

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" WATER	966.99 L.F.			
6" WATER	301.12 L.F.			
4" WATER	30.00 L.F.			
1" WATER	956.00 L.F.			
FIRE HYDRANTS	3 EACH			
12" X 8" TAPPING SLEEVE & VALVE	1 EACH			
8" X 8" TEE	1 EACH			
8" VALVE	2 EACH			
8" X 6" TEE	3 EACH			
6" X 6" TEE	2 EACH			
6" VALVE	5 EACH			
8" X 4" TEE	3 EACH			
4" VALVE	3 EACH			
8"-1/8" H.B.	2 EACH			
8"-1/32" H.B.	1 EACH			
8" X 6" REDUCER	1 EACH			
4" PLUG & BUTTRESS	3 EACH			
6" PLUG & BUTTRESS	3 EACH			
8" PLUG & BUTTRESS	1 EACH			
8" SEWER	180.65 L.F.			
MANHOLES	1 EACH			

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
1000	597807.85	1341268.66	461.10*

* SET RIM 1'-6" ABOVE EX. GROUND. STD. DET. GS14

NOTES: 1. CURB SERVICE BOXES LOCATED WITHIN PAVED ROADWAYS OR SIDEWALK AREAS SHALL BE CAST IRON W/ CAST IRON COVERS.

DEVELOPER'S CERTIFICATION

I 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.

Paul W. Keibel FOR: Waverly Woods Development Corp. 05-01-03
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. Keibel 05/01/03
SIGNATURE OF ENGINEER DATE

MDE TRACKING NUMBER: 20025623

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

Jan Meyer 5/19/03
U.S.D. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Robinson 5/19/03
APPROVED: HOWARD SOIL CONSERVATION DISTRICT DATE

SEDMENT 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 SOP 03-46 AND AS SHOWN ON THESE PLANS.

Paul W. Keibel FOR: Waverly Woods Development Corp. 05/01/03
SIGNATURE OF DEVELOPER DATE

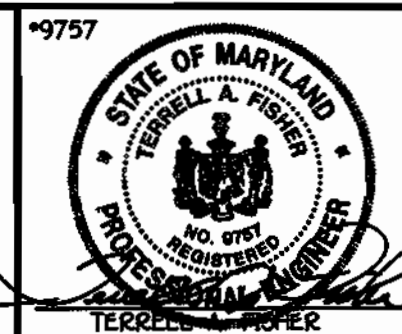
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

R. L. Johnson 5-9-03
CHIEF, BUREAU OF UTILITIES DATE

Chief, Development Engineering Division 5/9/03 DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL PIKE
ELKLOTT CITY, MARYLAND 21042
(410) 461-2255

