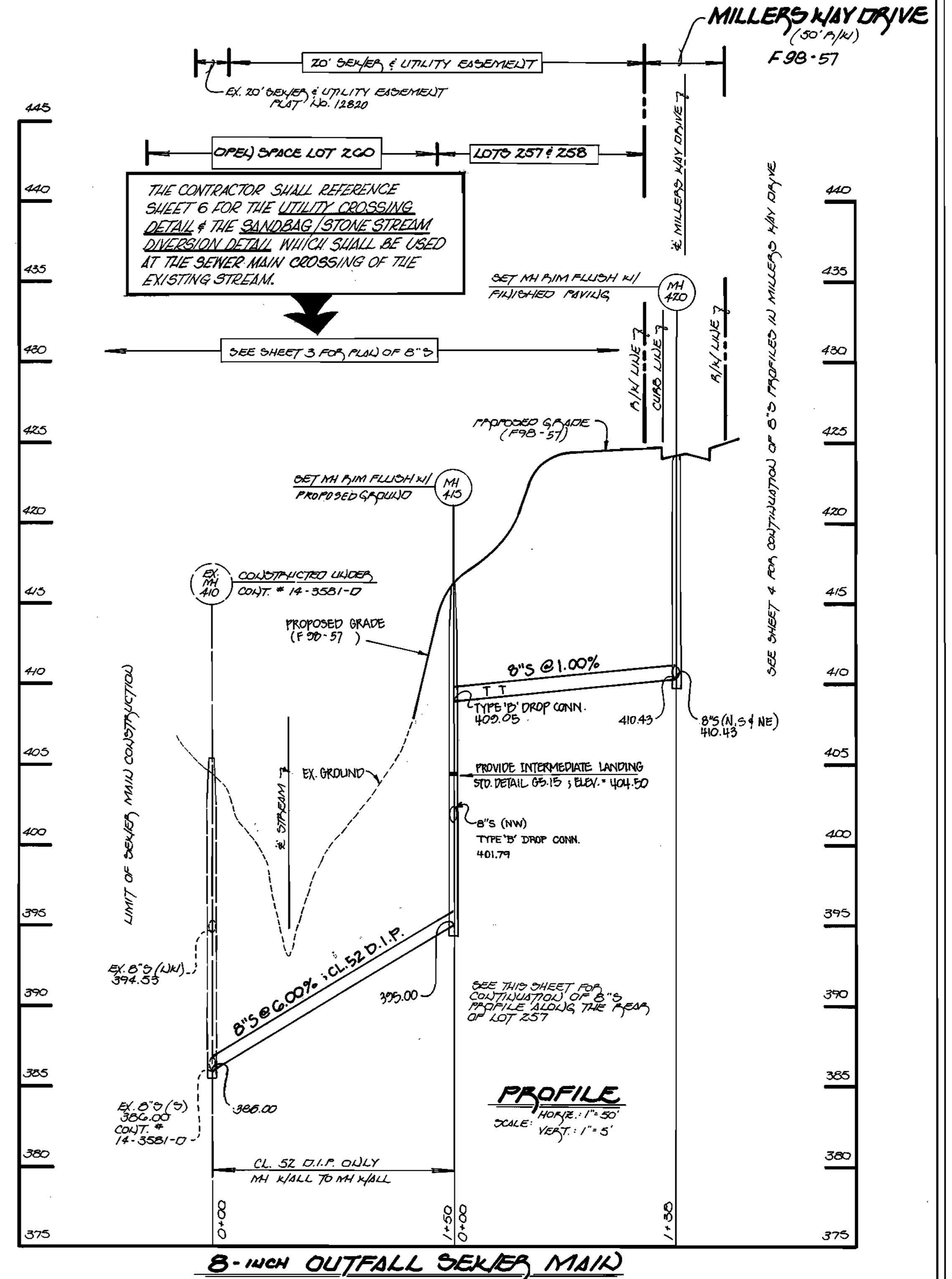


PROFILE
SCALE: HORIZ.: 1" = 50'
VERT.: 1" = 5'

