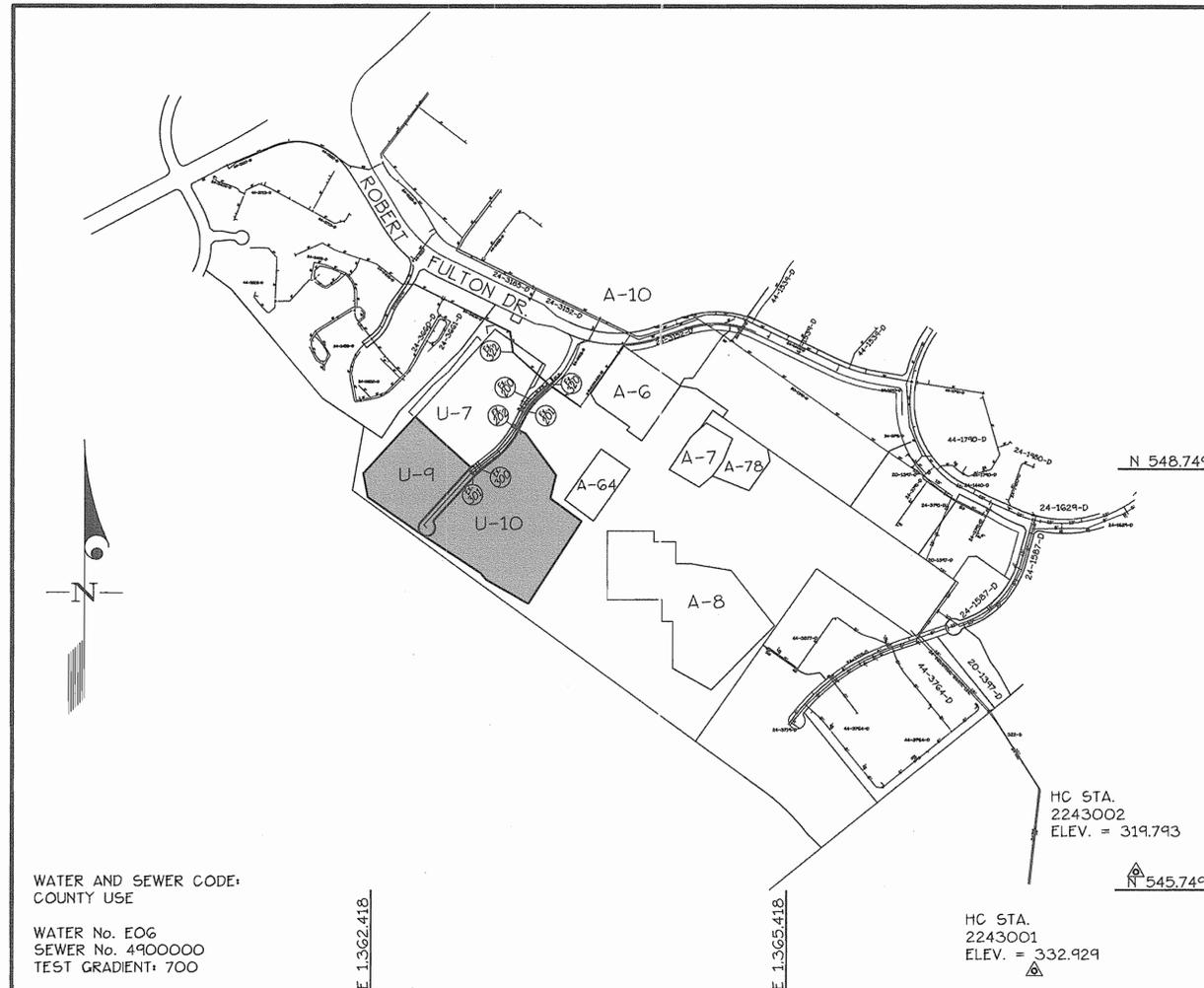


QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
12" WATER (DIP)	964 L.F.	508 L.F.	DIP CL. 52	GRIFFIN PIPE/BELAIR RD. SUPPLY
8" WATER (DIP)	204 L.F.	194 L.F.	DIP CL. 52	GRIFFIN PIPE/BELAIR RD. SUPPLY
6" WATER (DIP)	50 L.F.	52 L.F.	DIP CL. 52	GRIFFIN PIPE/BELAIR RD. SUPPLY
8" VALVE	5 EA.	4 EACH	GATE VALVE	KENNEDY VALVE/HUGHES
6" VALVE	2 EA.	2 EACH	GATE VALVE	KENNEDY VALVE/HUGHES
12" x 8" CROSS	1 EA.	1 EACH	---	GRIFFIN PIPE/BELAIR RD. SUPPLY
12" x 8" TEE	1 EA.	1 EACH	---	GRIFFIN PIPE/BELAIR RD. SUPPLY
12" x 6" FHT	2 EA.	2 EACH	---	GRIFFIN PIPE/BELAIR RD. SUPPLY
FIRE HYDRANT	2 EA.	2 EACH	FH	KENNEDY VALVE/HUGHES
8" CAP	4 EA.	4 EACH	---	GRIFFIN PIPE/BELAIR RD. SUPPLY
12"x8" REDUCER	1 EA.	1 EACH	---	GRIFFIN PIPE/BELAIR RD. SUPPLY
NAME OF UTILITY CONTRACTOR: HIGHLAND TURF INC.				
SURVEY AND DRAFTING DIV.		CHECKBOX AS-BUILT DATE: OCTOBER 2005		



TYPE OF BUILDING	COMMERCIAL
NUMBER OF UNITS	2 BULK PARCELS
NUMBER OF S.H.C.'s	N/A
NUMBER OF W.H.C.'s	4
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLANT	LITTLE PATUXENT WATER RECLAMATION PLANT

**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 (NORTH AMERICAN DATUM 1927 (NAD '27)).
  - ALL VERTICAL CONTROLS ARE BASED ON NAVD 88.
  - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
  - CLEAR ALL UTILITIES BY A MINIMUM OF 12". 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 OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED TO 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 (S) 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 (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 

AT+T	1-800-252-1133
