

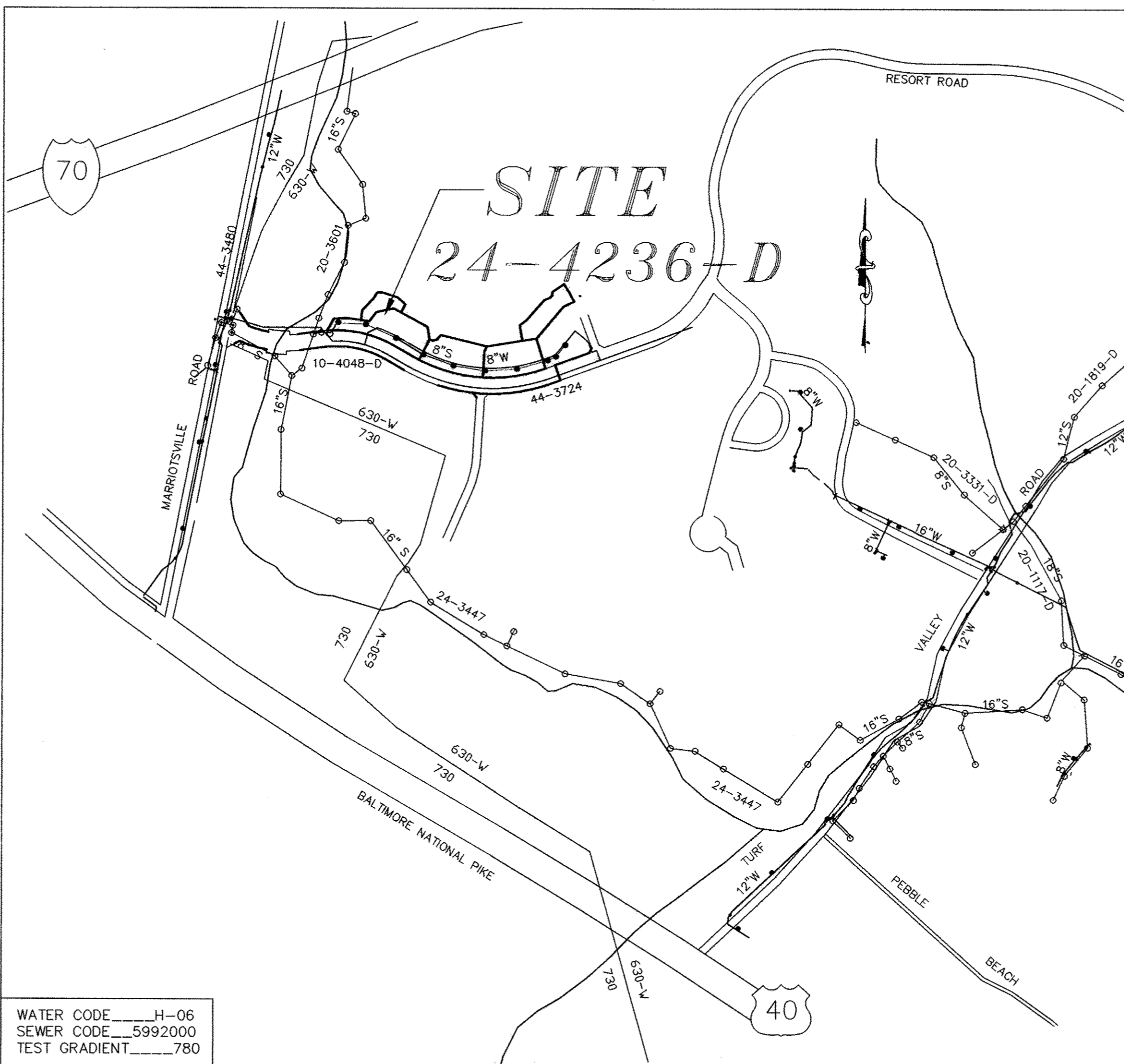
**QUANTITY TABLE**

ITEMS	QUANTITIES ESTIMATED	QUANTITIES		
		TYPE	MANUFACTURER/SUPPLIER	
STANDARD MH (HO. CO. STD.G-5.01)	10 EACH			
8" SEWER MAIN	1657 L.F.			
8" SEWER HOUSE CONNECTION	100 L.F.			
# MANHOLE SEWER HOUSE CONNECTIONS	4 EACH			
8" WATER MAIN	L.F.			
8" WATER HOUSE CONNECTION	40 L.F.			
# 8" WATER HOUSE CONNECTIONS	4 EACH			
8"x8" T	2 EACH			
8" V	6 EACH			
8"x6" T.&V.	8 EACH			
FH	4 EACH			
1/32 H.B.	6 EACH			
1/16 H.B.	1 EACH			
1/8 H.B.	4 EACH			
8" C.&B.	2 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				
8" WATER PVC C900	1613 L.F.			

**INDEX OF DRAWINGS**

NO.	DESCRIPTION
1	TITLE SHEET
2	SEWER PLAN
3	WATER PROFILE
4	SEWER PROFILES
5	WATER PLAN

**EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER SDP-07-062.**



WATER CODE \_\_\_\_\_ H-06  
SEWER CODE \_\_\_\_\_ 5992000  
TEST GRADIENT \_\_\_\_\_ 780

TYPE OF BUILDING	APARTMENTS
No. OF UNITS	4
No. OF WATER HOUSE CONNECTION	4
No. OF SEWER HOUSE CONNECTIONS	4
ELECTION DISTRICT	THIRD
DRAINAGE AREA	LITTLE PATUXENT R.
TREATMENT PLANT	LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER

**VICINITY MAP**

SCALE: 1"=600'

**GENERAL NOTES (CONT.)**

- PART I WATER**
- TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
  - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
  - UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN (17) POUNDS SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL 'TEES' USED WITH PVC MAINS SHALL BE DUCTILE IRON.