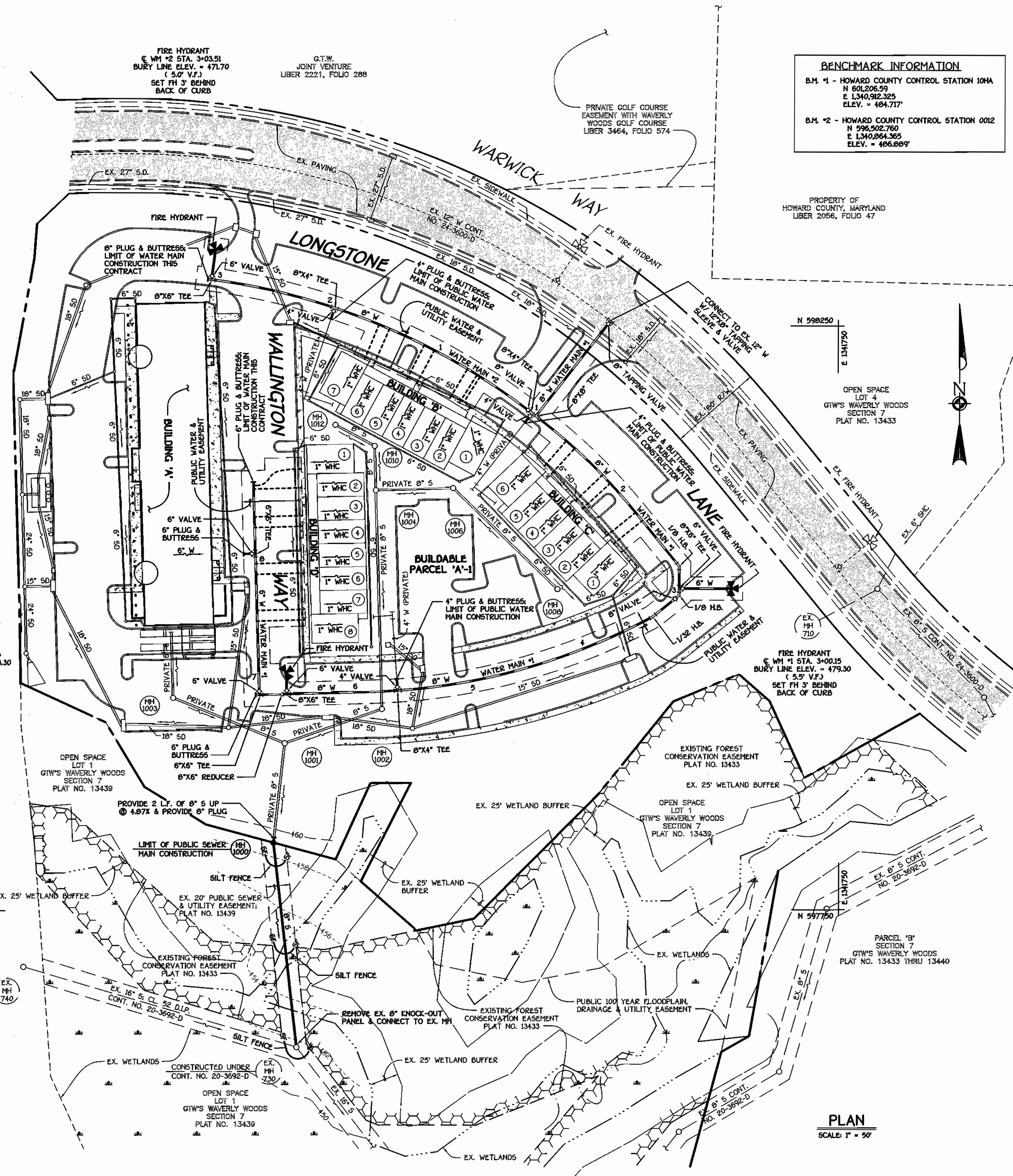


DESIGNED BY:	H.D.T.
DRAWN BY:	H.D.T.
CHECKED BY:	P.W.K.
DATE:	MAY, 2003
BY NO.	
REVISION	

WATER AND SEWER MAINS
TITLE SHEET & PLAN VIEW
600' SCALE MAP NO. 16 BLOCK NO. 5
F.C.C. WORK ORDER NO. 40354
FILE NAME: 40354 PRELIMINARY WATER PLAN

