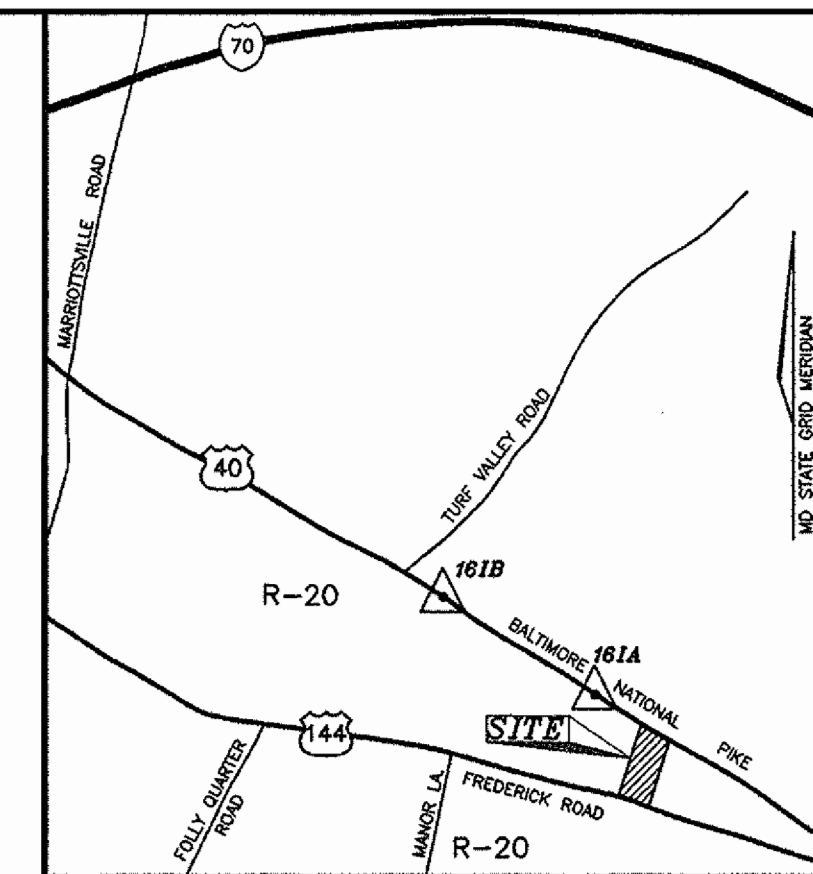


CORNNELL PROPERTY PUBLIC WATER AND SEWER PLANS HOWARD COUNTY, MARYLAND CONTRACT NO. 24-3668-D

BENCH MARKS
 HOWARD COUNTY CONTROL NUMBERS:
 161A N589,509.3981 E1,346,343.6452 EL. 463.67
 161B N590,475.2987 E1,344,753.9758 EL. 470.61

