

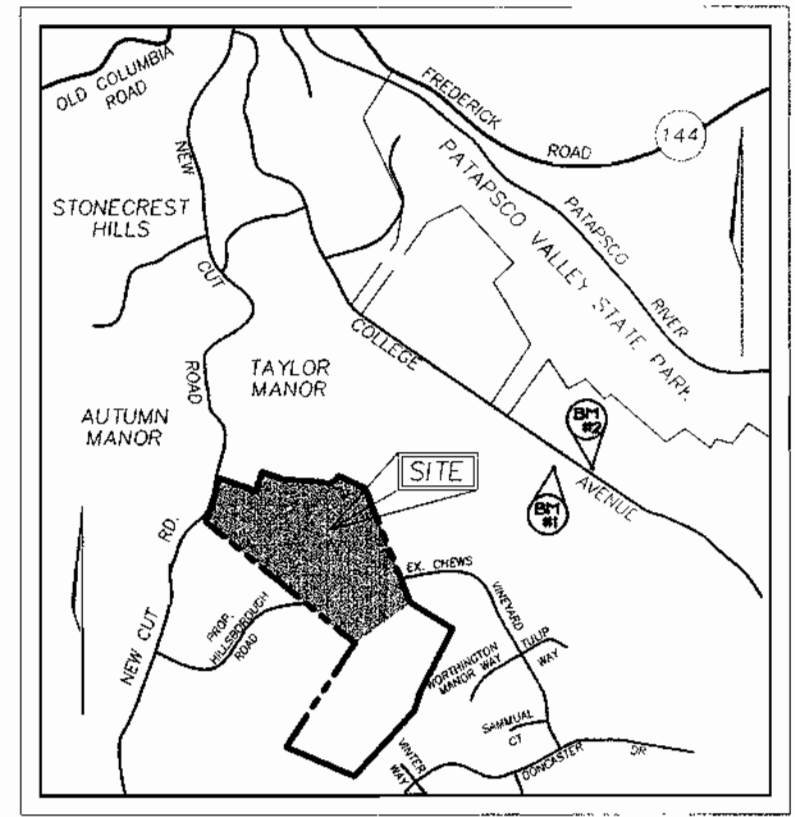
GENERAL NOTES

1. ALL UTILITIES SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
2. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED.
3. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF SAND OR GRAVEL.
4. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF SAND OR GRAVEL.
5. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF SAND OR GRAVEL.
6. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF SAND OR GRAVEL.
7. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF SAND OR GRAVEL.
8. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF SAND OR GRAVEL.
9. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF SAND OR GRAVEL.
10. ALL UTILITIES SHALL BE PROTECTED BY A MINIMUM OF 18" OF SAND OR GRAVEL.

- BACKSPLACES**
1. ALL BACKSPLACES SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 2. ALL BACKSPLACES SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 3. ALL BACKSPLACES SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 4. ALL BACKSPLACES SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 5. ALL BACKSPLACES SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 6. ALL BACKSPLACES SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 7. ALL BACKSPLACES SHALL BE CONCRETE UNLESS OTHERWISE NOTED.

- PAVING**
1. ALL PAVING SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 2. ALL PAVING SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 3. ALL PAVING SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 4. ALL PAVING SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 5. ALL PAVING SHALL BE CONCRETE UNLESS OTHERWISE NOTED.
 6. ALL PAVING SHALL BE CONCRETE UNLESS OTHERWISE NOTED.

WORTHINGTON FIELDS PHASE 1 LOTS 1-46 (4" WATER MAIN, 6" FORCE MAIN) HOWARD COUNTY, MARYLAND CONTRACT NO. #14-3853-D

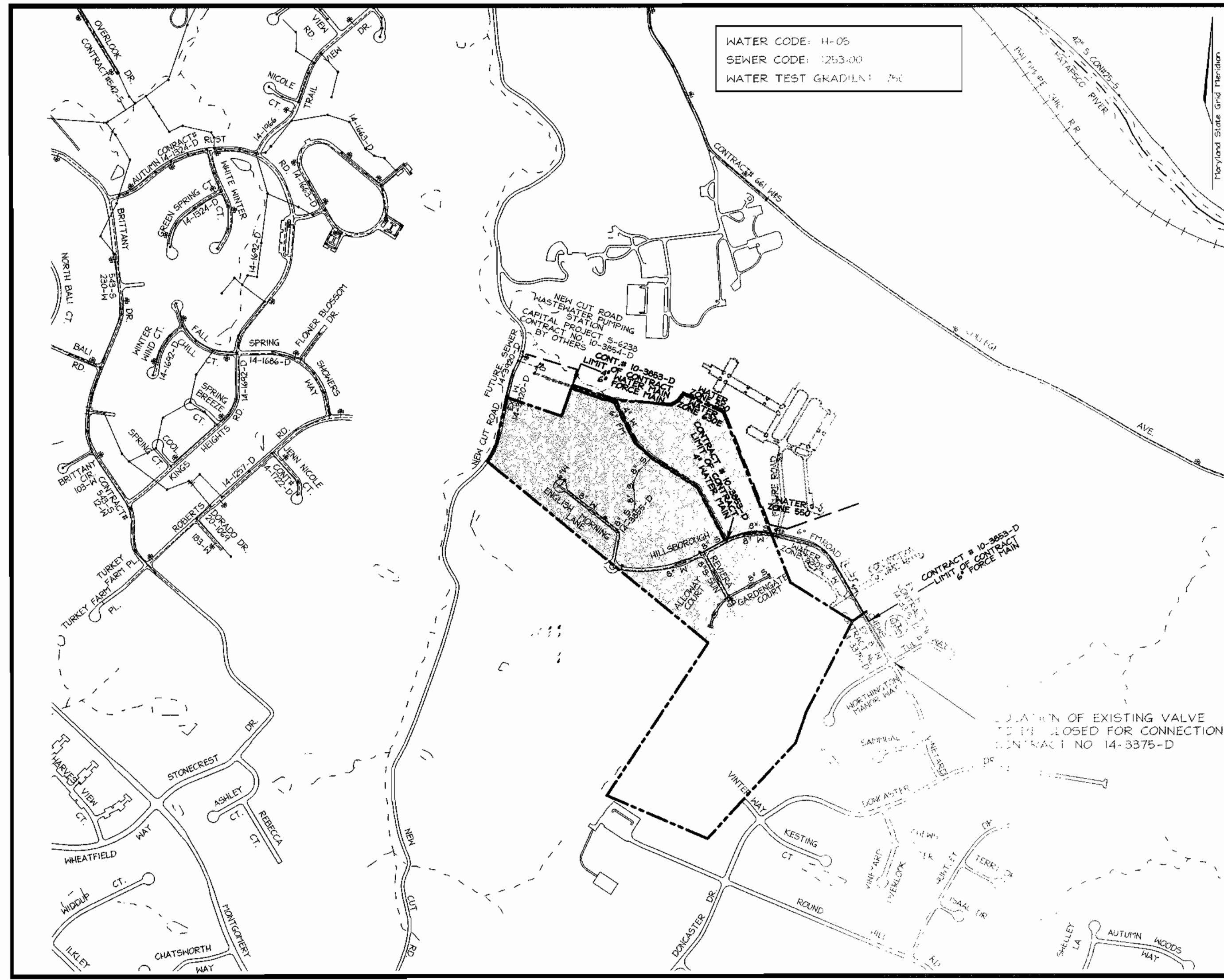


VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS

BENCHMARK NO. 1, COUNTY CONTROL #3044005R
3/4" REBAR 0.8' BELOW SURFACE
N. 576233.42, E. 1373142.33
ELEV. = 374.384

BENCHMARK NO. 2, COUNTY CONTROL #3044004R
3/4" REBAR 0.6' BELOW SURFACE
N. 576126.03, E. 1373460.71
ELEV. = 362.575



LOCATION PLAN
SCALE: 1"=600'

QUANTITIES				
NAME OF UTILITY CONTRACTOR :				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
6" FORCEMAIN	3117 LF			
8"x4" REDUCER	1 EA.			
4" CAP & BUTTRESS	1 EA.			
4" WATER	1820 LF			
8"x4" TEE	1 EA.			
4" VALVE	1 EA.			
TEST STATION	5 EA.			
FLUSHING CONNECTION MANHOLE	1 EA.			
6" FORCEMAIN CONTROL VALVE	1 EA.			
DROP MANHOLE	1 EA.			
5' PRECAST MANHOLE	1 EA.			
SEWER AIR VALVE	1 EA.			

SEDITION CONTROL PLAN SHALL BE SUBMITTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY ZONING AND SUBDIVISION ORDINANCES.

THIS PLAN HAS BEEN REVIEWED FOR SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

John Roberts 5/8/01
SOIL CONSERVATION DISTRICT DATE

Jim Meyer 5/8/01
SOIL CONSERVATION DISTRICT DATE



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert Bainger</i> 4-26-01 CHIEF, DESIGN DIVISION	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND DEVELOPMENT ENGINEERING DIVISION DATE	FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-8226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia	DES: RJ DRN: RJ CHK: JCO DATE: APRIL 2001	COUNTY COMMENTS: 03/26/01 COUNTY COMMENTS: 02/13/01 REVISION: DATE	4" WATER MAIN 6" FORCE MAIN TITLE SHEET 600 SCALE MAP NO. 25 BLOCK NO. 14	WORTHINGTON FIELDS PHASE 1 LOTS 1-46 AND NON-BUILDABLE PARCELS 'A' AND 'B' CONTRACT NO. 14-3853-D TAX MAP #25, GRID 20 # #31 2ND ELECTION DISTRICT PARCEL 98 # P/O PARCEL 4 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 9 OF 9
--	---	--	--	--	--	--	--------------------------------

EKLOF GUSTAV WALTER TRUSTEE
8810/872
278 1 / R-ED

TAYLOR MANOR
HOWARD COUNTY SANITARIUM COMPANY
84/588
56 AC. / POR
TAX MAP 25, PARCEL 73

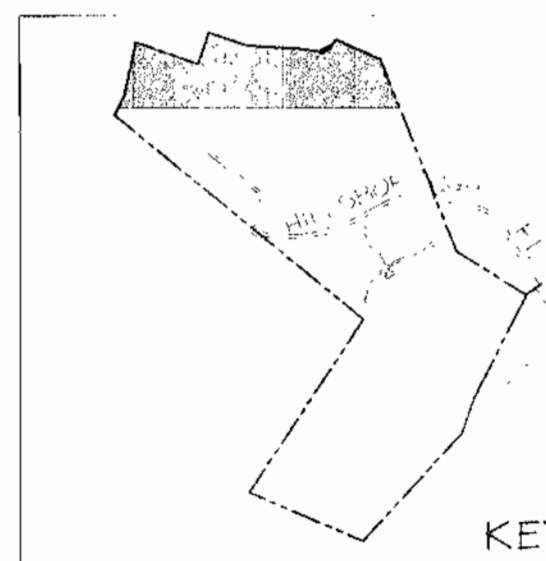
HISTORIC ELLICOTT PROPERTIES, INC.
5051/634
1,992 AC. / R-ED
TAX MAP 25 PARCEL 72

OPEN SPACE
LOT 44
HOWARD COUNTY REC. AND PARKS
27.84 ACRES
FOREST RETENTION EASEMENT #1
10.69 ACRES

MATCH LINE SEE SHEET 3 OF 9

PLAN

SCALE: 1" = 50'



KEYPLAN



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: JCO			
DATE: APRIL 2001	RJ	1	COUNTY COMMENTS 02/13/01
	BY	NO.	REVISION

**4" WATER MAIN
6" FORCE MAIN
PLAN**

600 SCALE MAP NO. 25 BLOCK NO. 14

WORTHINGTON FIELDS

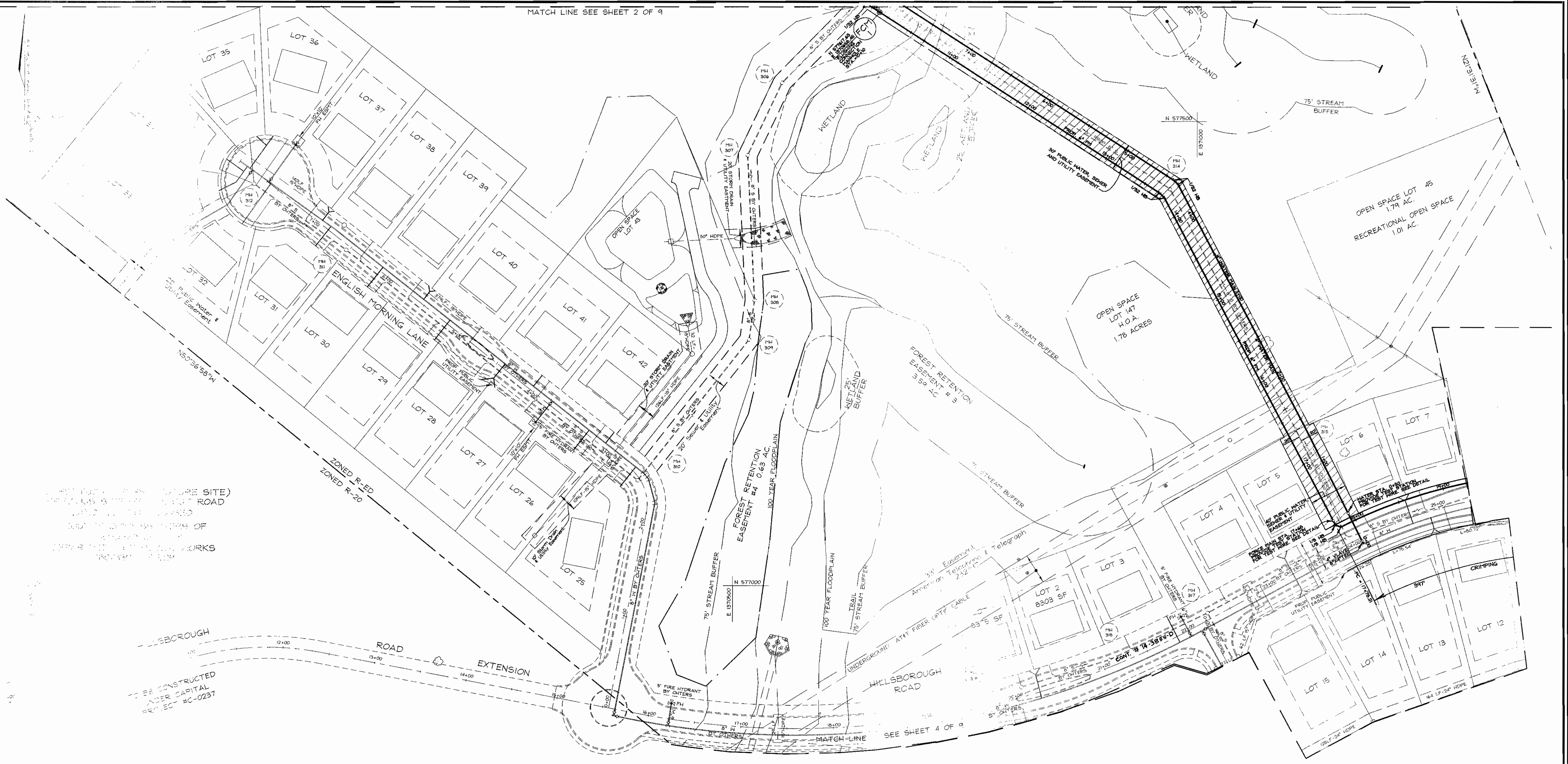
PHASE 1 LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