GTW'S WAVERLY WOODS
SECTION 7; PARCEL 'A-1'
CONTRACT NO. 24-4050-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 2

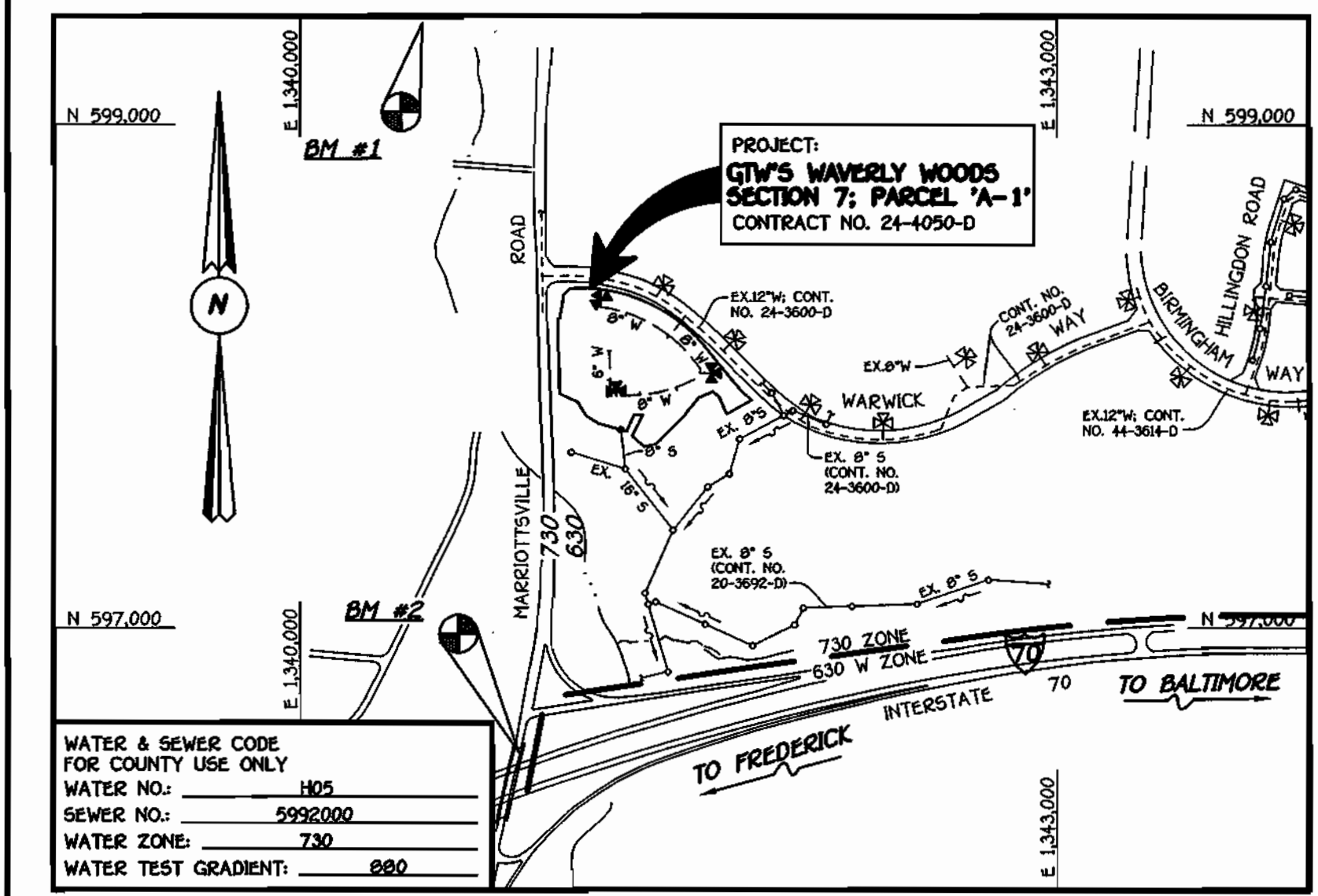


BENCHMARK INFORMATION
B.M. #1 - HOWARD COUNTY CONTROL STATION 10HA
N 801,208.59
E 1,340,982.325
ELEV. = 484.717'
B.M. #2 - HOWARD COUNTY CONTROL STATION 0012
N 596,502.760
E 1,340,864.365
ELEV. = 486.889'

PROPERTY OF HOWARD COUNTY, MARYLAND
LIBER 2056, FOLIO 47

OPEN SPACE LOT 4
GTW'S WAVERLY WOODS SECTION 7
PLAT NO. 13433

PLAN SCALE: 1" = 50'



TYPE OF BUILDING: COMMERCIAL, RETAIL CENTER AND OFFICE CONDOMINIUMS
NUMBER OF LOTS & PARCELS: 1
NO. OF WATER HOUSE CONNECTIONS: 21
NO. OF SEWER HOUSE CONNECTIONS: 0
DRAINAGE AREA: LITTLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT

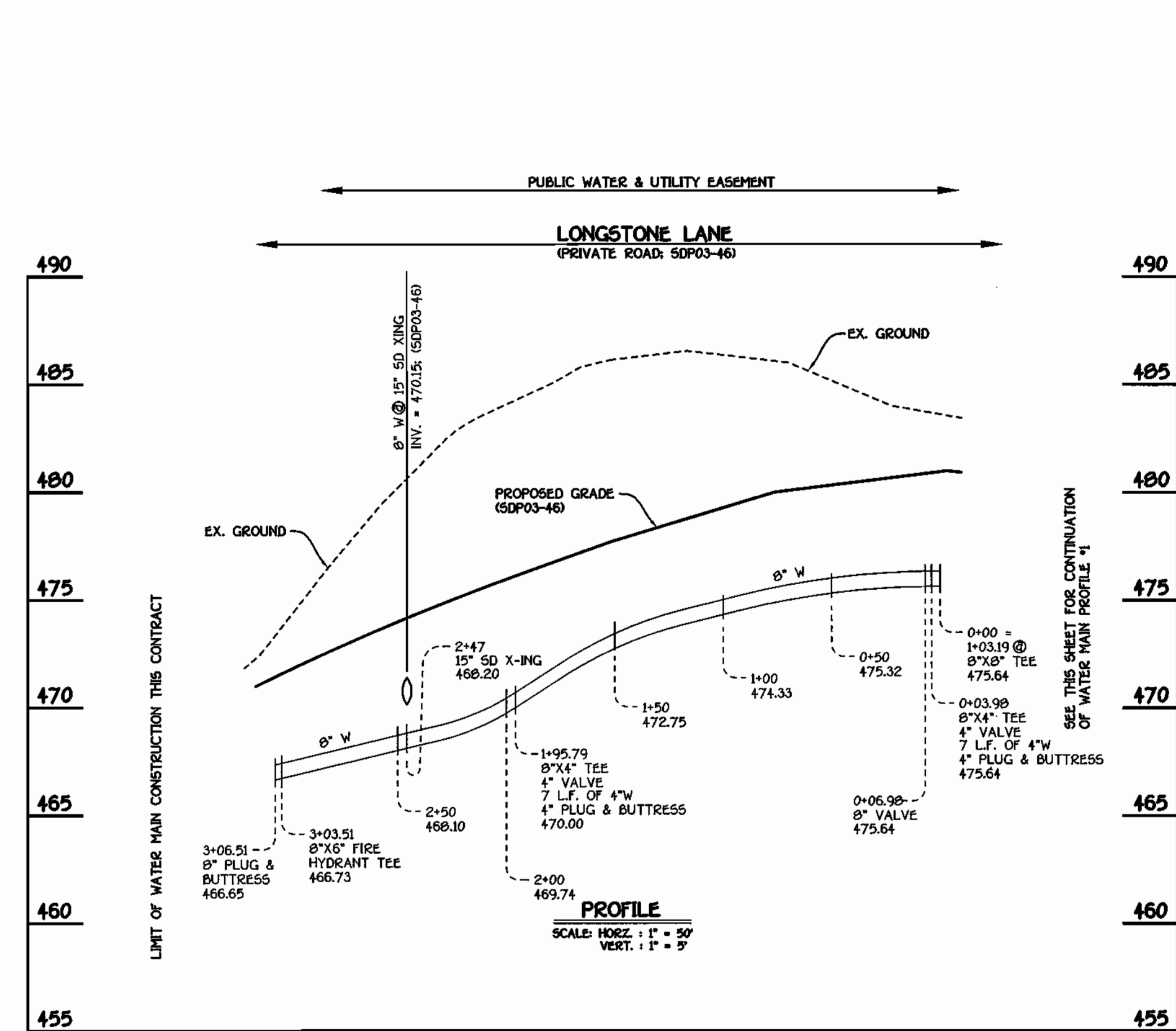
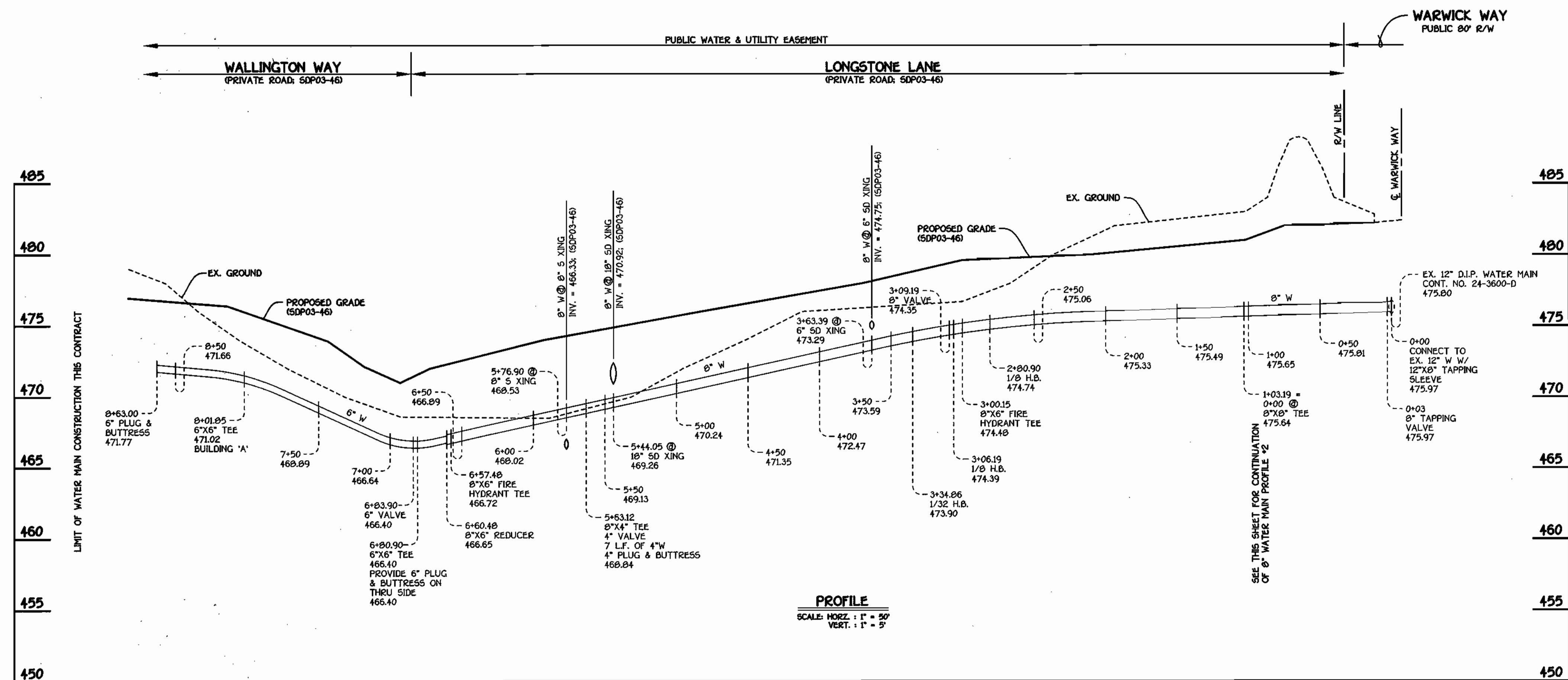
VICINITY MAP SCALE: 1" = 600'

GENERAL NOTES

- PART I
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON MVD 98.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 SITE.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL @ AT THE LOCATIONS OF THE TEST PITS. 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.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T 1-800-252-1133
BCE (CONTRACTOR SERVICES) 410-850-4620
BCE UNDERGROUND DAMAGE CONTROL 410-787-9068
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO 410-795-1390
MGS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-5533
VERIZON 1-800-743-0033/410-224-9210
 - 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.
 - 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.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING 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 REQUIREMENTS PER SECTION 10.114(b) OF THE HOWARD COUNTY CODE.
- PART II: WATER
- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 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 STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- 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 BECK 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 THE DRAWINGS.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

