
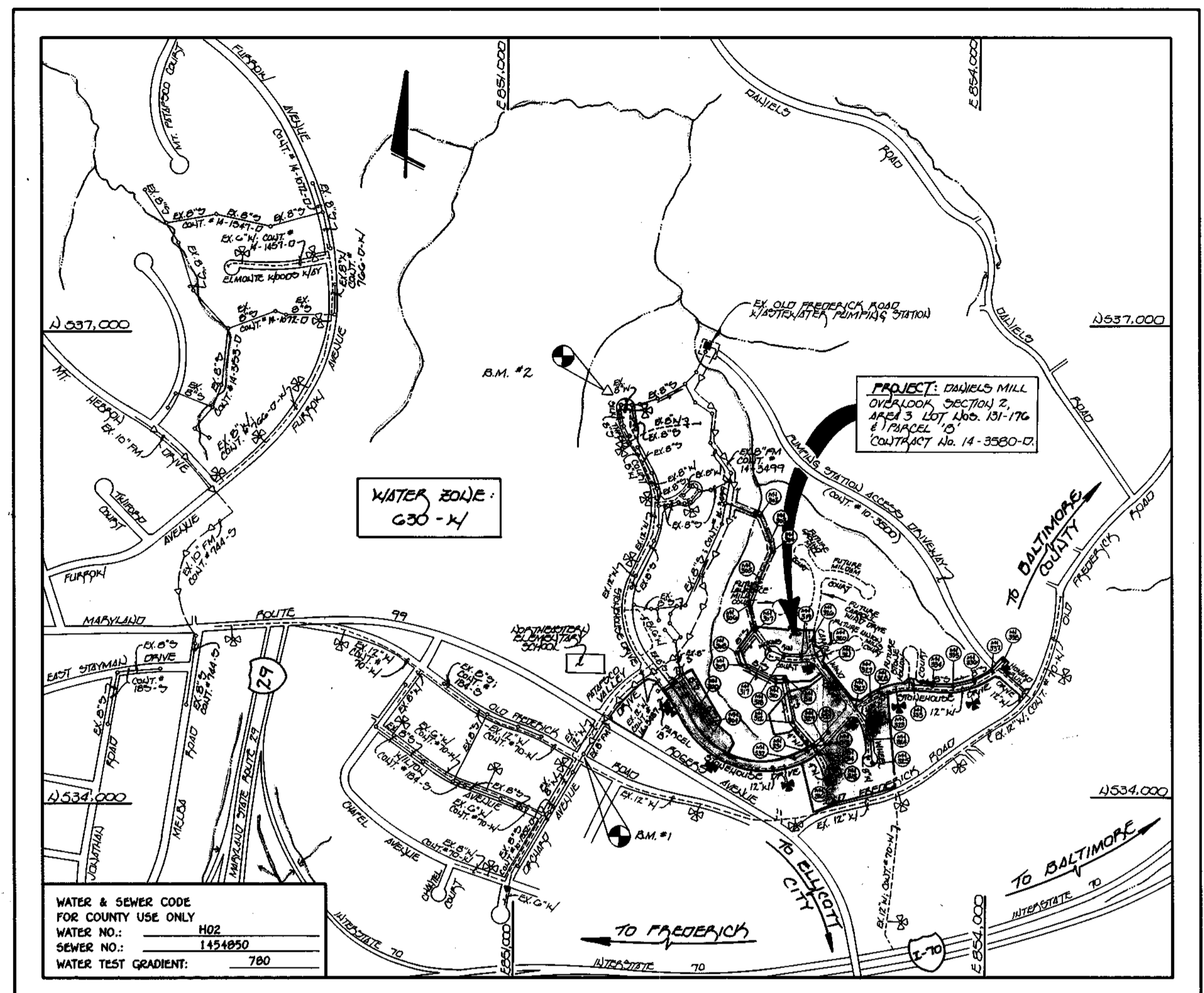


GENERAL NOTES

- 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.5.2.
- WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- HOUSE(S) 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 G.5.1.
- 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 (W.1.11 AND W.2.13). 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 18.114(b) OF THE HOWARD COUNTY CODE.