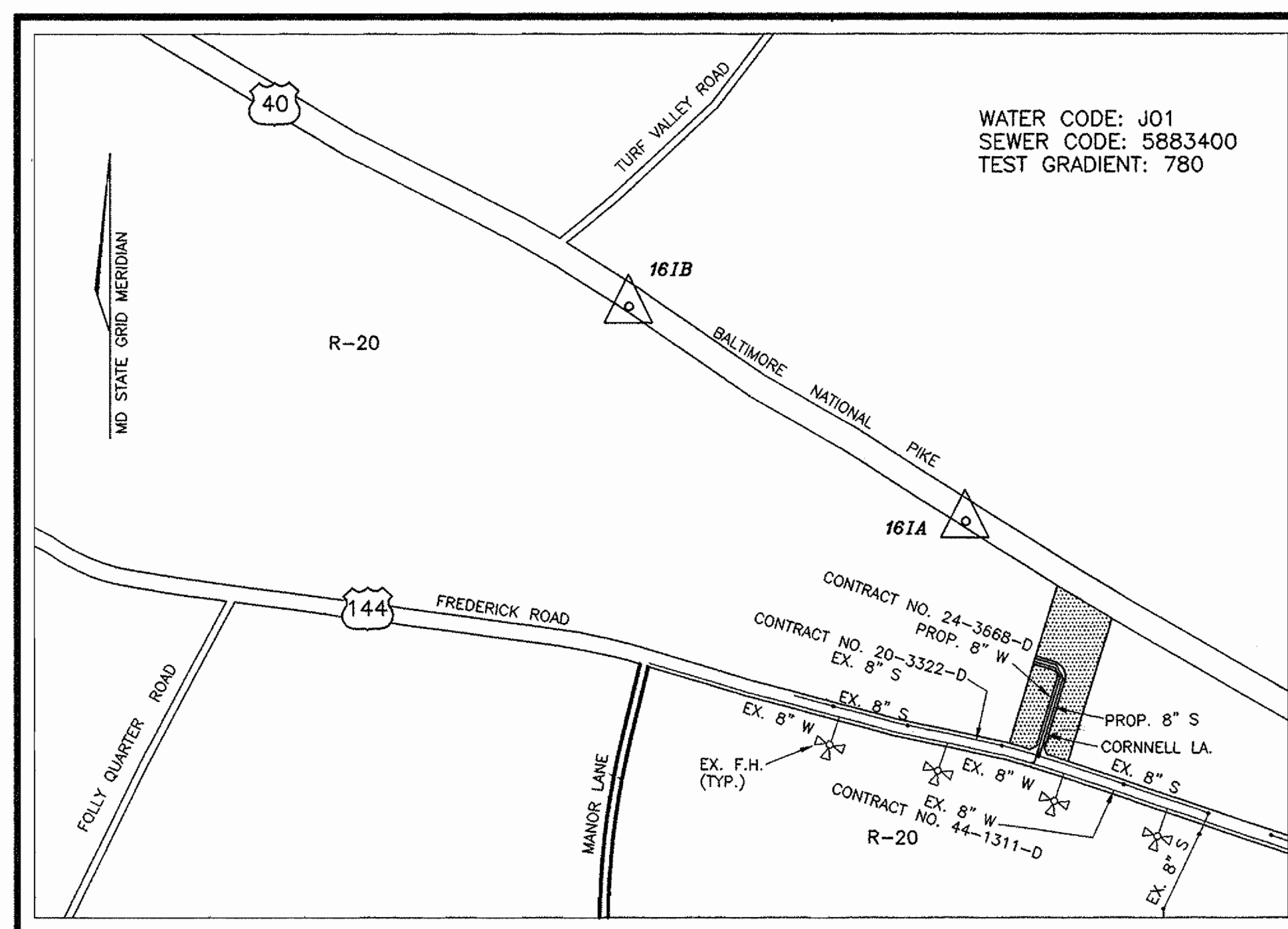


VICINITY MAP
SCALE: 1"=2000'

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 CONTRACTORS 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 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 CONTRACTED 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 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 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 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.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:

C. & P. TELEPHONE	597-8585
A.T. & T.	865-3833
STATE HIGHWAY ADMINISTRATION	531-5533
B.G.&E. CO. CONTRACTOR SERVICES	850-4620
B.G.&E. CO. UNDER GROUND DAMAGE CONTROL	787-9068
MISS UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	313-4900
BUREAU OF UTILITIES	
 - 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 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) 513-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAIN OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DFW REQUIREMENTS PER SECTION 18.114(c) OF THE HOWARD COUNTY CODE.



LOCATION PLAN

SCALE: 1"=600'

1 1/2" W.H.C.	30 L.F.			
1" W.H.C.	149 L.F.			
4" S.H.C.	188 L.F.			
MANHOLE	3			
8" SEWER	561 L.F.			
8" VALVE	1			
8" VALVE	1			
8"X8" TEE	1			
8"X8" TAPPING SLEEVE	1			
FIRE HYDRANT	1			
8" STOPPER	1			
8" CAP & BUTTRESS	1			
8" 1/8 H.B.	2			
8" WATER	592 L.F.			
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
AS-BUILT				
QUANTITIES				
NAME OF UTILITY CONTRACTOR				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				

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 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 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.