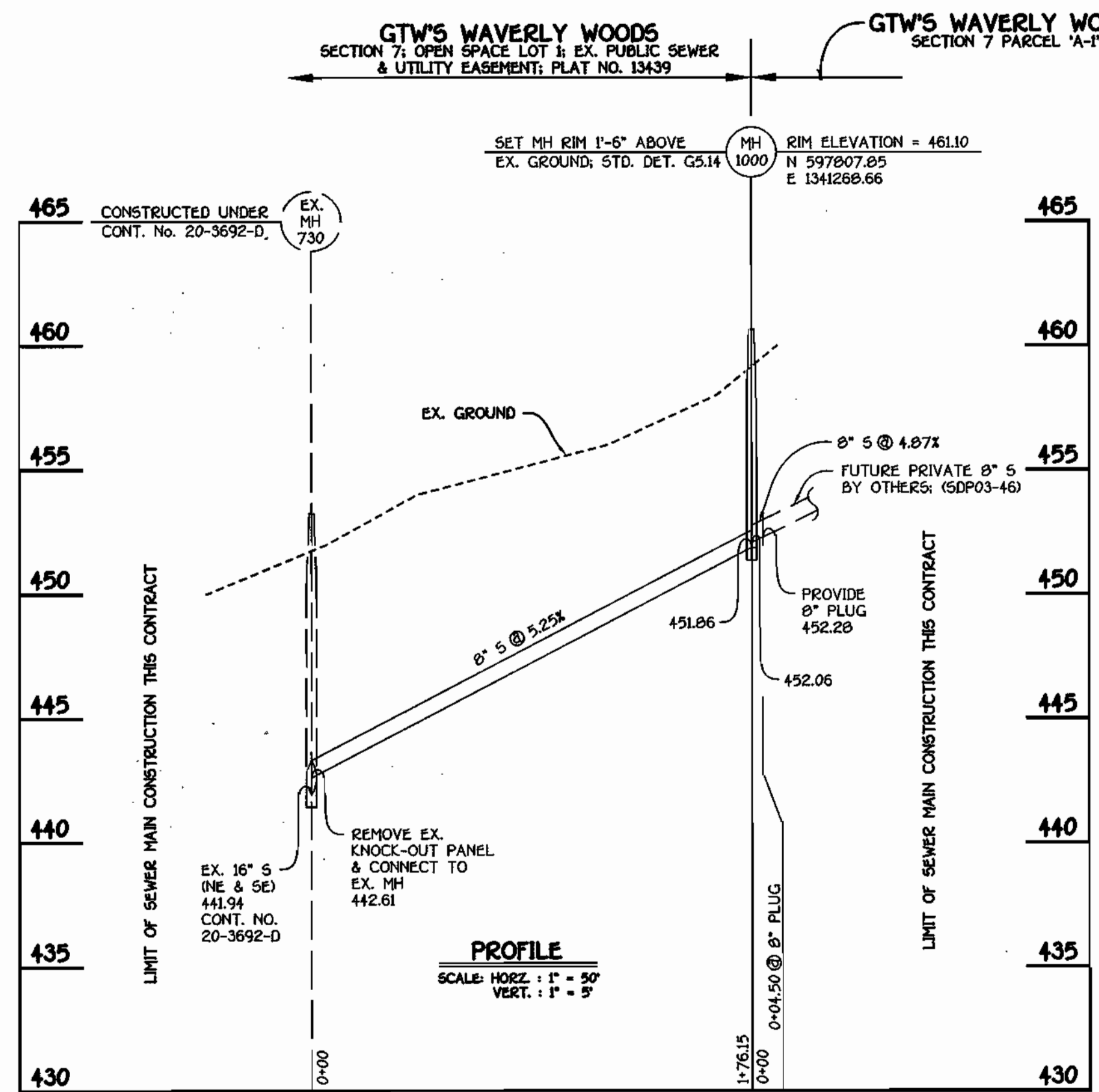
SEE SHEET 2 OF 2 FOR WATER MAIN TABULATION CHART

CONTRACT NO. 24-4050-D
GTW'S WAVERLY WOODS
SECTION 7; PARCEL 'A-1'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND



WATER MAIN #1

WATER MAIN #2



WATER MAIN TABULATION CHART

WM. STATION	APPURTENANCE	NORTHING	EASTING
WATER MAIN #1			
0+00.00	12" X 8" TAPPING SLEEVE	598254.29	1341555.94
0+03.00	8" TAPPING VALVE	598251.92	1341554.10
1+03.19	8" X 8" TEE	598172.96	1341492.42
1+07.71	P.C. (CRIMP RADIUS = 489.99')	598170.18	1341495.99
2+21.23	P.T. (CRIMP RADIUS = 489.99')	598090.85	1341576.84
2+80.90	1/8" H.B.	598044.42	1341614.32
3+00.15	8" X 6" FH TEE	598025.17	1341614.32
3+06.19	1/8" H.B.	598019.13	1341614.32
3+09.19	8" VALVE	598017.25	1341611.98
3+34.86	1/32" H.B.	598001.12	1341592.01
3+42.88	P.C. (CRIMP RADIUS = 531.23')	597997.49	1341585.08
5+63.12	8" X 4" TEE	597938.00	1341374.46
5+85.00	P.T. (CRIMP RAD. 531.23')	597936.97	1341352.60
6+57.48	8" X 6" FH TEE	597935.04	1341280.18
6+60.48	8" X 6" REDUCER	597934.96	1341277.16
6+80.90	8" X 6" TEE	597934.42	1341256.74
6+83.90	8" VALVE	597937.42	1341256.66
8+01.85	6" X 6" TEE	598055.33	1341253.53
8+63.00	6" PLUG & BUTTRESS	598116.46	1341251.90
WATER MAIN #2			
0+00.00	8" X 8" TEE	598172.96	1341492.42
0+03.98	8" X 4" TEE	598175.41	1341489.29
0+06.98	8" VALVE	598177.26	1341486.92
0+10.00	P.C. (CRIMP RADIUS = 562.55')	598179.12	1341484.54
1+95.79	8" X 4" TEE	598265.75	1341321.14
3+03.51	8" X 6" FH TEE	598289.92	1341216.33
3+06.51	P.T. (CRIMP RADIUS = 562.55')	598290.31	1341213.36

BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS

- NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- PLACE MATERIALS IN A LOCATION AND MANNER THAT DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
- RECTIFY ANY NONTIDAL WETLANDS, WETLANDS BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
- ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTICOLOR), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (Avena SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
- TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM. NOT APPLICABLE; NO IN-STREAM WORK.
- STORMWATER RUNOFF FROM IMPERVIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
- CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER.

MDE TRACKING NUMBER: 20025623

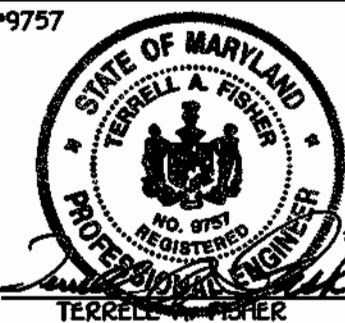
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R. J. ...
5-9-03
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature]
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS



DESIGNED BY: M.D.T.
DRAWN BY: M.D.T.
CHECKED BY: P.W.K.
DATE: MAY, 2003

WATER AND SEWER MAINS PROFILES

600' SCALE MAP NO. 16 BLOCK NO. 5
F.C.C. WORK ORDER NO. 40354
FILE NAME: 40354 FINAL WATER MAINS PLAN SH12

CONTRACT NO. 24-4050-D
GTW'S WAVERLY WOODS
SECTION 7; PARCEL 'A-1'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

GTW'S WAVERLY WOODS
SECTION 7; PARCEL 'A-1'
CONTRACT NO. 24-4050-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 2

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" WATER	966.99 L.F.			
6" WATER	301.12 L.F.			
4" WATER	30.00 L.F.			
1" WATER	0.00 L.F.			
FIRE HYDRANTS	3 EACH			
12" X 8" TAPPING SLEEVE & VALVE	1 EACH			
8" X 8" TEE	1 EACH			
8" VALVE	2 EACH			
8" X 6" TEE	3 EACH			
6" X 6" TEE	2 EACH			
6" VALVE	5 EACH			
8" X 4" TEE	3 EACH			
4" VALVE	3 EACH			
8"-1/2" H.B.	2 EACH			
8"-1/32" H.B.	1 EACH			
8" X 6" REDUCER	1 EACH			
4" PLUG & BUTTRESS	3 EACH			
6" PLUG & BUTTRESS	3 EACH			
8" PLUG & BUTTRESS	1 EACH			
8" SEWER	180.65 L.F.			
MANHOLES	1 EACH			

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
1000	597807.85	1341266.66	461.10*

NOTES: 1. CURB SERVICE BOXES LOCATED WITHIN PAVED ROADWAYS OR SIDEWALK AREAS SHALL BE CAST IRON W/ CAST IRON COVERS.

DEVELOPER'S CERTIFICATION
 I 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.

Paul W. Keibel FOR:
 Waverly Woods Development Corp. 05-01-03
 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. Keibel 05/01/03
 SIGNATURE OF ENGINEER DATE