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
8" SEWER	4,989 L.F.	4,989.0	P.V.C.	J.M. MANU.
8" SEWER D.I.P.	197 L.F.	198.0	D.I.P.	ATLANTIC STATES
4" SEWER	1,456 L.F.	1,235.0	"	"
MANHOLES	41 EACH	41 EA.	PRECAST	ATLANTIC CONC.
8" PLUG	1 EACH	1 EA.	"	"
12" WATER	2,850 L.F.	2840.0	D.I.P.	ATLANTIC STATES
8" WATER	1,173 L.F.	1,164.0	"	"
6" WATER	202 L.F.	278.0	"	"
4" WATER	430 L.F.	425.0	"	"
FIRE HYDRANT	9 EACH	9 EACH	CASTIRON	MULLER CO.
1" N.H.C.	510 L.F.	502	K. COPPER	READING CO.
3/4" N.H.C.	864 L.F.	829	K. COPPER	"
12" x 8" CHD	1 EACH	1 EA.	COMP.	UNION FOUNDRY
12" x 4" CHD	1 EACH	1 EA.	"	"
8" x 8" CHD	1 EACH	1 EA.	"	"
12" x 12" TEE	1 EACH	1 EA.	"	"
12" x 6" TEE	9 EACH	9 EA.	"	"
8" x 6" TEE	2 EACH	2 EA.	"	"
12" VALVE	7 EACH	7 EA.	RESWORE	MULLER CO.
8" VALVE	5 EACH	5 EA.	"	"
6" VALVE	11 EACH	11 EA.	"	"
4" VALVE	2 EACH	2 EA.	"	"
8" x 6" REDUCER	2 EACH	2 EA.	COMP.	UNION FOUNDRY
8" 1/2" H.B.	2 EACH	---	"	"
4" 1/2" H.B.	1 EACH	---	"	"
4" 1/2" H.B.	1 EACH	---	"	"
12" PLUG & BUTTRESS	1 EACH	1 EA.	COMP.	UNION FOUNDRY
8" PLUG & BUTTRESS	2 EACH	2 EA.	"	"
6" PLUG & BUTTRESS	2 EACH	2 EA.	"	"
4" PLUG & BUTTRESS	2 EACH	2 EA.	"	"

NAME OF UTILITY CONTRACTOR: QUINES CO. INC.
SURVEY & DRAWING DIVISION AS-BUILT DATE: NOV. 13, 1997 R.J.D.




TYPE OF BUILDING:	RESIDENTIAL: SINGLE FAMILY DETACHED
NUMBER OF LOTS:	47 (46 BUIDABLE)
NO. OF WATER HOUSE CONNECTIONS:	49
NO. OF SEWER HOUSE CONNECTIONS:	45
DRAINAGE AREA:	PATAPSCO
TREATMENT PLANT:	PATAPSCO W.W.T.P.; CITY OF BALTIMORE VIA THE OLD FREDERICK ROAD PUMPING STATION
N.H.C.'s FOR FUTURE LOTS:	14
S.H.C.'s FOR FUTURE LOTS:	20

VICINITY MAP

SCALE: 1"=600'

PLAN REFERENCE NUMBERS:
F-97-42

	BENCHMARKS
BENCHMARK No. 1	ELEV. = 481.10
EXISTING MANHOLE F.M. 1 (CONTR. #10-1332-D)	ELEV. = 495.345000
BENCHMARK No. 2	ELEV. = 407.75
HUB WITH STAKE MARKED 'TRAVELER PT. No. 126	ELEV. = 285.1766 890000


CONTRACT NO. 14 - 3580-D
DANIELS MILL OVERLOOK
SECTION 2, AREA 3
LOT NOS. 131 - 176 and PARCEL 'B'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Chester Simons 2/24/97
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
John R. Hamilton 2/24/97
 HOWARD SOIL CONSERVATION DISTRICT DATE

