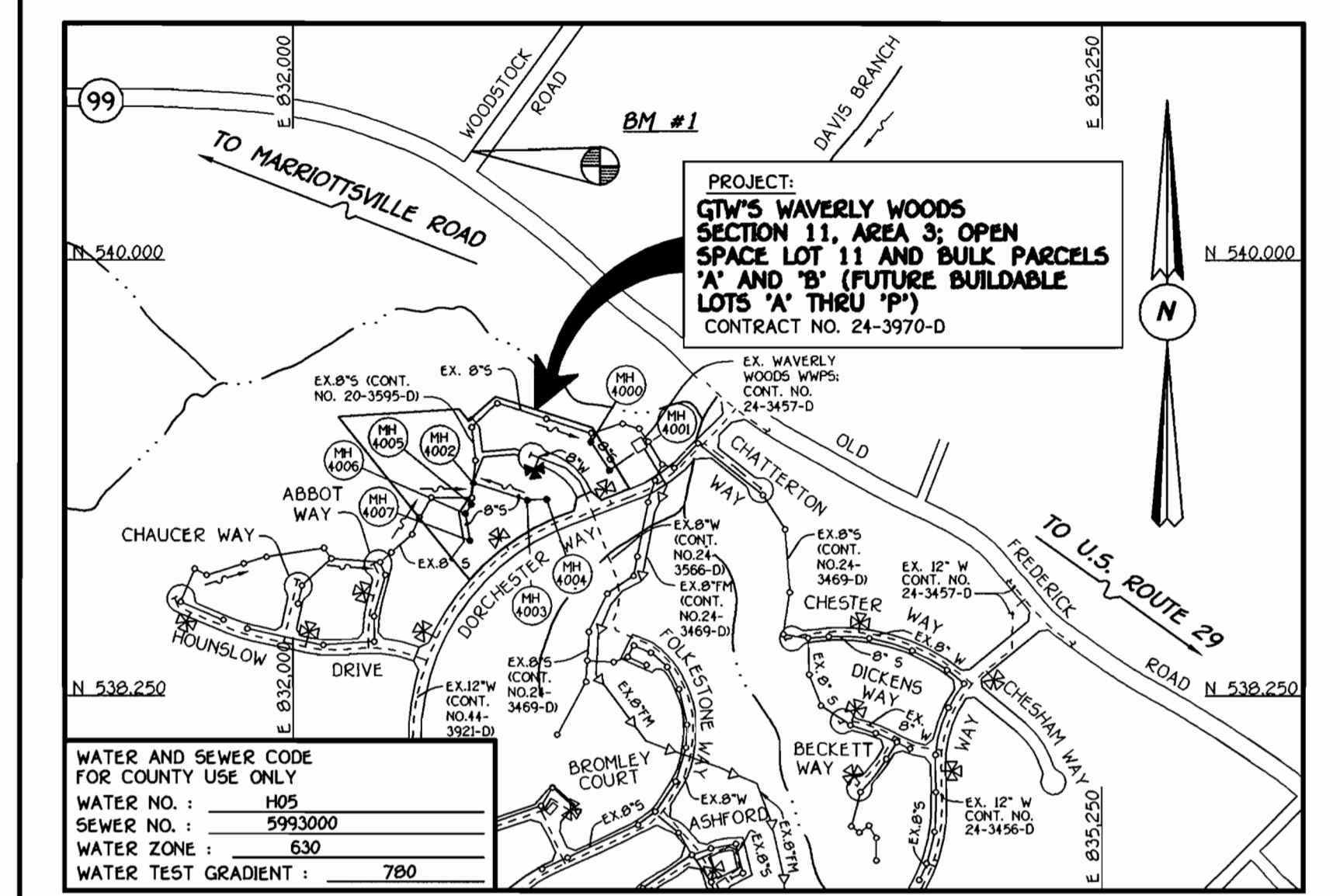


QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
8" WATER	293 L.F.			
6" WATER	44 L.F.			
1" WATER	372 L.F.			
FIRE HYDRANTS	1 EACH			
8" X 6" TEE	1 EACH			
6" VALVE	1 EACH			
8" - 1/16 H.B.	2 EACH			
8" SEWER	345 L.F.			
8" SEWER (D.I.P.)	302 L.F.			
4" SEWER	144 L.F.			
MANHOLES	8 EACH			
8" PLUG & BUTTRESS	1 EACH			
OUTSIDE METER SETTINGS	1 EACH			