MDE TRACKING NUMBER: 20025623

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

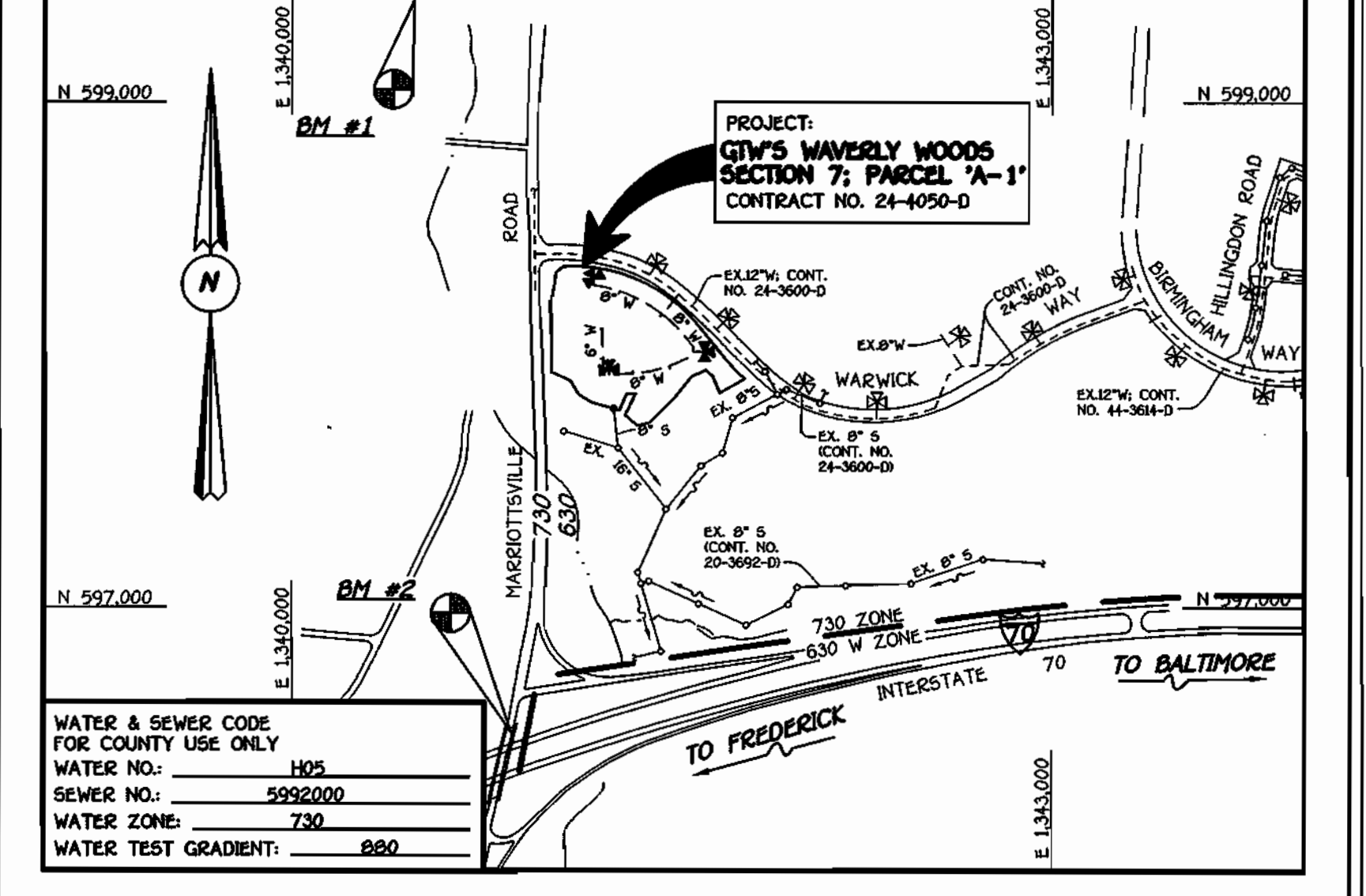
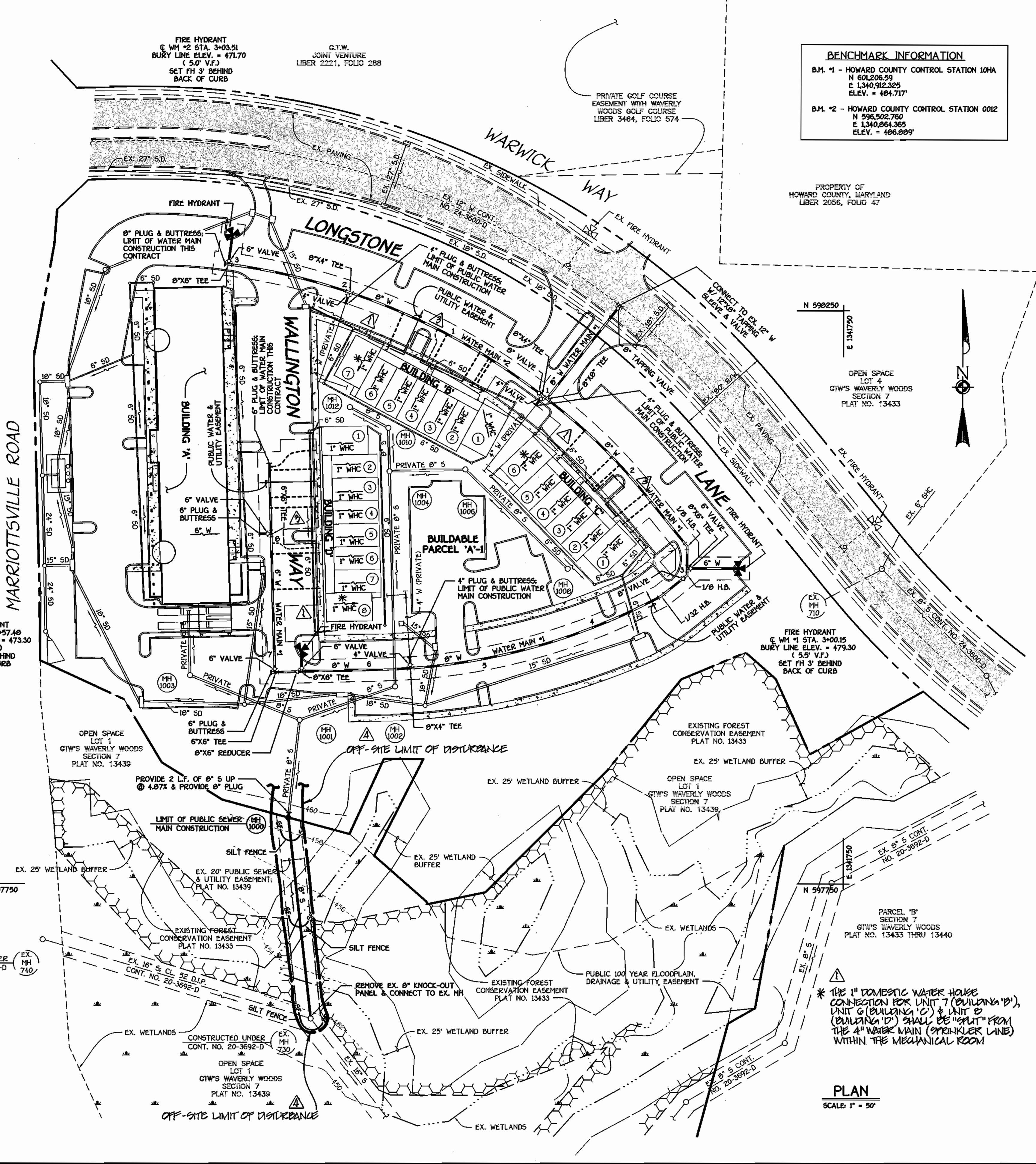
Jim Meyer 5/19/03
 U.S.D. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Johnston 5/19/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT 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 SDP 03-16 AND AS SHOWN ON THESE PLANS.