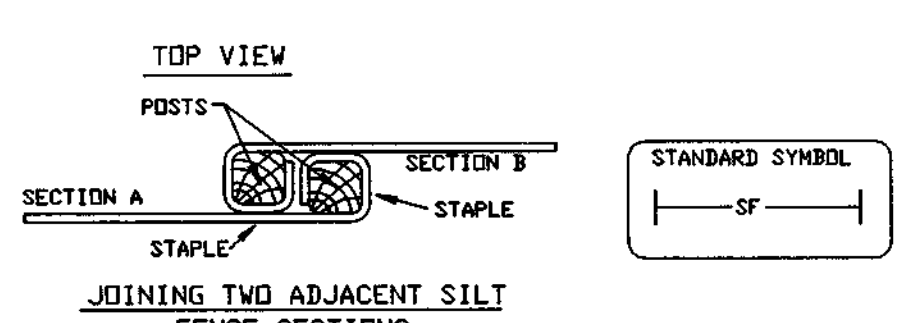
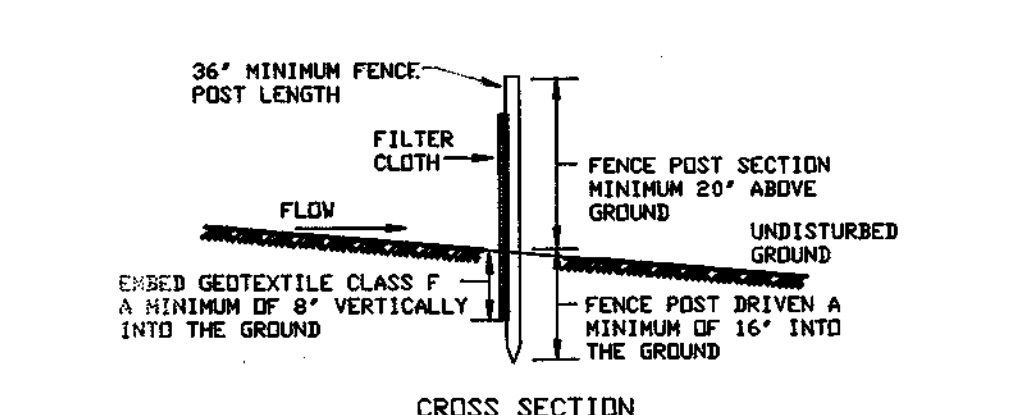
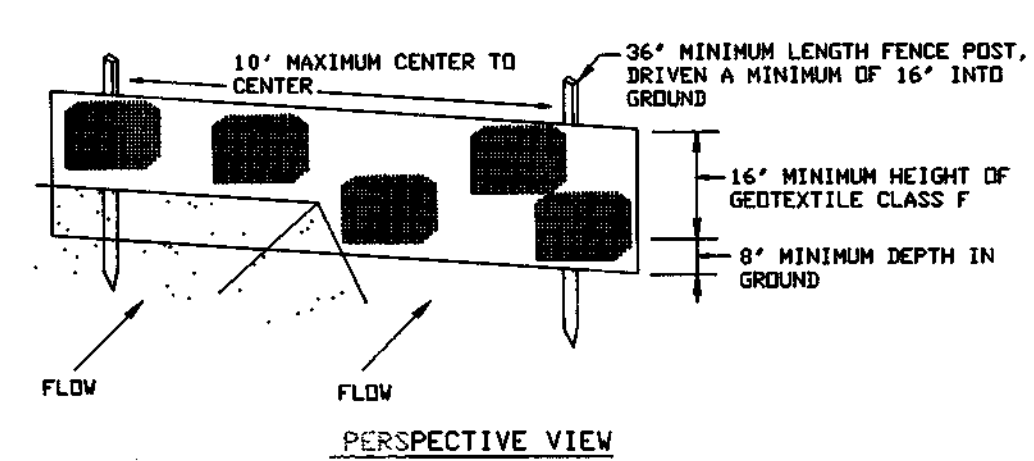
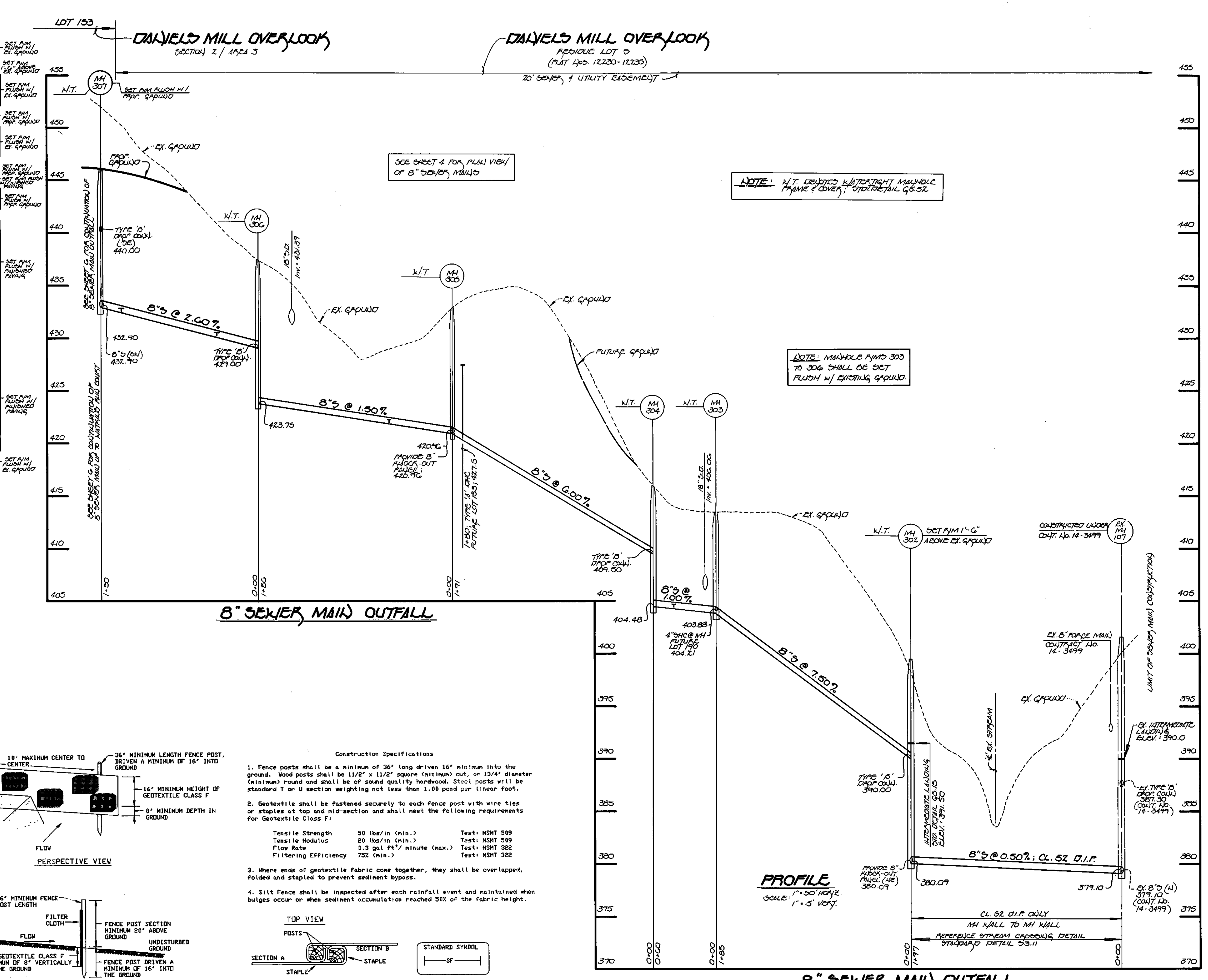
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS AND UNDER F-97-42.
Michael J. McCann 2-18-97
 SIGNATURE OF DEVELOPER DATE