8" SEWER MAIN: ACROSS LOT 257



8-INCH WATER MAIN: PARTIAL LOOP



8-INCH OUTFALL SEWER MAIN

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. ...
CHIEF, BUREAU OF UTILITIES

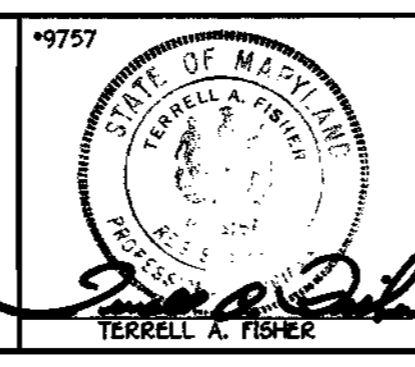
12-13-98
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

5/2/99
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 16272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21117
410-481-2255



DESIGNED BY:	M.J.M.
DRAWN BY:	J.M.M.
CHECKED BY:	P.W.K.
DATE:	1/22/98
BY NO.:	
REVISION:	
DATE:	

WATER AND SEWER MAINS
PROFILES

60' SCALE MAP NO. 17E 1D, BLOCK NO. 7E
F.C.C. WORK ORDER NO. 30294
FILE NAME: DANIELS MILL OVERLOOK 3/1

CONTRACT NO. 14-3651-D
DANIELS MILL OVERLOOK
SECTION 3, AREA 1
LOT NOS. 230 - 270
CONTRACT NO. 14-3651 - D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