STATE HIGHWAY ADMINISTRATION	410-531-5533
BGE CONTRACTOR SERVICES	410-850-4620
BGE UNDER GROUND DAMAGE CONTROL	410-291-4607
MES UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	410-549-4120
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES	410-313-4900
VERIZON	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.
  - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD 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 REQUIREMENT PER SECTION 18.114(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 INSTALLED IN ACCORDANCE WITH THE 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.
  - FOR SPRINKLER SYSTEM 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 DIP AND 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 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 + WITH ROAD DRAWINGS PLAN F-05-034, FOR SEDIMENT + EROSION CONTROL.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

*Jie Mym/05* 2/7/05  
 SIGNATURE DATE

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

APPROVED: *[Signature]* 2/7/05  
 HOWARD S.C.D. DATE

CONTRACT No. 24-4252-D  
**COLUMBIA GATEWAY**  
 PARCELS "U-9" & "U-10"  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS

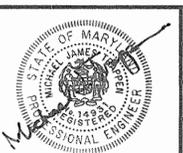
**AS BUILT**  
 DATE: OCTOBER 2005

GLW FILE #91-055  
 WATER + SEWER FINAL

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
*[Signature]* 2-2-05  
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
*[Signature]* 2/4/05  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3904 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 BALT: 410-860-1820 DC/VA: 301-981-2524 FAX: 301-421-4186