CONTRACT NO. 14 - 3580-D
 DANIELS MILL OVERLOOK
 SECTION 2, AREA 3
 LOT NOS. 131-176 and PARCEL 'B'
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert Beaman</i> 2-18-97 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND <i>Michael McCann</i> 2/25/97 CHIEF, DEVELOPMENT ENGINEERING DIVISION 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 	DES: H.J.M. DRWN: H.J.M./J.M.H. CHK: P.W.K. DATE: 11/12/97 NO. 1 REVISION: "AS-BUILT" QUANTITIES ADDED TO PLAN DATE: 11/12/97	TITLE SHEET 600' SCALE MAP NO. 17 BLOCK NO. 12	DANIELS MILL OVERLOOK SECTION 2, AREA 3 LOT NOS. 131-176 and PARCEL 'B' CONTRACT NO. 14 - 3580-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 1 OF 7
--	---	--	---	---	--

STATION	LOT	ELEVATION
0+40 FT	EX. MH 204 TO MH 300	
0+40 FT	131	424.19
1+10 FT	132	424.75
1+80 FT	133	425.31
MH 300 TO MH 301		
0+10 FT	134	430.57
0+80 FT	135	431.97
1+40 FT	136	433.17
@ MH 301 FT	137 (SNC @ MH)	434.09
MH 302 TO MH 303		
@ MH 303 LT	FUTURE LOT 190 (SNC @ MH)	404.57
MH 303 TO MH 304		
0+40 LT	FUTURE LOT 189	404.65
MH 304 TO MH 305		
1+80 LT	FUTURE LOT 183 (SNC)	427.70
MH 305 TO MH 306		
0+60 LT	FUTURE LOT 182	422.23
MH 306 TO MH 307		
0+40 LT	FUTURE LOT 180	430.41
1+80 LT	FUTURE LOT 179	432.75
MH 307 TO MH 308		
0+40 LT	153 (SNC)	442.20
MH 308 TO MH 309		
0+30 LT	152 (SNC)	441.70
MH 309 TO MH 310		
0+80 LT	151	437.13
1+80 LT	150	437.63
MH 310 TO MH 311		
0+40 LT	149	438.04
MH 311 TO MH 312		
1+10 LT	141	443.00
1+20 FT	140	443.51
MH 312 TO MH 313		
0+35 FT	139	449.61
0+40 FT	142	449.43
MH 314 TO MH 315		
0+40 FT	176	458.36
0+70 LT	172	461.12
MH 315 TO MH 316		
0+40 FT	175	462.17
@ MH 316 LT	173 (SNC @ MH)	462.55
@ MH 316 FT	174 (SNC @ MH)	462.97
MH 317 TO MH 317		
0+60 LT	154	441.12
MH 317 TO MH 318		
0+40 LT	155	443.66
MH 318 TO MH 319		
0+40 LT	156	444.79
0+65 FT	148	446.35
MH 320 TO MH 321		
0+70 LT	FUTURE LOT 218	450.43
MH 321 TO MH 322		
0+60 FT	147	451.01
1+00 LT	FUTURE LOT 219	450.93
1+50 FT	146	451.46
2+00 LT	FUTURE LOT 220	451.43
2+20 FT	145	451.81
MH 322 TO MH 323		
0+80 LT	158	459.81
1+00 FT	169	460.35
MH 323 TO MH 324		
0+30 LT	159	461.81
0+70 FT	168	463.53
0+80 LT	160	463.81
MH 324 TO MH 325		
0+50 LT	161	466.11
0+80 FT	167	467.17
1+00 LT	162	467.73
1+40 FT	166	469.51
1+65 LT	163	469.76
@ MH 325 LT	164 (SNC @ MH)	469.71
@ MH 325 FT	165 (SNC @ MH)	470.11
MH 326 TO MH 326		
0+60 FT	FUTURE LOT 209	446.92
@ MH 326 LT	157 (SNC @ MH @ 100%)	447.50
MH 327 TO MH 328		
0+30 LT	FUTURE LOT 221	452.87
@ MH 328 LT	FUTURE LOT 222 (SNC @ MH @ 100%)	453.09
MH 328 TO MH 329		
0+40 FT	171	455.82
MH 329 TO MH 330		
0+10 LT	143	455.55
@ MH 330 LT	144 (SNC @ MH)	456.29
@ MH 330 FT	170 (SNC @ MH)	456.47
MH 331 TO MH 332		
@ MH 332 LT	FUTURE LOT 220 (SNC @ MH @ 100%)	451.92
MH 332 TO MH 333		
0+35 LT	FUTURE LOT 231	450.06
MH 333 TO MH 334		
0+35 FT	FUTURE LOT 232	449.99
0+90 FT	FUTURE LOT 233	450.26
MH 334 TO MH 335		
0+75 FT	FUTURE LOT 234	450.76
MH 335 TO MH 336		
0+05 FT	FUTURE LOT 235	450.99
0+00 FT	FUTURE LOT 236 (SNC @ MH)	451.09
1+00 FT	FUTURE LOT 237 (SNC @ MH)	451.29
0+30 FT	FUTURE LOT 238 (SNC @ MH)	452.18