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
4000	60074.69	1346176.01	403.0*
4001	599966.08	1346239.88	408.9*
4002	599904.01	1345682.11	425.8*
4003	599824.72	1345891.90	428.6*
4004	599823.55	1345969.97	426.3*
4005	599840.83	1345673.52	425.6*
4006	599784.53	1345631.57	426.0*
4007	599680.14	1345642.88	432.7*

* SET ALL MANHOLE RIMS FLUSH W/ EXISTING GROUND



PROJECT: GTW'S WAVERLY WOODS SECTION 11, AREA 3; OPEN SPACE LOT 11 AND BULK PARCELS 'A' AND 'B' (FUTURE BUILDABLE LOTS 'A' THRU 'P') CONTRACT NO. 24-3970-D

WATER AND SEWER CODE FOR COUNTY USE ONLY
 WATER NO.: 105
 SEWER NO.: 9993000
 WATER ZONE: 630
 WATER TEST GRADIENT: 780

TYPE OF BUILDING: RESIDENTIAL: SINGLE FAMILY DETACHED
 NUMBER OF LOTS & PARCELS: 3 (16 FUTURE BUILDABLE LOTS)
 NO. OF WATER HOUSE CONNECTIONS: 10
 NO. OF SEWER HOUSE CONNECTIONS: 10
 DRAINAGE AREA: LITTLE PATUXENT
 TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT
 VIA THE WAVERLY WOODS WASTEWATER PUMPING STATION AND VIA THE ROUTE 108 WASTEWATER PUMPING STATION.

