

SHEET INDEX	
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4	PROFILES OF WATER AND SEWER MAINS

# WATER AND SEWER EXTENSIONS

# WORTHINGTON RESERVES

## SECTION ONE

### 2nd ELECTION DISTRICT

### HOWARD COUNTY, MARYLAND

#### GENERAL NOTES

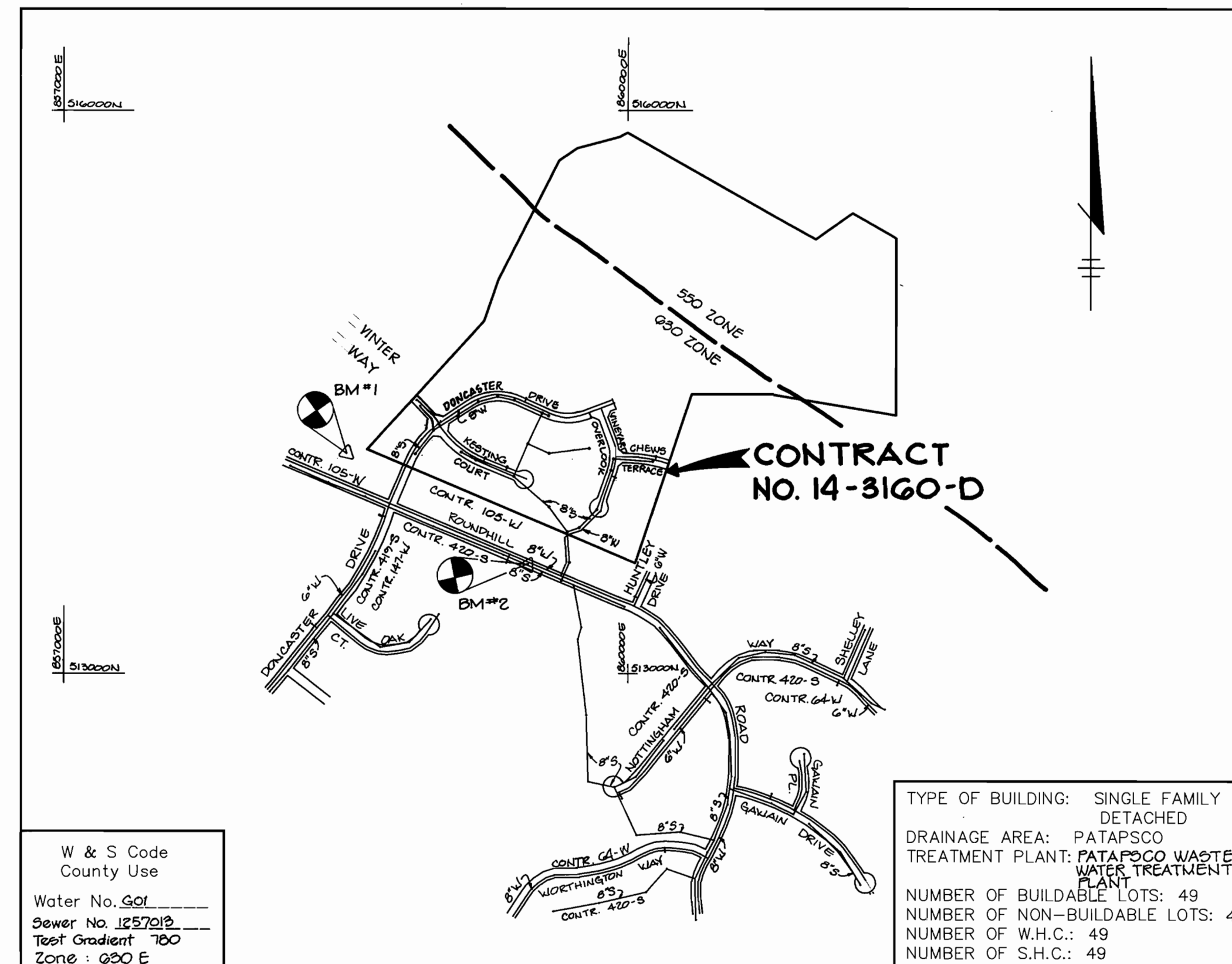
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the Contractor's expense.
- All horizontal controls are based on Maryland State Coordinates.
- All vertical controls are based on U.S.G.S. data.
- All pipe elevations shown  $\circ$  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 the 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 Detail 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  $\square$  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 operations at his own expense.
- Contractor shall notify the following utility companies 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. Underground 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 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 restrained and buttressed with concrete in accordance with Standard Details. 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 water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
- All sewer mains shall be DIP, RCP, VCPX, CSPX, RCCP and 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.
- Force mains shall be D.I.P. only.
- 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 1'-6" above finished grade unless otherwise noted on the drawings.
- House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
- MANHOLES CAN BE EITHER BRICK OR PRECAST CONCRETE STRUCTURES.