DES: _____	BY: _____	NO: _____	REVISION: _____	DATE: _____
DRN: mjt				
CHK: mjt				
DATE: FEB. 2005				

TITLE SHEET  
 600' SCALE MAP NO. 42 BLOCK NO. 11

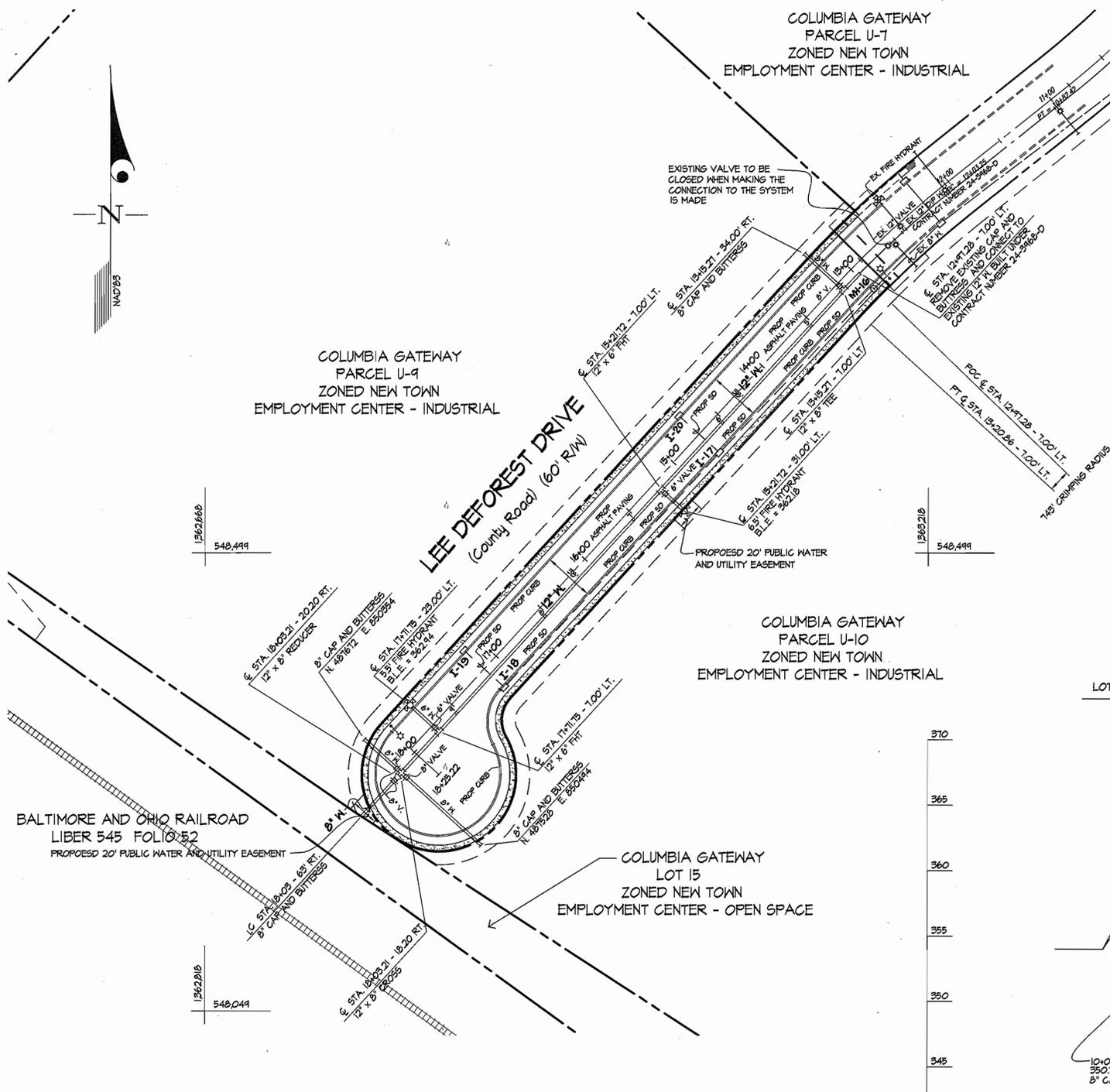
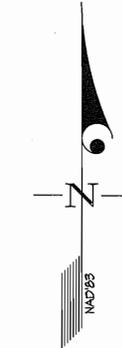
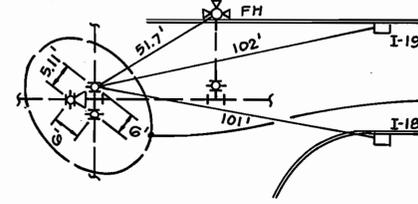
**COLUMBIA GATEWAY**  
 PARCELS U-9 & U-10  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 6  
 CONTRACT No. 24-4252-D

SCALE AS SHOWN  
 SHEET 1 OF 2

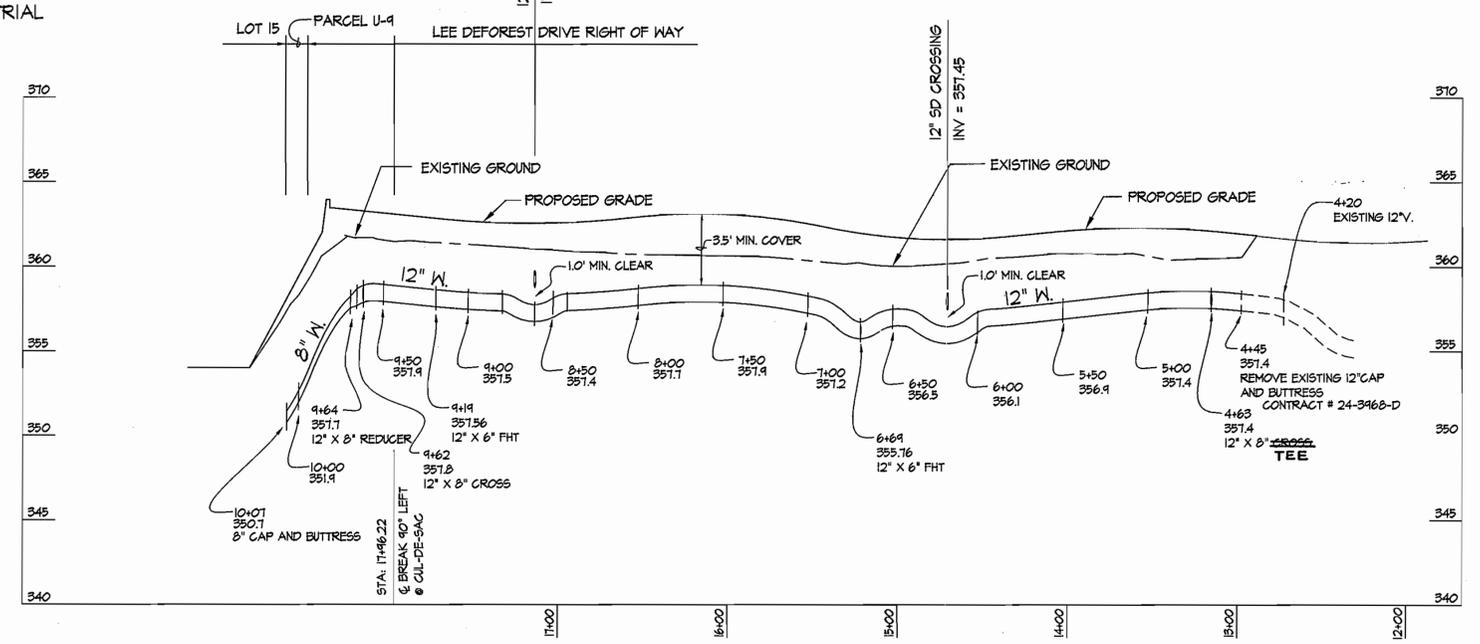
L:\CADD\DRAWINGS\91055\design2\91055WS\COVER.DWG 07/15/2004 04:42:13 PM EDT

AS BUILTS

VALVES	FROM	TO	DISTANCE
8" VALVE	M-10	VALVE	28'
4+03/13+15	Ex. FH	VALVE	72.3'
± ROAD STA.	Ex. FH VALVE	VALVE	66'
6" VALVE	FH	VALVE	22.0'
6+09/15+21	I-17	VALVE	51.0'
± ROAD STA.	I-20	VALVE	58.0'
6" VALVE	FH	VALVE	29'
9+19/17+71	I-18	VALVE	58.3'
± ROAD STA.	I-19	VALVE	61.0'
(3) 8" VALVES	FH	VALVE	51.7'
9+02 12" x 8"	I-18	VALVE	101'
CROSS	I-19	VALVE	102'



Plan  
Scale: 1" = 50'



Profile  
Scale: 1" = 50' Horiz.  
1" = 5' Vert.

**AS BUILT**  
DATE: OCTOBER 2005

DEPARTMENT OF  
PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*R.H. Basin* 2-7-05  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF  
PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20866  
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4188



DES:	
DRN: wsj/klp	
CHK: <i>rot</i>	
DATE: Nov. 2004	
BY	NO
REVISION	
DATE	

WATER PLAN  
SCALE: 1"=50'  
600' SCALE MAP NO. 42 BLOCK NO. 11

**COLUMBIA GATEWAY**  
PARCELS 'U-9' & 'U-10'  
HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 6  
CONTRACT No. 24-4252-D

SCALE  
1"=50'  
SHEET  
2 OF 2