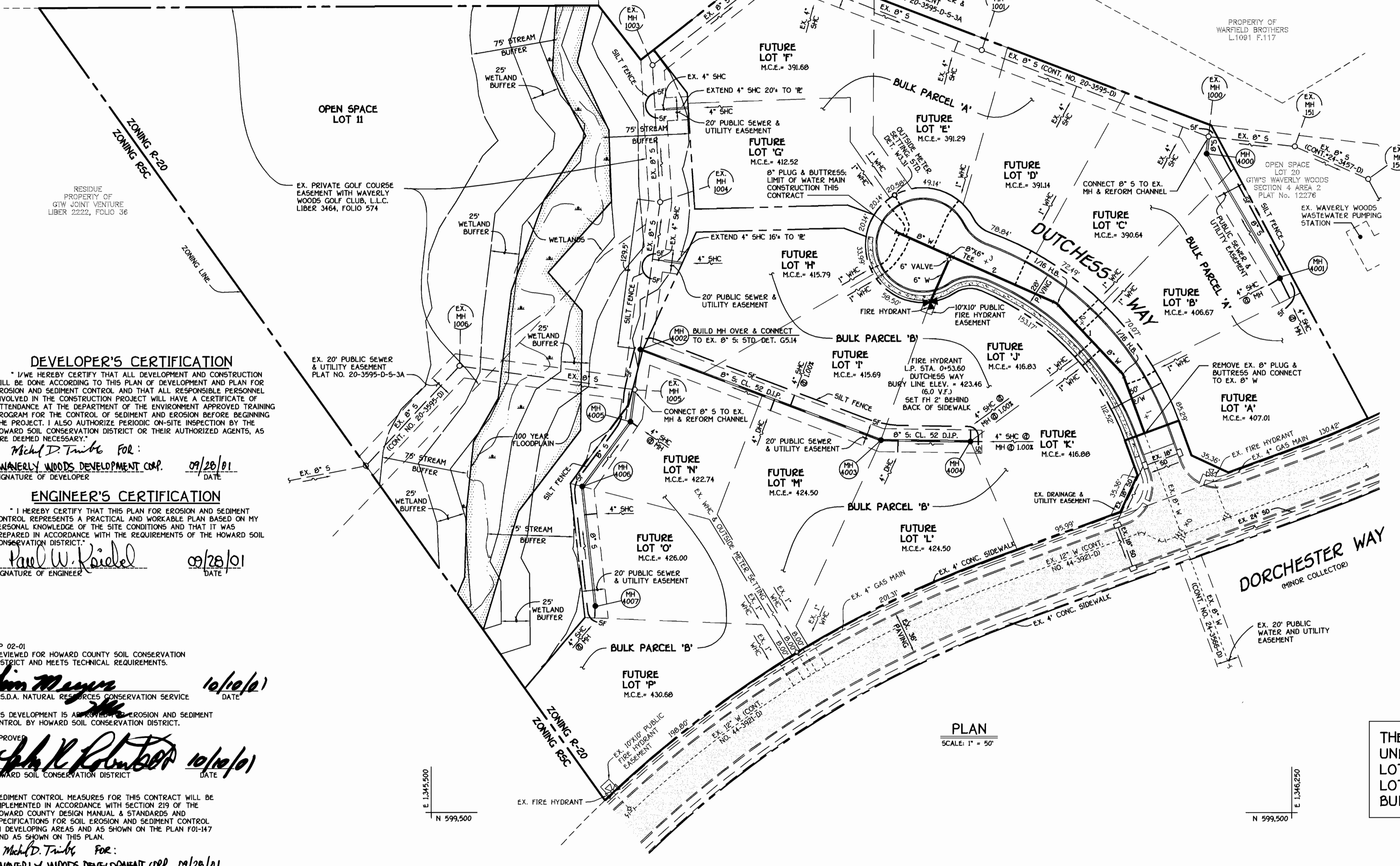
PLAN REFERENCE NUMBERS: P00-18, F01-147

VICINITY MAP
 SCALE: 1" = 600'

GENERAL NOTES

- 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 NAVD 29.
- ALL PIPE ELEVATIONS ARE PIPE ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 5'-0" MINIMUM.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (1991 CONSTRUCTION AMENDMENTS). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
- 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 OUC SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO THE 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 FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 AT&T 1-800-526-2000
 BGE (CONTRACTOR SERVICES) 410-850-4620
 BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9096
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 410-313-4900
 BELL ATLANTIC MARYLAND, INC. 1-800-621-9900
 COLONIAL PIPELINE CO. 410-795-1390
 MISS UTILITIES 1-800-257-7777
 STATE HIGHWAY ADMINISTRATION 410-531-5533
- 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 THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
- 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.
- T.B. DENOTES TEST BORING.
- 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 PLANS OR SPECIFICATIONS.
- HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- MANHOLES LOCATED WITHIN THE PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAMES AND COVERS, STANDARD DETAIL G5.51.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED AS TO HAVE ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- ALL WATER MAINS SHALL 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 ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS (W111 AND W213). SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER MAIN SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH THE AWWA SPECIFICATIONS C-153; DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, (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.

THE WATER AND SEWER HOUSE CONNECTIONS PROVIDED UNDER THIS CONTRACT ARE ALL FOR FUTURE BUILDABLE LOTS DENOTED IN PLAN AS FUTURE LOT 'A' THRU FUTURE LOT 'P'. FUTURE LOTS 'A' THRU 'P' CURRENTLY CONSTITUTE BULK PARCELS 'A' AND 'B'.



DEVELOPER'S CERTIFICATION
 I/WE HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Michel D. Trimb For:
 WAVERLY WOODS DEVELOPMENT CORP. 09/28/01
 SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATION
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Paul W. Kiebel For:
 09/28/01
 SIGNATURE OF ENGINEER DATE

CP 02-01
 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

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

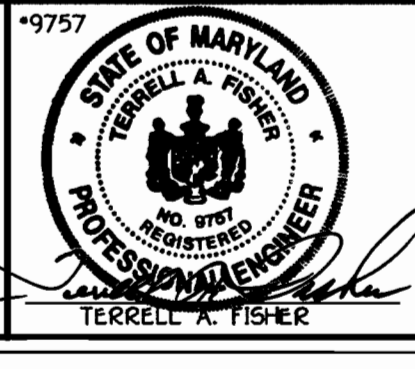
SEDDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND AS SHOWN ON THE PLAN F01-147 AND AS SHOWN ON THIS PLAN.