Quantities				
Item	Quantities		As-Built	
	Estimated	Quantity	Type	Manufacturer/Supplier
8" WATER	2,731 LF	2807'	D.I.P.	GRIFFIN
6" WATER	257 LF	661'	D.I.P.	" "
1" WHC	1,154 LF	1257'	1" COPPER	CAMBRIDGE LEE
8" SEWER	1,840 LF	1031'	P.V.C.	ETI
8" D.I.P. CL 52	1,440 LF	1627'	D.I.P.	GRIFFIN
4" SHC	1,264 LF	865'	P.V.C.	ETI
FIRE HYDRANTS	6 EA	6		KENNEDY
8" VALVES	7 EA	7		" "
6" VALVES	6 EA	6		" "
MANHOLES	25 EA 375 VF	25		ATLANTIC
8" x 8" TP 4V	1 EA	1	D.I.P.	GRIFFIN
1 1/2" DRAIN	1 EA	1		

NAME OF UTILITY CONTRACTOR: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_ AS-BUILT DATE: \_\_\_\_\_ SURVEY AND DRAFTING DIVISION



**VICINITY MAP**  
SCALE : 1"=600'

#### BENCHMARKS

- #1 BRONZE DISK SET IN CONCRETE AT EDGE OF MAGADAM DRIVE, HOWARD COUNTY CONTROL PT. 2044002  
ELEV. 505.87  
N 514102.56  
E 858500.50
- #2 SANITARY SEWER MANHOLE RIM IN ROUNDHILL ROAD  
ELEV. 509.55  
N 513618.7  
E 859325.9

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on F-92-50.

*John R. Blanton* 3/4/92  
HOWARD SOIL CONSERVATION DISTRICT

Review for Howard Soil Conservation District and meet technical requirements.

*John M. Hata* 3/4/92  
HOWARD SOIL CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James J. ...* 3-5-92  
DIRECTOR OF PUBLIC WORKS DATE

*Robert M. Benjamin* 2-26-92  
CHIEF, BUREAU OF UTILITIES DATE

*...* 3/5/92  
CHIEF, LAND DEVELOPMENT DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
8818 Centre Park Drive Suite 200 Columbia, Md. 21045  
410-997-8700 FAX : 410-997-9262

*Arthur E. Muegge* #8707  
PROFESSIONAL ENGINEER



DES: DAM			
DRN: DAM			
CHK: CJR	FCC	REVISE QUANTITIES (8" WATER, 1" WHC)	6-10-93
DATE: 10-28-91	JWG	ADD WINTER WAY TO PLAN & REVISE QUANTITIES	6-8-93
BY: NO.	NO.	REVISION	DATE