**GENERAL NOTES**

- PART I**
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
  - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON FEB. 1999 BY WINGS AERIAL MAPPING.
  - HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '27 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 3440001 AND NO. 3440002. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.C. DATA.
  - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
  - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. 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 THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWNED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
  - FOR DETAILS NOT SHOWN ON THE DRAWING, 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 LOCATIONS OF THE TEST PITS. 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.
  - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
    - AT&T.....1-800-252-1133
    - BGE(CONSTRUCTION SERVICES).....410-850-4620
    - BGE(EMERGENCY).....410-685-1400
    - BUREAU OF UTILITIES.....410-313-4900
    - COLONIAL PIPELINE CO.....410-795-1390
    - STATE HIGHWAY ADMINISTRATION.....410-531-5533
    - VERIZON.....1-800-743-0033/410-224-9210
  - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
  - THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATED. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
  - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.
  - PLEASE USE CAUTION WHEN EXCAVATING IN THE VICINITY OF OVERHEAD ELECTRIC LINES.

- PART II WATER**
- ALL WATER MAINS SHALL BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
  - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
  - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 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.
  - FOR SPRINKLER SYSTEMS FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1' CONNECTION WITH A 3/4" METER.

- PART III SEWER**
- 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.
  - 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 COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
  - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATED THAT THE CELLAR CANNOT BE SERVED.

**CONTRACT NO.: 24-4236-D**  
**OAKMONT AT TURF VALLEY**  
**WATER AND SEWER MAIN EXTENSIONS**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

**DEVELOPER**

MANGIONE ENTERPRISES OF TURF VALLEY, L.P.  
1205 YORK ROAD, PENTHOUSE  
LUTHERVILLE, MARYLAND 21093  
(410) 825-8400

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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 AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

DEVELOPER'S NAME \_\_\_\_\_

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

ENGINEER'S SIGNATURE *John B. Miltenberg* DATE *7/10/06*

ENGINEER'S NAME JOHN B. MILTENBERG

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA NATURAL RESOURCES CONSERVATION SERVICE

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

HOWARD SCD SIGNATURE *John R. Blanton* DATE *7/31/06*

STATE OF MARYLAND  
BENJAMIN FRANKLIN  
PROFESSIONAL ENGINEER  
1/24/2005

FOR REVISIONS BY  
BENCHMARK ENG. INC. ONLY  
8180 BALTIMORE NATL. PIKE  
SUITE 418  
(410) 465-4105

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 22551 Expiration Date: 7/22/2013

**PLAN REFERENCE NUMBERS**

P-00-007, P-00-021  
F-02-74, F-02-82  
SDP-07-062

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

CHEF, BUREAU OF UTILITIES DATE *7-25-06*

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

CHEF, DEVELOPMENT ENGINEERING DIVISION DATE *8/1/06*

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsy Hill Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 897-0296 Fax. (301) 621-5521 Wash. (410) 897-0298 Fax.

STATE OF MARYLAND  
BENJAMIN FRANKLIN  
PROFESSIONAL ENGINEER  
1/24/2005

engineering	HSP/MMM				
illustration	HSP/MMM				
approval	HSP/MMM	JBM	3	REVISE WATER MAIN TO PVC C900, ADD S.H.C. AND REVISE PUBLIC WATER & UTILITY EASEMENT AND GENERAL NOTES.	11/16/03
project	MMM	MMM	2	REVISE QUANTITY TABLE	7/7/04
date	RD,B	RD,B	1	REVISED SEWER PIPE LENGTH	7/7/07
date	JUNE 06	BY	NO.	REVISION	DATE

