

VILLAGE OF RIVER HILL

WATER & SEWER MAIN EXTENSION

SECTION 4 • AREA 1 • PARCEL A-1


SHEET INDEX	
NO.	PLAN
1 OF 3	TITLE SHEET
2 OF 3	WATER & SEWER PLAN
3 OF 3	WATER & SEWER PROFILES

CONTRACT NO. 34-4009-D

5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

GENERAL NOTES

PART I - 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 (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 6'. CLEAR ALL POLES BY 2'-0" MIN. OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED UTILITY COMPANIES AND MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON DRAWINGS. IN EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO SCHEDULE BRACING OF 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. 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 OPERATIONS AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - (410) 531-5633
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - (410) 950-4620
 - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL - (410) 291-4607
 - MISS UTILITY - 1-800-257-7777
 - BELL ATLANTIC - 1-800-446-5266
 - COLONIAL PIPELINE CO. - (410) 549-4120
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - (410) 313-4900
- 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 410-313-2450 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(a) OF THE HOWARD COUNTY CODE.

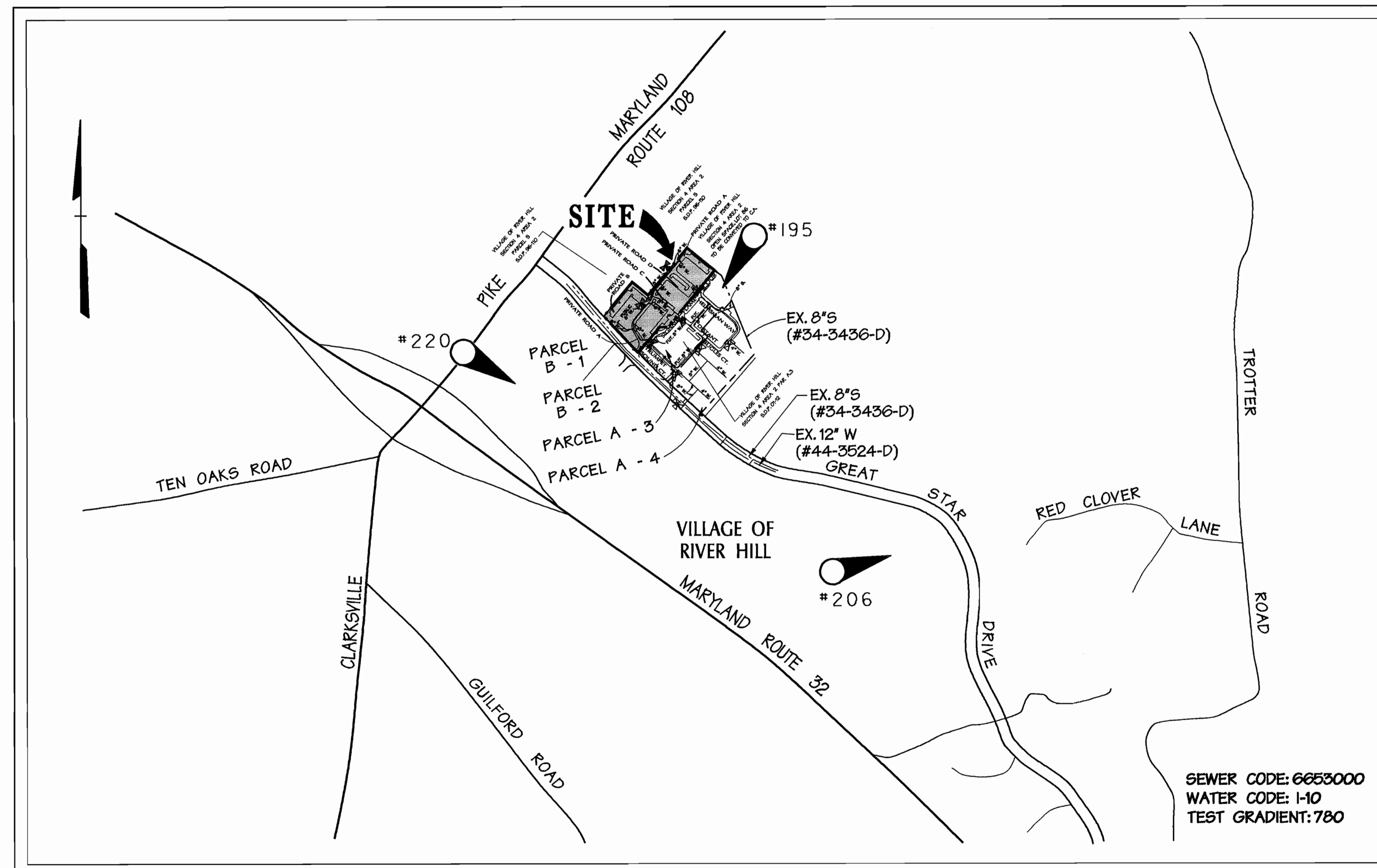
PART II - WATER

- 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 TREES SHALL BE STRAPPED TO TREES.
- 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 STRAPPED 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 THE PLANS OR IN THE SPECIFICATIONS.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3 INCH THROUGH 12 INCH FOR WATER AND OTHER LIQUIDS.