Michel D. Trimb For:
 WAVERLY WOODS DEVELOPMENT CORP. 09/28/01
 SIGNATURE OF DEVELOPER DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 10-4-01
 DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 10/16/01
 DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 10/16/01
 DATE



DESIGNED BY: M.D.T.
 DRAWN BY: M.D.T.
 CHECKED BY: P.W.K.
 DATE: SEPTEMBER, 2001

WATER AND SEWER MAINS
 PLAN VIEW
 600' SCALE MAP NO. 16 BLOCK NO. 5
 F.C.C. WORK ORDER NO. 30686
 FILE NAME: 30686 FINAL WATER AND SEWER PLAN SHT1

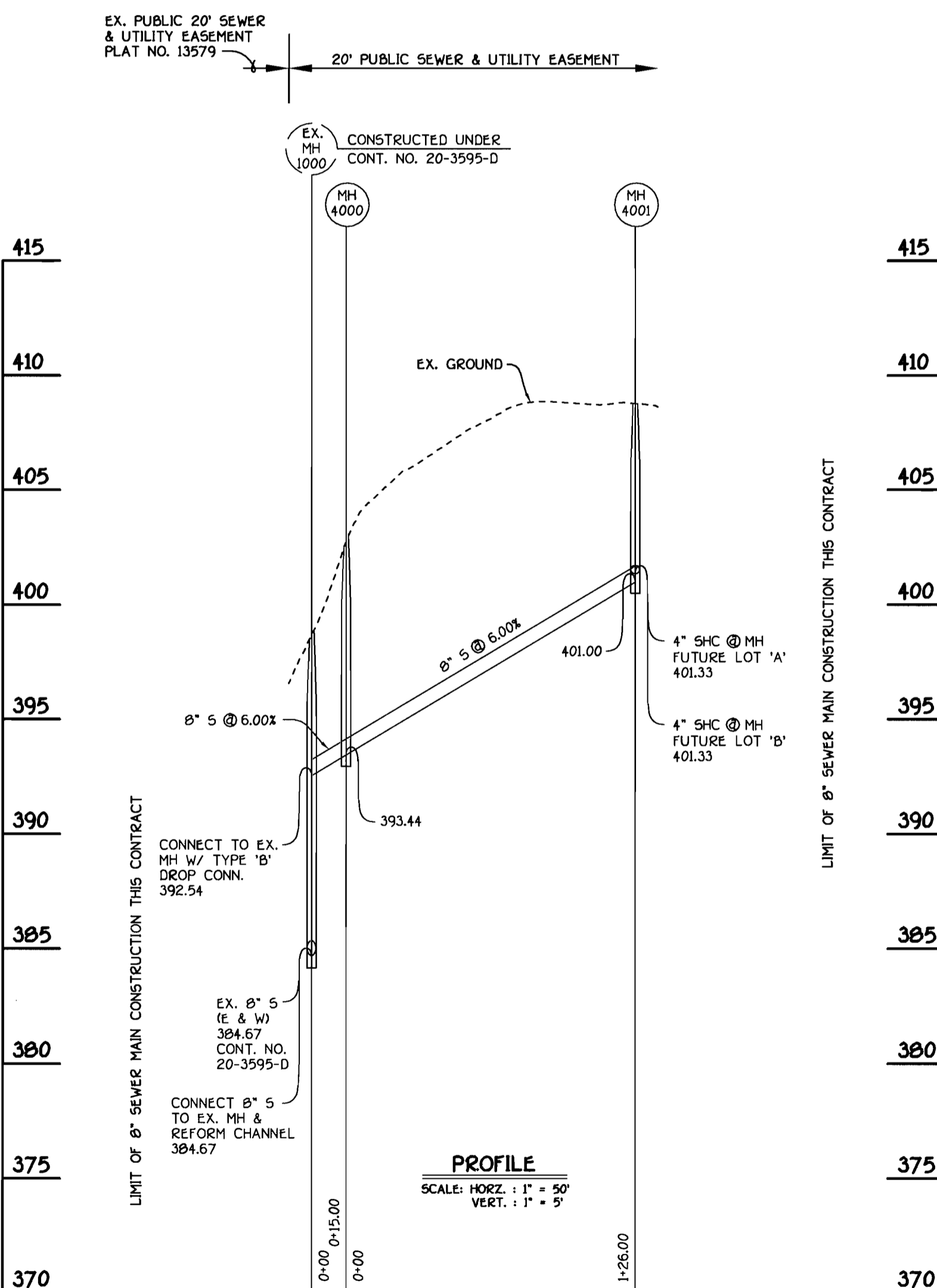
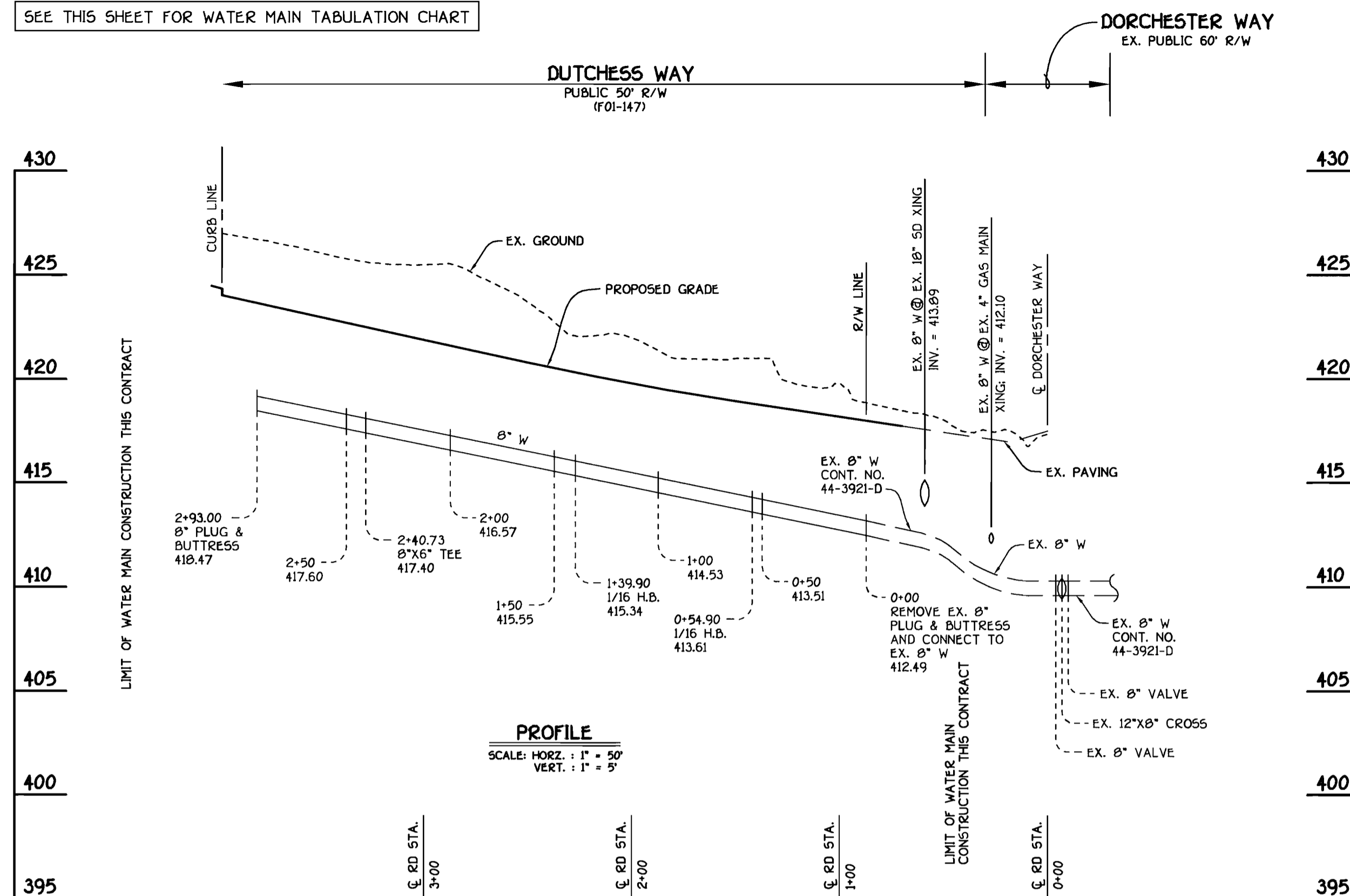
GTW'S WAVERLY WOODS
 SECTION 11, AREA 3; OPEN SPACE LOT 11 AND BULK PARCELS 'A' & 'B' (FUTURE BUILDABLE LOTS 'A' THRU 'P')
 CONTRACT NO. 24-3970-D
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 1 of 2