**TITLE SHEET**

600' SCALE MAP NO. \_\_\_\_\_ 16 \_\_\_\_\_ BLOCK NO. \_\_\_\_\_ 10 & 16 \_\_\_\_\_

**OAKMONT AT TURF VALLEY**  
**TAX MAP 16 PARCEL 8**  
CONTRACT NO.: 24-4236-D  
THIRD ELECTION DISTRICT  
HOWARD COUNTY

scale AS SHOWN  
**1 OF 5**

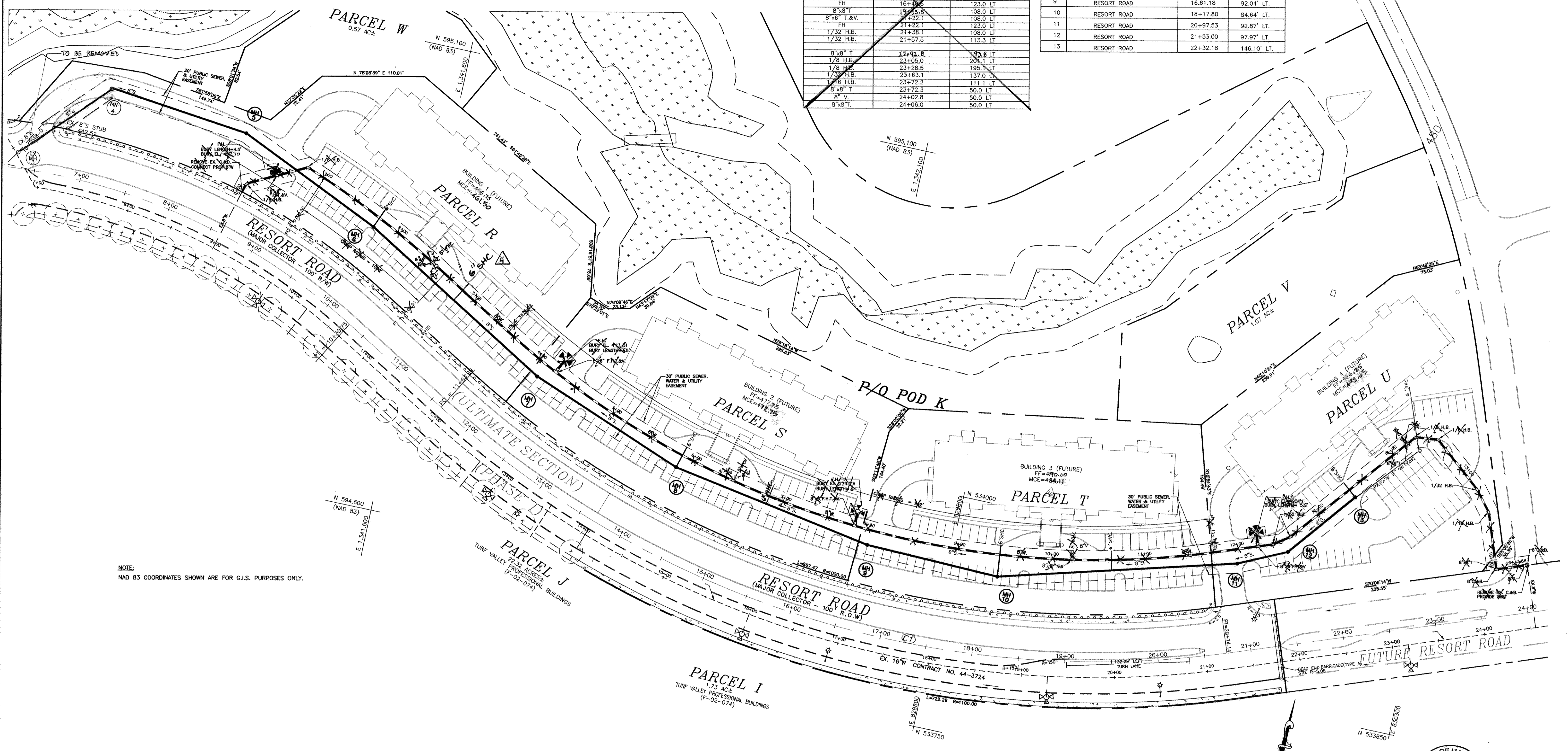


\* SEE SHEET 3 FOR WATER MAIN TABULATION CHART  
 \* SEE SHEET 3 FOR SEWER HOUSE CONNECTION TABLE

APPURTENANCE	ROAD STA.	OFFSET
1/8" H.B.	8+61.2	59.8 LT
8"x6" T.&V.	8+83.4	82.8 LT
FH	8+77.3	90.0 LT
1/8" H.B.	9+05.2	107.7 LT
8"x8" T	10+04.5	108.4 LT
8" V	10+08.5	108.4 LT
8"x6" T.&V.	12+36.5	108.0 LT
FH	12+36.5	123.0 LT
8"x8" T	14+32.0	108.1 LT
8"x6" T.&V.	16+50.6	108.0 LT
FH	16+49.6	123.0 LT
8"x8" T	19+25.5	108.0 LT
8"x6" T.&V.	21+22.1	108.0 LT
FH	21+22.1	123.0 LT
1/32" H.B.	21+38.1	108.0 LT
1/32" H.B.	21+57.5	113.3 LT
8"x8" T	23+92.0	193.6 LT
1/8" H.B.	23+05.0	201.1 LT
1/8" H.B.	23+28.5	195.1 LT
1/32" H.B.	23+63.1	137.0 LT
1/8" H.B.	23+72.2	111.1 LT
8"x8" T	23+72.3	50.0 LT
8" V	24+02.8	50.0 LT
8"x8" T	24+06.0	50.0 LT

MANHOLE LOCATION CHART	CL STATION	OFFSET
MH # 1	6+83.61	106.19 LT.
MH # 2	8+39.79	107.96' LT.
MH # 3	9+86.46	95.68' LT.
MH # 4	12+22.91	92.03' LT.
MH # 5	14+17.94	93.67' LT.
MH # 6	16.61.18	92.04' LT.
MH # 7	18+17.80	84.64' LT.
MH # 8	20+97.53	92.87' LT.
MH # 9	21+53.00	97.97' LT.
MH # 10	22+32.18	146.10' LT.

SEWER HOUSE CONNECTION TABLE	UNIT #	% SLOPE	INV @ EASE	MIN. CELLAR ELEV.
1	2		447.58	452.04
2	2		460.50	464.90
3	2		473.56	477.82
4	2		479.18	483.88



NOTE:  
 NAD 83 COORDINATES SHOWN ARE FOR G.I.S. PURPOSES ONLY.