PART III - SEWER

- ALL SEWER MAINS SHALL BE DIP CLASS 52 OR PVC.
- 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.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER TIGHT FRAME AND COVERS, STANDARD DETAIL GS-52. WHERE WATER TIGHT 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.

TYPE OF BUILDING:	SINGLE FAMILY DETACHED
NO. OF LOTS/PARCELS:	9
NO. OF WATER HOUSE CONNECTIONS:	9
NO. OF SEWER HOUSE CONNECTIONS:	9
DRAINAGE AREA:	LITTLE PATUMNET
TREATMENT PLANT:	THE 100 PUMPING STATION

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH THE ROAD CONSTRUCTION PLAN F-98-163

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

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Sheldon A. ... 12/4/98
SOIL CONSERVATION DISTRICT

Cheryl Simmons / et al. 12/4/98
U.S. Natural Resource Conservation Service

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

VOGEL & ASSOCIATES
ENGINEERS-SURVEYORS-PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.463.3966



DES: P.K.P.
DRN: P.K.P.
CHK: R.H.V.
NOVEMBER, 1998

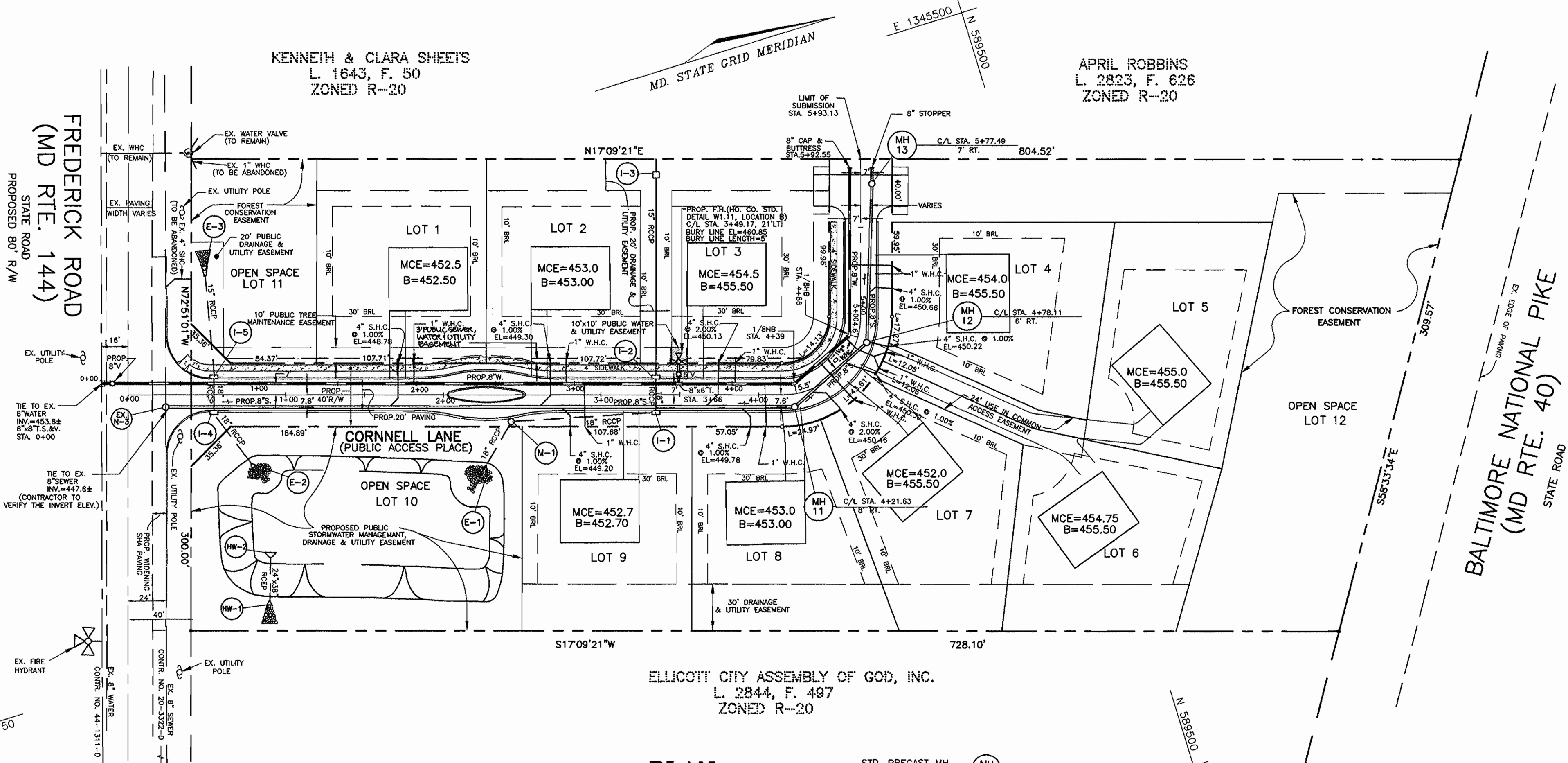
BY	NO.	REVISION	DATE

TITLE SHEET

CORNNELL PROPERTY
 LOTS 1 - 9 AND
 OPEN SPACE LOTS 10 - 12
 CONTRACT NO. 24-3668-D
 TAX MAP #16 PARCEL #37 BLOCK #24
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 2