TAX MAP #25, GRID 20 # 31
2ND ELECTION DISTRICT

PARCEL 98 # P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 9

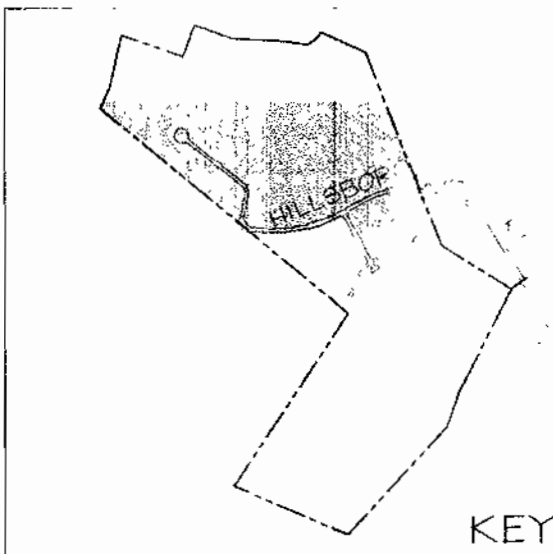
MATCH LINE SEE SHEET 2 OF 9



THE PROPOSED (OR EXISTING) SITE) CONTAINS STATE AND LOCAL ROAD AND UTILITY EASEMENTS AND IS SUBJECT TO THE TERMS OF ANY APPLICABLE EASEMENTS AND LOCAL ORDINANCES.

TO BE CONSTRUCTED UNDER CAPITAL PROJECT #C-0237

PLAN
SCALE: 1"=50'

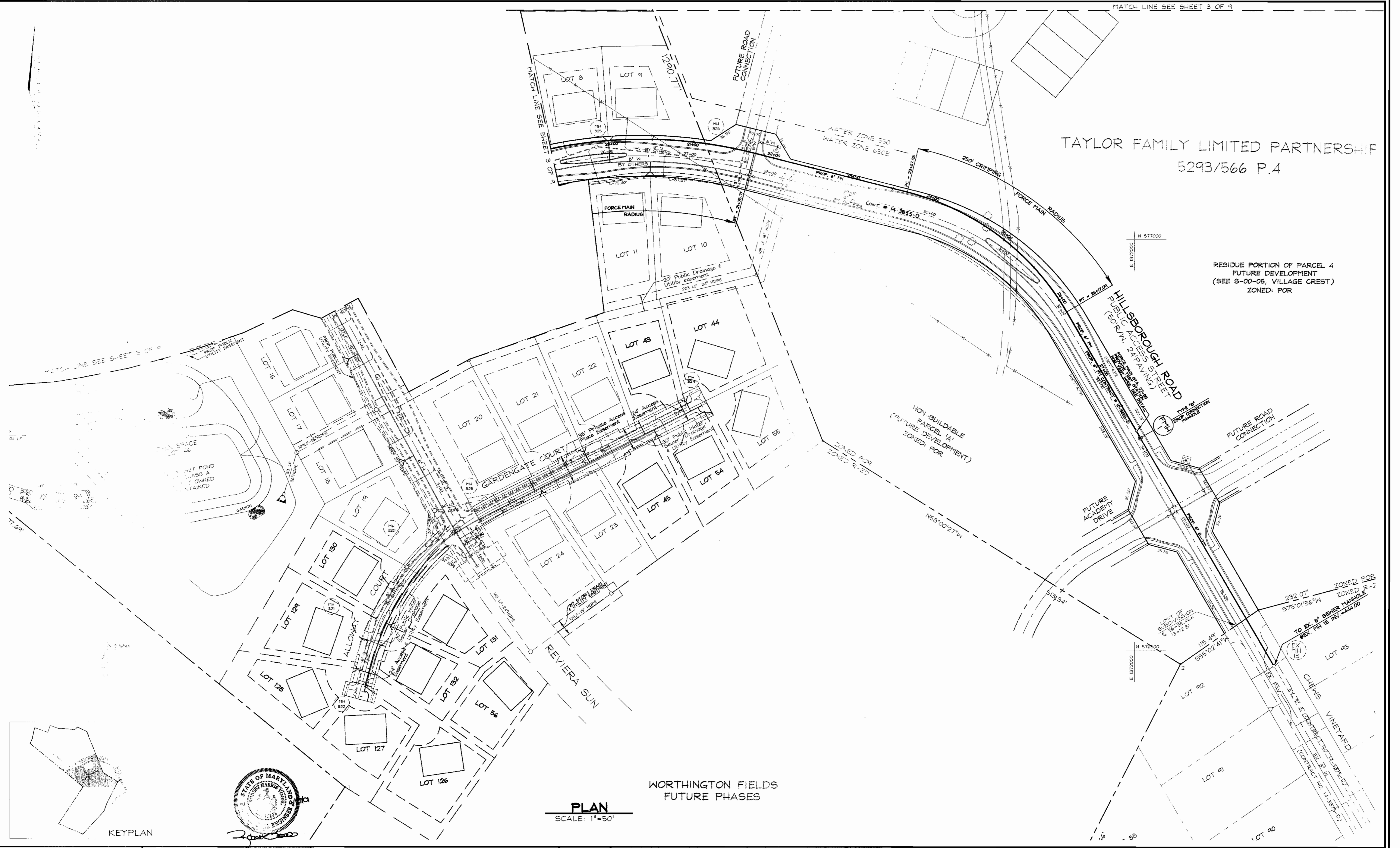


DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND		FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia		4" WATER MAIN 6" FORCE MAIN PLAN		WORTHINGTON FIELDS PHASE I LOTS 1-46 AND NON-BUILDABLE PARCELS 'A' AND 'B' CONTRACT NO. 14-3853-D		SCALE AS SHOWN SHEET 3 OF 9	
DES: RJ		CHK: RHV		DATE: APRIL 2001	BY: NO.	COUNTY COMMENTS	02/13/01	600 SCALE MAP NO. 25	BLOCK NO. 14	TAX MAP #25, GRID 20 # 31	PARCEL 98 & P/O PARCEL 4 HOWARD COUNTY, MARYLAND

M:\PROJECTS\2010\11\ENR\09\PM\1\1\604653.dwg Wed Apr 25 11:18:47 2001 E4

TAYLOR FAMILY LIMITED PARTNERSHIP
5293/566 P.4

RESIDUE PORTION OF PARCEL 4
FUTURE DEVELOPMENT
(SEE S-00-05, VILLAGE CREST)
ZONED: POR



WORTHINGTON FIELDS
FUTURE PHASES

PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert Benjamin
CHIEF, BUREAU OF PUBLIC WORKS
4-26-01

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, BUREAU OF PLANNING & ZONING
4/26/01



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: RHV			
RJ	1	COUNTY COMMENTS	02/13/01
BY	NO.	REVISION	DATE

**4" WATER MAIN
6" SEWER MAIN
PLAN**

600' SCALE MAP NO. 25 BLOCK NO. 14

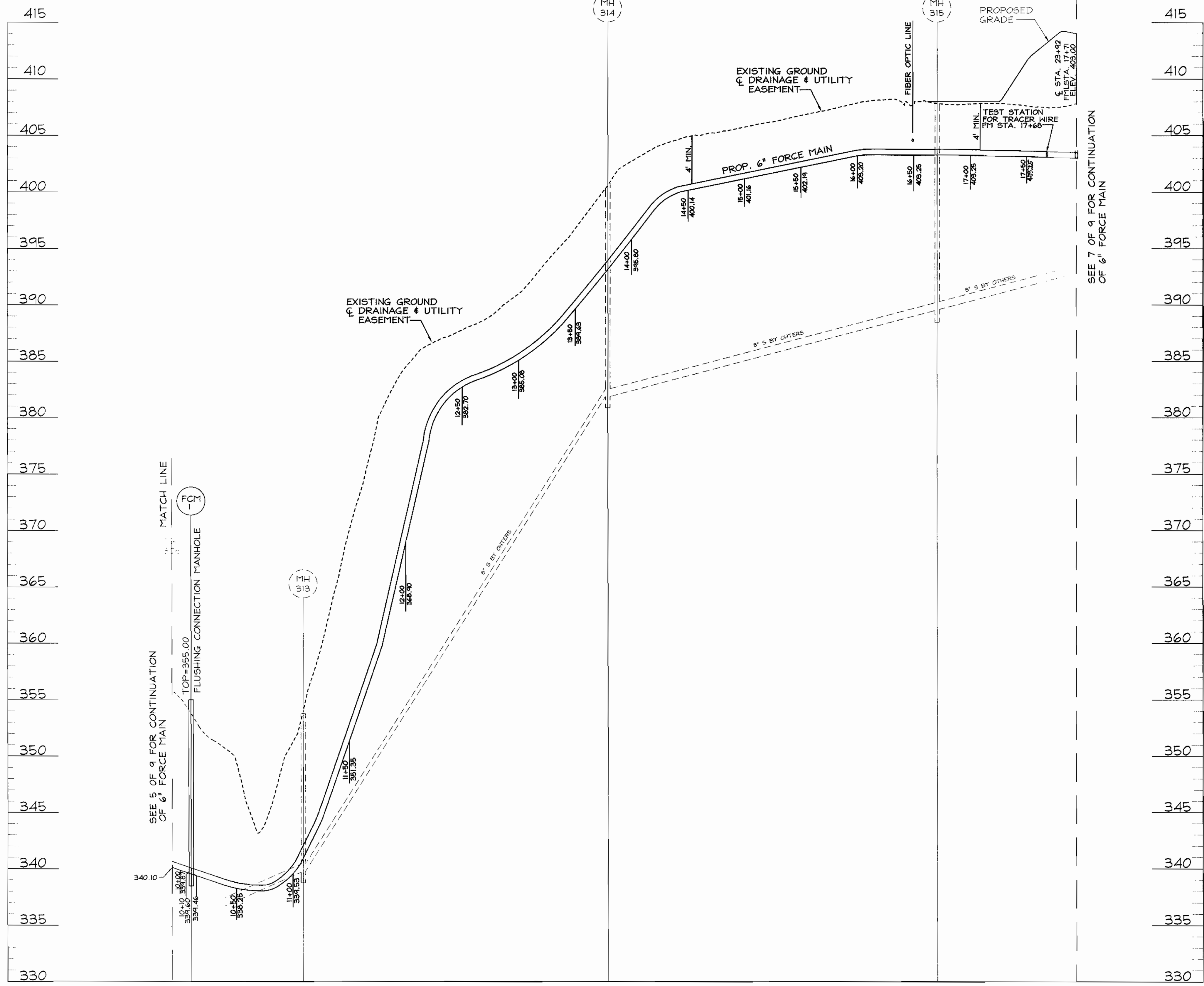
WORTHINGTON FIELDS
PHASE 1 LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT

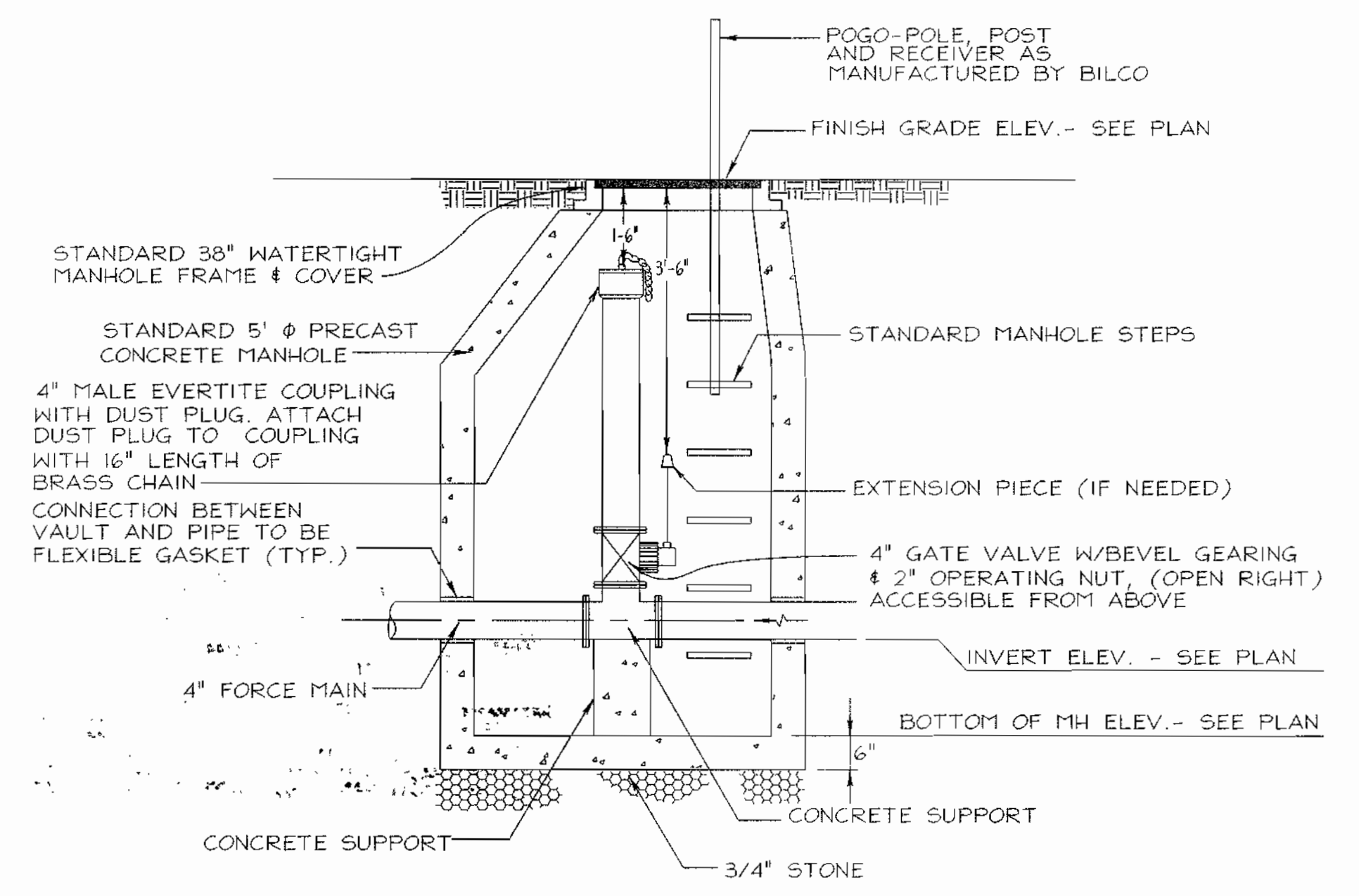
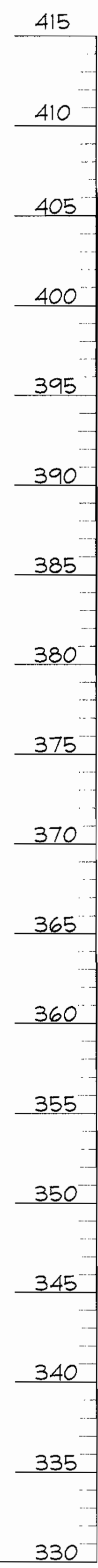
PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

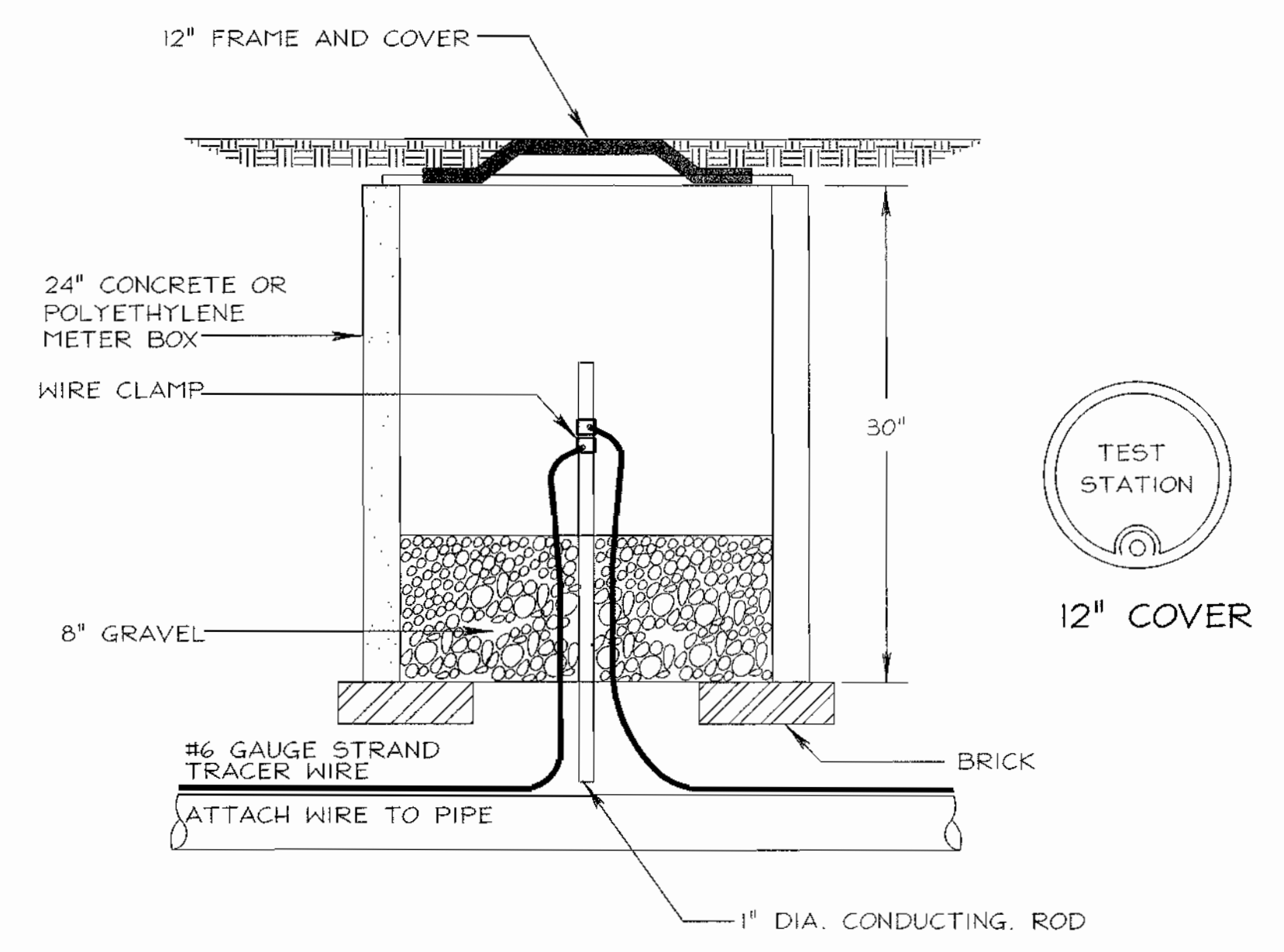
SHEET
4 OF 9



6" FORCE MAIN PROFILE
SCALE: 1" = 50' HORZ.



**SECTION
FLUSHING CONNECTION MANHOLE**

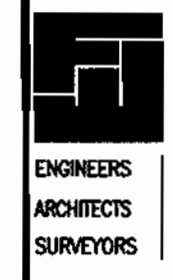


TRASH RACK DETAIL & TRACER WIRE



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: JCO			
DATE: APRIL 2001	RJ	1	COUNTY COMMENTS
	BY	NO.	REVISION
			DATE

6" FORCE MAIN PROFILES

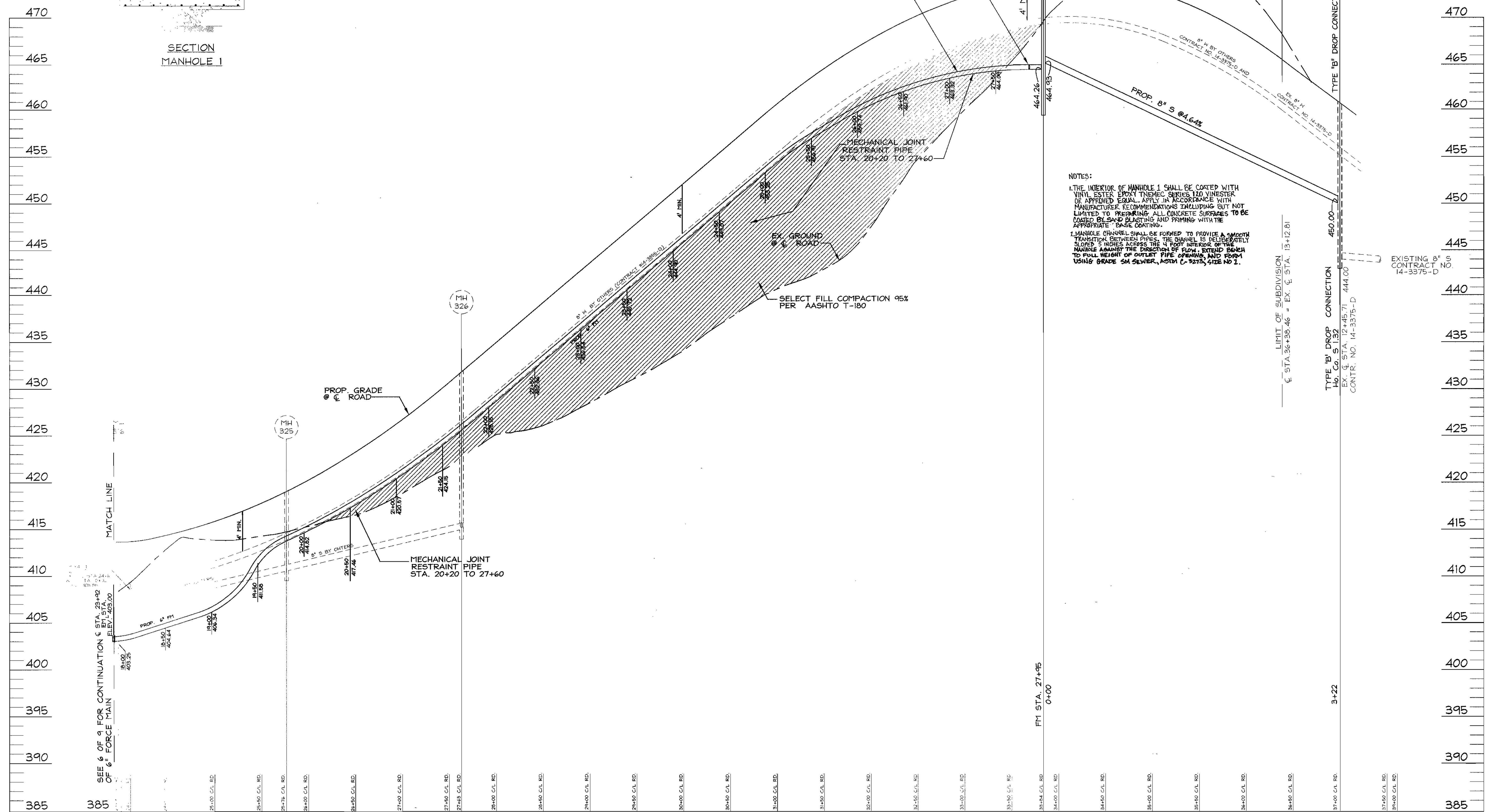
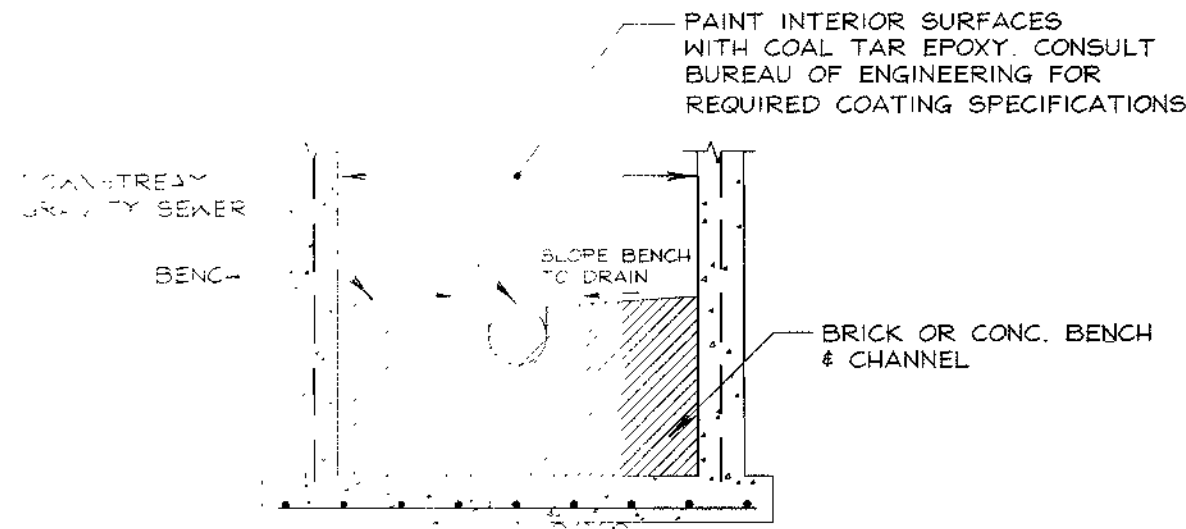
600' SCALE MAP NO. 25 BLOCK NO. 14

WORTHINGTON FIELDS
PHASE 1 LOTS 1-42 AND 145-148
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT

PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 6 OF 9



NOTES:
 1. THE INTERIOR OF MANHOLE 1 SHALL BE COATED WITH VINYL ESTER EPOXY (TMEC, SERIES T10 VINESTER OR APPROVED EQUAL). APPLY IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS INCLUDING BUT NOT LIMITED TO PREPARING ALL CONCRETE SURFACES TO BE COATED BY SAND BLASTING AND PRIMING WITH THE APPROPRIATE BASE COATING.
 2. MANHOLE CHANNEL SHALL BE FORMED TO PROVIDE A SMOOTH TRANSITION BETWEEN PIPES. THE CHANNEL IS DELIBERATELY SLOPED 5 INCHES ACROSS THE 14 FOOT INTERIOR OF THE MANHOLE AGAINST THE DIRECTION OF FLOW. EXTEND BENCH TO FULL HEIGHT OF OUTLET PIPE OPENING, AND FORM USING GRADE 5M SLEWER, ASTM C-5275, SIZE NO. 1.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
 7125 Riverwood Drive Columbia, Maryland 21046-2354
 Phone: 410-290-9550 Fax: 410-720-6226
 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: RHV			
DATE: APRIL 2001			