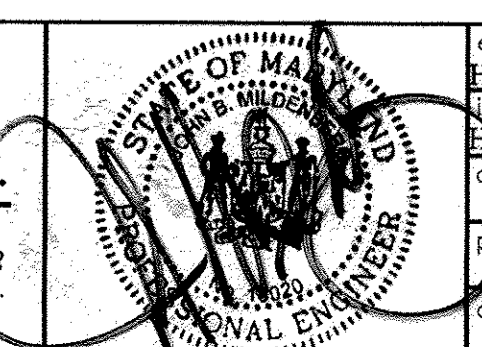
THIS PLAN IS FOR SEWER MAIN ONLY.  
 SEE SHEET 5 FOR WATER MAIN PLAN.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 28589, Expiration Date: 7/21/2009

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 R. K. B. 7-25-06  
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
 M. J. M. 8/4/06  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
 (410) 987-0286 Balt. (301) 621-5521 Wash. (410) 997-0286 Fax



BY	NO.	REVISION	DATE
JBM	4	SHOW 6" SHC ON PARCEL - R'	4/11/03
JBM	3	REMOVE WATER MAIN FROM PLAN VIEW	11.8.12
MMM	2	REVISE LOCATION OF WHE'S SHC	7/1/08
MMM	1	REVISED TO REFLECT SHC MODIFICATIONS	7/3/08
JULY 06			

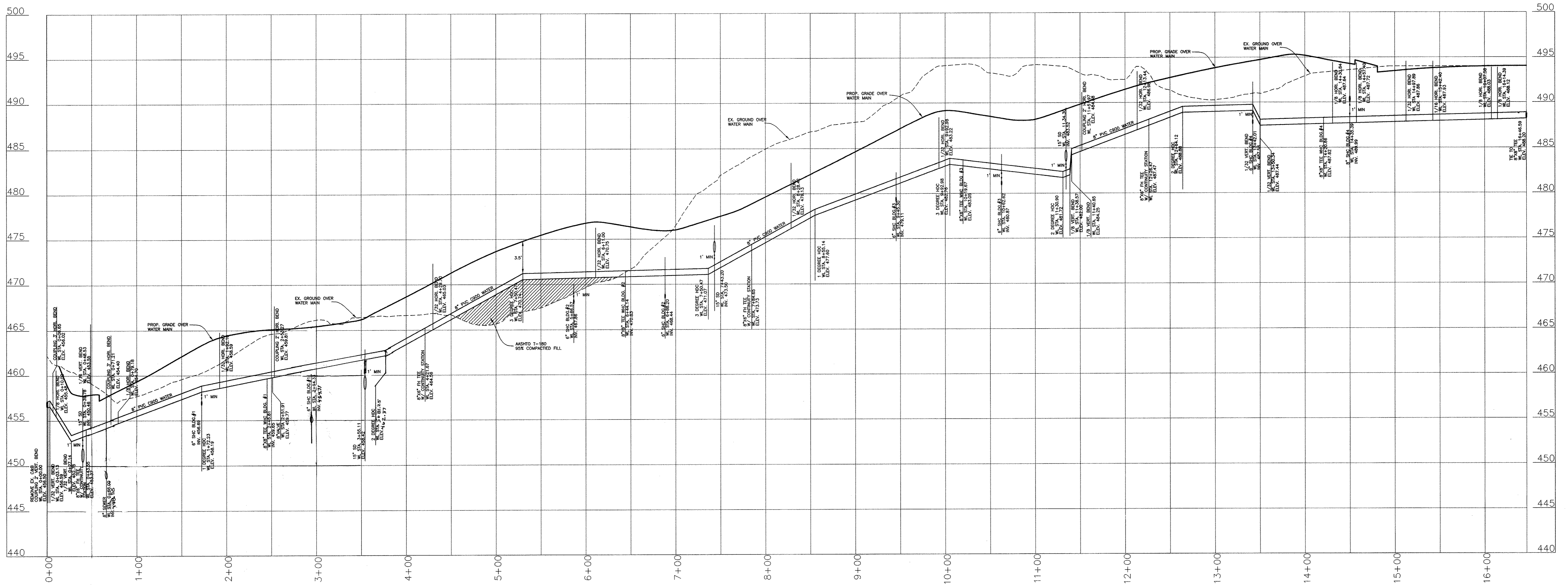
**SEWER PLAN**  
 600' SCALE MAP NO. 16 BLOCK NO. 10 & 16

**OAKMONT AT TURF VALLEY**  
**TAX MAP 16 PARCEL 8**  
 CONTRACT NO.: 24-4236-D  
 THIRD ELECTION DISTRICT  
 HOWARD COUNTY  
 scale 1"=50'  
 2 OF 5



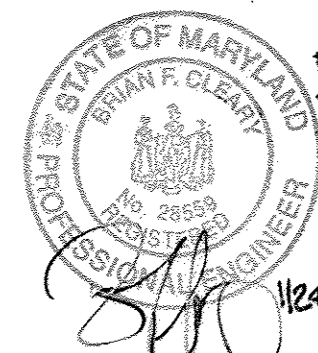
APPURTENANCE	STATION	LOCATION
COUPLING 3' HB	WL STA 0+06.65	N 594906.36 E 1341396.32
1/8" HB	WL STA 0+10.05	N 594909.52 E 1341397.36
8"X6" TEE FH	WL STA 0+43.55	N 594924.65 E 1341427.24
COUPLING 3' HB	WL STA 0+78.62	N 594937.07 E 1341451.77
1/8" HB	WL STA 0+79.18	N 594940.29 E 1341459.06
1/32" HB	WL STA 1+92.16	N 594899.54 E 1341564.43
8"X6" TEE WHC	WL STA 2+45.81	N 594870.84 E 1341609.74
8"X6" TEE FH	WL STA 4+21.97	N 594797.76 E 1341769.52
1/32" HB	WL STA 4+29.70	N 594777.68 E 1341768.29
1/32" HB	WL STA 6+11.00	N 594718.23 E 1341939.57
8"X6" TEE WHC	WL STA 6+44.14	N 594713.66 E 1341972.39
8"X6" TEE FH	WL STA 7+84.65	N 594694.28 E 1342111.56
1/32" HB	WL STA 8+28.42	N 594688.2395 E 1342154.90
1/32" HB	WL STA 9+92.98	N 594697.67 E 1342319.20
8"X6" TEE WHC	WL STA 10+19.67	N 594704.35 E 1342345.04
COUPLING 2' HB	WL STA 11+51.97	N 594737.48 E 1342473.13
1/32" HB	WL STA 12+13.44	N 594754.94 E 1342532.07
8"X6" TEE FH	WL STA 12+26.47	N 594761.00 E 1342543.60
1/16" HB	WL STA 12+51.00	N 594772.40 E 1342565.31
8"X6" TEE WHC	WL STA 14+20.86	N 594903.79 E 1342672.97
1/8" HB	WL STA 14+30.84	N 594911.51 E 1342679.30
1/8" HB	WL STA 14+57.40	N 594915.5258 E 1342705.55
1/32" HB	WL STA 14+97.89	N 594891.56 E 1342738.18
1/16" HB	WL STA 15+42.40	N 594858.71 E 1342768.22
1/8" HB	WL STA. 16+07.58	N 578945.07 E 1293732.74
1/8" HB	WL STA. 16+14.39	N 578942.41 E 1293739.01