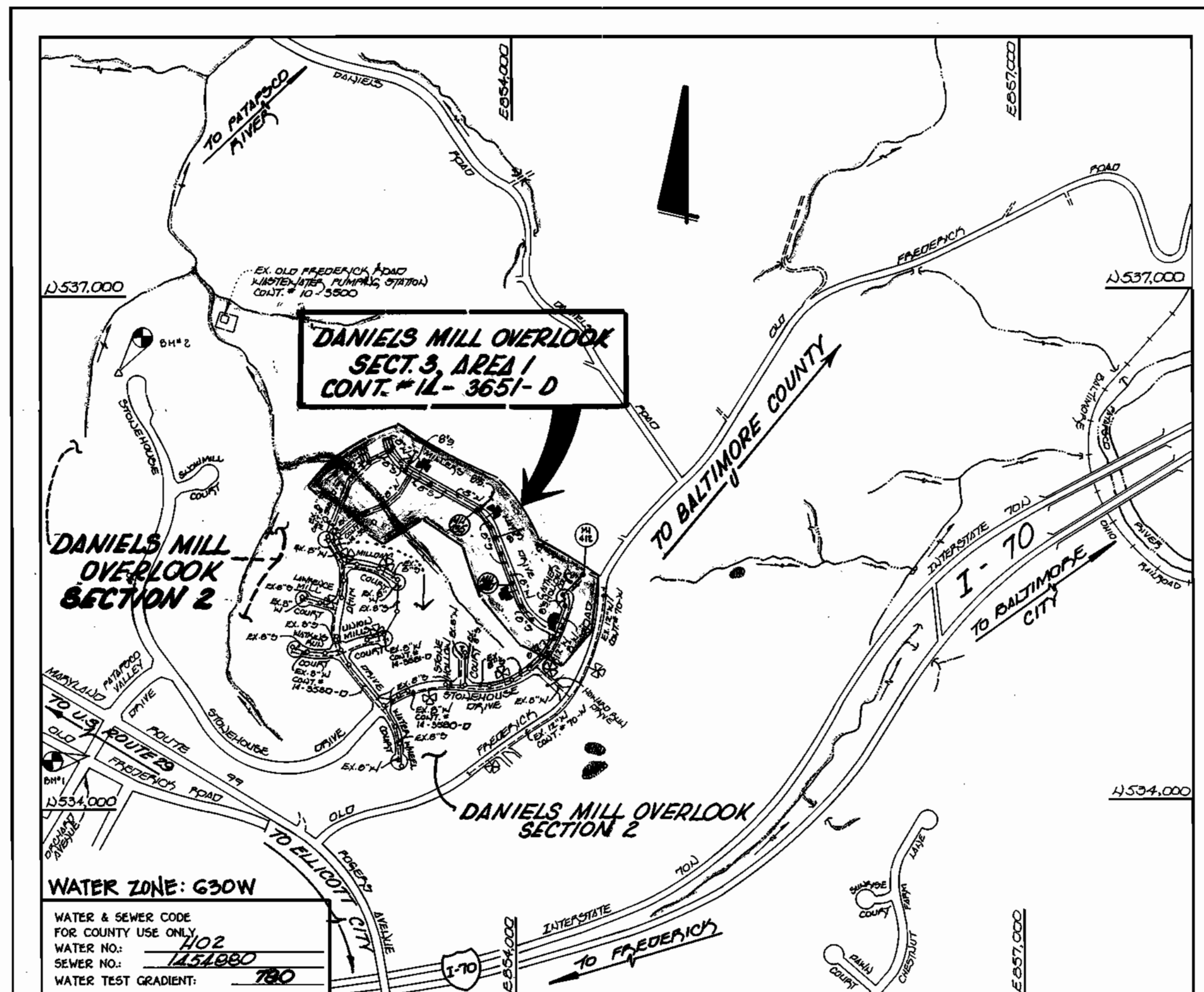
SHEET
5 OF 6

CONTRACT NO. 14-3651-D
DANIELS MILL OVERLOOK
SECTION 3, AREA 1
LOT NOS. 230 - 270
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

REF. NO.: F98-57

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" SEWER	2,456 L.F.	2456	SDR 35	BELAIR RD SUPPLY
8" D.I.P. SEWER	150 L.F.	150	CL-52	ATLANTIC
4" SEWER	941 L.F.	241	SDR 35	BELAIR RD SUPPLY
MANHOLES	16 EACH	16	PRE-CAST	ATLANTIC
12" WATER	166 L.F.	166	CL-52 DIP	ATLANTIC
8" WATER	2,194 L.F.	2,194	"	"
6" WATER	109 L.F.	109	"	"
1" W.H.C.	278 L.F.	208	C.5	BELAIR RD SUPPLY
3/4" W.H.C.	576 L.F.	576	"	"
TWIN METER SETTING	1 EACH	1	VAULT	"
FIRE HYDRANTS	4 EACH	4	MOELLER	U.S. FILTER
8" 1/2 H.B.	1 EACH	1	UNION FOUNDRY	"
12" x 8" TEE	1 EACH	1	"	"
8" x 8" TEE	3 EACH	3	"	"
12" x 8" REDUCER	1 EACH	1	"	"
8" VALVE	7 EACH	7	MUELLER	"
8" 1/2 H.B.	8 EACH	8	UNION FOUNDRY	"
8" x 6" TEE	4 EACH	4	"	"
8" VALVE & BUTTRESS	4 EACH	4	"	"
8" 1/2 V.B.	1 EACH	1	"	"
6" VALVE	4 EACH	4	MUELLER	"
8" 1/2 V.B.	2 EACH	2	UNION FOUNDRY	"

NAME OF UTILITY CONTRACTOR: CAJINES INC.
SURVEY & DRAFTING DIVISION AS-BUILT DATE:



WATER ZONE: G50W
WATER & SEWER CODE FOR COUNTY USE ONLY
WATER NO: 1102
SEWER NO: 142880
WATER TEST GRADIENT: 780

TYPE OF BUILDING: RESIDENTIAL SINGLE FAMILY DETACHED
NUMBER OF LOTS: PARCELS: 43 (45 BUILDABLE)
NO. OF WATER HOUSE CONNECTIONS: 37 #
NO. OF SEWER HOUSE CONNECTIONS: 37 #
DRAINAGE AREA: PATAPSCO
TREATMENT PLANT: PATAPSCO WWTPL, CITY OF BALTIMORE, VIA OLD FREDERICK ROAD RAMP STA.