- ALL EXISTING VALVES TO BE CLOSED WHEN CONNECTION TO THE SYSTEM IS MADE.
- FOR SPRINKLER SYSTEM FOR ALL TOWN HOMES OR MULTIFAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1' CONNECTION WITH A 3/4" METER.

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 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.

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" D.I.P.	906'			
6" D.I.P.	57'			
8" X 8" TEE	1			
8" VALVE	2			
6" VALVE	6			
6" CAP	5			
6" FIRE HYDRANT	2			
(8") 1/4" HORZ BEND	3			
(8") 1/4" HORZ BEND	4			
8" X 6" TEE	5			
6" X 6" TEE	1			
8" SEWER	12'			
DROP CONNECTION 8"	1			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:				



VICINITY MAP

SCALE: 1" = 600'

BENCHMARK DESCRIPTION

POINT #	DESCRIPTION	ELEV.	N	E
195	1/2" x 18" REBAR w/ TRAV. CAP	445.29	N 561832.019	E 1331158.577
206	1/2" x 18" REBAR w/ TRAV. CAP	374.55	N 569906.249	E 1322228.583
220	1/2" x 18" REBAR w/ TRAV. CAP	457.14	N 561238.646	E 1329635.522

TYPE OF BUILDING :	CONDOMINIUMS
NO. OF BUILDINGS :	4
NO. OF 6" WATER HOUSE CONNECTIONS :	4
NO. OF 8" SEWER HOUSE CONNECTIONS :	1
DRAINAGE AREA:	MIDDLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER, SAVAGE, HOWARD COUNTY

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Signature: *Jim Myers* DATE: 1/30/02

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

Signature: *John R. Robertson* DATE: 1/30/02

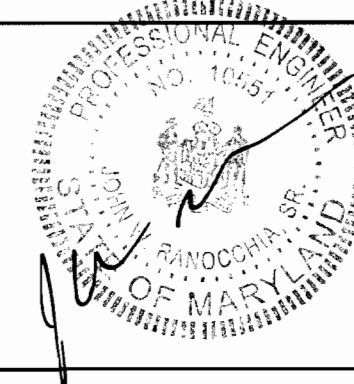
SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SITE DEVELOPMENT PLAN SDP-02-26.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

DMW
Daft-McCune-Walker, Inc.