BUILDING #	% SLOPE	ELEV. AT EASEMENT	MIN. CELLAR ELEV.
1	2	456.83	461.50
1	2	460.43	465.10
2	2	468.07	472.75
2	2	468.57	473.22
3	2	479.33	484.11
3	2	481.06	485.71
4	2	487.95	492.65
4	2	490.20	495.39



**8" WATER PROFILE**  
 HORIZONTAL SCALE: 1"=50'  
 VERTICAL SCALE: 1"=5'

NOTE: ALL COUPLINGS FOR PVC WATER ARE TO BE "CERTAINTED PVC HIGH DEFLECTIONS COUPLINGS".



FOR REVISION #3 BY BEI ONLY

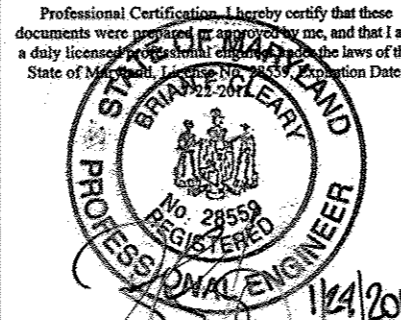
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 28559, Expiration Date: 7/22/2013

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE & SUITE 418 A ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-485-8644  
 80 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702  
 (P) 301-371-3505 (F) 301-371-3506  
 WWW.BED-ENGINEERING.COM