* EIGHT (8) OF THE BUILDABLE LOTS WERE PREVIOUSLY PROVIDED WATER & SEWER HOUSE CONNECTIONS UNDER CONT. NO. IL-3580-D, DANIELS MILL OVERLOOK, SECT. 2, AREA 3

VICINITY MAP

SCALE: 1"=600'

PLAN REFERENCE NUMBERS: F98-57

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 COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (1991 AMENDMENTS) THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
- 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 NOT 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 THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9068
 - MISS UTILITY - 1-800-257-7777
 - COLONIAL PIPELINE CO. - 795-1390
 - 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 DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- T.B. DENOTES TEST BORING.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT 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 PLANS OR IN THE SPECIFICATIONS.
- HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- MANHOLES LOCATED WITHIN THE PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAMES AND COVERS, STANDARD DETAIL G5.51.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED AS TO HAVE ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- ALL WATER MAINS SHALL 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 ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS (W11) AND (W213). SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-153; DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, # (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.11(A) OF THE HOWARD COUNTY CODE.

DEVELOPER'S CERTIFICATE

"I HEREBY CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR EROSION & SEDIMENT CONTROL & THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Michael J. McCann for RYLAND HOMES INC. 4-15-98
SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION & SEDIMENT CONTROL REPRESENTS A PRACTICAL & FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Paul K. K... 10/29/97
SIGNATURE OF ENGINEER DATE

REFERENCE: F98-57

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

Cheryl Simmond 5/19/98
S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT IS APPROVED FOR SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT.

John R. Robinson 5/19/98
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS AND UNDER F 98-57.

Michael J. McCann for RYLAND HOMES, INC. 4-15-98
SIGNATURE OF DEVELOPER DATE

CONTRACT NO. 14-3651-D
DANIELS MILL OVERLOOK
SECTION 3, AREA 1
LOT NOS. 230-276
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

BENCHMARKS

BENCHMARK No. 1	ELEV. 481.10
€ DUMPING MANHOLE RIM No. 1 (CONT. # 10-1992-D)	
N 534, 318, 091000	E 851, 475, 348000
BENCHMARK No. 2	ELEV. 407.75
WUB WITH PILE MARKED " TRANSVERSE PT. No. 12C "	
N 534, 142, 340000	E 851, 766, 870000

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
5-12-98
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
5/22/98
DATE

Fisher, Collins & Carter, Inc.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK
10272 Baltimore National Pike
Ellicott City, Maryland 21042
(410) 461-2885

DESIGNED BY: M.J.M.
DRAWN BY: M.J.M. J.M./B.L.M.
CHECKED BY: P.M.K.
DATE: 1/22/98

TITLE SHEET
600' SCALE MAP NO. 17 BLOCK NO. 16
F.C.C. WORK ORDER NO. 30594
FILE NAME: DANIELS MILL OVERLOOK, 3/1
ASBUILT CONDITIONS ADDED TO PLAN
4/99
DATE

CONTRACT NO. 14-3651-D
DANIELS MILL OVERLOOK
SECTION 3, AREA 1
LOT Nos. 230-276
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DANIELS MILL OVERLOOK
SECTION 3, AREA 1
LOT Nos. 230-276
CONTRACT NO. 14-3651-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 1 OF 6