SEE THIS SHEET FOR WATER MAIN TABULATION CHART

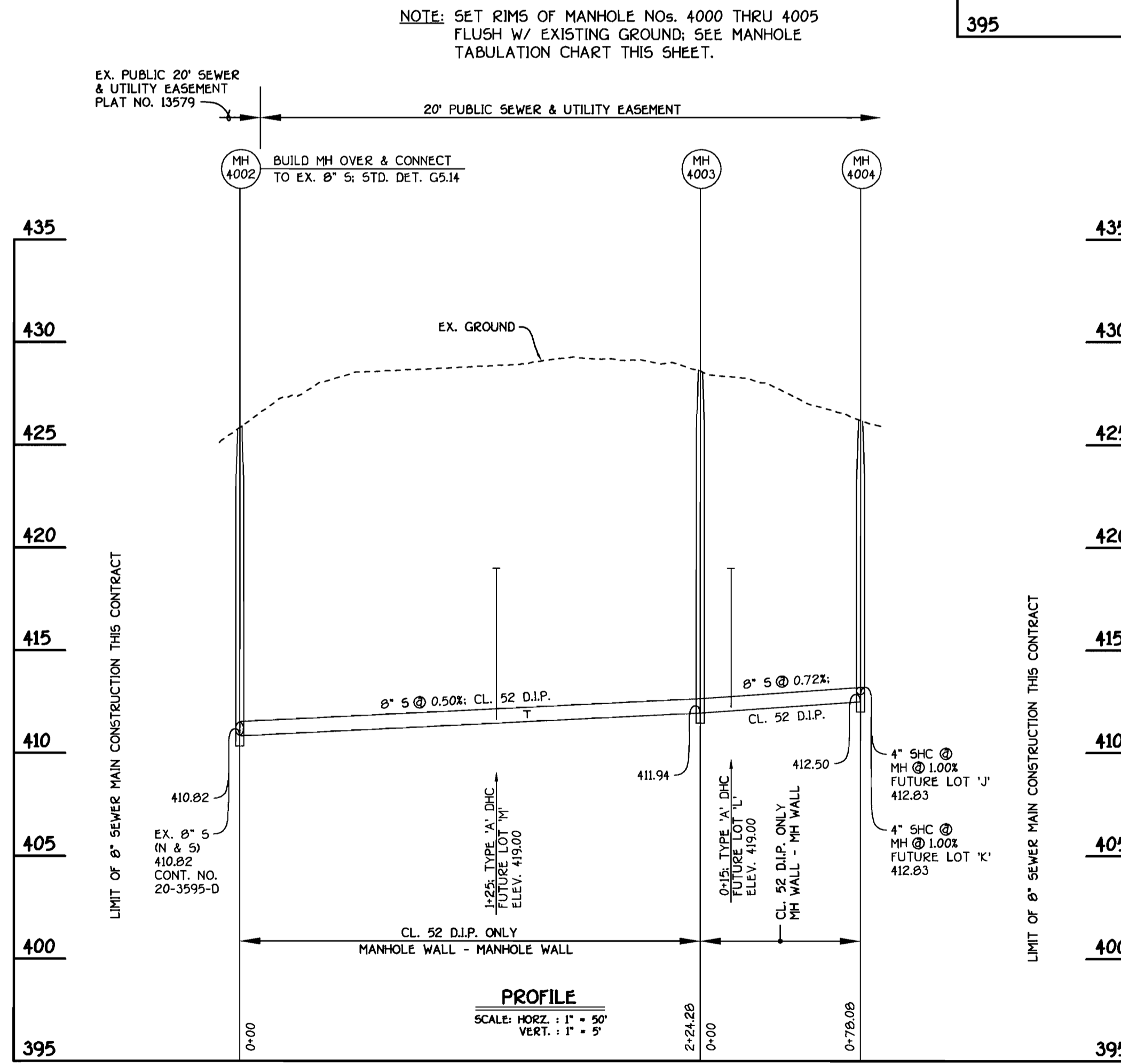
SHC INVERT @ PROPERTY LINE CHART		
STATION	LOT	ELEVATION
	MH 4000 TO MH 4001	
② MH 4001 RT.	FUTURE 'B' (SHC @ MH)	401.57
② MH 4001 CT.	FUTURE 'A' (SHC @ MH)	401.71
	MH 4002 TO MH 4003	
1+25 RT.	FUTURE 'M' (DHC)	419.20
1+40 LT.	FUTURE 'I' (SHC @ 1.00%)	411.79
	MH 4003 TO MH 4004	
0+15 RT.	FUTURE 'L' (DHC)	419.20
② MH 4004 LT.	FUTURE 'J' (SHC @ MH @ 1.00%)	412.93
② MH 4004 CT.	FUTURE 'K' (SHC @ MH @ 1.00%)	412.93
	MH 4005 TO MH 4006	
② MH 4005 LT.	FUTURE 'N' (SHC @ MH)	417.54
	MH 4006 TO MH 4007	
0+25 LT.	FUTURE 'O'	420.90
② MH 4007 CT.	FUTURE 'P' (SHC @ MH)	425.36