DESIGN: JCO  
 DRAFT: JCO  
 CHK: BFC  
 DATE: 11.8.12

NO.	REVISIONS	DATE
1	REVISE WATER ELEV. 0+50 TO 0+70 & 2+88 TO 3+81	4-19-13
2	REVISE WATER MAIN TO PVC C900	11.8.12

**WATER PROFILE**

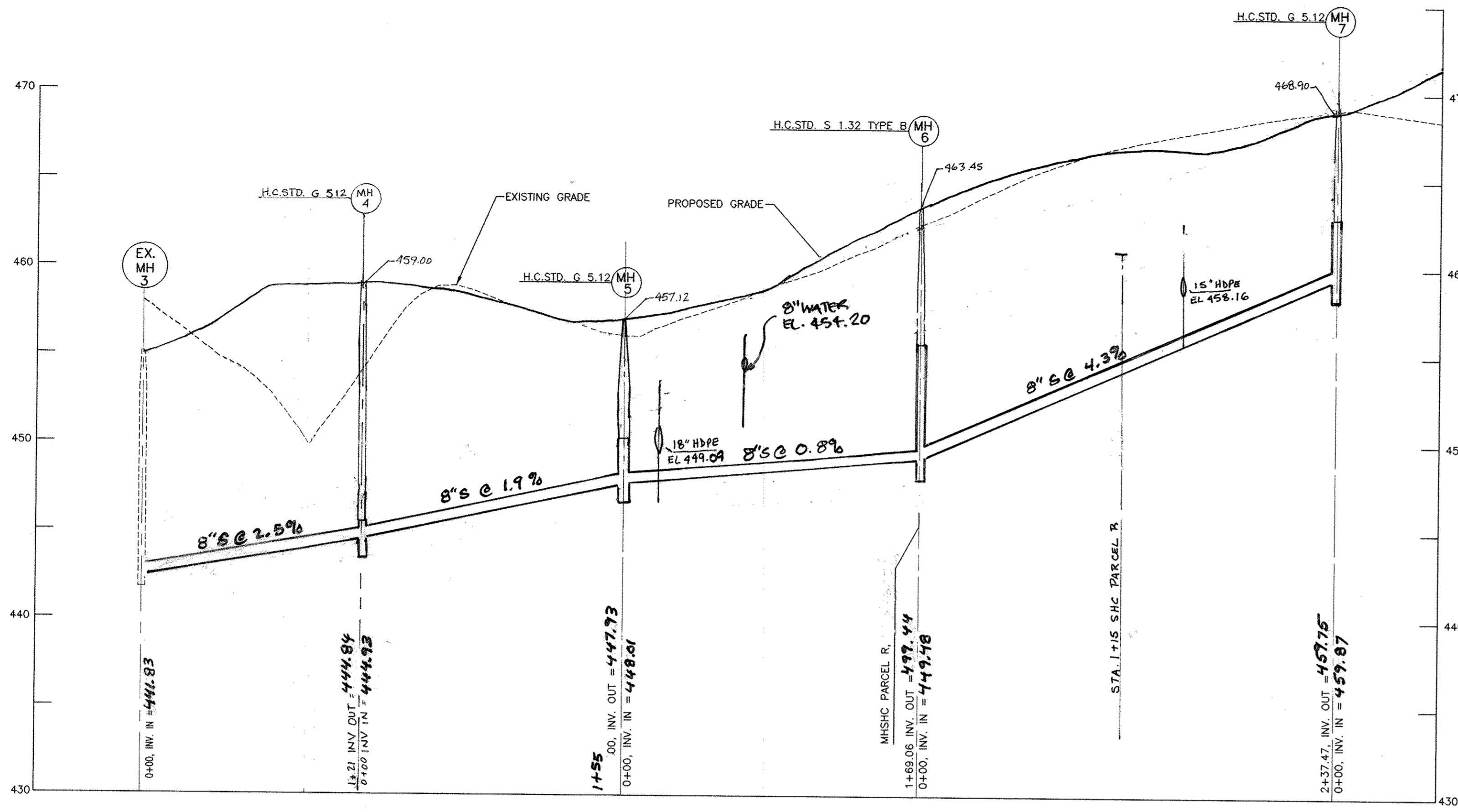
600 SCALE MAP NO. 16 BLOCK: 10 & 16

**OAKMONT AT TURF VALLEY  
 TAX MAP 16 PARCEL 8**

CONTRACT NO: 24-4236-D  
 THIRD ELECTION DISTRICT  
 HOWARD COUNTY

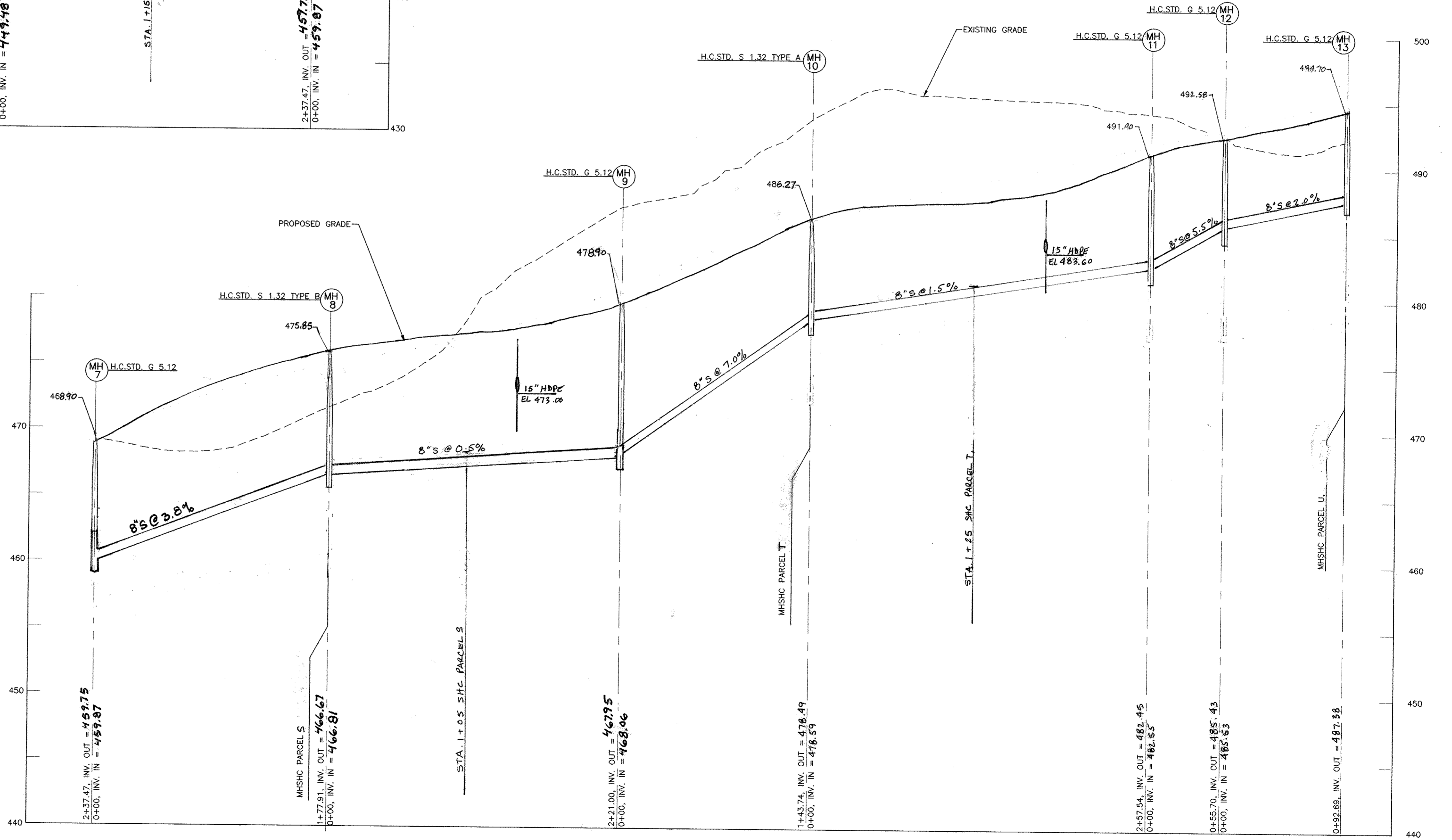
SCALE:  
 AS SHOWN

SHEET NO.  
 3 OF 5



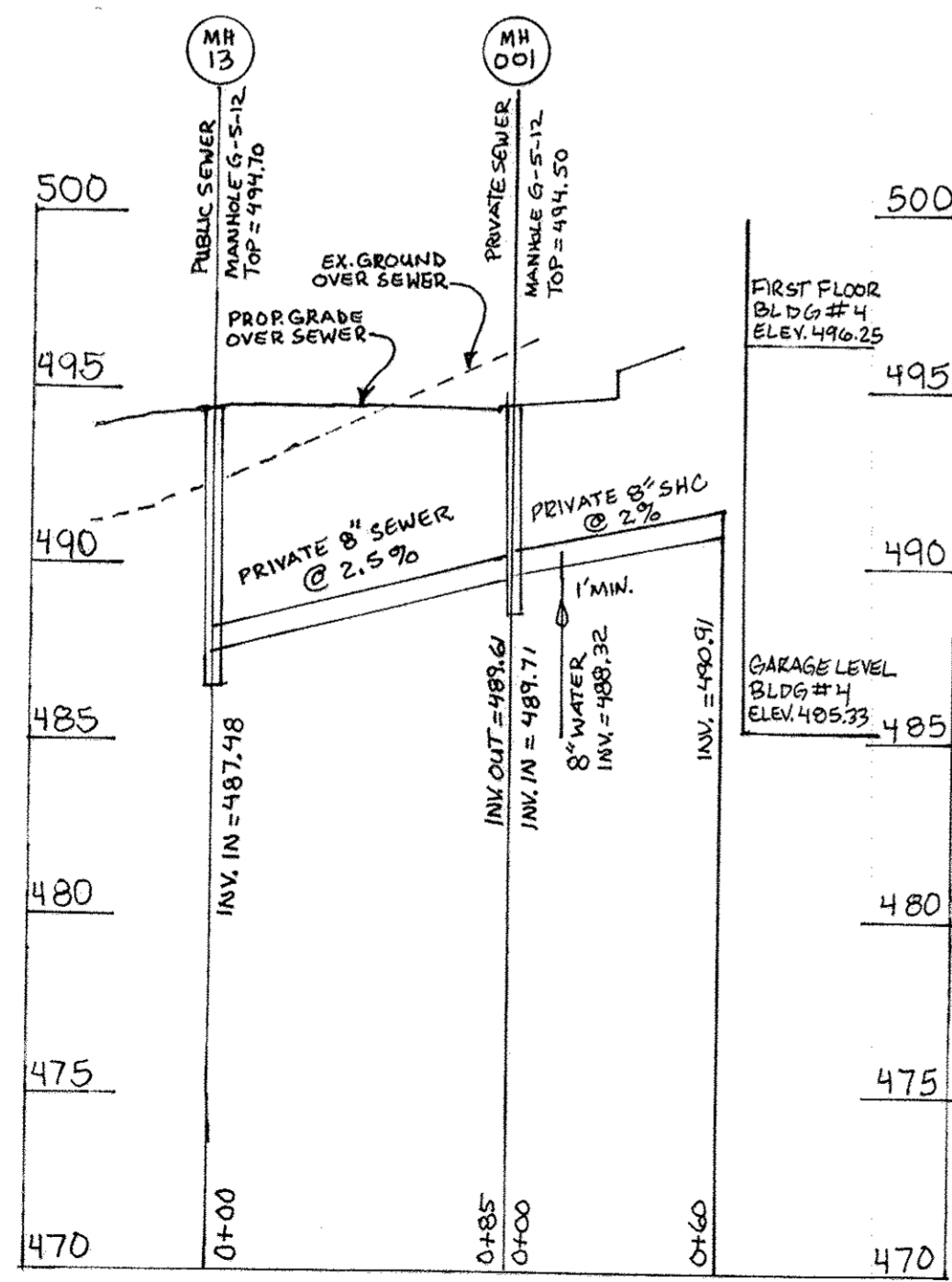