No.	STATION	DISTANCE	SLOPE	AIM ELEVATION
300				434.65
301				440.25
302				400.00
303				413.75
304				416.25
305				433.28
306				436.55
307				445.80
308				446.00
309				446.19
310				447.10
311				448.33
312				462.21
313				463.56
314				465.88
315				472.48
316				476.20
317				453.74
318				456.83
319				460.19
320				462.60
321				463.85
322				467.82
323				472.04
324				476.00
325				482.88
326				489.54
327				464.88
328				463.41
329				465.60
330				467.26
331				461.21
332				457.71
333				464.99
334				467.14
335				463.41
336				461.97
337				461.95
338				462.24
339				468.07
340				467.57



SILT FENCE
NOT TO SCALE

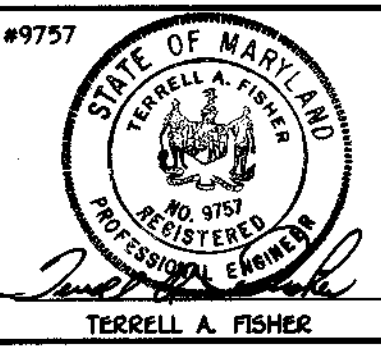
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. ... 2-18-97
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

... 2/18/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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



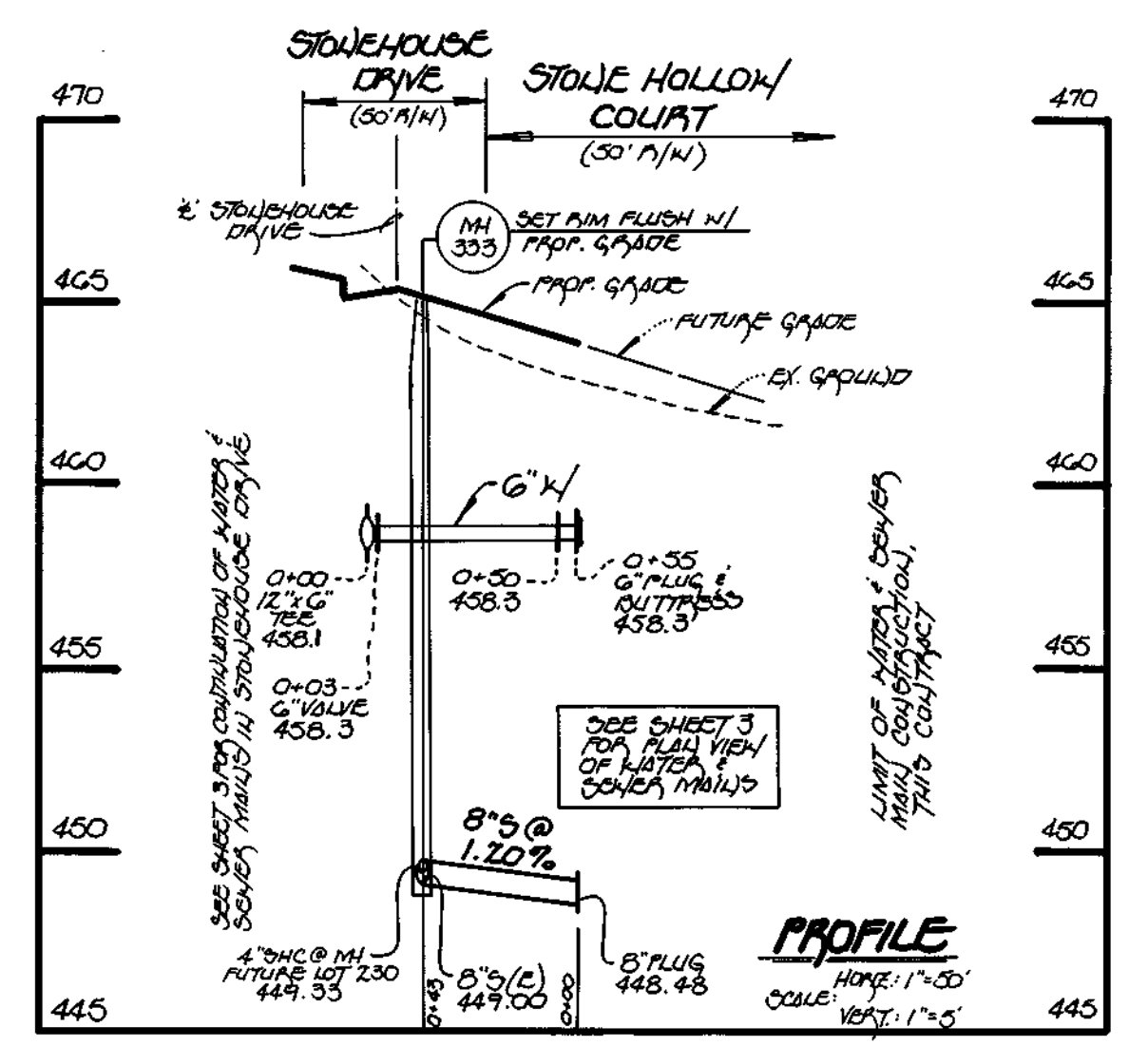
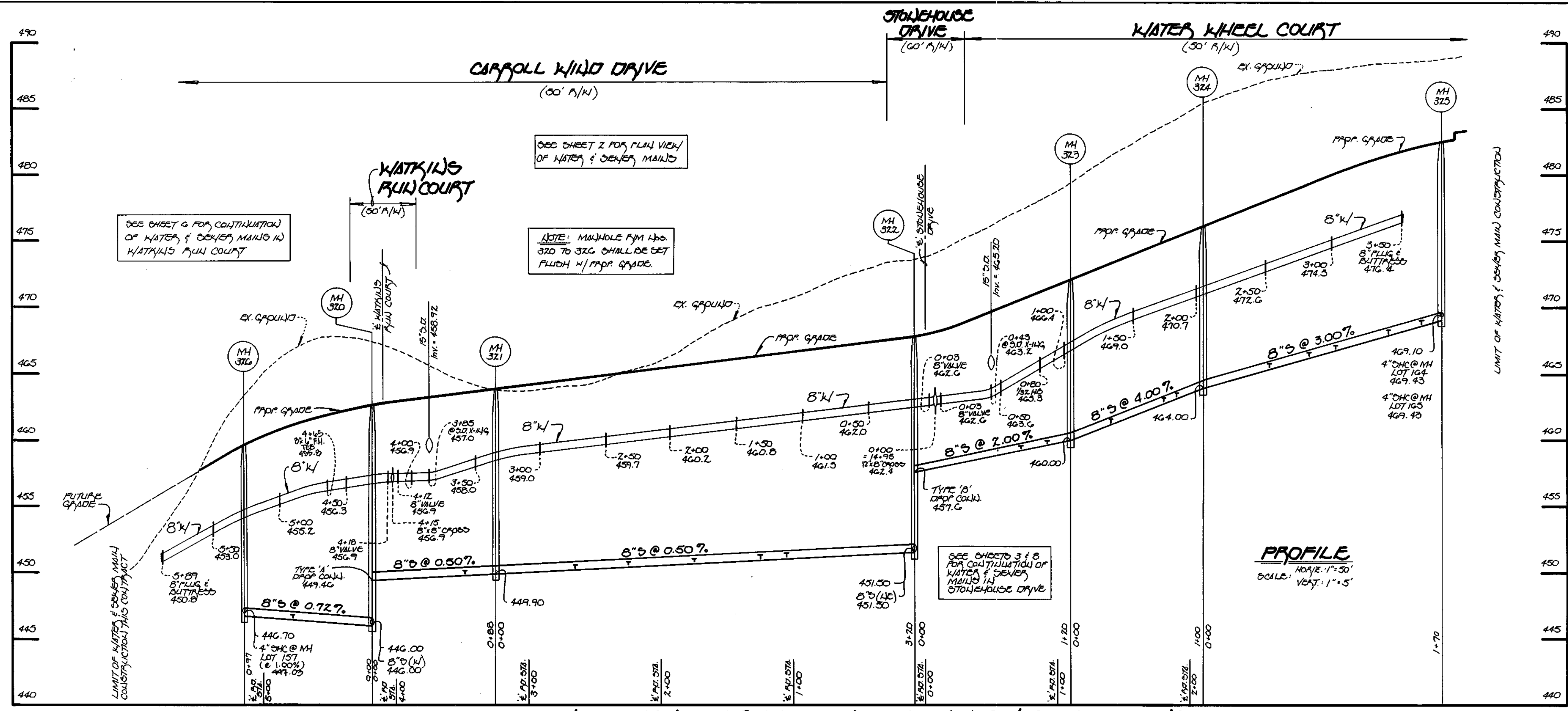
DES:	M.J.M.
DRN:	J.M.M.
CHK:	P.W.K.
DATE:	F.C.C. 1/17/97
BY:	NO.
REVISION:	
DATE:	0/97