A Team of Land Planners,
Landscape Architects,
Township, Maryland 21286
(410) 296-3333
Fax: 296-4705



DESIGN BY:	REC	DATE:	BY	NO.	REVISION	DATE
DRAWN BY:	KDE	9/18/01				
CHECKED BY:	REC					

TITLE SHEET

VILLAGE OF RIVER HILL

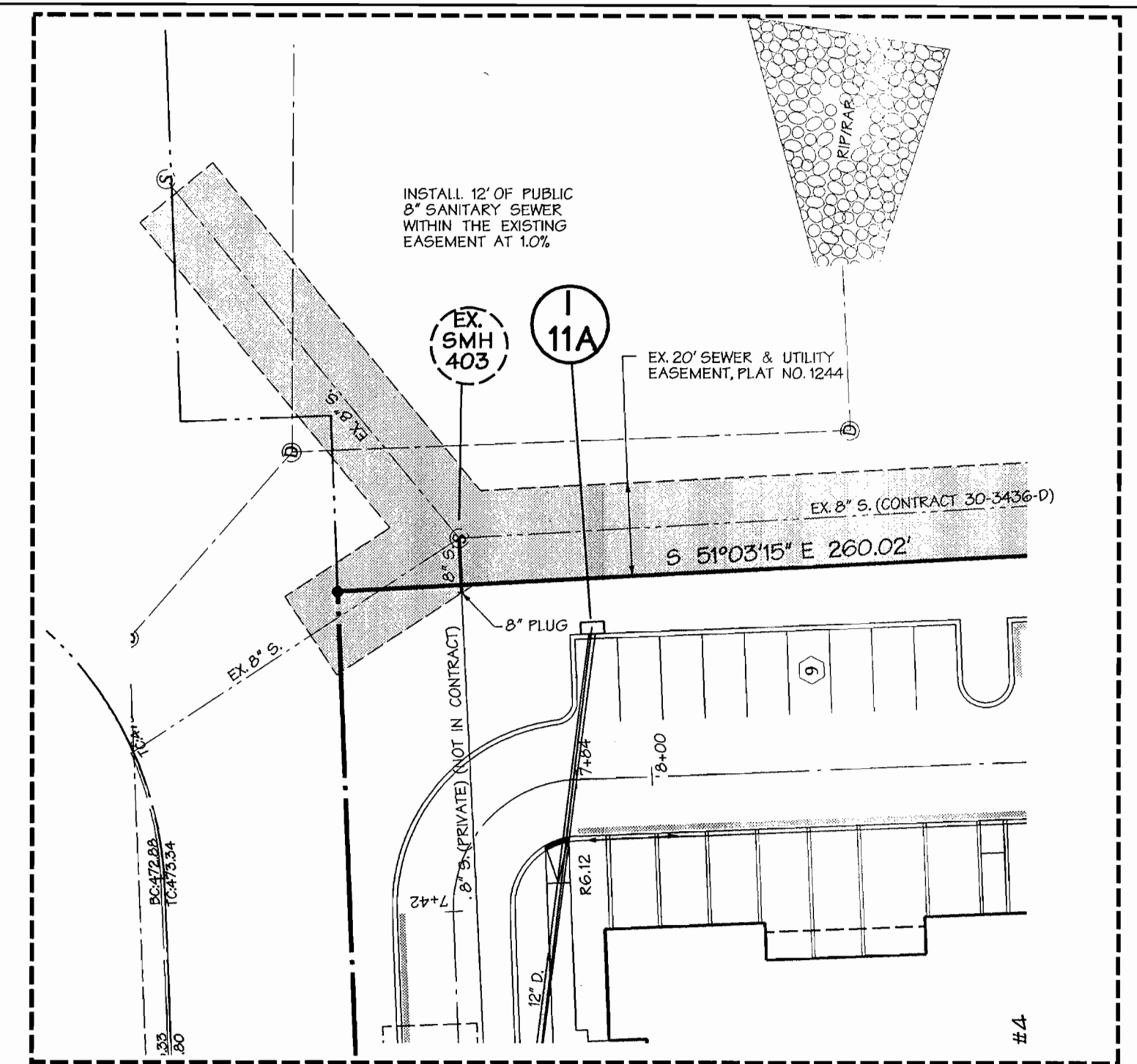
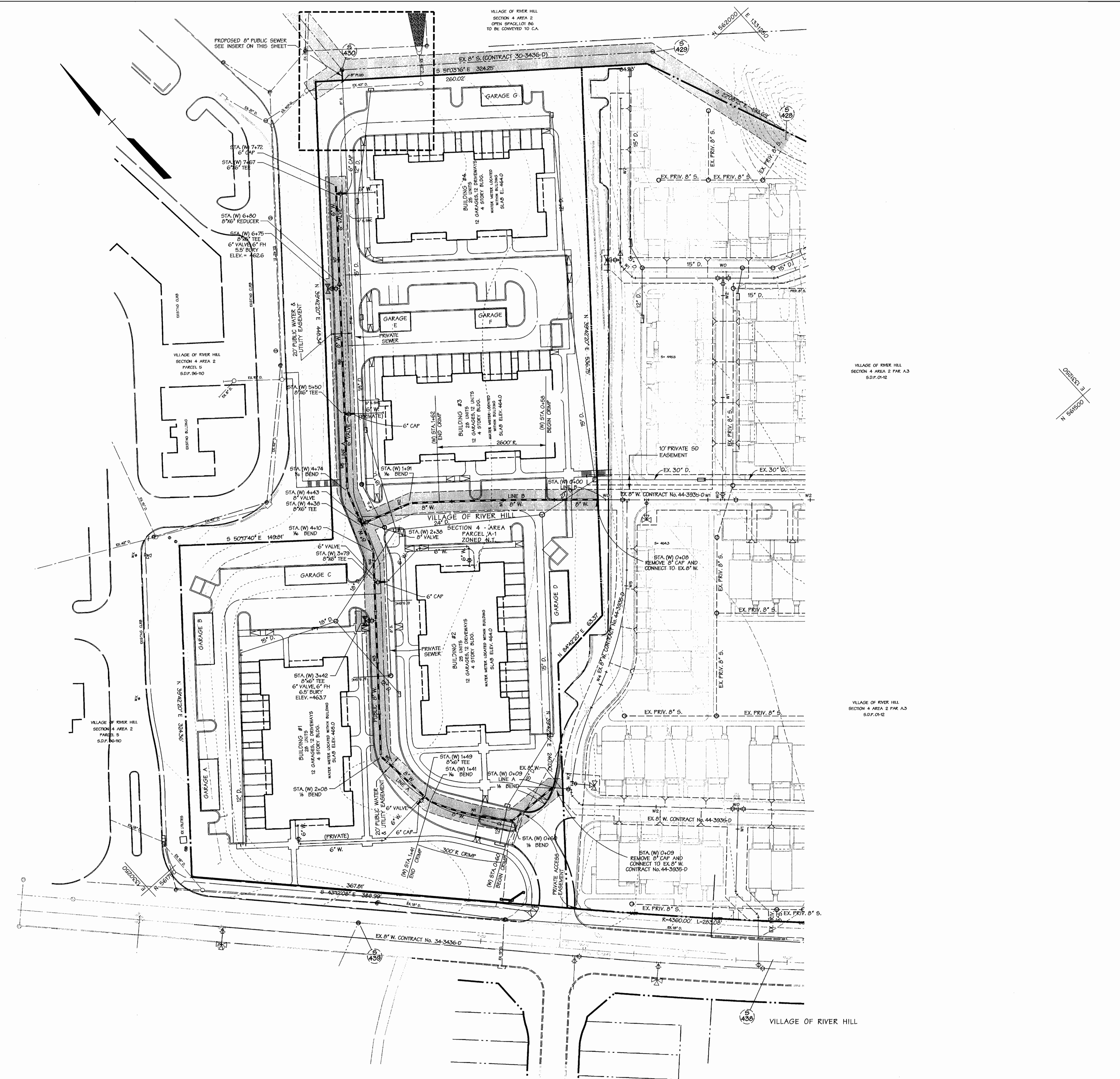
SECTION 4, AREA 1, PARCEL A-1
TAX MAP 35