**SEWER MAIN PROFILE**

HORIZONTAL SCALE: 1" = 50'  
VERTICAL SCALE: 1" = 5'



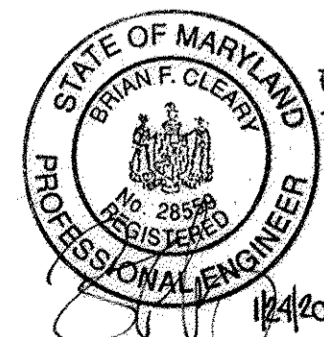
**SEWER MAIN PROFILE**

HORIZONTAL SCALE: 1" = 50'  
VERTICAL SCALE: 1" = 5'



**PRIVATE SEWER PROFILE**

HORIZONTAL SCALE: 1" = 50'  
VERTICAL SCALE: 1" = 5'



FOR REVISIONS BY  
BET ONLY

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

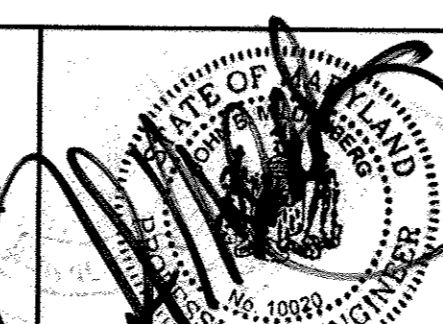
License No. 28559 Expiration Date: 7/22/2015

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 987-0286 Balt. (301) 621-5521 Wash. (410) 987-0286 Pa.