ACADIGS\CORNNELL\FINAL\TITLE.DWG

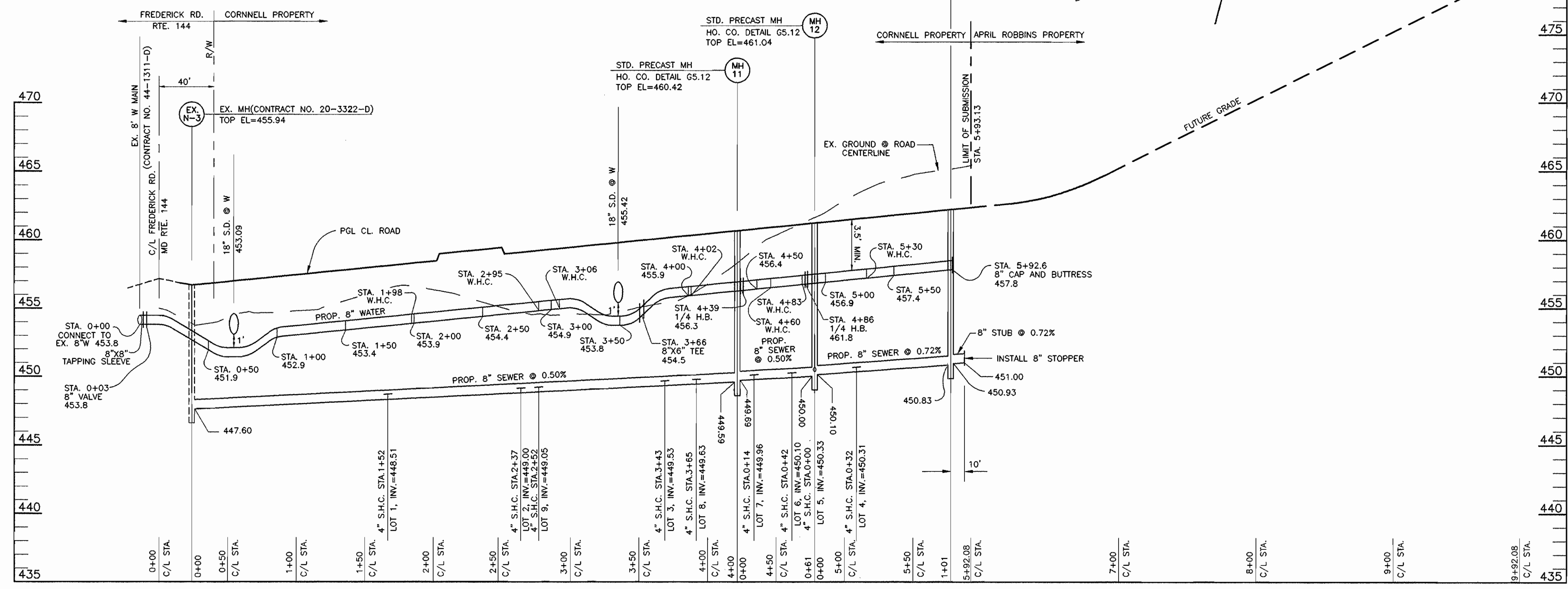


LEGEND

- EXISTING WATER
- EXISTING SEWER
- PROPERTY LINE
- PROPOSED WATER
- PROPOSED SEWER

SEWER CONNECTION TABULATION				
LOT NO.	ELEV. @	MAIN ELEV. @	LOT/R.O.W.	M.C.E.
1	448.56	448.85		452.50
2	449.00	449.30		453.00
3	449.53	450.13		454.50
4	450.31	450.66		454.00
5	450.33	450.22		455.00
6	450.10	450.30		454.75
7	449.96	450.46		452.00
8	449.63	449.78		453.00
9	449.05	449.20		452.70

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZ. 1"=50', VERT. 1"=5'

OWNER
WILLIAM S. CORNNELL
10676 FREDERICK ROAD
ELLICOTT CITY, MARYLAND 21042
(410)465-3980

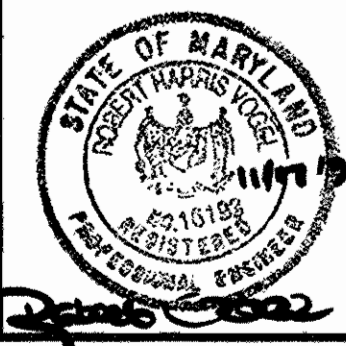
DEVELOPER
LAND HOLDINGS, LLC
C/O JIM GREENFIELD
P. O. BOX 999
COLUMBIA, MARYLAND 21044
(410)730-3940

ACAD:DWG:CORNNELL:FINAL:V5.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANING & ZONING
HOWARD COUNTY, MARYLAND

VOGEL & ASSOCIATES
ENGINEERS-SURVEYORS-PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3966



DES:	J.E.R.
DRN:	J.E.R.
CHK:	R.H.V.
DATE:	NOV., 1998
BY:	NO.
REVISION:	
DATE:	