RJ	1	COUNTY COMMENTS	02/13/01
BY	NO.	REVISION	DATE

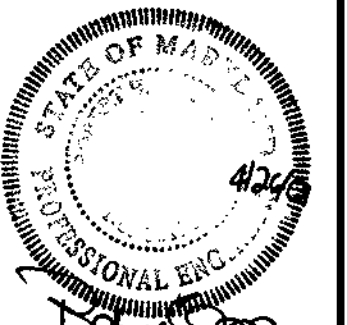
6" FORCE MAIN PROFILES

WORTHINGTON FIELDS
 PHASE 1 LOTS 1-46
 AND NON-BUILDABLE PARCELS 'A' AND 'B'
 CONTRACT NO. 14-3853-D

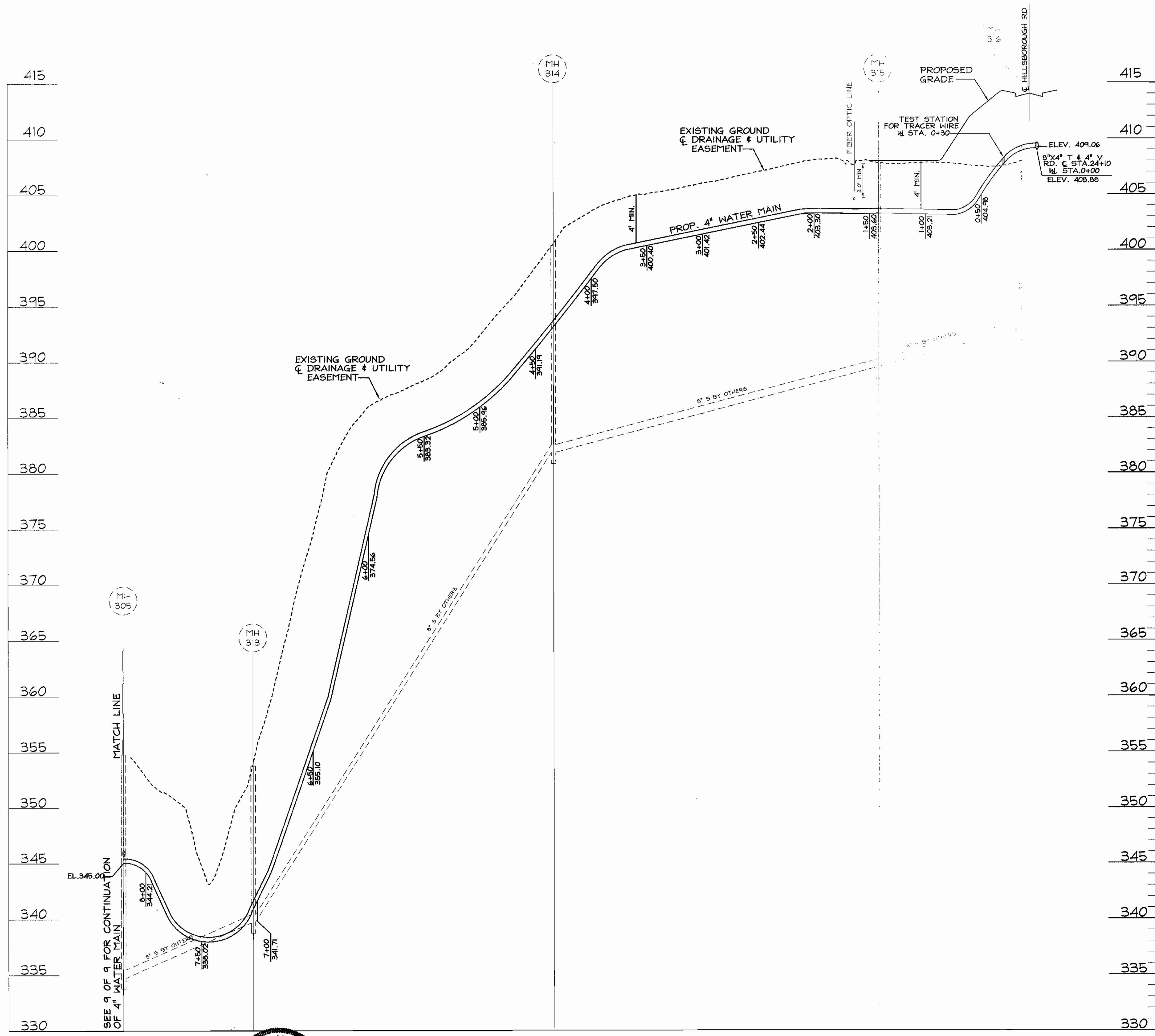
TAX MAP #25, GRID 20 & #31
 2ND ELECTION DISTRICT

PARCEL #8 & P/O PARCEL 4
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 7 OF 9



K:\PROJECTS\2010\011\ENGR\DWG\FMAIN\604655.dwg Wed Apr 25 11:17:02 2001 E4



4" WATER MAIN PROFILE

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



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John Benner
CHIEF, BUREAU

4-26-01

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature]
DEVELOPMENT ENGINEERING DIVISION

DATE: 5/6/01

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: JCO			
DATE: JAN. 2001	RJ	COUNTY COMMENTS	02/13/01
	BY NO.	REVISION	DATE

4" WATER MAIN PROFILES

600' SCALE MAP NO. 25 BLOCK NO. 14

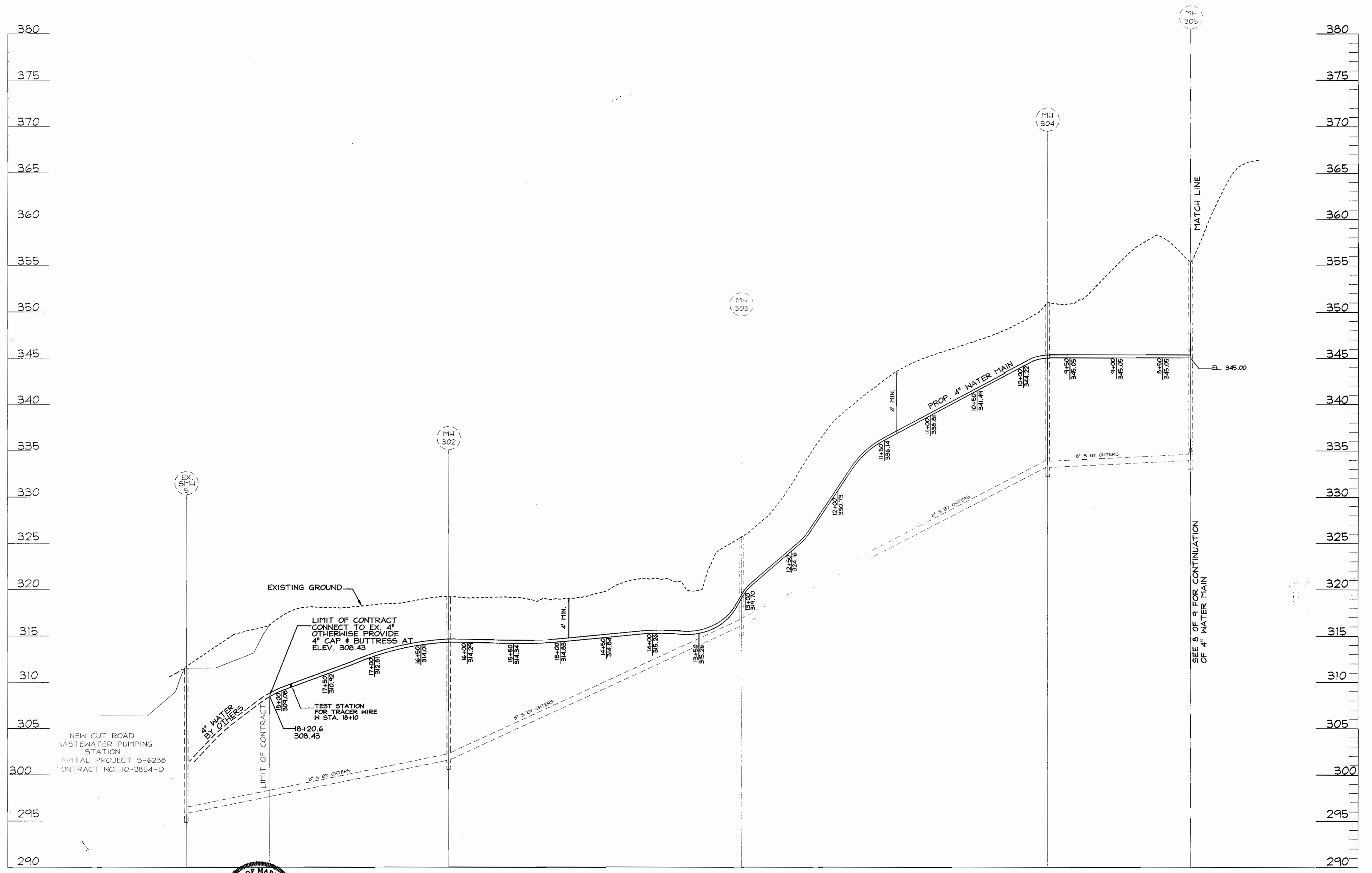
WORTHINGTON FIELDS
PHASE 1 LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT

PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 8 OF 9




4" WATER MAIN PROFILE
 SCALE: 1" = 50' HORZ.
 1" = 5' VERT.



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND		FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia		DES: RJ DRN: RJ CHK: JCO DATE: APRIL 2001		4" WATER MAIN PROFILES		WORTHINGTON FIELDS PHASE 1 LOTS 1-46 AND NON-BUILDABLE PARCELS 'A' AND 'B' CONTRACT NO. 14-3853-D		SCALE AS SHOWN
NEW CUT ROAD WASTEWATER PUMPING STATION CAPITAL PROJECT S-6238 CONTRACT NO. 10-3854-D		LIMIT OF CONTRACT LIMIT OF CONTRACT LIMIT OF CONTRACT LIMIT OF CONTRACT		TEST STATION FOR TRACER WIRE IN STA. 18+10		COUNTY COMMENTS REVISION DATE		600' SCALE MAP NO. 25 BLOCK NO. 14		TAX MAP #25, GRID 20 # #31 2ND ELECTION DISTRICT		SHEET 9 OF 9

H:\PROJECTS\201901\ENGR\dwg\FW.MD\14-3853-D.dwg Tue Apr 17 16:22:08 2001 E4

GENERAL NOTES

- PART I**
- 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 DATA.
 - 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. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
 - 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 (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV 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 NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:

C. & P. TELEPHONE	637-9585
A. T. T.	865-3900
STATE HIGHWAY ADMINISTRATION	531-5533
B.G.H.E. CO. CONTRACTOR SERVICES	950-4620
B.G.H.E. CO. UNDER-GROUND DAMAGE CONTROL	787-9068
MISS. UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES	315-4900
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 33-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAIN OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPA REQUIREMENTS PER SECTION 814(c) OF THE HOWARD COUNTY CODE.

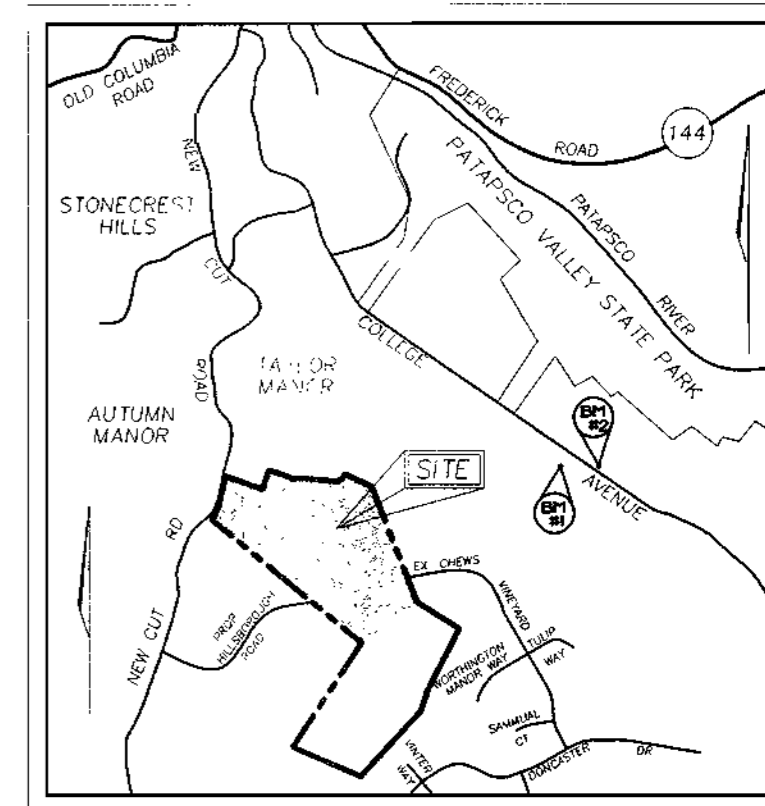
PART II - WATER

- 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 RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND 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 WATER HOUSE CONNECTIONS SHALL BE FOR INVERT METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

PART III - SEWER

- FORCE MAINS SHALL BE DUCTILE IRON MINIMUM CLASS 52 WITH DOUBLE CEMENT LINING.
- 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 DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED; SET TOP OF FRAME 15" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