WATER AND SEWER MAINS PROFILES

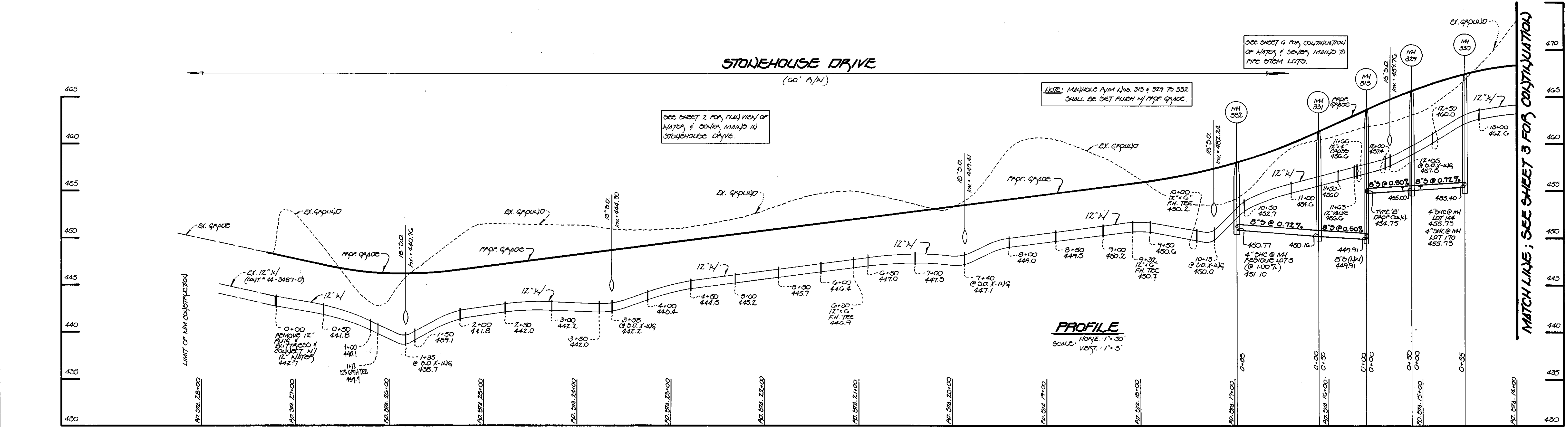
600' SCALE MAP NO. 17 BLOCK NO. 12

DANIELS MILL OVERLOOK
SECTION 2, AREA 3
LOT NOS. 131-176 and PARCEL 'A'
CONTRACT NO. 14-3580-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 5 OF 7



CARROLL WIND DRIVE & WATER WHEEL COURT: WATER & SEWER MAINS



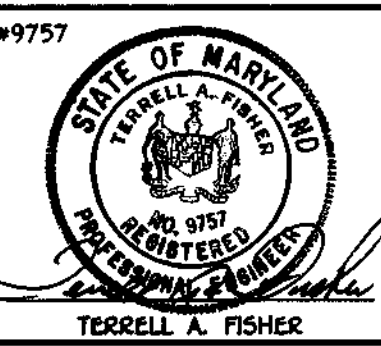
WATER & SEWER MAINS: STONEHOUSE DRIVE

MATCH LINE; SEE SHEET 3 FOR CONTINUATION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
2-18-97

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
2/25/97

Fisher, Collins & Carter, Inc.
CIVIL ENGINEERING CONSULTANTS &
LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK
10272 Baltimore National Pike
Beltsville City, Maryland 21042
(410) 481-2856



DES: M.J.H.					
DRWN: J.M.H.					
CHK: P.W.K.					
DATE:					
BY:	NO.	REVISION	DATE		

WATER AND SEWER MAINS PROFILES
600' SCALE MAP NO. 17 BLOCK NO. 12

DANIELS MILL OVERLOOK
SECTION 2, AREA 3
LOT NOS. 131-176 and PARCEL 'A'
CONTRACT NO. 14-3580-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 7 OF 7