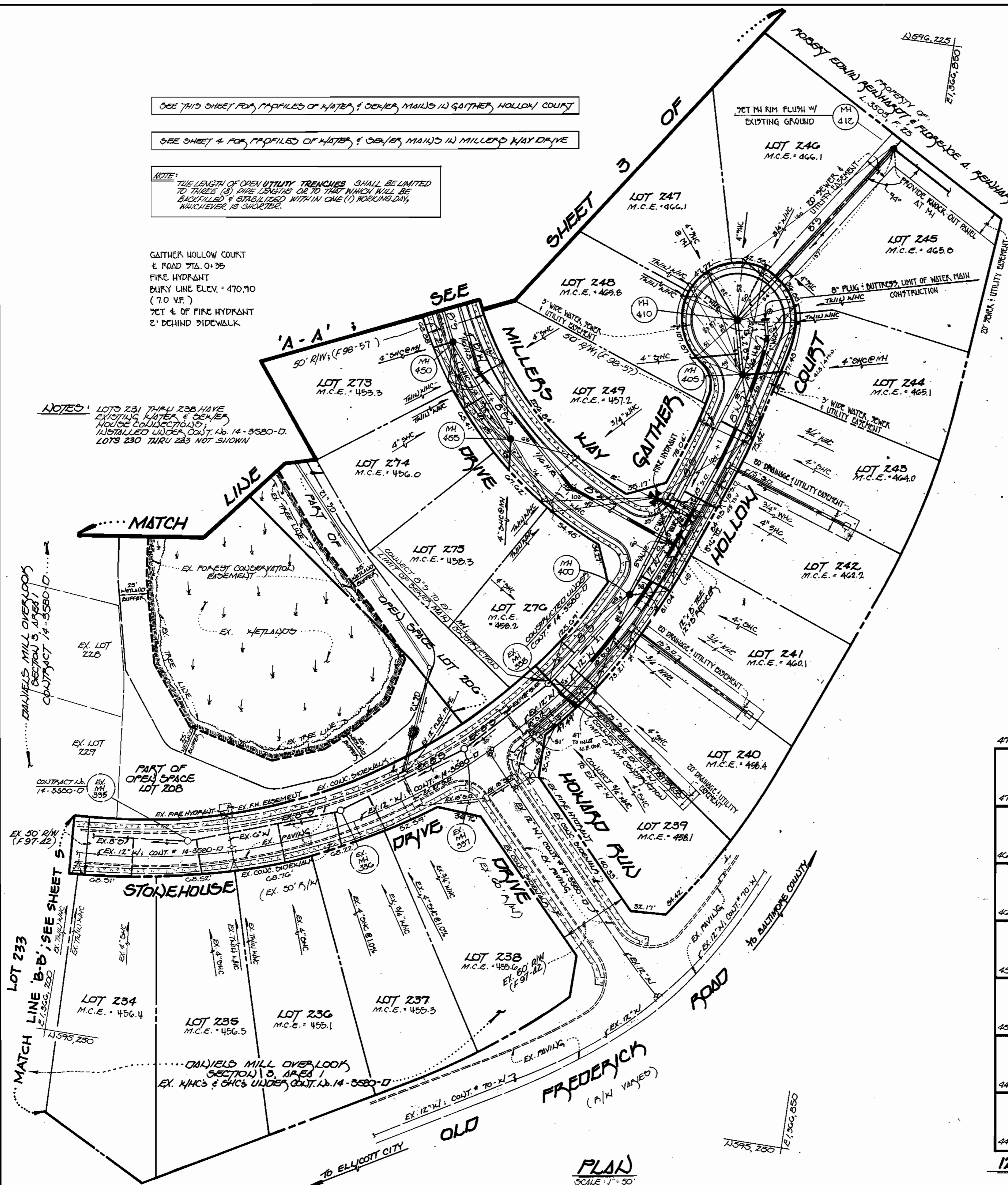
SEE THIS SHEET FOR PROFILES OF WATER & SEWER MAINS IN GAITHER HOLLOW COURT

SEE SHEET 4 FOR PROFILES OF WATER & SEWER MAINS IN MILLERS WAY DRIVE

NOTE: THE LENGTH OF OPEN UTILITY TRENCHES SHALL BE LIMITED TO THREE (3) SPAN LENGTHS OR TO THAT WHICH WILL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.

