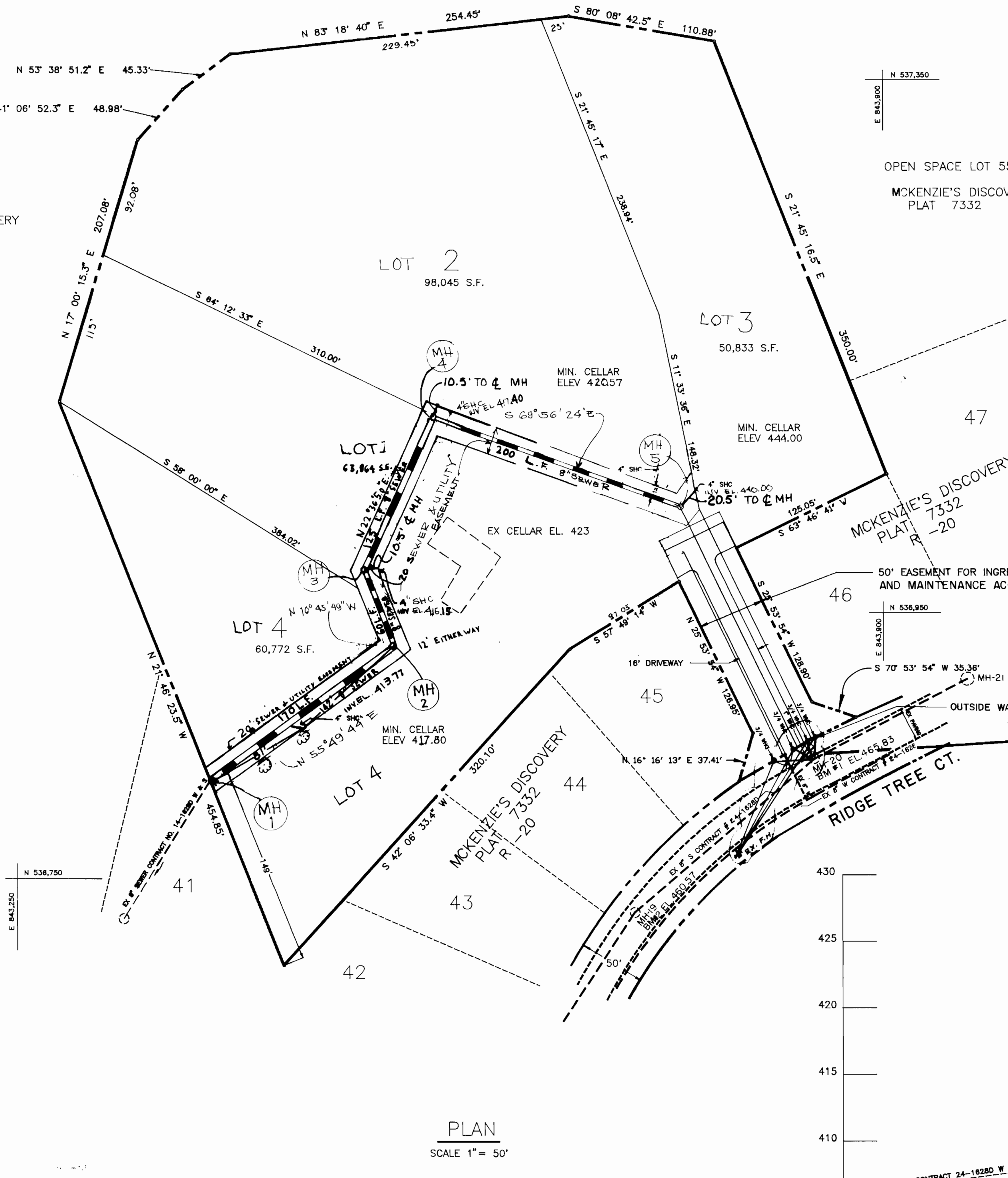