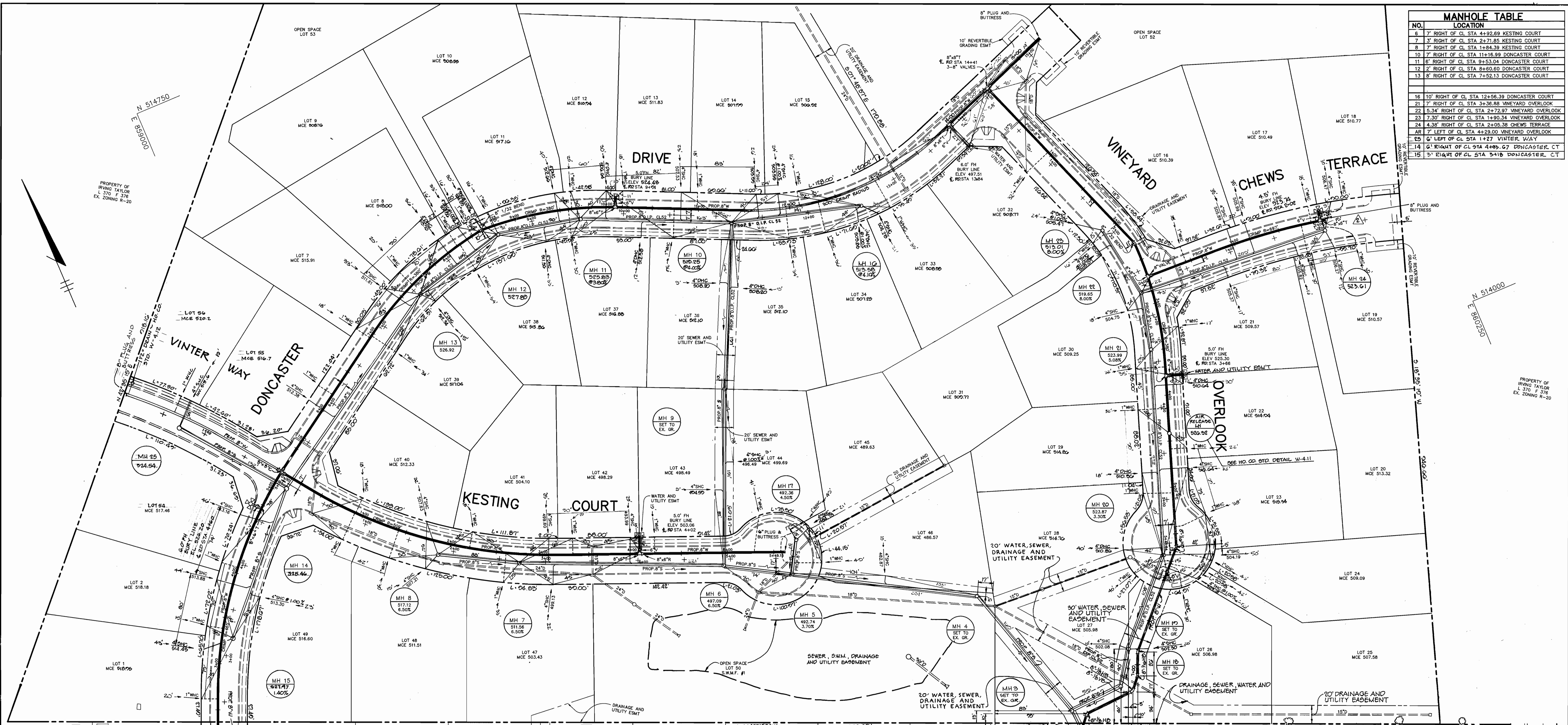
TITLE SHEET

600' SCALE MAP NO. 31 BLOCK NO. 2

WORTHINGTON RESERVES  
SECTION ONE  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 14-3160-D

SCALE AS SHOWN  
SHEET 1 OF 4

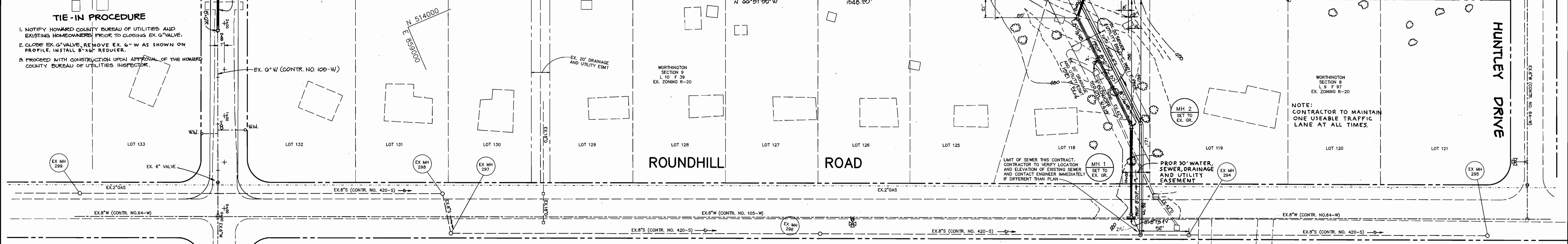
NO.	LOCATION
6	7' RIGHT OF CL STA 4+92.69 KESTING COURT
7	3' RIGHT OF CL STA 2+71.85 KESTING COURT
8	7' RIGHT OF CL STA 1+84.39 KESTING COURT
10	7' RIGHT OF CL STA 11+16.99 DONCASTER COURT
11	6' RIGHT OF CL STA 8+53.04 DONCASTER COURT
12	2' RIGHT OF CL STA 8+60.60 DONCASTER COURT
13	8' RIGHT OF CL STA 7+52.13 DONCASTER COURT
16	10' RIGHT OF CL STA 12+56.39 DONCASTER COURT
21	7' RIGHT OF CL STA 3+36.88 VINEYARD OVERLOOK
22	5.34' RIGHT OF CL STA 2+72.97 VINEYARD OVERLOOK
23	7.30' RIGHT OF CL STA 1+20.34 VINEYARD OVERLOOK
24	4.30' RIGHT OF CL STA 2+56.38 CHEWS TERRACE
AR	7' LEFT OF CL STA 4+29.00 VINEYARD OVERLOOK
25	6' LEFT OF CL STA 1+27 VINTER WAY
14	6' RIGHT OF CL STA 4+89.67 DONCASTER CT
15	5' RIGHT OF CL STA 5+16 DONCASTER CT



**TIE-IN PROCEDURE**

1. NOTIFY HOWARD COUNTY BUREAU OF UTILITIES AND EXISTING HOMEOWNERS PRIOR TO CLOSING EX. G VALVE.
2. CLOSE EX. G VALVE, REMOVE EX. 6" W AS SHOWN ON PROFILE, INSTALL 8"x6" REDUCER.
3. PROCEED WITH CONSTRUCTION UPON APPROVAL OF THE HOWARD COUNTY BUREAU OF UTILITIES INSPECTOR.