GAITHER HOLLOW COURT
 ± ROAD 716.0 ± 35
 FIRE HYDRANT
 BULKY LINE ELEV. ± 470.10
 (7.0 V.F.)
 7' ± OF FIRE HYDRANT
 2' BEHIND SIDEWALK

NOTES: LOTS 231 THRU 236 HAVE EXISTING WATER & SEWER MAINS COLLECTORS INSTALLED UNDER CO. 14-3580-D. LOTS 230 THRU 233 NOT SHOWN

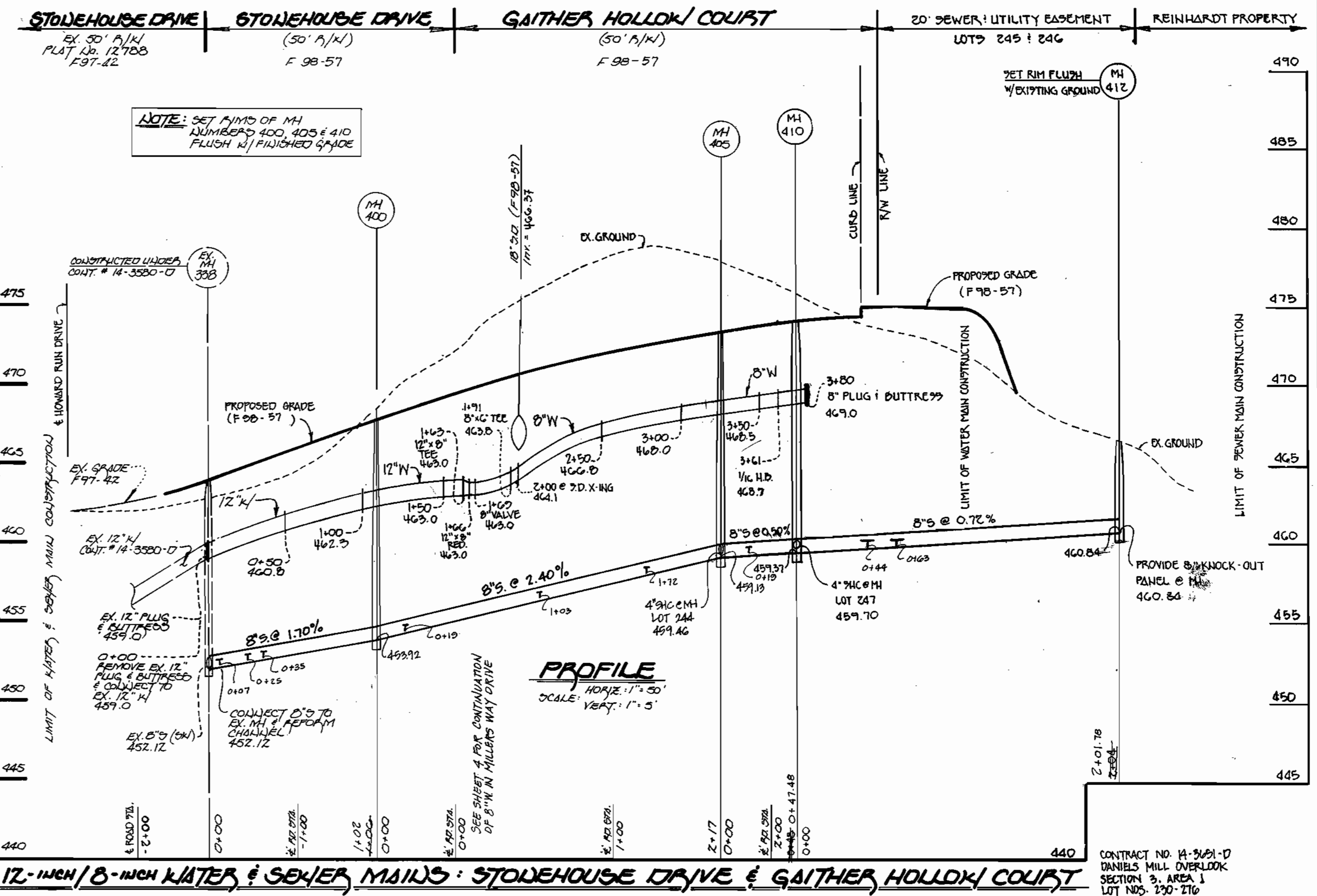


MANHOLE TABULATION CHART				
NO.	± ROAD STATION	DISTANCE	SLOPE	ELEVATION
400	0+50	3' RT	3.37 %	467.75
405	IN CUL-DE-SAC			473.50
410	IN CUL-DE-SAC			474.32
412				476.50
420	14+99	5' LT	-1.24 %	474.55
425	13+67	9' LT	-4.04 %	470.06
430	11+94	7' LT	-5.00 %	436.71
435	8+82	3' LT	-1.88 %	449.85
440	7+60	3' LT	+1.88 %	449.30
445	5+92	7' LT	-0.49 %	446.63
447	4+11	7' LT	-5.21 %	451.76
450	2+59	7' LT	-6.00 %	460.77
455	1+63	6' LT	-3.50 %	465.55
441	6+70	7' LT	+1.50 %	447.20
435	9+80	7' LT	-4.32 %	447.22
412				466.50 **

* ± SET MH RIM FLUSH WITH PROPOSED GROUND
 ** ± SET MH RIM FLUSH WITH EXISTING GROUND

SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
EX. MH 335 TO MH 400		
0+07 FT	237	453.07
0+25 FT	240	453.40
0+35 FT	276	453.15
MH 400 TO MH 405		
0+19 FT	241	453.17
1+03 FT	242	457.34
1+72 FT	243	456.88