NO.	REVISION	DATE
1	REVISIONS TO REFLECT SUBMITTALS	7/3/07
2	REVISE SEWER PROFILES	7/7/08
3	ADD PRIVATE SEWER PROFILE	1/14/09
4	REVISE INV. MH 3 TO MH 9 PER AS-BUILT CONDITIONS	7/19/09

**SEWER PROFILES**

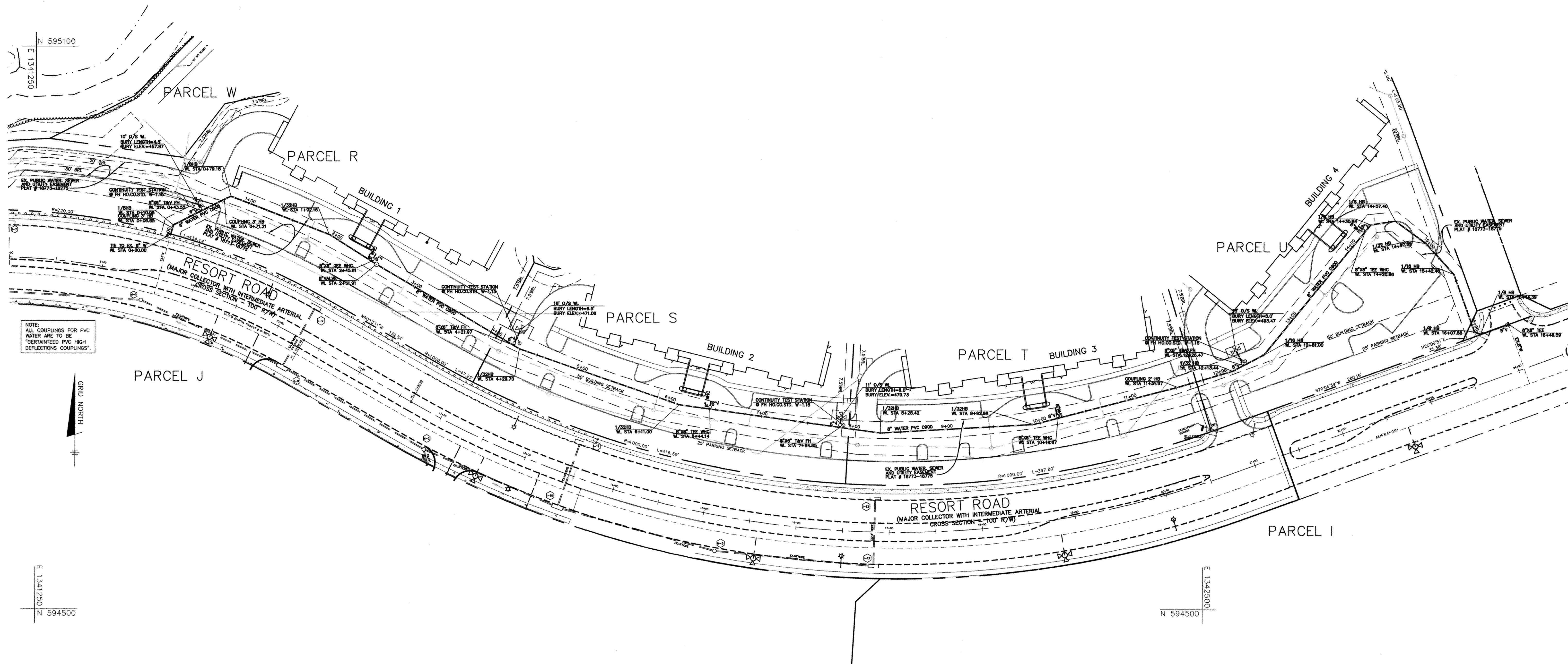
600' SCALE MAP NO. 16 BLOCK NO. 10 & 16

**OAKMONT AT TURF VALLEY  
TAX MAP 16 PARCEL 8**

CONTRACT NO.: 24-4236-D  
THIRD ELECTION DISTRICT  
HOWARD COUNTY

scale  
AS SHOWN





NOTE:  
ALL COUPLINGS FOR PVC  
WATER ARE TO BE  
"CERTANTEED PVC HIGH  
DEFLECTIONS COUPLINGS".

THIS PLAN IS FOR WATER MAIN PLAN VIEW ONLY. SEE SHEET 2 FOR SEWER MAIN PLAN VIEW.  
SEE SHEET 3 FOR WATER MAIN TABULATION CHART AND SEWER HOUSE CONNECTION TABLE.

THE SHEET IS ADDED TO THE PREVIOUSLY  
APPROVED SET DATED JULY 2006 PER REVISION #3

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

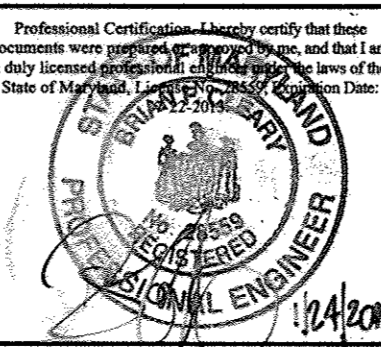
*Silva*  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

*Chris*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**BENCHMARK**  
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**ENGINEERING, INC.**

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DESIGN:	JCO				
DRAFT:	JCO				
CHK:	BFC				
DATE:	11.8.12				
BY:	NO.	REVISIONS	DATE		
	3	REVISE WATER PLAN TO PVC C900	11.8.12		

**WATER PLAN**

600 SCALE MAP NO. 16 BLOCK: 10 & 16

**OAKMONT AT TURF VALLEY**  
**TAX MAP 16 PARCEL 8**

CONTRACT NO: 24-4236-D  
THIRD ELECTION DISTRICT  
HOWARD COUNTY

SCALE:  
1"=50'

SHEET NO.  
5 OF 5