WATER MAIN TABULATION CHART			
WM STATION	APPURTENANCE	ROAD STATION	DISTANCE
DUTCHESS WAY			
0+00	CONNECT TO EX. 8" W	0+07.10	7' LT.
0+54.90	1/16 H.B.	1+42.65	0.88' LT.
1+39.90	1/16 H.B.	2+28.48	1.53' LT.
2+40.73	8" X 6" TEE	L.P. STA. 0+25.49	20.47' RT.
2+93.00	8" PLUG & BUTTRESS	L.P. STA. 1+41.75	13.59' RT.

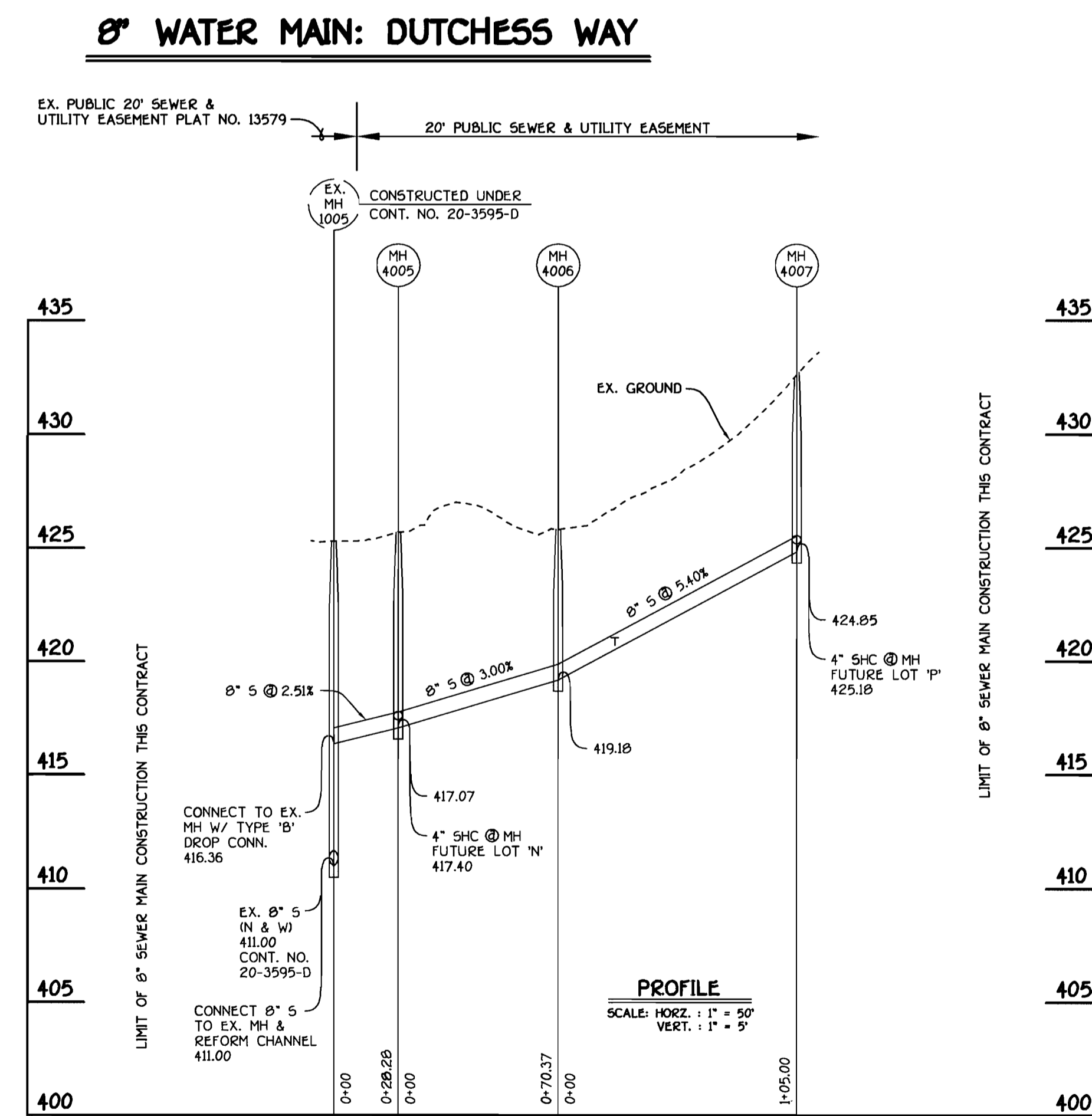
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8" SEWER MAINS: FUTURE LOTS 'A' AND 'B'



8" SEWER MAINS: FUTURE LOTS 'I' THRU 'M'

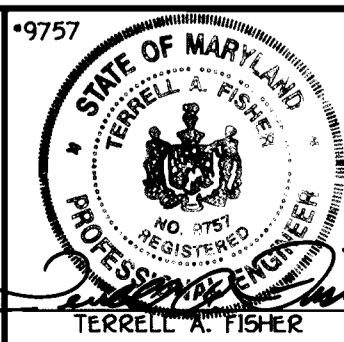


8" SEWER MAINS: FUTURE LOTS 'N' THRU 'P'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
410-461-2899



DESIGNED BY: M.D.T.
DRAWN BY: M.D.T.
CHECKED BY: P.W.K.
DATE: SEPTEMBER, 2001

WATER AND SEWER MAINS
PROFILES

600' SCALE MAP NO. 16 BLOCK NO. 5
F.C.C. WORK ORDER NO. 30686
FILE NAME: 30686 FINAL WATER AND SEWER PROFILES SHT2

GTW'S WAVERLY WOODS
SECTION 11, AREA 3; OPEN SPACE LOT 11 AND BULK
PARCELS 'A' & 'B' (FUTURE BUILDABLE LOTS 'A' THRU 'P')
CONTRACT NO. 24-3970-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN
SHEET
2 OF 2

CONTRACT NO. 24-3970-D
GTW'S WAVERLY WOODS
SECTION 11, AREA 3
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND