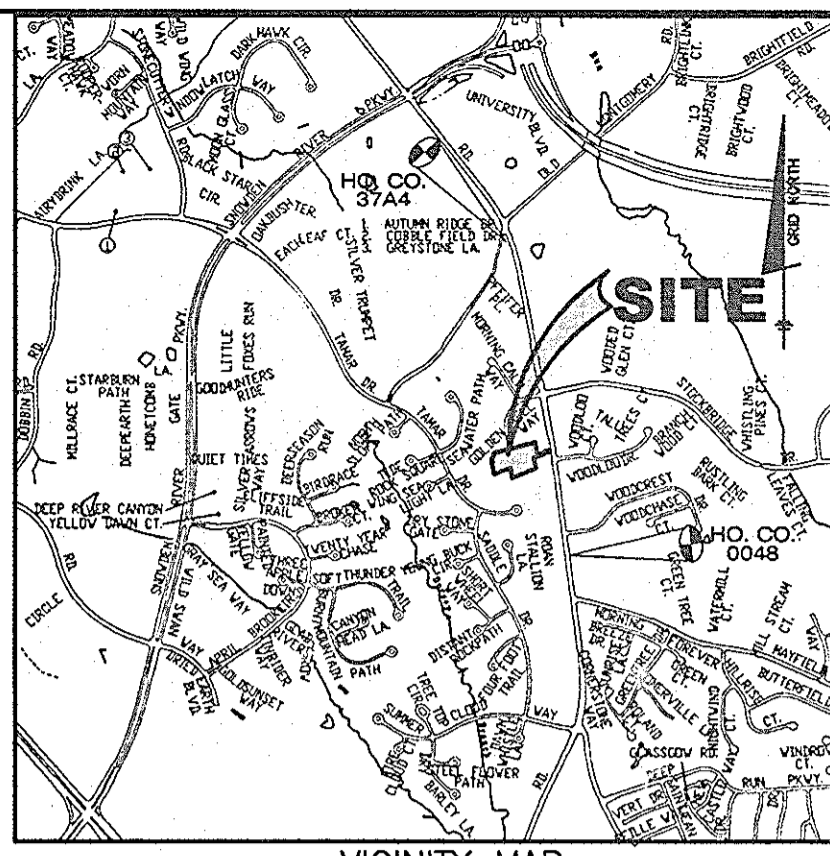


QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUF./SUPPLIER
8" WATER	274 L.F.		DIP	GRIFFIN PIPE
3/4" METER VAULTS	2 EA.			
FIRE HYDRANTS	2 EA.	2 EA.		MUELLEN
1" WHC	519 L.F.		COPPER	RENDING
8" x 6" FH TEE	2 EA.	2 EA.		SIGMA CORP
8" D.I.P. SEWER	118 L.F.		DIP	GRIFFIN
8" PVC SEWER	523 L.F.		PVC SDR-35	SM ESPE
4" SHC	460 L.F.		PVC SDR-35	PLASTIC TRENDS
MANHOLES	9 EA.	9 EA.	CONCRETE	CONTRACTORS PRECAST CORP

NAME OF UTILITY CONTRACTOR: C.J. MILLER
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE:

PUBLIC WATER AND SEWER CONSTRUCTION PLANS GASTINGER PROPERTY LOTS 1 THRU 13 AND OPEN SPACE LOT 14 TAX MAP 37 - GRID 14 - PARCELS 246 & 249 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT No. 24-4511-D

BENCH MARKS	
HO. CO. #0048 (NAD '83)	ELEV. 348.036
STANDARD DISC ON CONCRETE MONUMENT BEING 10.3' OFF CENTER LINE OF MAYFIELD RD. AND 5.3' NORTHWEST OF BG&E POLL NO. 254657	
N 557526.346'	E 1370661.99'
HO. CO. #3744 (NAD '83)	ELEV. 437.276'
STANDARD DISC ON CONCRETE MONUMENT BEING 23.0' OFF THE NORTH EAST CURB OF ROUTE 108/WATERLOO ROAD EAST OF GOLDFINCH COURT AND 19.8' FROM THE NORTHEAST CORNER OF THE END OF THE SIDEWALK	
N 563835.911'	E 1367971.65'



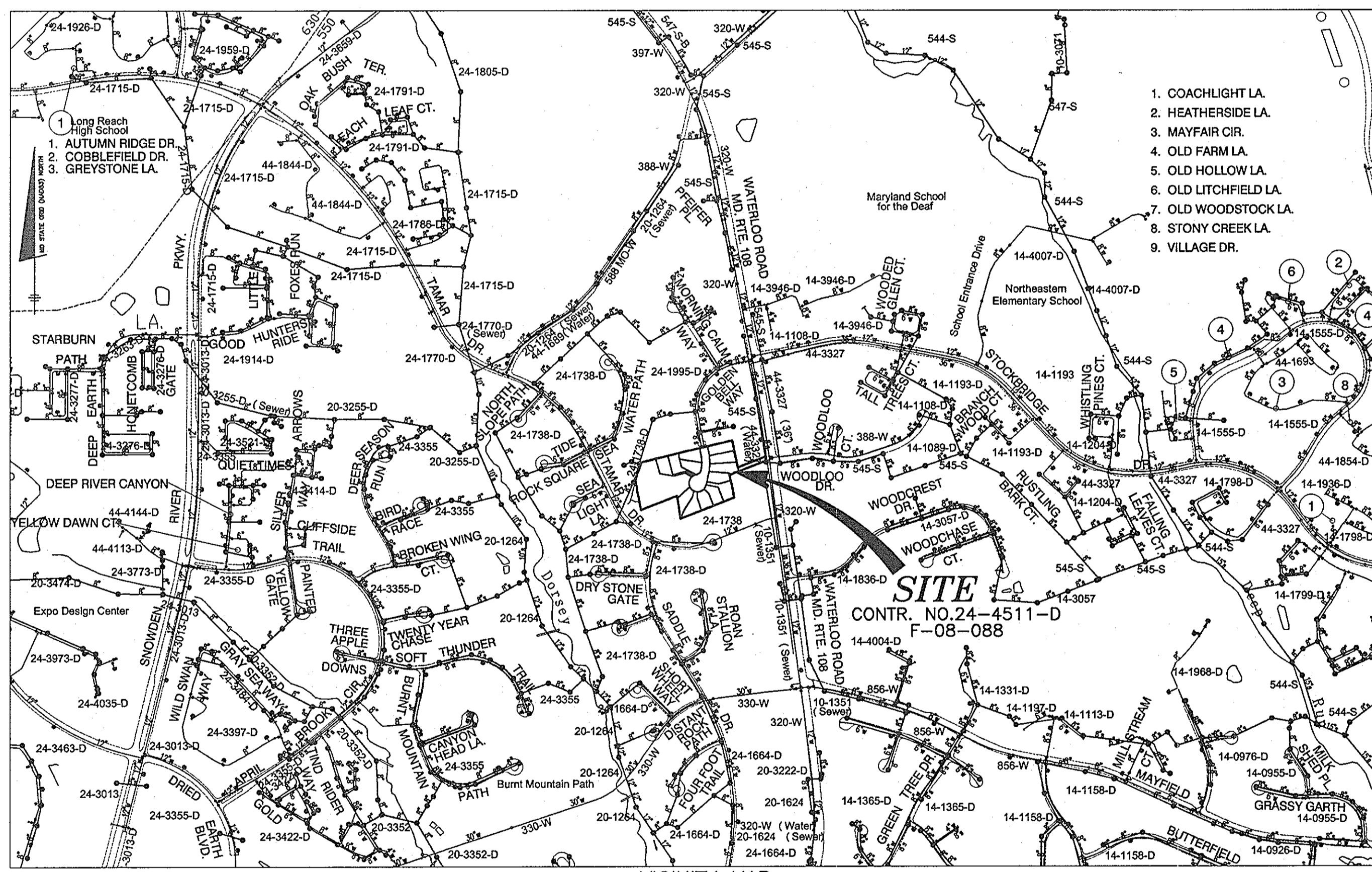
LEGEND

EXIST. WATER MAIN	=====
EXIST. SEWER MAIN	=====
EXIST. SEWER MANHOLE	○
EXIST. STORM DRAIN	=====
PROP. WATER MAIN	=====
PROP. SEWER MAIN	=====
PROP. STORM DRAIN (B OTHERS)	=====
PROP. SEWER MANHOLE	○
PROP. TERMIN. MANHOLE	○
PROP. SEWER HOUSE CONNECTION	-----
PROP. DROP SEWER HOUSE CONN. (SEE PLAN VIEW FOR TYPE)	-----
PROP. WATER HOUSE CONNECTION	-----
PROP. FIRE HYDRANT	-----
PROP. VALVE	-----
PROP. PLUG & BUTTRESS	-----

VALVES	FROM	TO	DISTANCE	REMARKS
6" FHV	FH	V	9'	LA OF LOT 1
	SMH 108	V	62.3'	
	8" V	V	2.5'	
8" VALVE	FH	V	10.5'	LA OF LOT 1
	SMH 9	V	64.7'	
	6" FHV	V	2.5'	
6" FHV	FH	V	39'	IN FRONT
	SMH 106	V	38.5'	OF LOT 7
	SMH 109	V	30'	

SHEET INDEX

NO.	DESCRIPTION
1	WATER & SEWER TITLE SHEET
2	PLAN OF WATER AND SEWER MAINS
3	WATER & SEWER PROFILES, NOTES, AND DETAILS



VICINITY MAP
SCALE: 1" = 600'

(FOR COUNTY USE ONLY)	
WATER AND SEWER COUNTY CODE	
WATER CODE: E07	
SEWER CODE: 2780000	
TEST GRADIENT: 700	

TYPE OF BUILDING: SINGLE FAMILY RESIDENTIAL	
NO. OF LOTS/PARCELS: 13 (INCLUDING 1 OS LOT)	
NUMBER OF SHC'S: 13	
NUMBER OF WHC'S: 13	
SEWER SHED: DORSEY	
TREATMENT PLANT: DORSEY RUN PUMPING STATION	

- GENERAL NOTES:**
- PART 1 - GENERAL**
- 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. (NORTH AMERICAN DATUM OF 1983 (NAD'83)).
 - 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 12". 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 [] AT THE LOCATION OF THE TEST PIT. A NOTE ON THE DRAWINGS 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 (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION.....410-531-5533
 - BGE CONTRACTOR SERVICES.....410-850-4620
 - BGE UNDERGROUND DAMAGE CONTROL.....410-291-4607
 - MISS UTILITY.....1-800-257-7777
 - COLONIAL PIPELINE CO.....410-549-4120
 - HOWARD CO. DEPT. OF PUBLIC WORKS.....410-313-4900
 - BUREAU OF UTILITIES.....1-800-446-5266
 - BELL ATLANTIC.....1-800-446-5266
 - 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.
 - PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE OPERATIONS.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 AT LEAST FIVE (5) 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(c) OF THE HOWARD COUNTY CODE.
- PART 2 - WATER**
- ALL WATER MAINS TO BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5' 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 WATER HOUSE CONNECTIONS SHALL BE 1 INCH.
 - FOR SPRINKLER SYSTEM FOR ALL TOWN HOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1' CONNECTION WITH A 3/4" METER.
- PART 3 - SEWER**
- ALL SEWER MAINS SHALL BE 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 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.

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

John R. Roberts 2/20/09
 HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER F-08-088

OWNER:
 CHARLES J. GASTINGER AND
 BARBARA E. GASTINGER
 6200 WATERLOO ROAD
 COLUMBIA, MARYLAND 21045

DEVELOPER:
 SECURITY DEVELOPMENT L.L.C.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21041

NOTE: ALL JOINTS AND CONNECTIONS LOCATED WITHIN STRUCTURAL FILL AREAS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION)

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

John C. Green 1/10/09
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

Chad Edmondson 1/23/09
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE • SUITE 418
 ELLICOTT CITY, MARYLAND 21045
 PHONE: 410-465-8100 FAX: 410-465-6644
 E-MAIL: be@benchmark-engineering.com

STATE OF MARYLAND
 PROFESSIONAL CERTIFICATION
Donald M. Miller 12/30/08
 Professional Engineer, License No. 21443, Expired Date: 12-31-2010

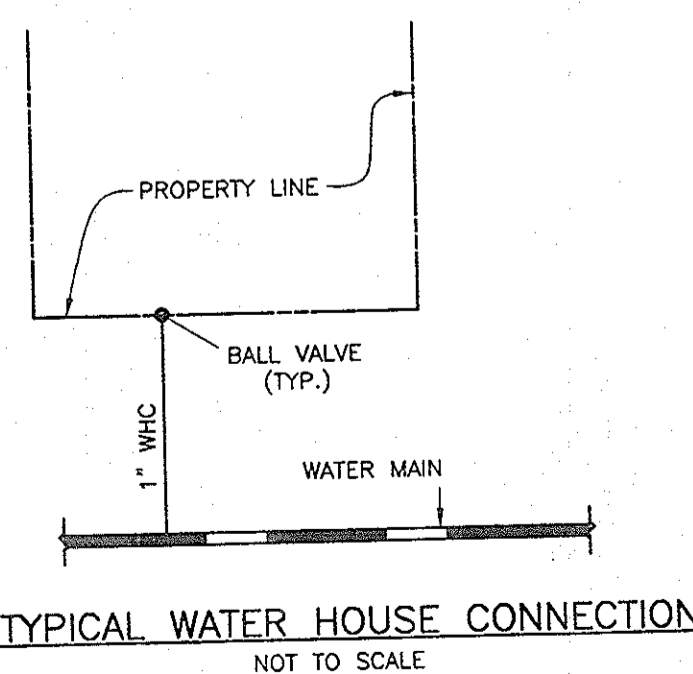
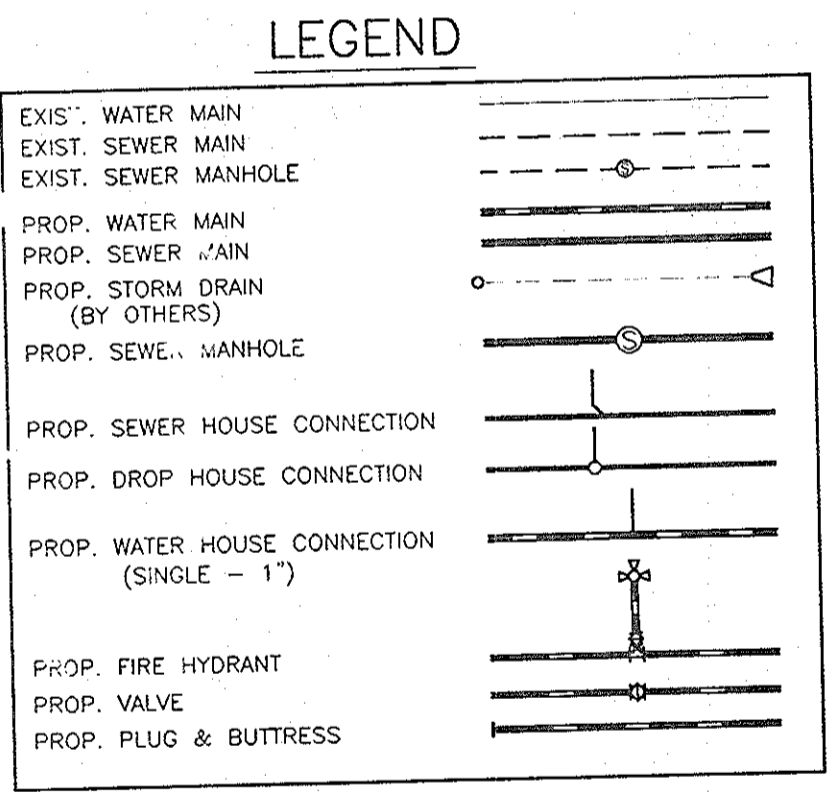
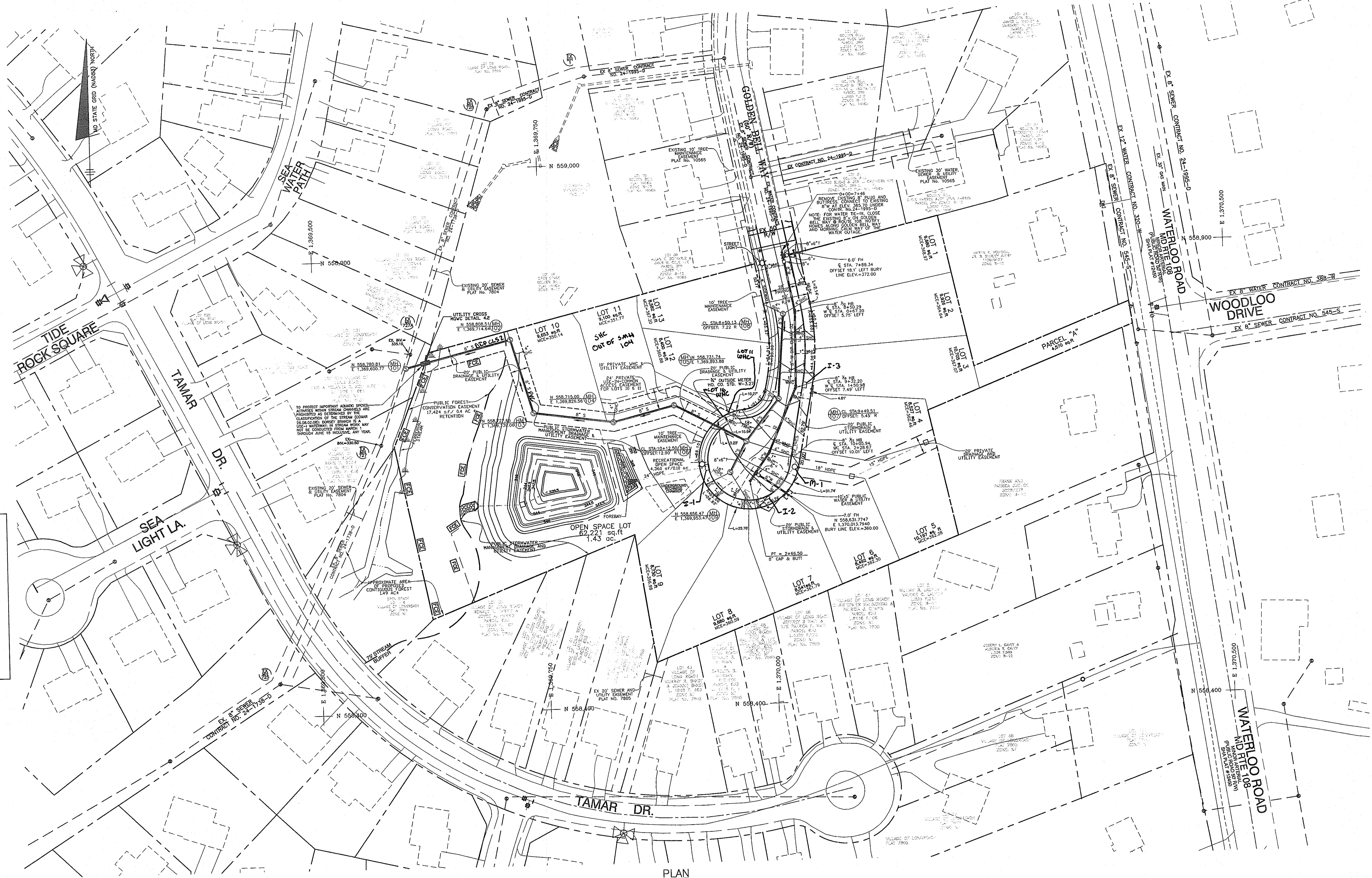
DES:	WEO				
DRN:	WEO				
CHK:	DAM				
DATE:	11/13/07				
BY:	KCS	AS-BUILT			
NO.					
REVISIONS					
DATE:	11/13/07				

WATER AND SEWER
TITLE SHEET

600 SCALE MAP: 37 BLOCK: 3

GASTINGER PROPERTY
 LOTS 1 THRU 13 AND
 OPEN SPACE LOT 14
 TAX MAP 37 - GRID 14 - PARCELS 246 & 249
 ELECTION DISTRICT NO. 6
CONTRACT No. 24-4511-D

SCALE: AS SHOWN
 SHEET NO. 1 OF 3
 F-08-088



PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Shelby C. Green 1/16/09
CHIEF, BUREAU OF UTILITIES DATE

Chad Edwards 1/29/09
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644

David M. ... 12-30-08
Professional Engineer under the laws of the State of Maryland, License No. 21443, Expiration Date: 12-31-2010.

DESIGN: WEO					
DRAFT: WEO					
CHECK: DAM					
DATE: 11/13/07					
BY: NO.					
AS-GUILT					
REVISIONS					
DATE					
FEB 2012					

PLAN OF WATER AND SEWER MAINS

600 SCALE MAP NO. 37 BLOCK 3

OWNER:
CHARLES J. GASTINGER AND
BARBARA E. GASTINGER
6200 WATERLOO ROAD
COLUMBIA, MARYLAND 21045

DEVELOPER:
SECURITY DEVELOPMENT L.L.C.
P.O. BOX 417
ELLCOTT CITY, MARYLAND 21041

GASTINGER PROPERTY
LOTS 1 THRU 13 AND
OPEN SPACE LOT 14
TAX MAP 37 - GRID 14 - PARCELS 246 & 249
ELECTION DISTRICT NO. 6

CONTRACT No. 24-4511-D

SCALE:
AS SHOWN

SHEET NO.
2 OF 3

F-08-088