5th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

CONTRACT NO. 34-4009-D

SCALE:
As
Shown

SHEET
1 of 3



PUBLIC 8" SANITARY SEWER INSERT
SCALE 1" = 30'

WATER LINE A

STATION	TYPE	LOCATION
(W) 0+09	CONNECT TO EX. 8" W.	LOCATED FIELD
(W) 0+09	8" 1/2 BEND	LOCATED FIELD
(W) 0+60	8" 1/2 BEND	N 561,562.1 E 1,330,558.0
(W) 0+60	BEGIN CRIMP	N 561,562.1 E 1,330,558.0
(W) 1+41	END CRIMP	N 561,629.9 E 1,330,510.7
(W) 1+41	8" 1/2 BEND	N 561,629.9 E 1,330,510.7
(W) 1+49	8"x6" TEE	N 561,637.1 E 1,330,510.1
(W) 2+08	8" 1/2 BEND	N 561,695.1 E 1,330,504.7
(W) 3+42	8"x6" TEE	N 561,797.6 E 1,330,589.8
(W) 3+79	8"x6" TEE	N 561,826.3 E 1,330,613.6
(W) 4+10	8" 1/2 BEND	N 561,849.9 E 1,330,633.2
(W) 4+38	8"x8" TEE	N 561,877.3 E 1,330,642.5
(W) 4+43	8" VALVE	N 561,881.5 E 1,330,644.0
(W) 4+74	8" 1/2 BEND	N 561,910.8 E 1,330,653.9
(W) 5+50	8"x6" TEE	N 561,968.4 E 1,330,701.7
(W) 6+75	8"x6" TEE	N 562,063.3 E 1,330,780.6
(W) 6+80	8"x6" REDUCER	N 562,067.0 E 1,330,783.6
(W) 7+67	6"x6" TEE	N 562,134.6 E 1,330,839.7
(W) 7+72	6" CAP	N 562,140.1 E 1,330,844.3

WATER LINE B

STATION	TYPE	LOCATION
(W) 0+08	CONNECT TO EX. 8" W.	LOCATED FIELD
(W) 0+58	BEGIN CRIMP	
(W) 1+62	END CRIMP	
(W) 1+91	8" 1/2 BEND	
(W) 2+38	8" VALVE	
(W) 2+43	8"x8" TEE	SEE LINE A

CONTRACTOR SHALL TEST PIT TO DETERMINE ACTUAL LOCATION AND ELEVATION OF EXISTING 8" WATER PRIOR TO LAYING PIPE.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

DMW
Daft-McCune-Walker, Inc.
A Team of Land Planners,
Landscape Architects,
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705