NOTE: CONTRACTOR TO MAINTAIN ONE USABLE TRAFFIC LANE AT ALL TIMES.



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James B. Elmer* 3/6/92 DIRECTOR OF PUBLIC WORKS  
*Robert W. Bowers* 2-26-92 CHIEF, BUREAU OF UTILITIES

*William E. Reddy* 3-5-92 CHIEF, BUREAU OF ENGINEERING  
*William E. Reddy* CHIEF, LAND DEVELOPMENT

RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
8818 Centre Park Drive Suite 200 Columbia, Md. 21045  
410-997-8900 FAX: 410-997-9282



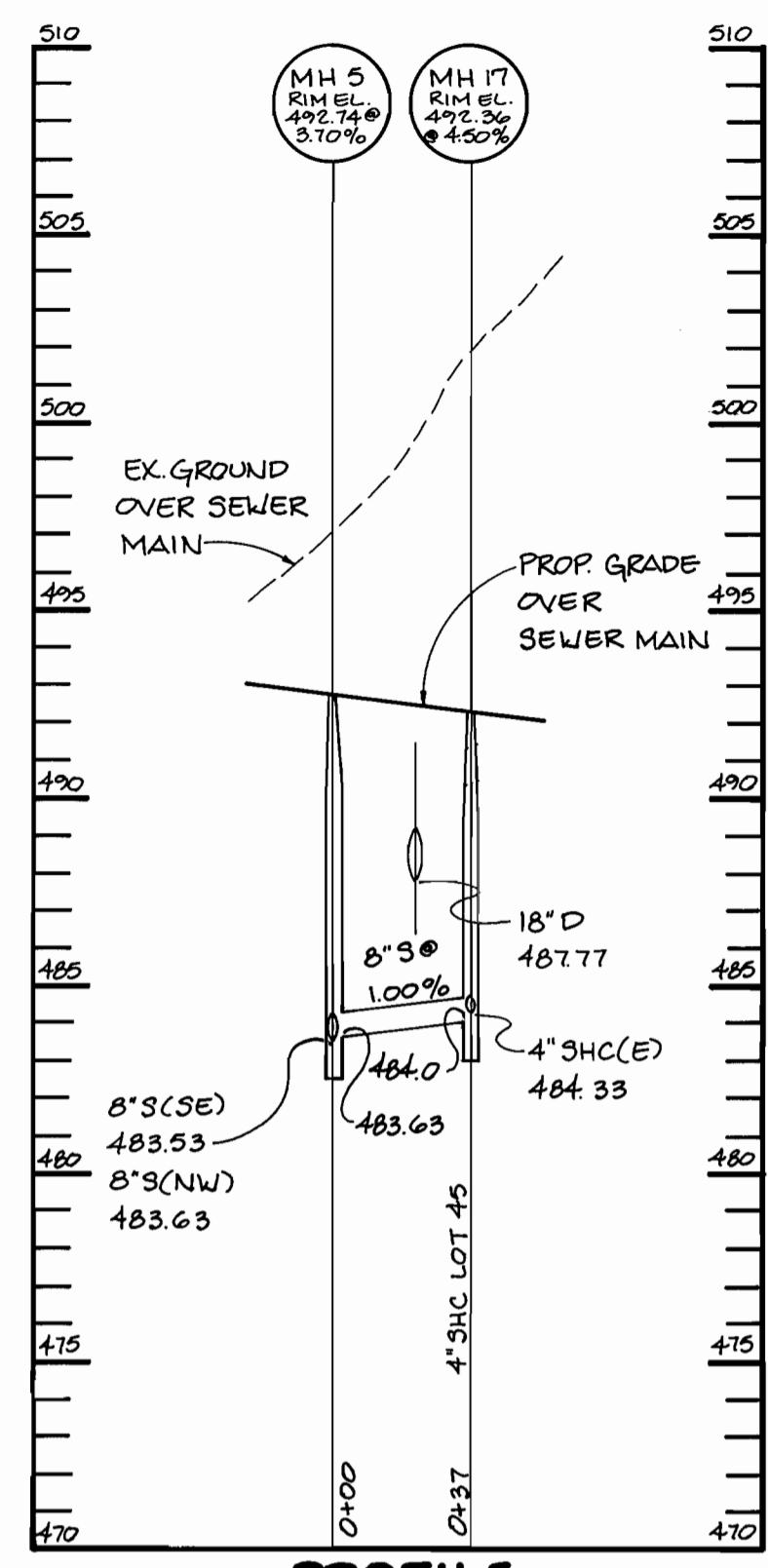
DES: DAM	
DRN: DAM	
CHK: GJR	
DATE: 10-26-01	
BY: NO.	REVISION
FCC	ELIMINATE 8" W AFTER FH IN CHEWS TERRACE & REVISE BURY LINE INFO. & MH 24 RM ELEVATION
JW/G	ADD VINTER WAY TO PLAN & SHOW RESUBDIVISION OF LOTS 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25