WORTHINGTON FIELDS PHASE 1 LOTS 1-46 (4" WATER MAIN, 6" FORCE MAIN) HOWARD COUNTY, MARYLAND CONTRACT NO. #14-3853-D

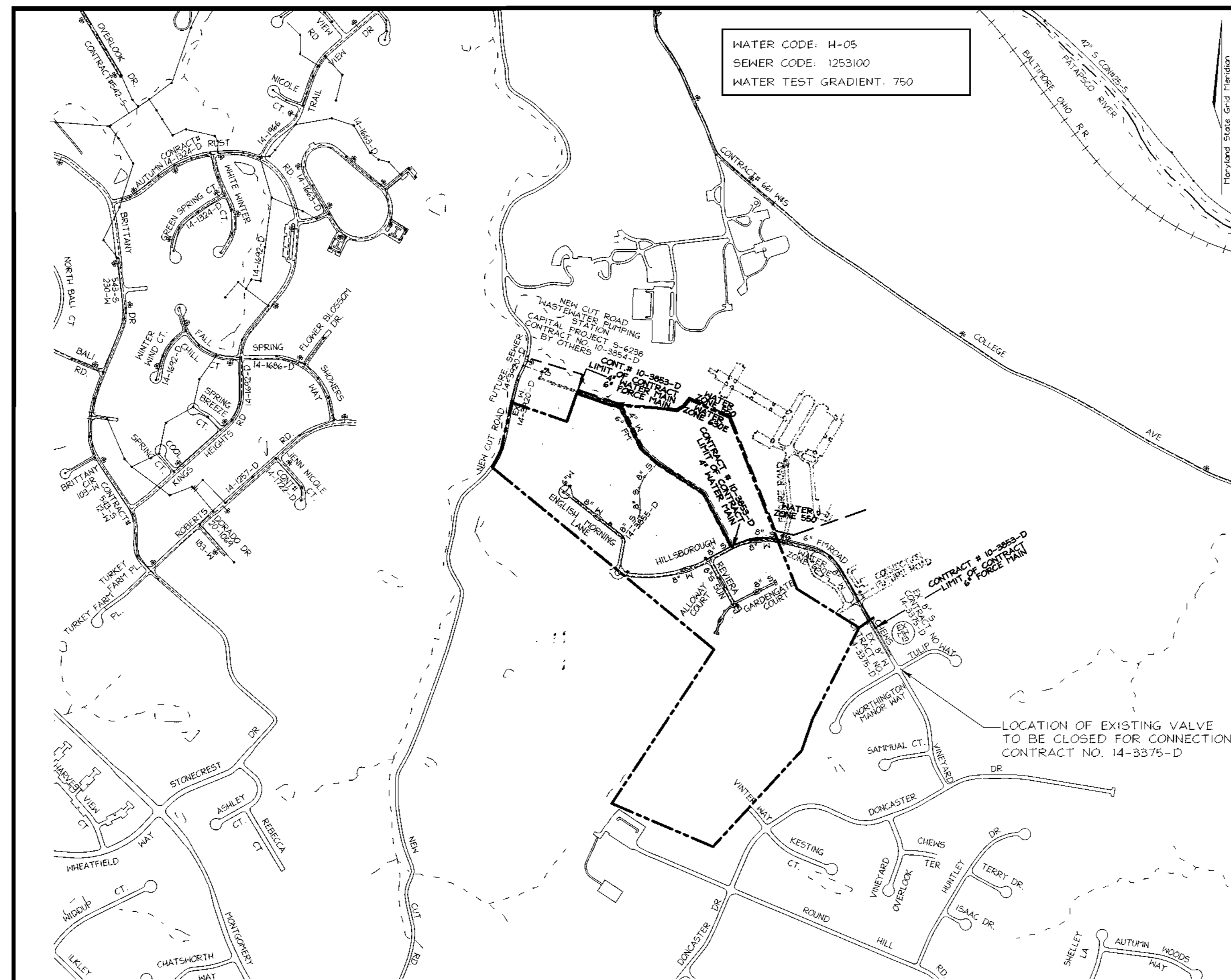


VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS

BENCHMARK NO. 1 COUNTY CONTROL #3044005R
3/4" REBAR 0.6' BELOW SURFACE
N. 578233.92, E. 137342.33
ELEV. = 374.389

BENCHMARK NO. 2 COUNTY CONTROL #3044004R
3/4" REBAR 0.6' BELOW SURFACE
N. 578128.03, E. 137460.71
ELEV. = 362.575



LOCATION PLAN
SCALE: 1"=600'

QUANTITIES				
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
6" FORCEMAIN	3167 LF			
8"x4" REDUCER	1 EA.			
4" CAP & BUTTRESS	1 EA.			
4" WATER	1808 LF			
8"x4" TEE	1 EA.			
4" VALVE	1 EA.			
TEST STATION	5 EA.			
FLUSHING CONNECTION MANHOLE	1 EA.			
6" FORCEMAIN CONTROL VALVE	1 EA.			
DROP MANHOLE	1 EA.			
5' PRECAST MANHOLE	1 EA.			
SEWER AIR VALVE	1 EA.			

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH FINAL PLAN F-01-60.

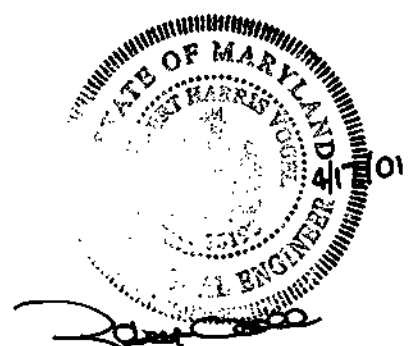
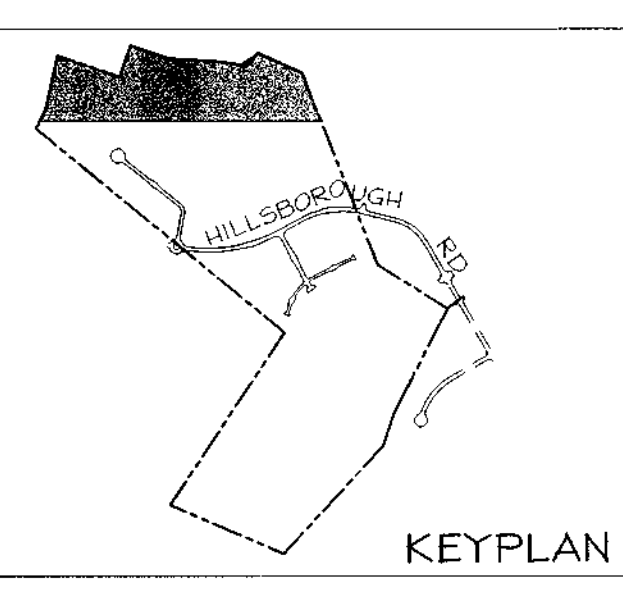
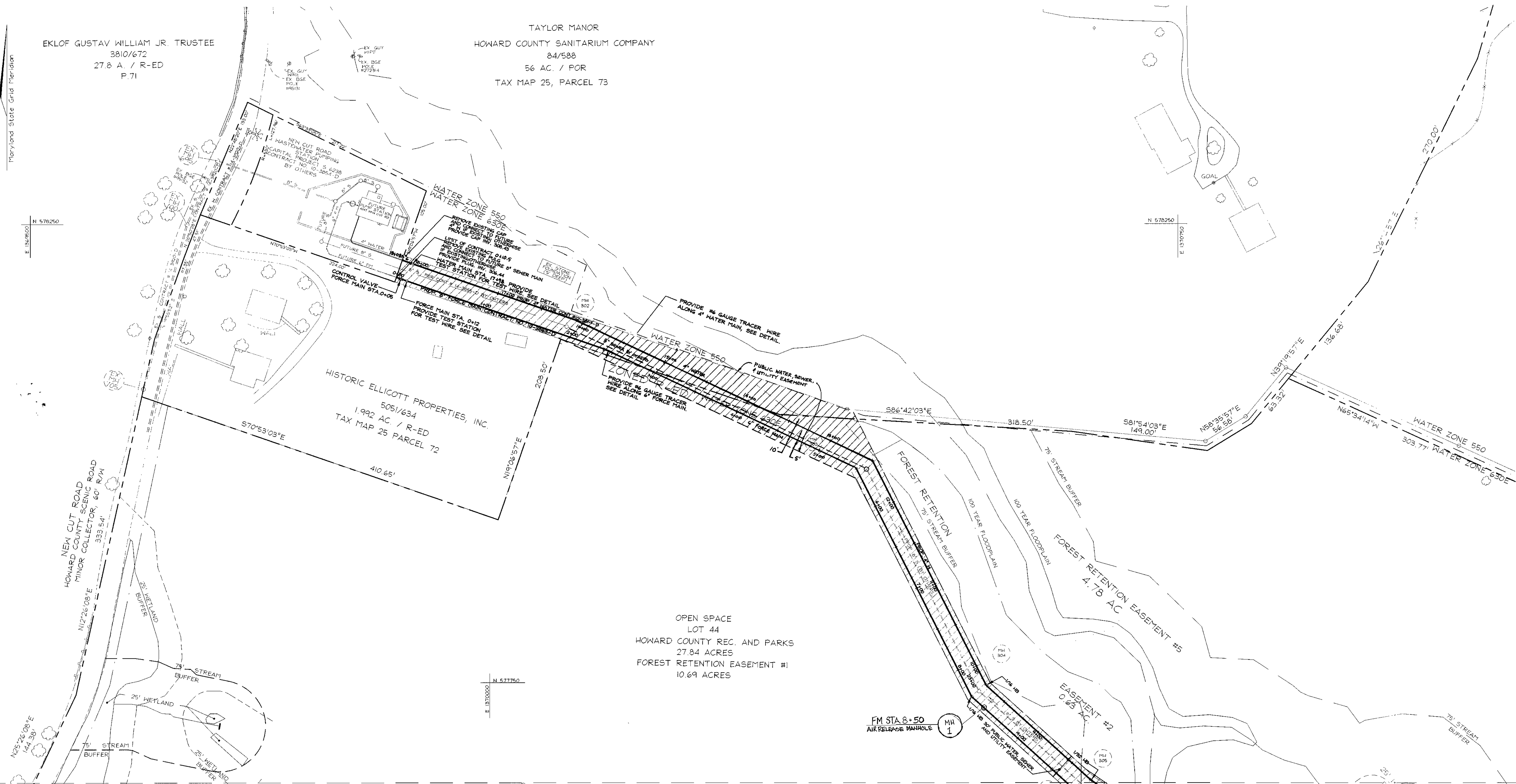
THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

John Robertson 5/6/01
SOIL CONSERVATION DISTRICT DATE

Jim Meyer 5/8/01
SOIL CONSERVATION DISTRICT DATE



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert B. ...</i> 4-26-01 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>...</i> 5/6/01 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia	DES: RJ DRN: RJ CHK: JCO DATE: APRIL 2001	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>BY</td> <td>NO.</td> <td>REVISION</td> <td>DATE</td> </tr> <tr> <td>JT</td> <td>3</td> <td>REVISE QUANTITIES SCHEDULE</td> <td>12/17/01</td> </tr> <tr> <td>RJ</td> <td>2</td> <td>COUNTY COMMENTS</td> <td>03/26/01</td> </tr> <tr> <td>RJ</td> <td>1</td> <td>COUNTY COMMENTS</td> <td>02/13/01</td> </tr> </table>	BY	NO.	REVISION	DATE	JT	3	REVISE QUANTITIES SCHEDULE	12/17/01	RJ	2	COUNTY COMMENTS	03/26/01	RJ	1	COUNTY COMMENTS	02/13/01	<p style="text-align: center;">4" WATER MAIN 6" FORCE MAIN TITLE SHEET</p> <p style="text-align: center;">600' SCALE MAP NO. 25 BLOCK NO. 14</p>	<p style="text-align: center;">WORTHINGTON FIELDS PHASE 1 LOTS 1-46 AND NON-BUILDABLE PARCELS 'A' AND 'B' CONTRACT NO. 14-3853-D</p> <p style="text-align: center;">TAX MAP #25, GRID 20 # #31 2ND ELECTION DISTRICT</p> <p style="text-align: center;">PARCEL 98 & P/O PARCEL 4 HOWARD COUNTY, MARYLAND</p>	SCALE AS SHOWN SHEET 1 OF 9
BY	NO.	REVISION	DATE																				
JT	3	REVISE QUANTITIES SCHEDULE	12/17/01																				
RJ	2	COUNTY COMMENTS	03/26/01																				
RJ	1	COUNTY COMMENTS	02/13/01																				



MATCH LINE SEE SHEET 3 OF 9

PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert Berman
CHIEF, BUREAU OF UTILITIES
4-26-01

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ				
DRN: RJ				
CHK: JCO	JT	2	REVISE UTILITIES AND EASEMENT	12/17/01
	RJ	1	COUNTY COMMENTS	02/13/01
DATE: APRIL 2001	BY NO.		REVISION	DATE

**4" WATER MAIN
6" FORCE MAIN
PLAN**

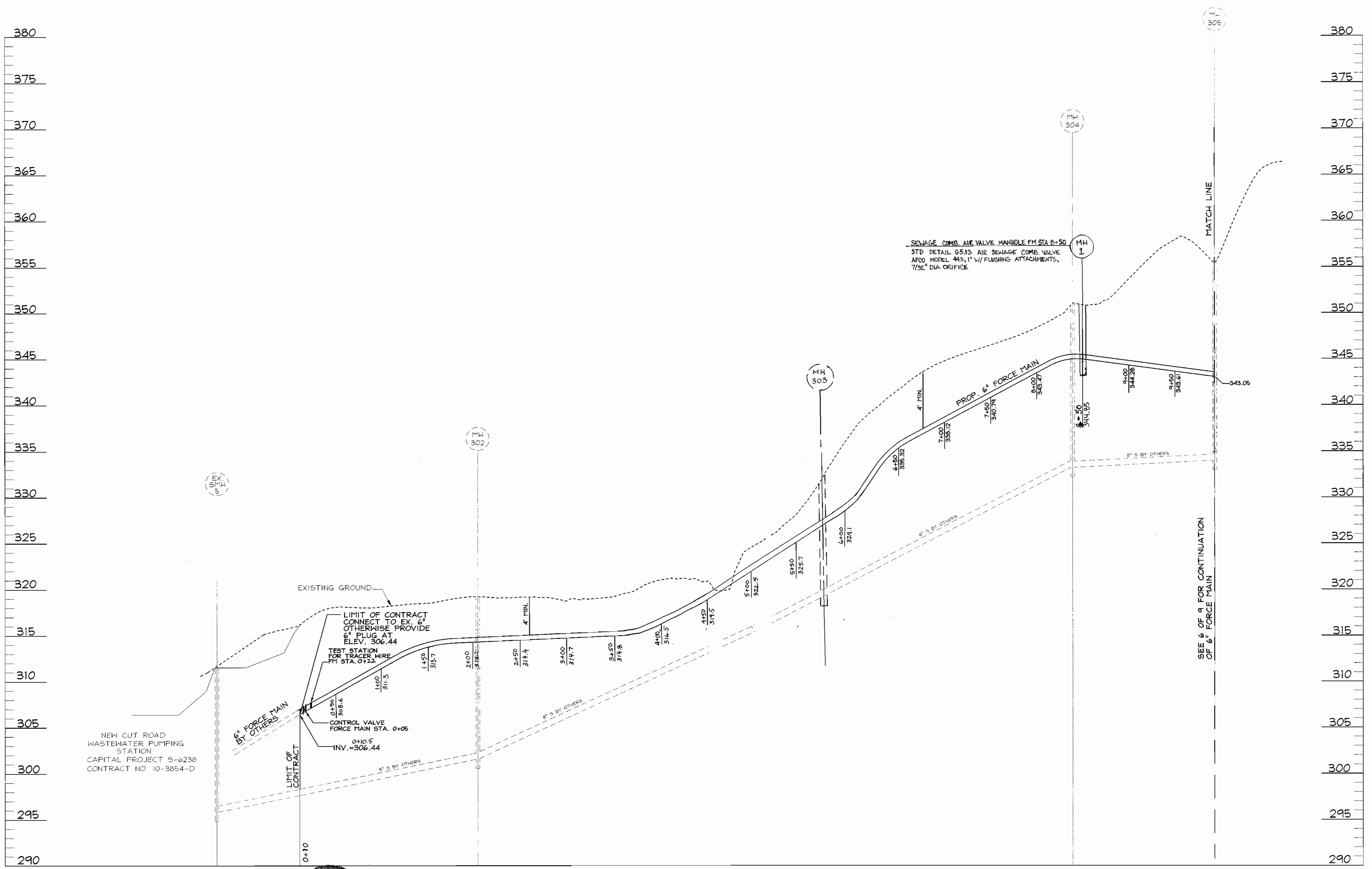
600' SCALE MAP NO. 25 BLOCK NO. 14

WORTHINGTON FIELDS
PHASE 1 LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT

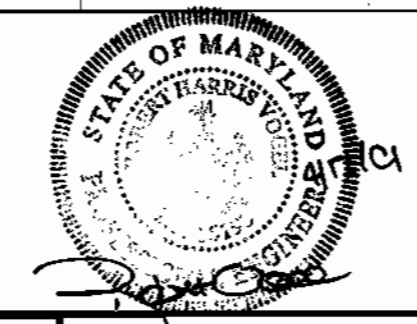
PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 9



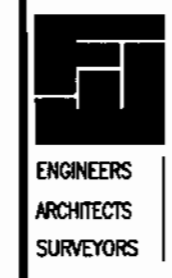
6" FORCE MAIN PROFILE

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



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ				
DRN: RJ				
CHK: JCO	JT	2	REVISE PROFILE	12/17/01
	RJ	1	COUNTY COMMENTS	02/13/01
DATE: APRIL 2001	BY	NO.	REVISION	DATE

6" FORCE MAIN PROFILES

600' SCALE MAP NO. 25 BLOCK NO. 14

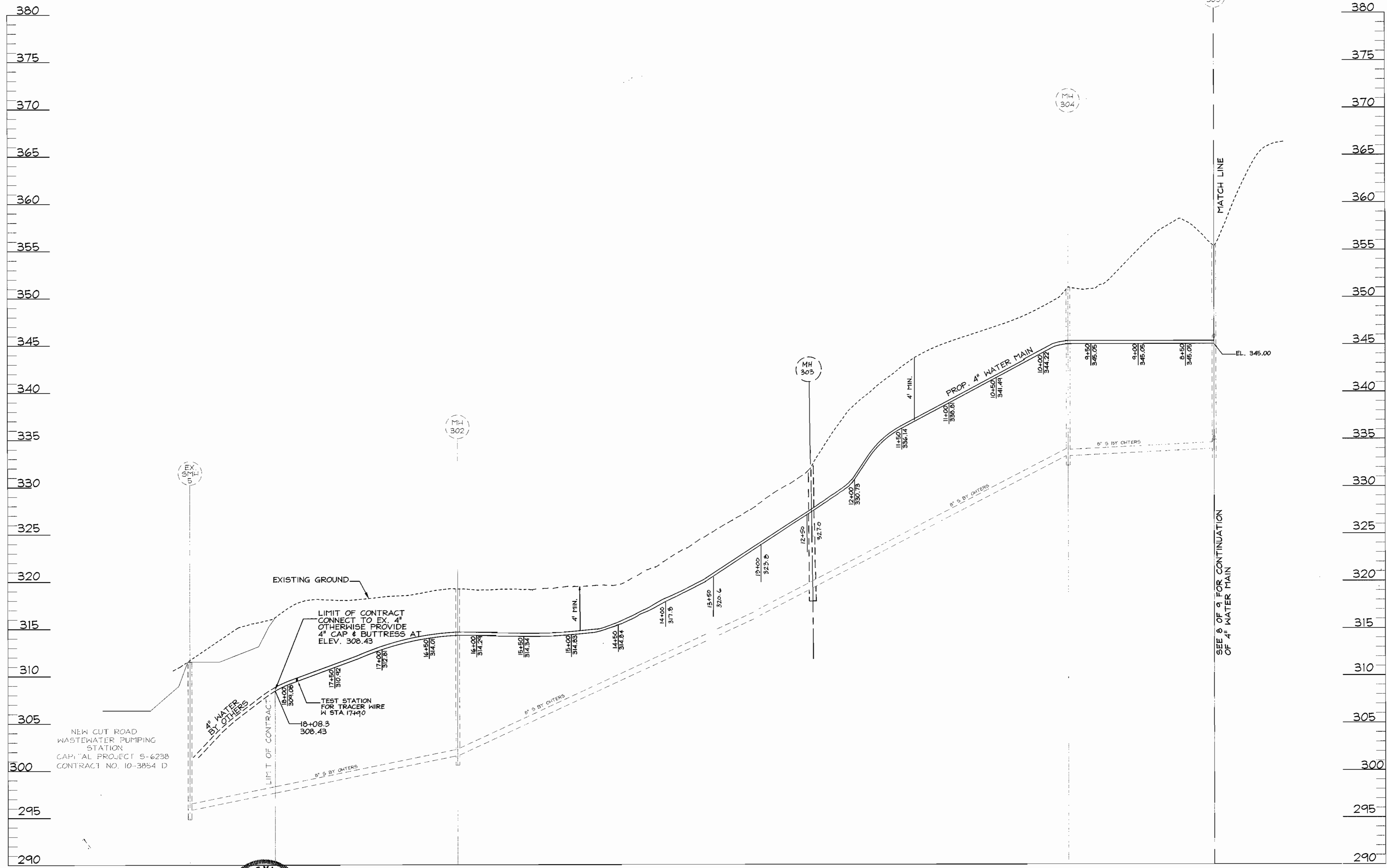
WORTHINGTON FIELDS

PHASE 1 LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT

PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 5 OF 9



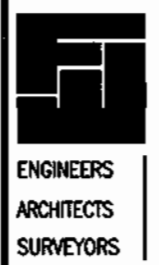
4" WATER MAIN PROFILE

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



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: JCO	JT	2	REVISE PROFILE
DATE: APRIL 2001	RJ	1	COUNTY COMMENTS.
	BY	NO.	REVISION
			DATE

4" WATER MAIN PROFILES

600' SCALE MAP NO. 25 BLOCK NO. 14

WORTHINGTON FIELDS

PHASE I LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D


TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT

PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 9 OF 9

GENERAL NOTES

PART I

- 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 DATA.
- 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. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- 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 (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV 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 NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:

C. & P. TELEPHONE	937-8565
A.T. & T.	265-3003
STATE HIGHWAY ADMINISTRATION	531-5533
B.G.E. CO. CONTRACTOR SERVICES	850-4620
B.G.E. CO. UNDER GROUND DAMAGE CONTROL	787-9068
MISSES UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	795-1340
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES	313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OR COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAIN OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

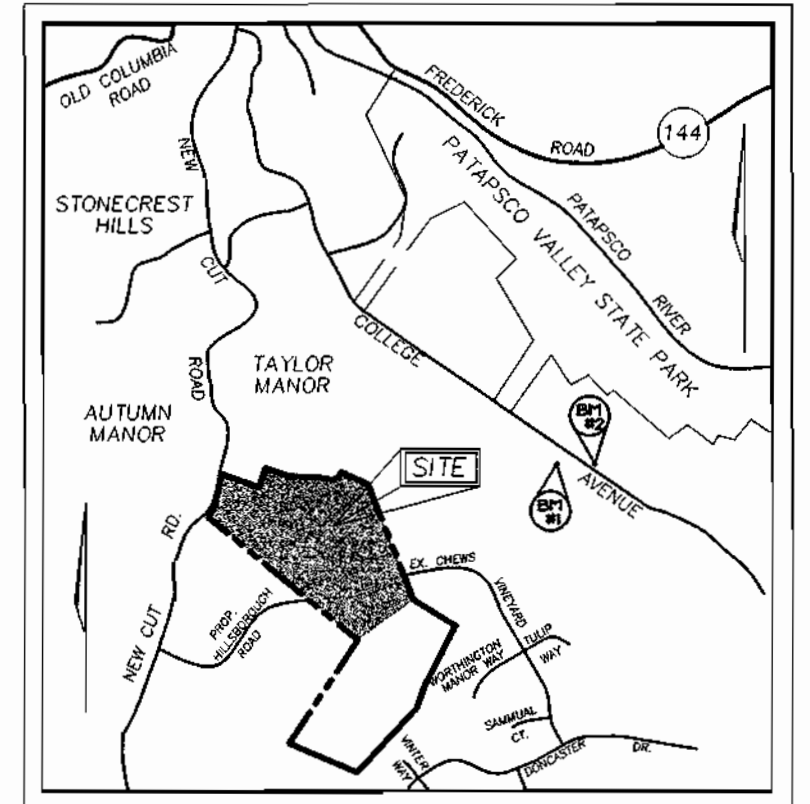
PART II - WATER

- 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 RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND 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 WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

PART III - SEWER

- FORCE MAINS SHALL BE DUCTILE IRON MINIMUM CLASS 52 WITH DOUBLE CEMENT LINING.
- 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 DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65-52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 18" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

WORTHINGTON FIELDS PHASE 1 LOTS 1-46 (4" WATER MAIN, 6" FORCE MAIN) HOWARD COUNTY, MARYLAND CONTRACT NO. #14-3853-D

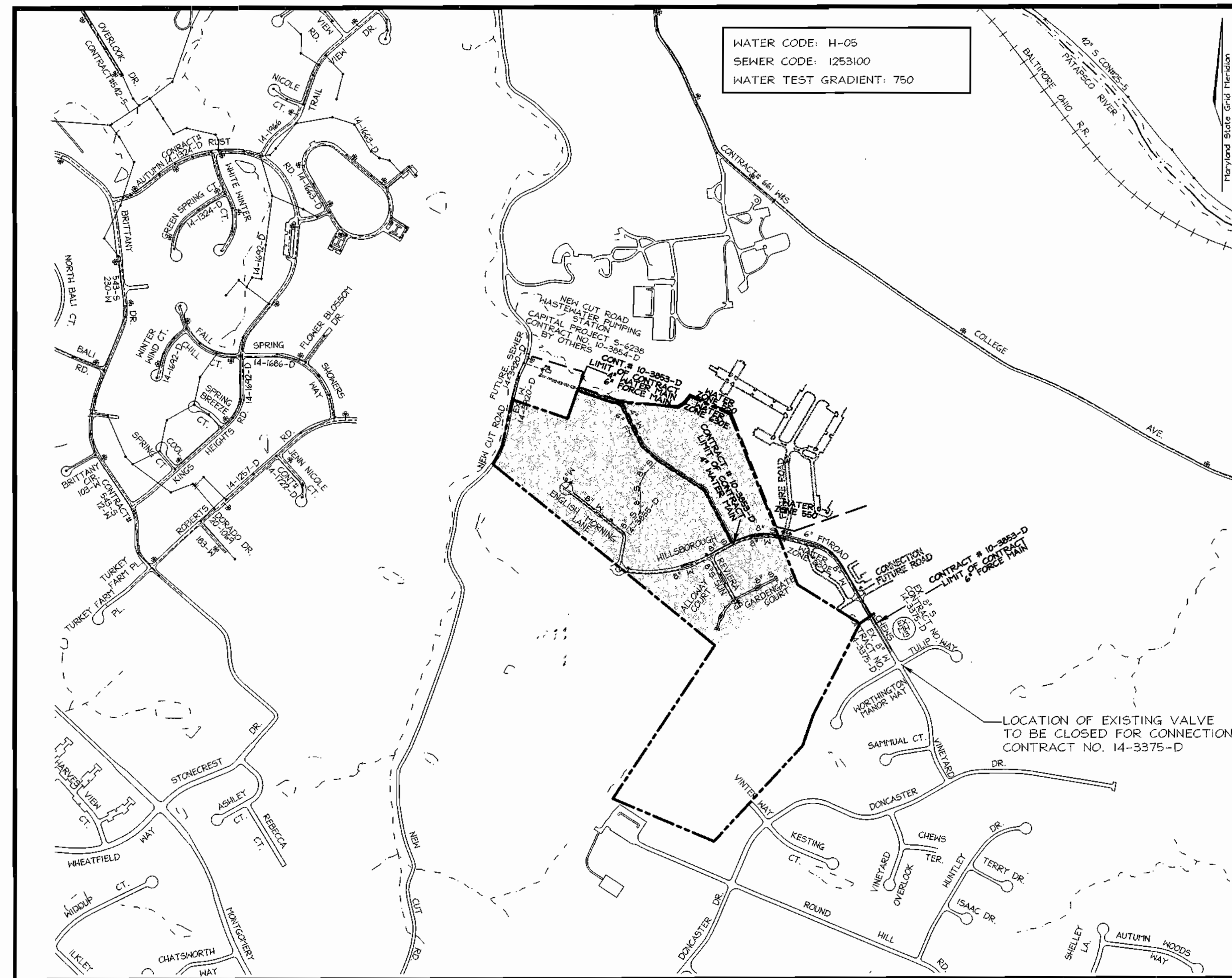


VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS

BENCHMARK NO. 1 COUNTY CONTROL #3044005R
3/4" REBAR 0.6' BELOW SURFACE
N. 578233.92, E. 1373142.33
ELEV. = 374.389

BENCHMARK NO. 2 COUNTY CONTROL #3044004R
3/4" REBAR 0.6' BELOW SURFACE
N. 578128.03, E. 1373460.71
ELEV. = 362.575



LOCATION PLAN
SCALE: 1"=600'

QUANTITIES				
NAME OF UTILITY CONTRACTOR :				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
6" FORCEMAIN	3107 LF	3107	DIP	GRIFFIN / BEL AIR RD. SUPPLY
8"x4" REDUCER	1 EA.	1EA.		U.S. PIPE / " " " "
4" CAP & BUTTRESS	1 EA.	1EA.		" " / " " " "
4" WATER	1806 LF	1806	DIP	GRIFFIN / " " " "
8"x4" TEE	1 EA.	1EA.		U.S. PIPE / " " " "
4" VALVE	1 EA.	1EA.	R.S.	MUELLER / " " " "
TEST STATION	5 EA.	5EA.	CONCRETE	DAVIS / " " " "
FLUSHING CONNECTION MANHOLE	1 EA.	1EA.		" " " "
6" FORCEMAIN CONTROL VALVE	1 EA.	1EA.	R.S.	MUELLER / " " " "
DROP MANHOLE	1 EA.	1EA.	PRECAST	ATLANTIC PRECAST
5' PRECAST MANHOLE	1 EA.	1EA.	PRECAST	" " " "
SEWER AIR VALVE	1 EA.	1EA.		CRISPIN

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH FINAL PLAN F-01-60.

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

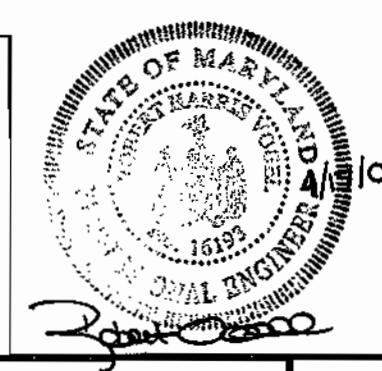
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

John Roberts
SOIL CONSERVATION DISTRICT

5/8/01
DATE

Jim Meyer
SOIL CONSERVATION DISTRICT

5/8/01
DATE



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John Roberts 4-26-01
CHIEF, BUREAU OF UTILITIES

Jim Meyer 5/8/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ	K.C.I. 4	ASBUILT DATA	10/01/02
	JT 3	REVISE QUANTITIES SCHEDULE	12/17/01
CHK: JCO	RJ 2	COUNTY COMMENTS	03/26/01
	RJ 1	COUNTY COMMENTS	02/13/01
DATE: APRIL 2001	BY NO.	REVISION	DATE

**4" WATER MAIN
6" FORCE MAIN
TITLE SHEET**

600' SCALE MAP NO. 25 BLOCK NO. 14

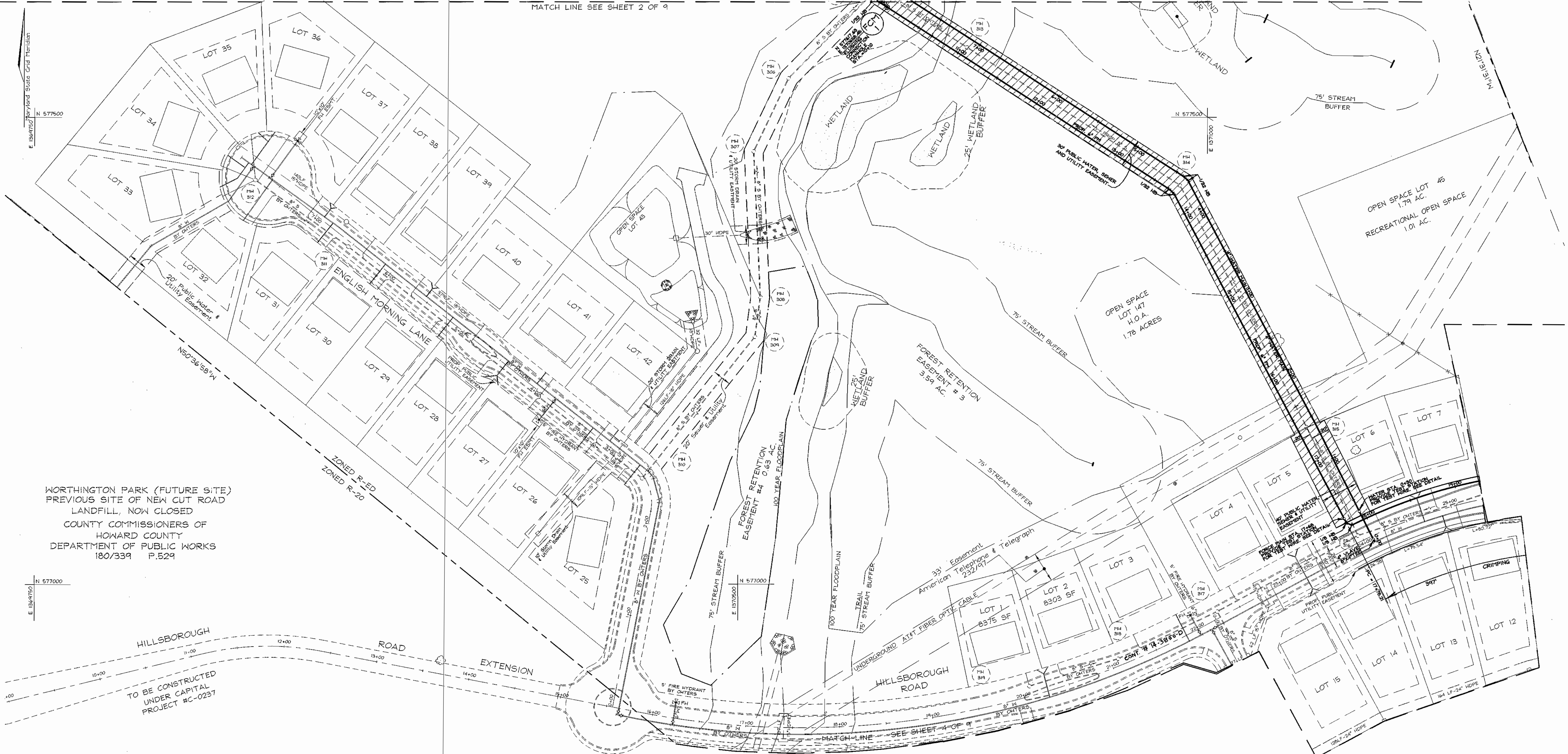
**WORTHINGTON FIELDS
PHASE 1 LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D**

TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT

PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 9

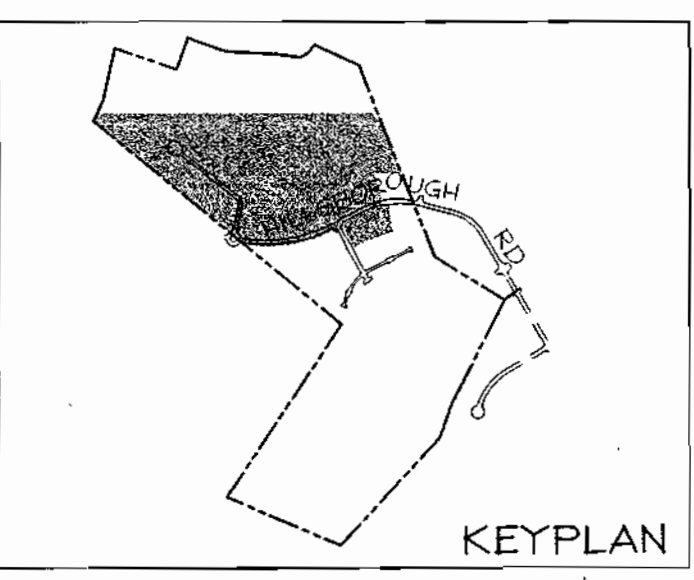
MATCH LINE SEE SHEET 2 OF 9



WORTHINGTON PARK (FUTURE SITE)
PREVIOUS SITE OF NEW CUT ROAD
LANDFILL, NOW CLOSED
COUNTY COMMISSIONERS OF
HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS
180/339 P.529

HILLSBOROUGH ROAD
EXTENSION
TO BE CONSTRUCTED
UNDER CAPITAL
PROJECT #C-0237

PLAN
SCALE: 1"=50'



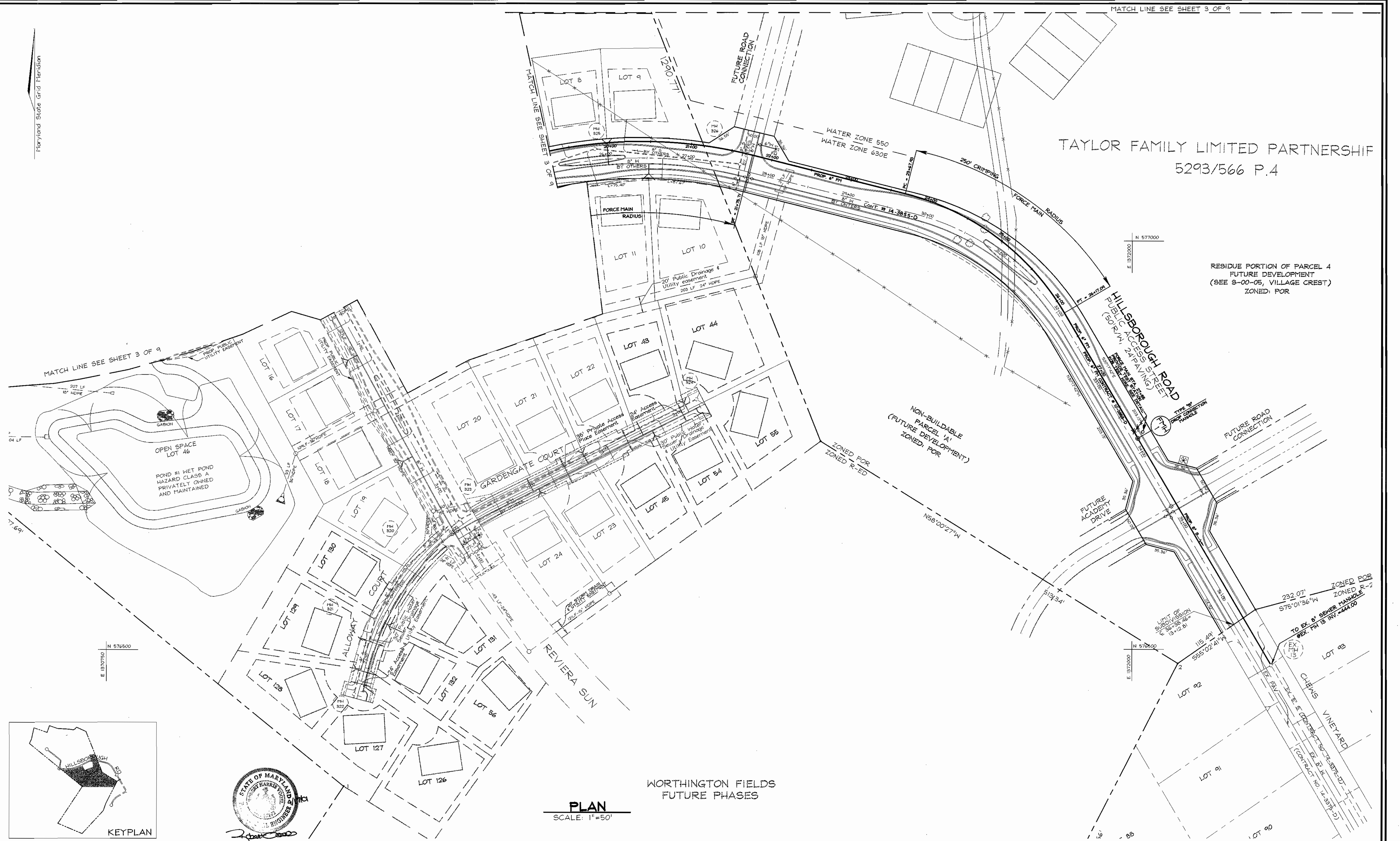
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND		FREDERICK WARD ASSOCIATES, INC. 7125 Riverwood Drive Columbia, Maryland 21046-2354 Phone: 410-290-9550 Fax: 410-720-6226 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia		DES: RJ DRN: RJ CHK: RHV DATE: APRIL 2001		4" WATER MAIN 6" FORCE MAIN PLAN		WORTHINGTON FIELDS PHASE I LOTS 1-46 AND NON-BUILDABLE PARCELS 'A' AND 'B' CONTRACT NO. 14-3853-D		SCALE AS SHOWN SHEET 3 OF 9	
R. J. ... 4-26-01 CHIEF, BUREAU OF UTILITIES		... 5/9/01 CHIEF, DEVELOPMENT ENGINEERING DIVISION		RJ 1 COUNTY COMMENTS REVISION		02/13/01 DATE		600' SCALE MAP NO. 25 BLOCK NO. 14		TAX MAP #25, GRID 20 & #31 2ND ELECTION DISTRICT		PARCEL 98 & P/O PARCEL 4 HOWARD COUNTY, MARYLAND	

K:\PROJECTS\201901\1\ENGR\DWG\FINAL\64653.dwg Mod Apr 25 11:10:47 2001 EA

Maryland State Grid Termination

TAYLOR FAMILY LIMITED PARTNERSHIP
5293/566 P.4

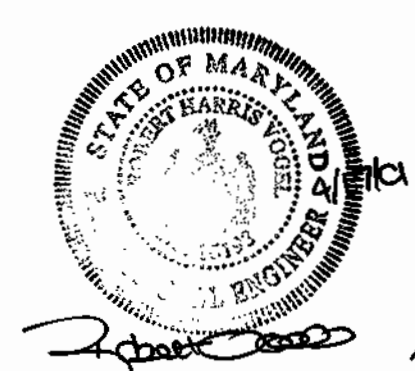
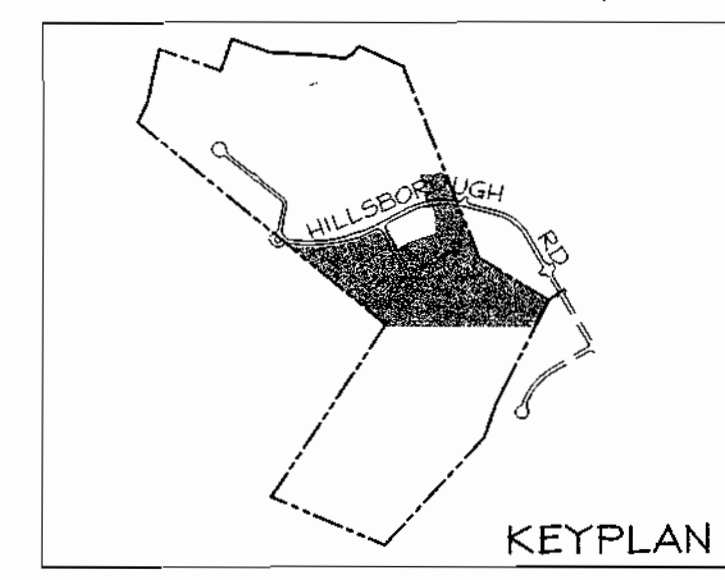
RESIDUE PORTION OF PARCEL 4
FUTURE DEVELOPMENT
(SEE S-00-05, VILLAGE CREST)
ZONED: POR



MATCH LINE SEE SHEET 3 OF 9

PLAN
SCALE: 1"=50'

WORTHINGTON FIELDS
FUTURE PHASES



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES:	RJ				
DRN:	RJ				
CHK:	RHV				
RJ	1	COUNTY COMMENTS	02/13/01		
BY	NO.	REVISION	DATE		

**4" WATER MAIN
6" SEWER MAIN
PLAN**

WORTHINGTON FIELDS
PHASE I LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

SCALE
AS
SHOWN

SHEET
4 OF 9

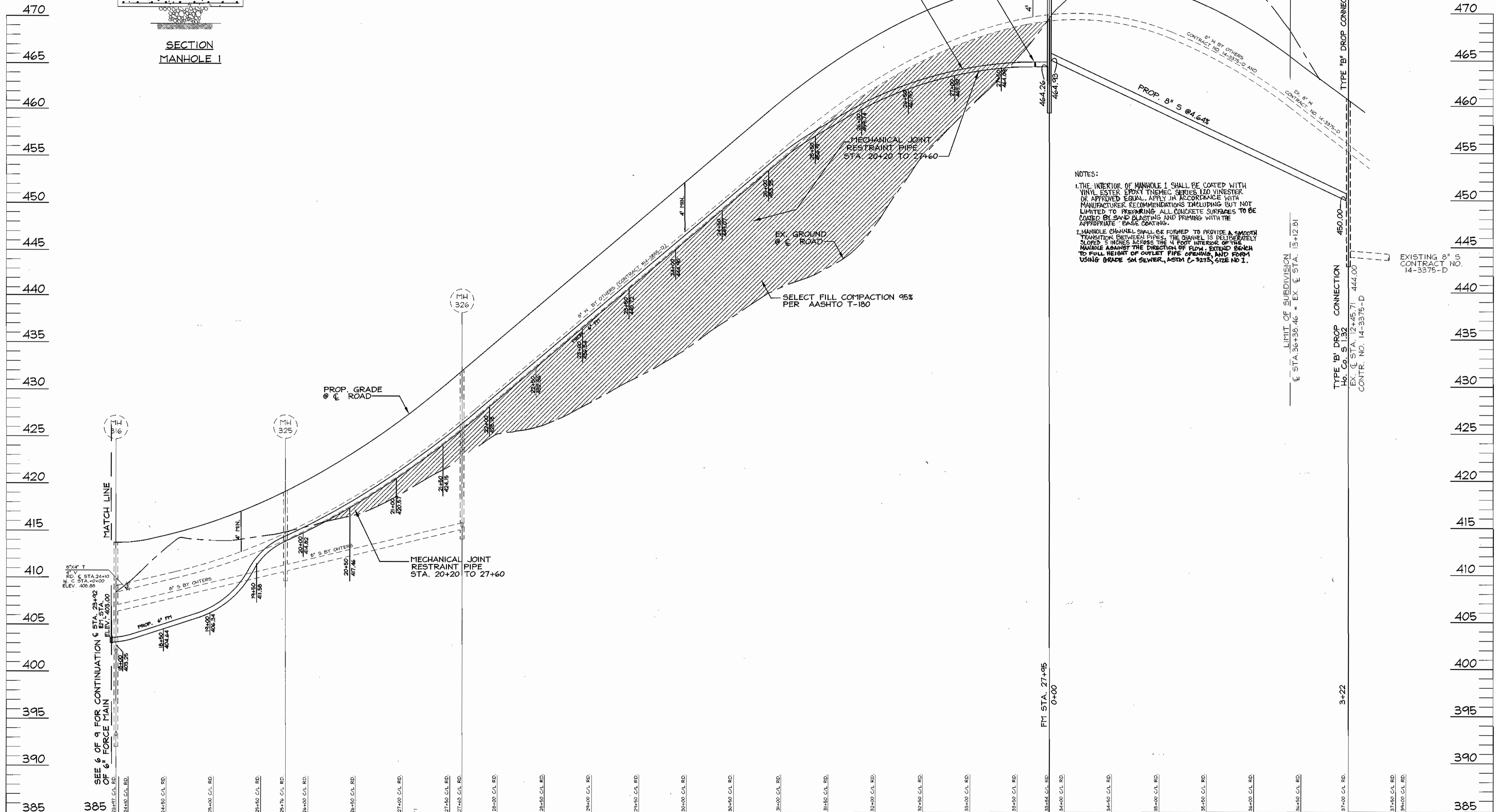
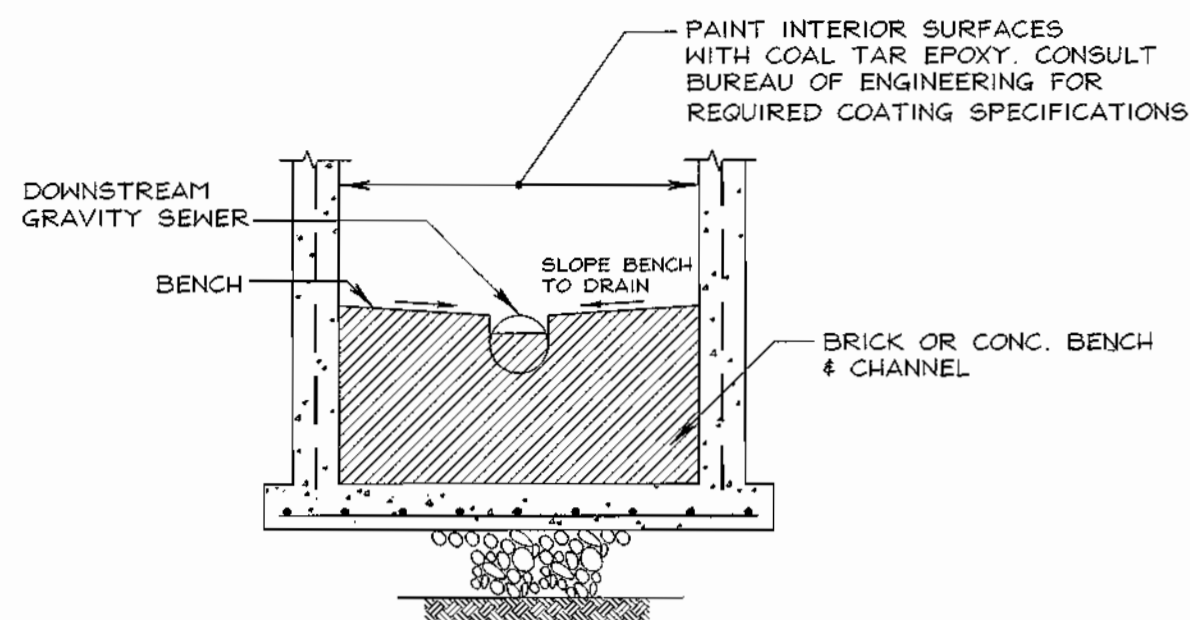
Robert Berman 4-26-01
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 5/1/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

600' SCALE MAP NO. 25 BLOCK NO. 14

TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT

PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND



NOTES:

- THE INTERIOR OF MANHOLE I SHALL BE COATED WITH VINYL ESTER EPOXY TMEEC SERIES 120 VINESTER OR APPROVED EQUAL. APPLY IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS INCLUDING BUT NOT LIMITED TO PREPARING ALL CONCRETE SURFACES TO BE COATED BY SAND BLASTING AND PRIMING WITH THE APPROPRIATE BASE COATING.
- MANHOLE CHANNEL SHALL BE FORMED TO PROVIDE A SMOOTH TRANSITION BETWEEN PIPES. THE CHANNEL IS DELIBERATELY SLOPED 3 INCHES ACROSS THE 4 FOOT INTERIOR OF THE MANHOLE AGAINST THE DIRECTION OF FLOW. EXTEND BENCH TO FULL HEIGHT OF OUTLET PIPE OPENING, AND FORM USING GRADE 5M SEWER, ASTM C-3215, SIZE NO. 1.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ			
DRN: RJ			
CHK: RHV			
DATE: APRIL 2001	RJ I	COUNTY COMMENTS	02/13/01
	BY NO.	REVISION	DATE

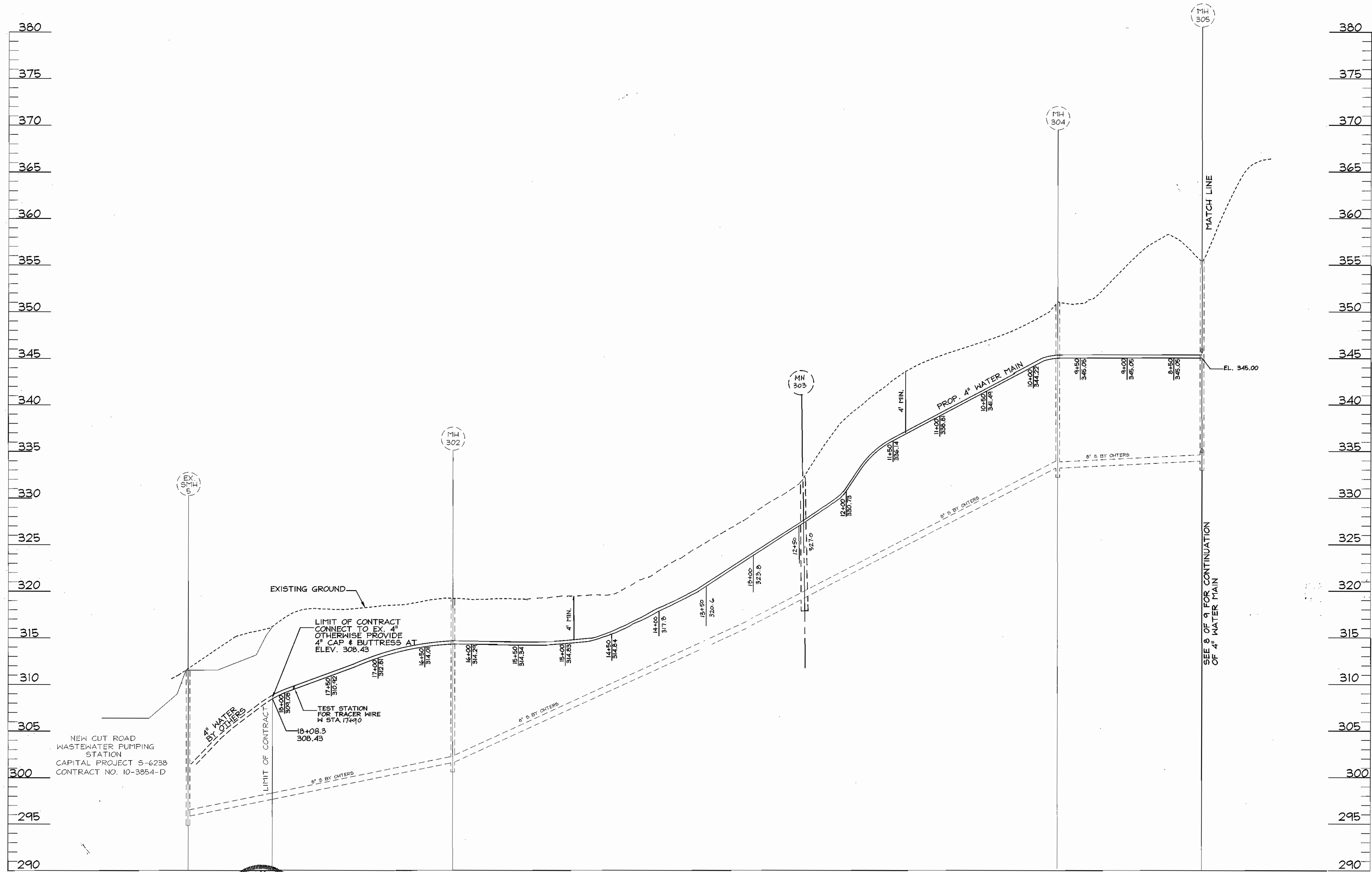
6" FORCE MAIN PROFILES

WORTHINGTON FIELDS
PHASE I LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

SCALE AS SHOWN
SHEET 7 OF 9

TAX MAP #25, GRID 20 & #31
2ND ELECTION DISTRICT
PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND





4" WATER MAIN PROFILE

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



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES
DATE: 4-26-01

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 5/6/01

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DES: RJ					
DRN: RJ					
CHK: JCO	JT	2	REVISE PROFILE	12/17/01	
DATE: APRIL 2001	RJ	1	COUNTY COMMENTS.	02/13/01	
	BY	NO.	REVISION	DATE	

4" WATER MAIN PROFILES

600' SCALE MAP NO. 25 BLOCK NO. 14

WORTHINGTON FIELDS
PHASE 1 LOTS 1-46
AND NON-BUILDABLE PARCELS 'A' AND 'B'
CONTRACT NO. 14-3853-D

TAX MAP #25, GRID 20 # #31
2ND ELECTION DISTRICT

PARCEL 98 & P/O PARCEL 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN.

SHEET 9 OF 9