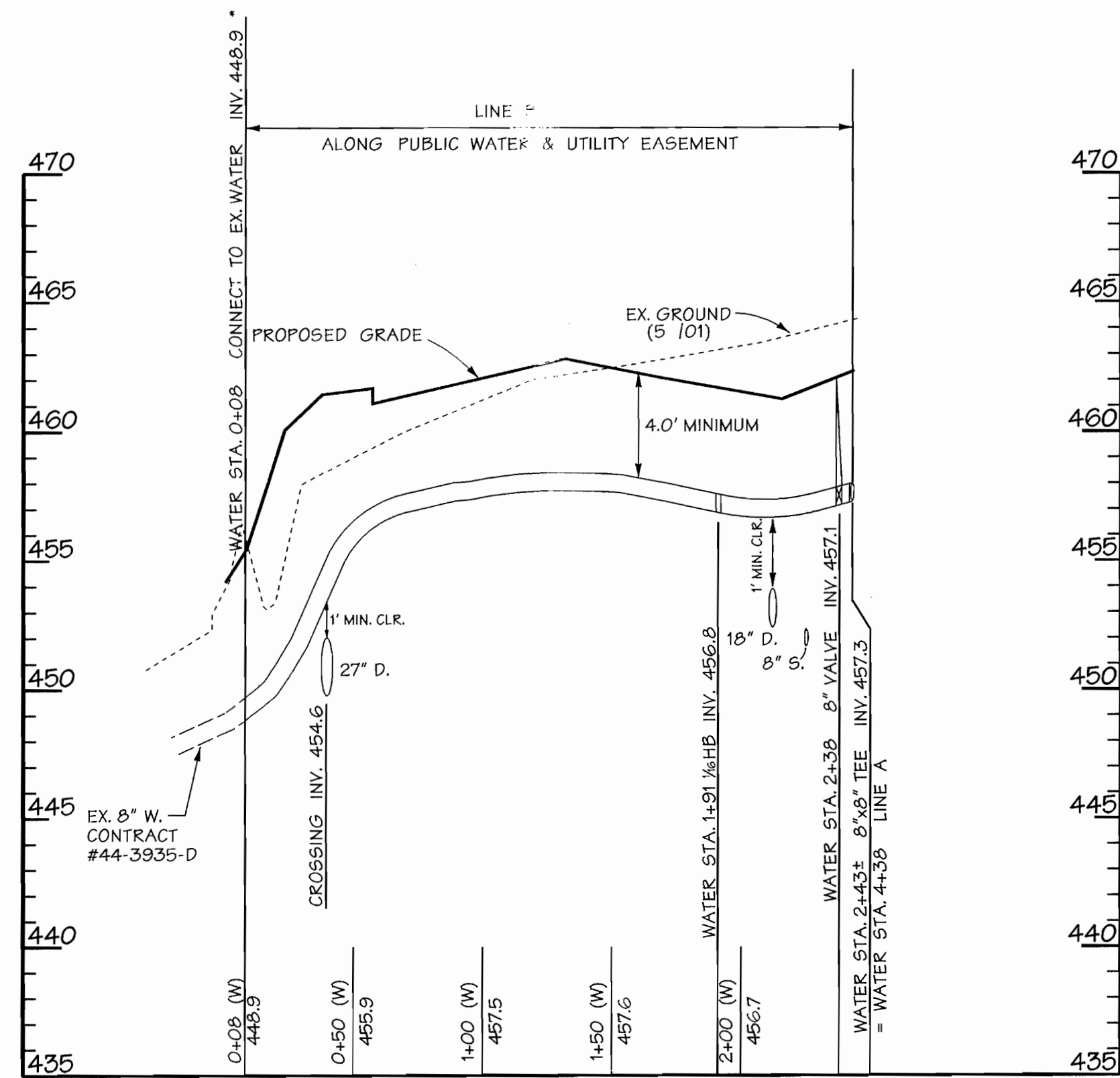
DESIGN BY:	REC				
DRAWN BY:	KDE				
CHECKED BY:	REC				
DATE:	9/18/01	BY	NO.	REVISION	DATE