PLAN OF WATER AND SEWER MAINS

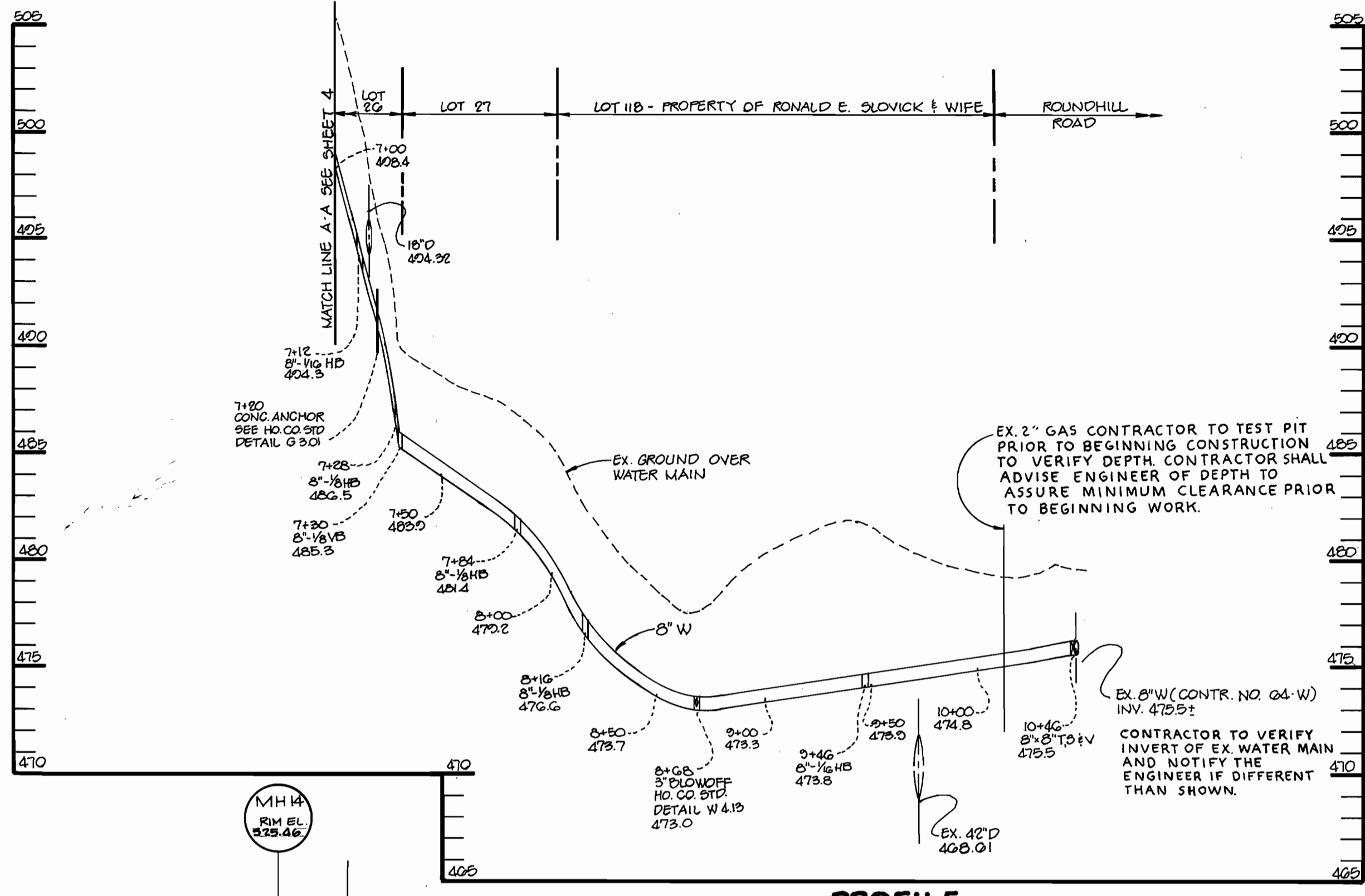
600' SCALE MAP NO. 31 BLOCK NO. 2

WORTHINGTON RESERVES SECTION ONE  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 14-3160-D