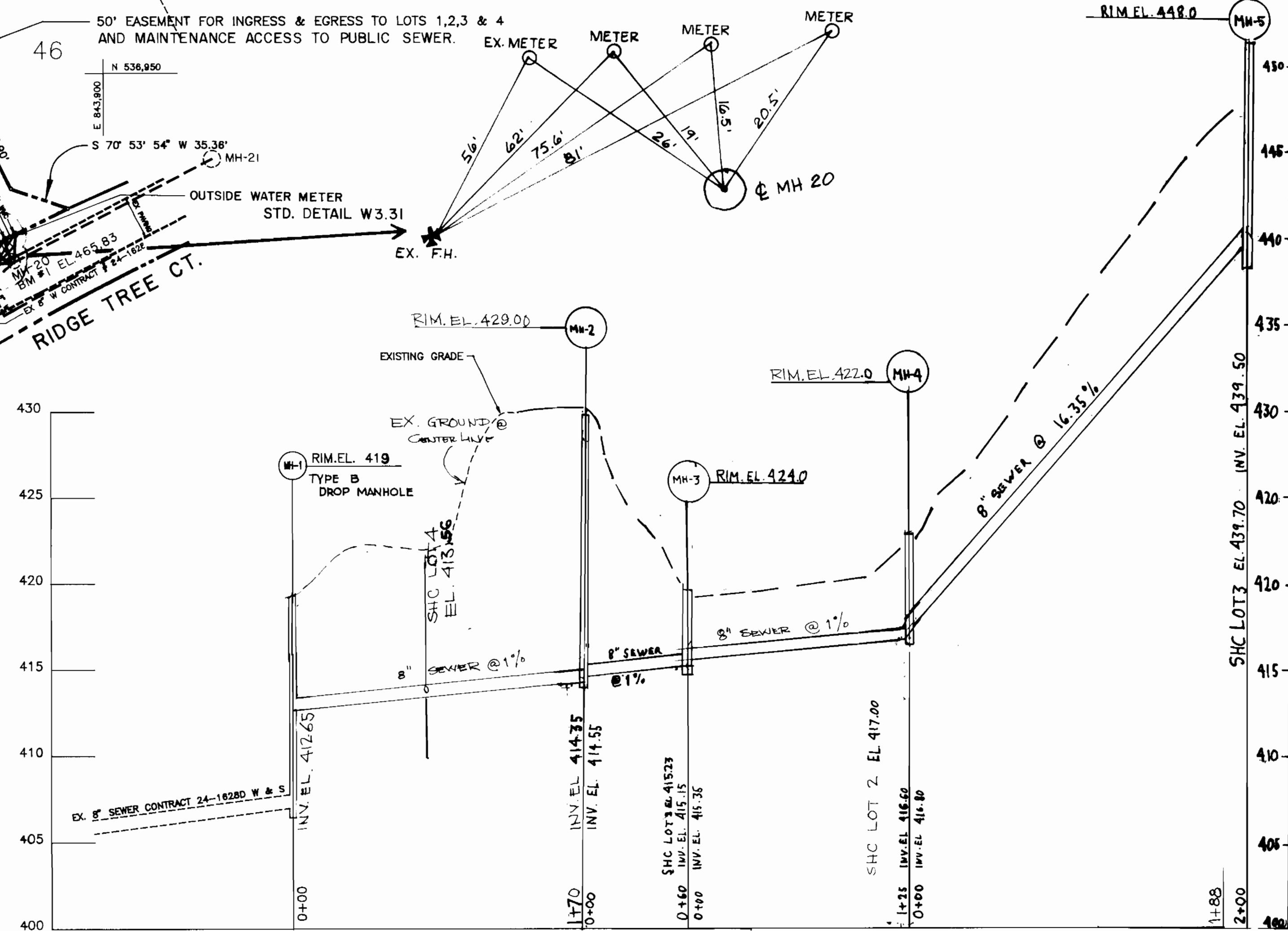
VICINITY MAP
SCALE 1"=600'