**PLAN AND PROFILE
WATER AND SEWER**

600' SCALE MAP NO. 16 BLOCK NO. 24

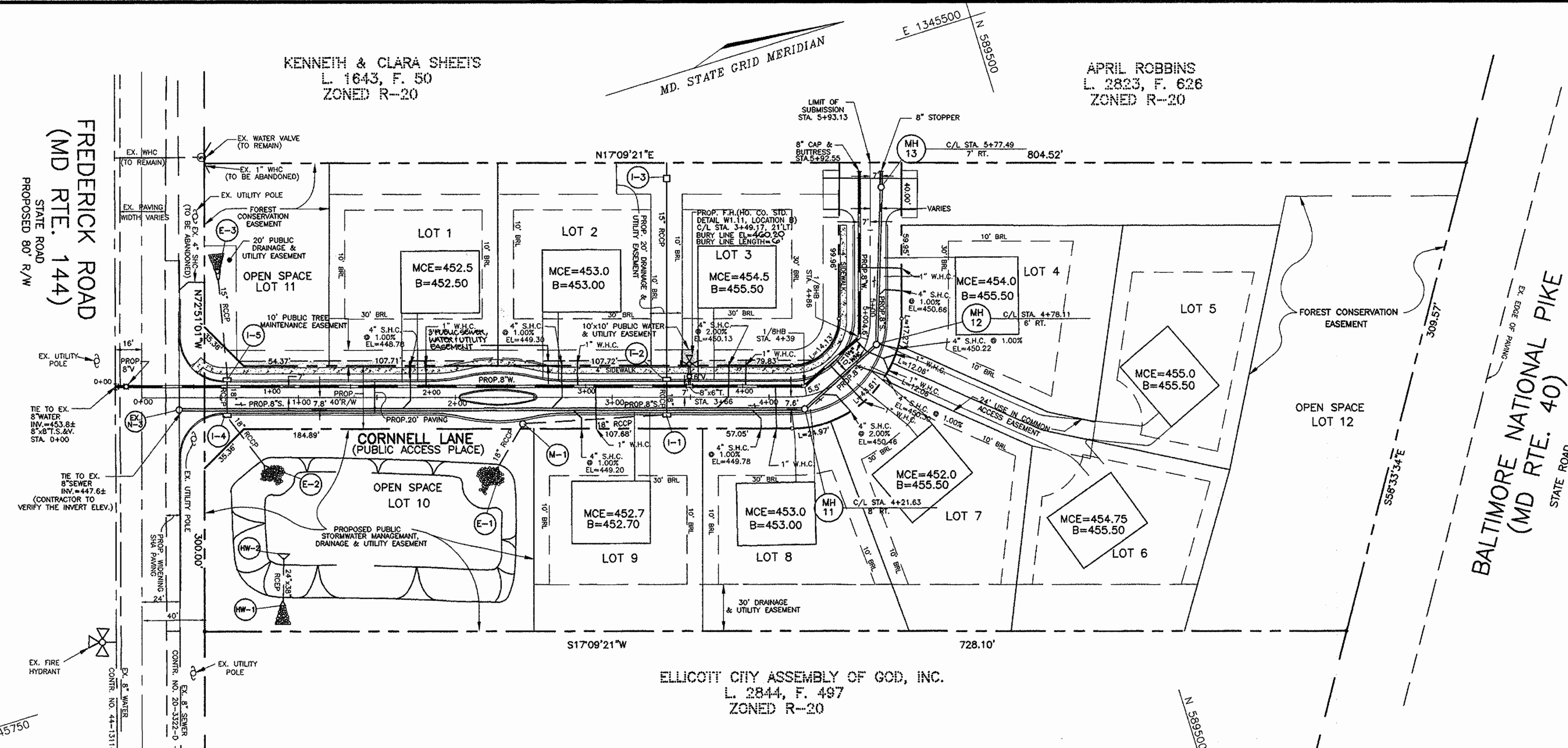
**CORNNELL PROPERTY
LOTS 1 - 9 AND
OPEN SPACE LOTS 10 - 12
CONTRACT NO.24-3668-D**

TAX MAP #16 PARCEL #37 BLOCK #24
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET AS SHOWN
2 OF 2

R.H. V. 12-4-98
CHIEF, BUREAU OF UTILITIES DATE

Chris D... 12/1/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

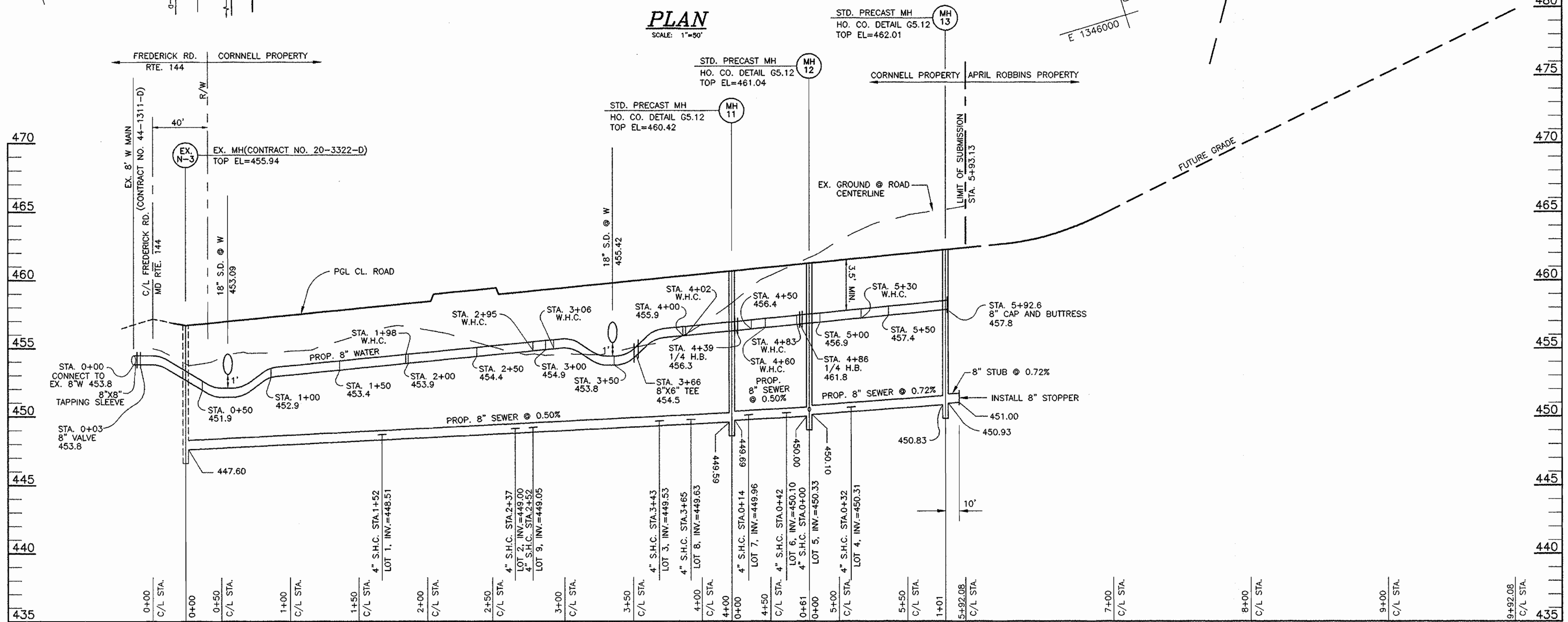


LEGEND

- EXISTING WATER
- EXISTING SEWER
- PROPERTY LINE
- PROPOSED WATER
- PROPOSED SEWER

SEWER CONNECTION TABULATION

LOT NO.	ELEV. @ MAIN	ELEV. @ LOT/R.O.W.	M.C.E.
1	448.56	448.85	452.50
2	449.00	449.30	453.00
3	449.53	450.13	454.50
4	450.31	450.86	454.00
5	450.33	450.22	455.00
6	450.10	450.30	454.75
7	449.96	450.46	452.00
8	449.63	449.78	453.00
9	449.05	449.20	452.70



PROFILE
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R.H. V. 12-4-98
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

M. J. D. 12/18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

VOGEL & ASSOCIATES
ENGINEERS-SURVEYORS-PLANNERS

3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

DES:	J.E.R.				
DRN:	J.E.R.				
CHK:	R.H.V.				
DATE:	NOV., 1998				
BY:	JCO	1	ADJUST BURY ELEVATION AND LENGTH	4/30/99	
NO.:			REVISION	DATE	

**PLAN AND PROFILE
WATER AND SEWER**

600' SCALE MAP NO. 16 BLOCK NO. 24

OWNER
WILLIAM S. CORNELL
10676 FREDERICK ROAD
ELLCOTT CITY, MARYLAND 21042
(410)465-3980

DEVELOPER
LAND HOLDINGS, LLC
C/O JIM GREENFIELD
P. O. BOX 999
COLUMBIA, MARYLAND 21044
(410)730-3940

**CORNELL PROPERTY
LOTS 1 - 9 AND
OPEN SPACE LOTS 10 - 12
CONTRACT NO.24-3668-D**

TAX MAP #16 PARCEL #37 BLOCK #24
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 2

A:\00105\CORNELL\FINAL.VIS.DWG