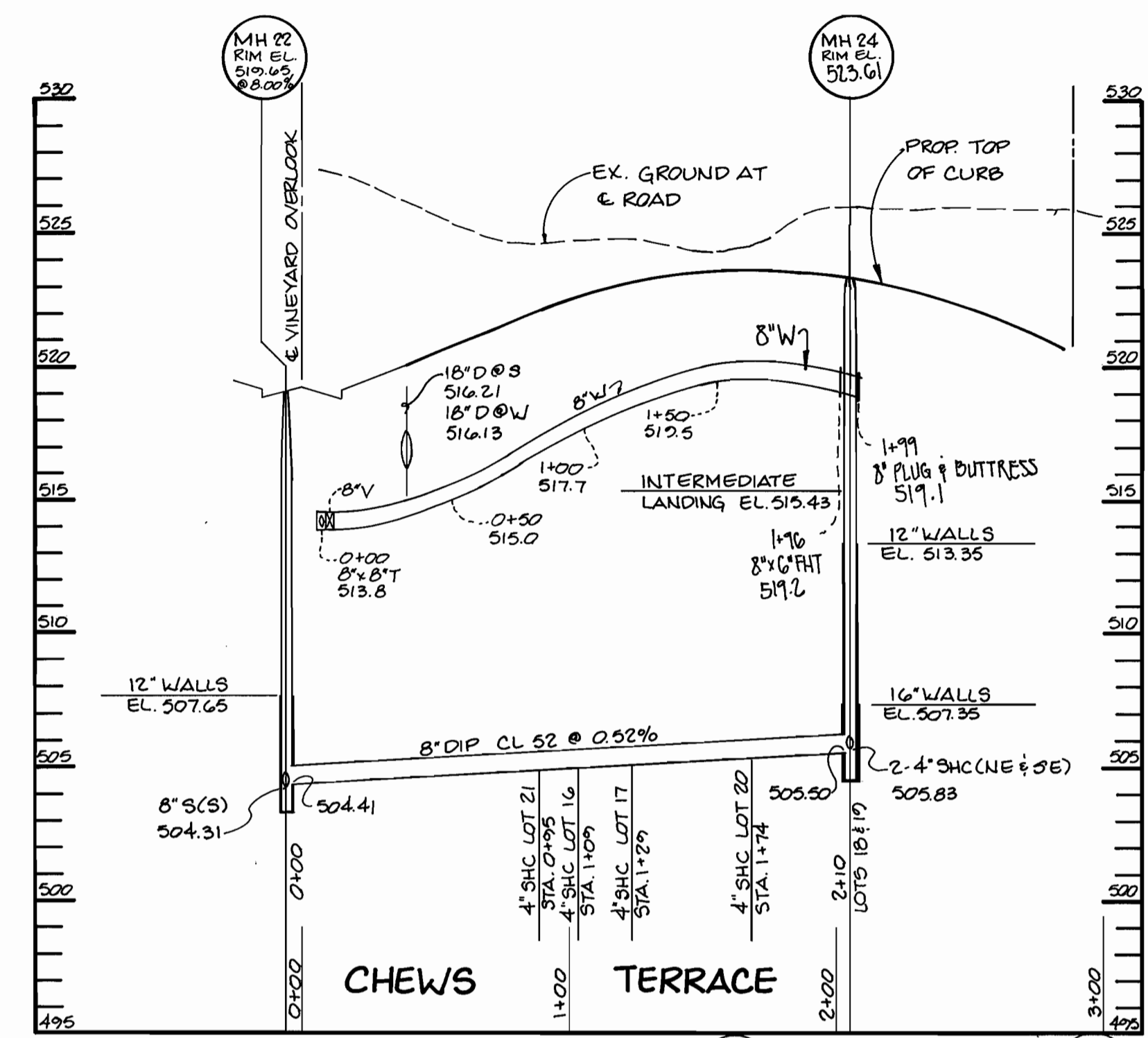
SCALE 1" = 50'  
SHEET 2 OF 4



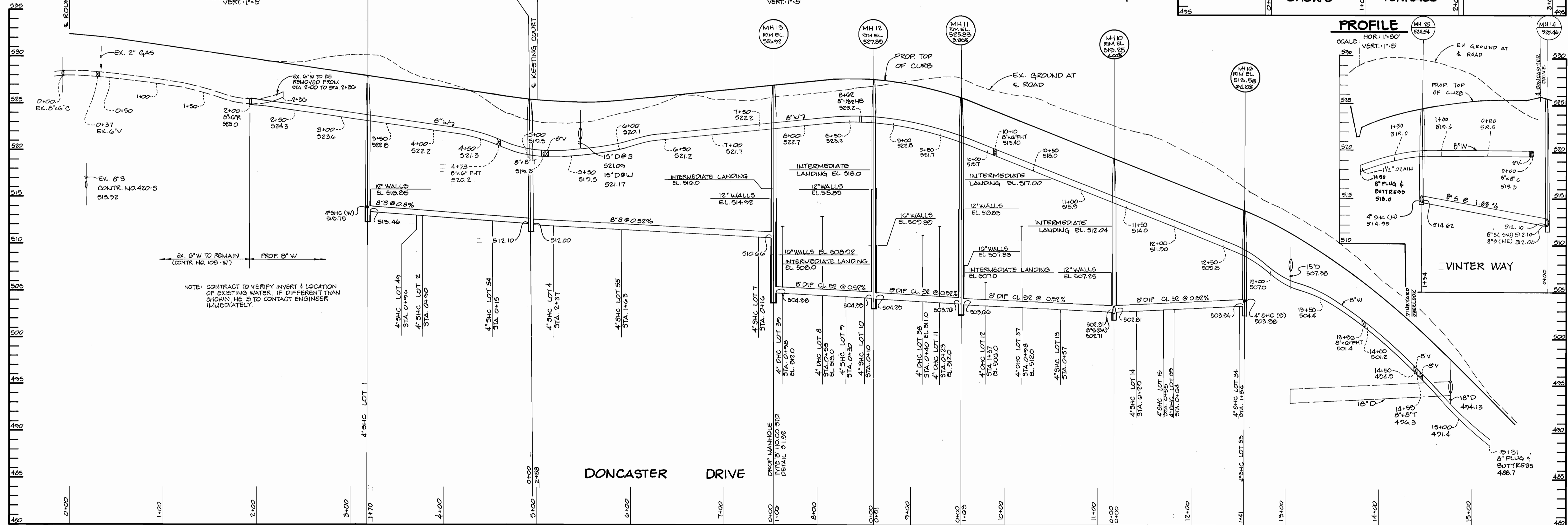
**PROFILE**  
SCALE: HOR: 1"=50'  
VERT: 1"=5'



**PROFILE**  
SCALE: HOR: 1"=50'  
VERT: 1"=5'



**PROFILE**  
SCALE: HOR: 1"=50'  
VERT: 1"=5'



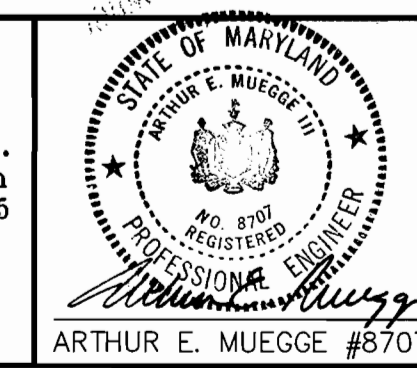
**PROFILE**  
SCALE: HOR: 1"=50'  
VERT: 1"=5'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James J. Law* 3/5/92  
DIRECTOR OF PUBLIC WORKS DATE  
*Robert J. Beaman* 2-26-92  
CHIEF, BUREAU OF UTILITIES DATE

*Richard E. P. Ryan* 3-5-92  
CHIEF, BUREAU OF ENGINEERING DATE  
*Arthur E. Muegge* 3/5/92  
CHIEF, LAND DEVELOPMENT DATE

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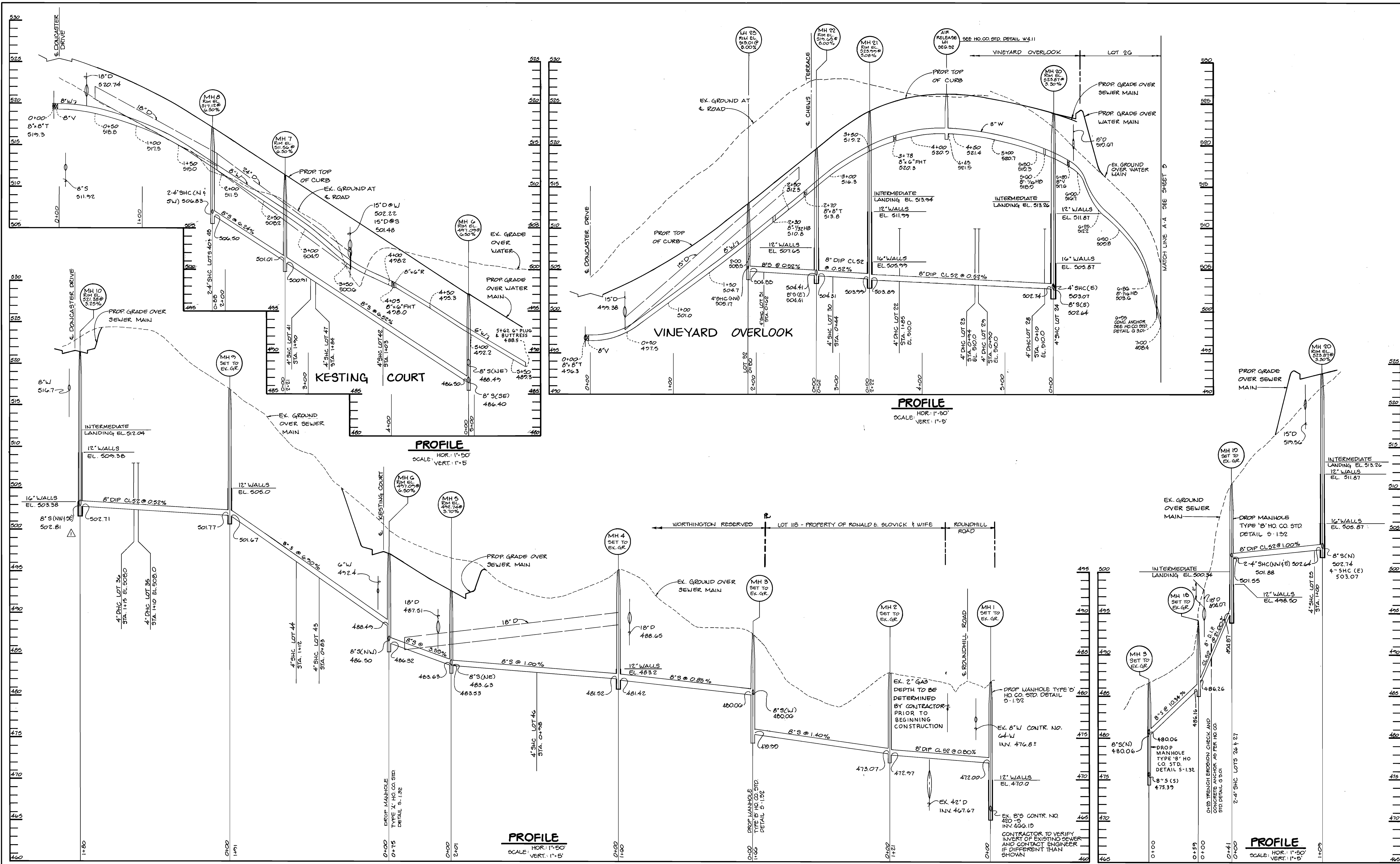
DES: DAM	
DRN: S.D.K.	
CHK: CJR	
DATE: 10-20-91	
BY: NO.	
REVISION	
DATE	

PROFILES OF WATER AND SEWER MAINS

600' SCALE MAP NO. 21 BLOCK NO. 2

WORTHINGTON RESERVES  
SECTION ONE  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 14-3160-D

SCALE AS SHOWN  
SHEET 3 OF 4



DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

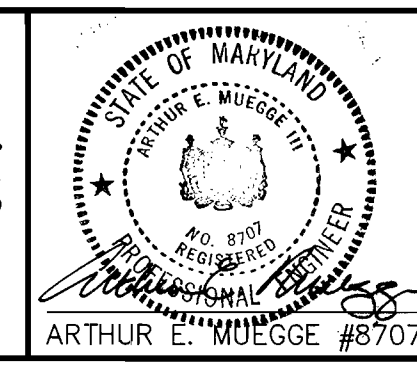
*James J. Kelly* 3-5-92  
 DIRECTOR OF PUBLIC WORKS DATE

*William E. Kelly* 3-5-92  
 CHIEF, BUREAU OF ENGINEERING DATE

*Robert B. Brown* 2-26-92  
 CHIEF, BUREAU OF UTILITIES DATE

*William E. Kelly* 3/5/92  
 CHIEF, LAND DEVELOPMENT DATE

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 A Land Planning, Engineering and Consulting Firm  
 8818 Centre Park Drive Suite 200 Columbia, Md. 21045  
 410-797-8900 FAX: 410-797-7282



DES: DAM	
DRN: S.D.K.	
CHK: C.J.R.	
MAD:  REMOVED 8" @ MH 10; ADDED NORTH WEST DIRECTION TO 8"5	4-2-92
DATE: 10-20-91	
BY: NO.	REVISION

PROFILES OF  
 WATER AND SEWER MAINS

600' SCALE MAP NO. 31 BLOCK NO. 2

WORTHINGTON RESERVES  
 SECTION ONE  
 2nd ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 CONTRACT NO. 14-3160-D

SCALE AS SHOWN

SHEET 4 OF 4

AS-BUILT 1/25/04