QUANTITIES			
ITEM	ESTIMATED	AS BUILT	SUPPLIER
8" SEWER	55 L.F.	54 L.F.	J+M
MANHOLES	41 V.F.	41 V.F.	ATLANTIC
4" SHC	45 L.F.	45 L.F.	J+M
1" WHC	25 L.F.	27 L.F.	CAMBRIDGELEE
3/4" WHC	40 L.F.	43 L.F.	CAMBRIDGE LEE

NO. OF LOTS	4
NO. OF WHC	4
NO. OF SHC	4
DRAINAGE AREA	PATAPSCO (ROUTE 106 PUMPING STATION)



PLAN
SCALE 1"=50'



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

- GENERAL NOTES:
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE PREPARED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
 - ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 6".
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USED HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. 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 ON THE DRAWINGS. 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 PITS HAVE BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST TEN WORKING DAYS BEFORE STARTING WORK ON THESE PLANS.
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC, CONTRACTOR SERVICES - 561-2585
 - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL - 234-5521
 - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING - 298-9013
 - MISS UTILITY - 1-301-559-0100
 - COLONIAL PIPE LINE COMPANY - 795-1390
 - HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS CONSTRUCTION INSPECTION DIVISION - 792-7272
 - BUREAU OF UTILITIES - 313-4900
 - TREES AND SHRUBS SHALL 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 LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
 - ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3-1/2 FEET 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 IN THE DRAWINGS.
 - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1,000 AND 1,005 OF THE STANDARD SPECIFICATIONS. (STD. DETAILS W.3.21).
 - 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 THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
 - WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL BE WATER TIGHT FRAME AND COVERS STANDARD DETAIL GS.52. WHERE WATER TIGHT FRAME AND COVER IS USED, SET TO OF FRAME 1" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., OR PVC UNLESS OTHERWISE NOTED.
 - 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 18" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL GS.51.
 - ALL WATER HOUSE CONNECTIONS ARE FOR OUTSIDE METER SETTING LOT TO HAVE TRAFFIC BEARING FRAME & COVER.
 - ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-153 DUCTILE IRON COMPACT FITTING, 3" THROUGH 12" FOR WATER AND OTHER LIQUIDS.

WATER CODE - H03
SEWER CODE - 5758000

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

APPROVED: *[Signature]* 1/16/91 DATE
HOWARD COUNTY SOIL CONSERVATION DISTRICT

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

APPROVED: *[Signature]* 1-16-91 DATE
U.S. SOIL CONSERVATION SERVICE

(F-91-50)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

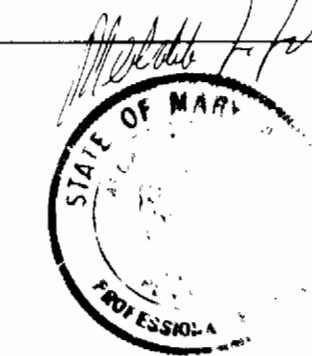
[Signature] 1/16/91 DATE
DIRECTOR OF PUBLIC WORKS

[Signature] 1/16/91 DATE
CHIEF BUREAU OF ENGINEERING

[Signature] 12-31-90 DATE
CHIEF BUREAU OF UTILITIES

[Signature] 1/16/91 DATE
CHIEF, LAND DEVELOPMENT DIVISION

loria engineering inc.
CONSULTING ENGINEERS • LAND PLANNERS • SURVEYORS
3230 BETHANY LANE, SUITE 4
ELLCOTT CITY, MARYLAND 21043
TEL. (301) 465-0400



DATE	BY	REVISION
5-2-91	LEB	TYPE D DROP MANHOLE (MH1 PROFILE)
8-8-94	LEB	REVISED SEWER LINE

PLAN AND PROFILE
WATER AND SEWER

CONTRACT NO. 24-3097-D

HANNON PROPERTY
LOTS 1 TO 4

TAX MAP 17 PARCEL 362 6th ELECTION DISTRICT HOWARD COUNTY, MD.

AS-BUILT 8-29-95