

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 SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL SURVEY BY VRM DATED AUGUST 2004.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 42EC AND 42EF.
ALL VERTICAL CONTROLS ARE BASED ON (NAVD' 27). VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE:
GEODETIC SURVEY CONTROL 42EC (N 545417.0027/E 1360140.3852,84)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED AT NORTH EAST INTERSECTION OF OAKLAND MILLS ROAD & GUILFORD ROAD, SOUTH OF CHURCH PARKING AREA, AND 5' AWAY FROM GUILFORD ROAD.
GEODETIC SURVEY CONTROL 42EF (N 545623.3641/E 1359044.4442,86)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED AT SOUTH SIDE OF GUILFORD ROAD, WEST OF OAKLAND MILLS ROAD, AND 2' AWAY FROM GUARD RAIL.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
- 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 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 MONIES 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 NOTES 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 OPERATION AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
AT &T 1-800-252-1133
BGE (CONTRACTOR SERVICE) 410-850-4620
BGE (EMERGENCY) 410-685-1400
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO. 410-795-1390
MISS UTILITY 1-800-257-7777
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 WITHIN 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 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) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY 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(c) OF THE HOWARD COUNTY CODE.

PART II - WATER

- ALL WATER MAINS TO BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" 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 INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE 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.

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 FRAME 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." INDICATES THAT CELLAR CANNOT BE SERVED.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SITE DEVELOPMENT PLAN SDP-07-066.

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
John R. Robinson 12/14/07
SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
[Signature]
U.S. SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
[Signature] 12/11/07
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
[Signature] 12-21-07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

ROBERT H. VOGEL
ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410-461-7666
ELLICOTT CITY, MD 21043 FAX: 410-461-8961



DES:	MMR			
DRN:	KG			
CHK:	MMR			
DATE:	DECEMBER 2007	BY:	NO.	
		REVISION		

FINAL WATER & SEWER PLAN
COVER SHEET
600' SCALE MAP NO. 42 BLOCK NO. 19

OAKHURST III
TOWNHOUSE UNITS 1-17
CONTRACT NO. 24-4496-D
PROP. PARCEL C EX. PARCEL 70/72 HOWARD COUNTY, MARYLAND
TAX MAP 42 BLOCK 19 6TH ELECTION DISTRICT

SCALE AS SHOWN
SHEET 1 OF 2

FINAL WATER PLAN

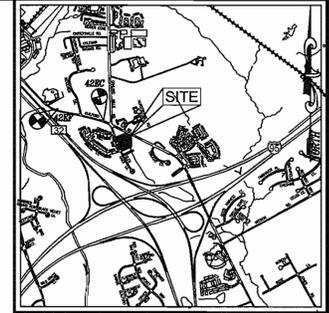
OAKHURST III

TOWNHOUSE UNITS 1-17

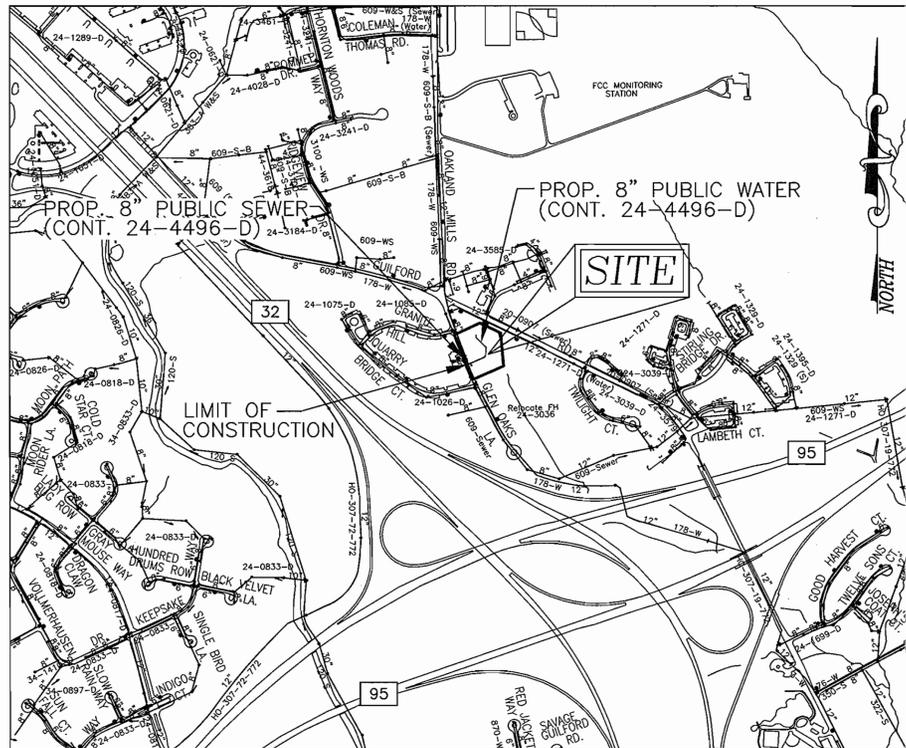
CONTRACT 24-4496-D

BENCHMARKS

HOWARD COUNTY BENCHMARK 42EC (CONCRETE MONUMENT)
N 545,417.0027 E 1,360,140.3852 ELEV. 365.410
HOWARD COUNTY BENCHMARK 42EF (CONCRETE MONUMENT)
N 545,623.3641 E 1,359,044.4442 ELEV. 347.044



LOCATION MAP
SCALE: 1"=2000'



VICINITY MAP
SCALE: 1"=600'

WATER CODE: 103
SEWER CODE: 6740000
TEST GRADIENT: 700

Type of Building :	TOWNHOUSES
No. of Lots/Parcels :	17
No. of single Water House Connections :	11
No. of twin Water House Connections :	3
No. of Sewer House Connections :	1
Drainage Area :	LITTLE PATUXENT RIVER
Treatment Plant :	

QUANTITIES

NAME OF UTILITY CONTRACTOR :		SURVEY AND DRAFTING DIVISION AS-BUILT DATE :		
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
WATER				
12"Ø TAPPING SLEEVE	1 EA			
8" WATER	350 LF			
1-1/2" WHC	234 LF			
1-1/2" WHC(TWIN)	46 LF			
8" X 8" TEE	1 EA			
8" VALVE	1 EA			
6" VALVE	1 EA			
6" FIRE HYDRANT	1 EA			
8" - 1/8" BEND	3 EA			
8" - 1/16" BEND	1 EA			
SINGLE METER BOXES	11 EA			
TWIN METER BOXES	3 EA			
SEWER				
8" SEWER	20 LF			
MANHOLE	1 EA			