@ MH 405 FT	244	460.14
MH 405 TO MH 410		
0+19 FT	248	460.18
@ MH 410 FT	247	460.76
MH 450 TO MH 455		
@ MH 455 FT	275	453.30
0+37 FT	249	450.23
0+35 FT	274	450.97
MH 410 TO MH 412		
0+44 FT	246	460.52
0+63 FT	245	460.19

SEE THIS SHEET FOR PLAN OF WATER & SEWER MAINS



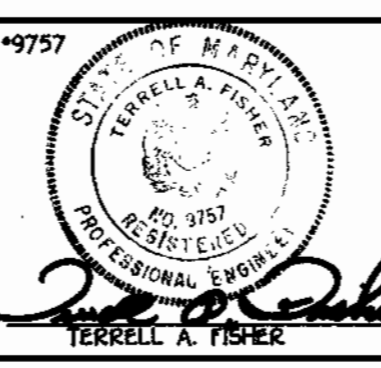
12-INCH / 8-INCH WATER & SEWER MAINS: STONEHOUSE DRIVE & GAITHER HOLLOW COURT

REF. NO.: F98-57

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 5/22/98

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 DATE: 5/22/98

Fisher, Collins & Carter, Inc.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK
 10672 Baltimore National Pike
 Beltsville, MD, Maryland 21045
 (410) 481-2855



DESIGNED BY: J.M.
 DRAWN BY: J.M.
 CHECKED BY: P.W.K.
 DATE: 1/22/98
 BY NO. 481 ASBUILT CONDITIONS ADDED TO PLAN
 REVISION

WATER & SEWER MAINS
 PLAN & PROFILES
 600' SCALE MAP NO. 1791B BLOCK NO. 12
 F.C.C. WORK ORDER NO. 30594
 FILE NAME: DANIELS MILL OVERLOOK, SECT. 3/1

DANIELS MILL OVERLOOK
 SECTION 3, AREA 1
 LOT Nos. 230-276
 CONTRACT No. 14-3651-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 2 OF 2