WATER & SEWER PLAN

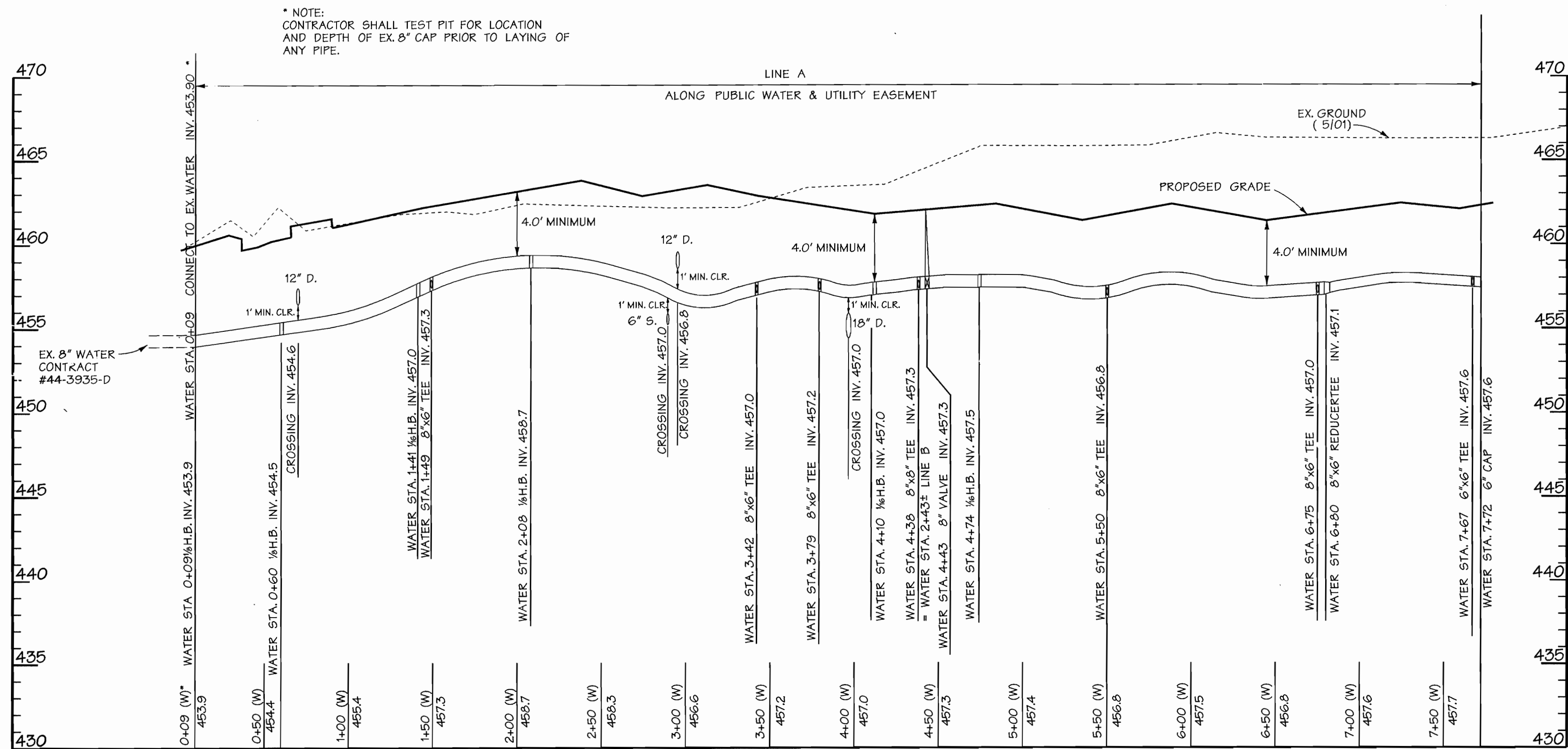
VILLAGE OF RIVER HILL

SECTION 4, AREA 1, PARCEL A-1
TAX MAP 35
5th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-4009-D

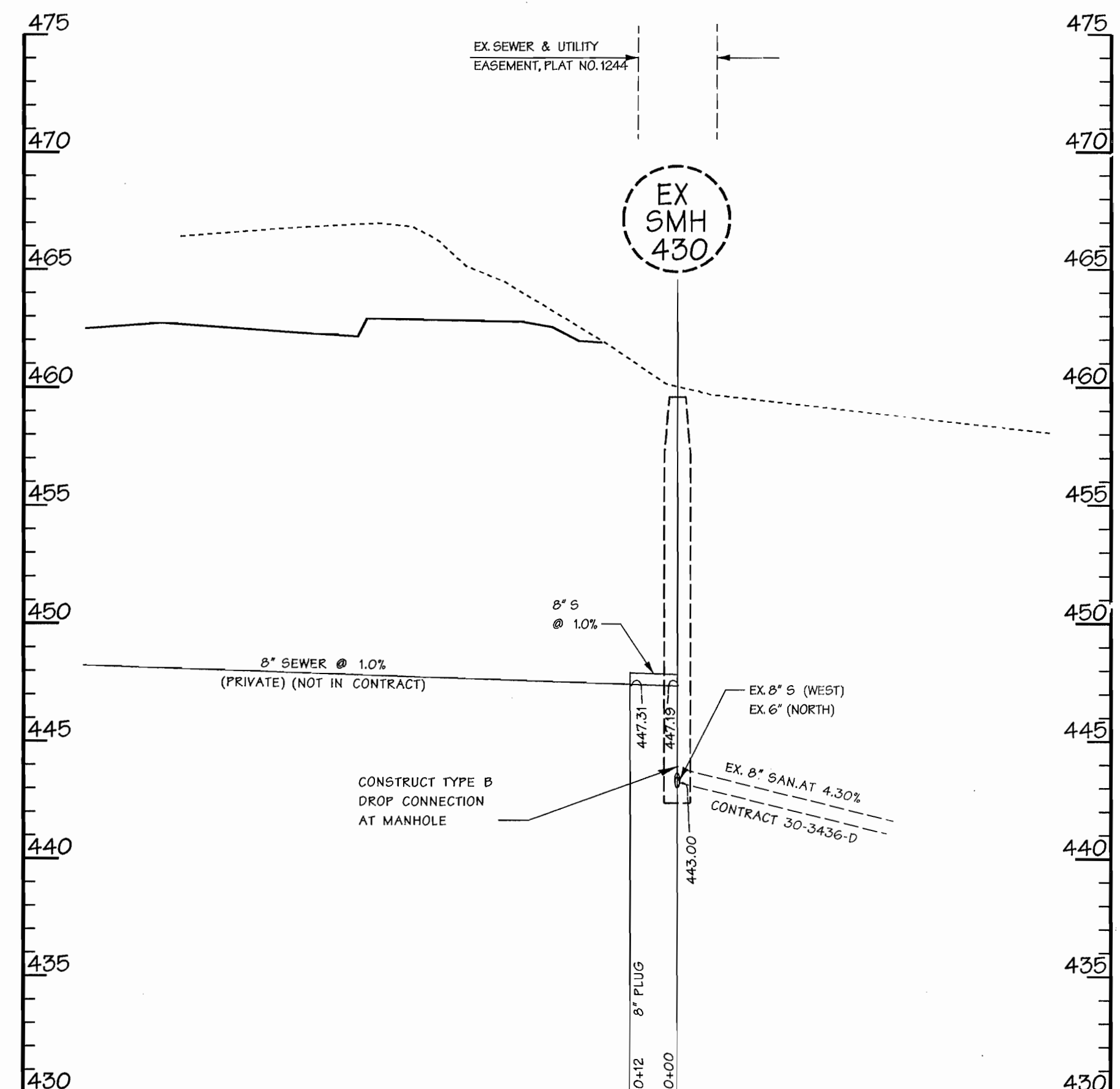
SCALE:
1"=50'
SHEET
2 of 3



LINE "B"



LINE "A"



SEWER PROFILE

SCALE: HORIZ. 1"=30'
VERT. 1"=5'

WATER MAIN PROFILES

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

WATER & SEWER PROFILE

VILLAGE OF RIVER HILL

SECTION 4, AREA 1, PARCEL A-1
TAX MAP 35
5th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

CONTRACT NO. 34-4009-D

SCALE: A5 SHOWN

SHEET 3 of 3

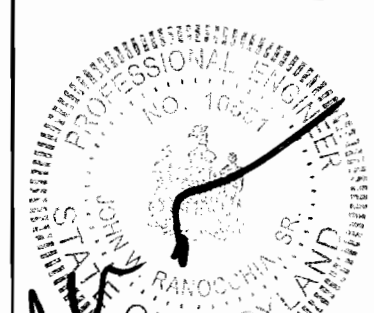
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND



Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 286-3333
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Civil Engineers, Surveyors &
Environmental Professionals



DESIGN BY: REC
DRAWN BY: KDE
CHECKED BY: REC
DATE: 9/18/01

BY NO. REVISION DATE

600 SCALE MAP NO. 35 BLOCK NO. 1