Paul W. Keibel FOR:
 Waverly Woods Development Corp. 05/01/03
 SIGNATURE OF DEVELOPER DATE



WATER & SEWER CODE FOR COUNTY USE ONLY	WATER NO. 105
SEWER NO.	5992000
WATER ZONE	730
WATER TEST GRADIENT	880

TYPE OF BUILDING: COMMERCIAL RETAIL CENTER AND OFFICE CONDOMINIUMS
 NUMBER OF LOTS & PARCELS: 21
 NO. OF WATER HOUSE CONNECTIONS: 21
 NO. OF SEWER HOUSE CONNECTIONS: 0
 DRAINAGE AREA: LITTLE PATUXENT
 TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT

GENERAL NOTES

- PART I**
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 86.
 - ALL PIPE ELEVATIONS SHOWN ARE FINISH ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 SITE.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL (P) AT THE LOCATIONS OF THE TEST PITS. 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 MADE SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - AT&T 1-800-252-1133
 - BCE (CONTRACTOR SERVICES) 410-850-1620
 - BCE (UNDERGROUND DAMAGE CONTROL) 410-787-9068
 - BUREAU OF UTILITIES 410-313-4900
 - COLONIAL PIPELINE CO. 410-795-1390
 - MISS UTILITY 1-800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
 - VERIZON 1-800-743-0033/410-524-9210
 - 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.
 - 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.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING ANY CONCRETE ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 10.1(K)(6) OF THE HOWARD COUNTY CODE.
- PART II - WATER**
- ALL WATER MAINS SHALL BE D.I.P. CLASS 92 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-5" OF 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 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 STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- 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 18" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL C5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE 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 THE CELLAR CANNOT BE SERVED.

SEE SHEET 2 OF 2 FOR WATER MAIN TABULATION CHART

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

John R. Johnston
 CHIEF, BUREAU OF UTILITIES
 DATE: 5-9-03

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

John R. Johnston
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 5/19/03

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 1000 SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL Pkz
 ELICOTT CITY, MARYLAND 21117
 (410) 961-2555

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 NO. 9781
 TERRILL

DESIGNED BY:	M.D.T.		
DRAWN BY:	M.D.T.	7/15/03	
CHECKED BY:	P.M.K.	7/15/03	
DATE:	MAY, 2003		
BY:	NO.	REVISION	DATE
		INDICATE LIMIT OF DISTURBANCE FOR WIDE COMMENT	7/15/03
		REVISE PUBLIC WATER & UTILITY EASEMENT LIMITS	7/15/03
		REVISE QUANTITY OF 1" WAC	7/15/03
		INDICATE 1" WAC FOR DOMESTIC SERVICE FROM A*W	7/15/03

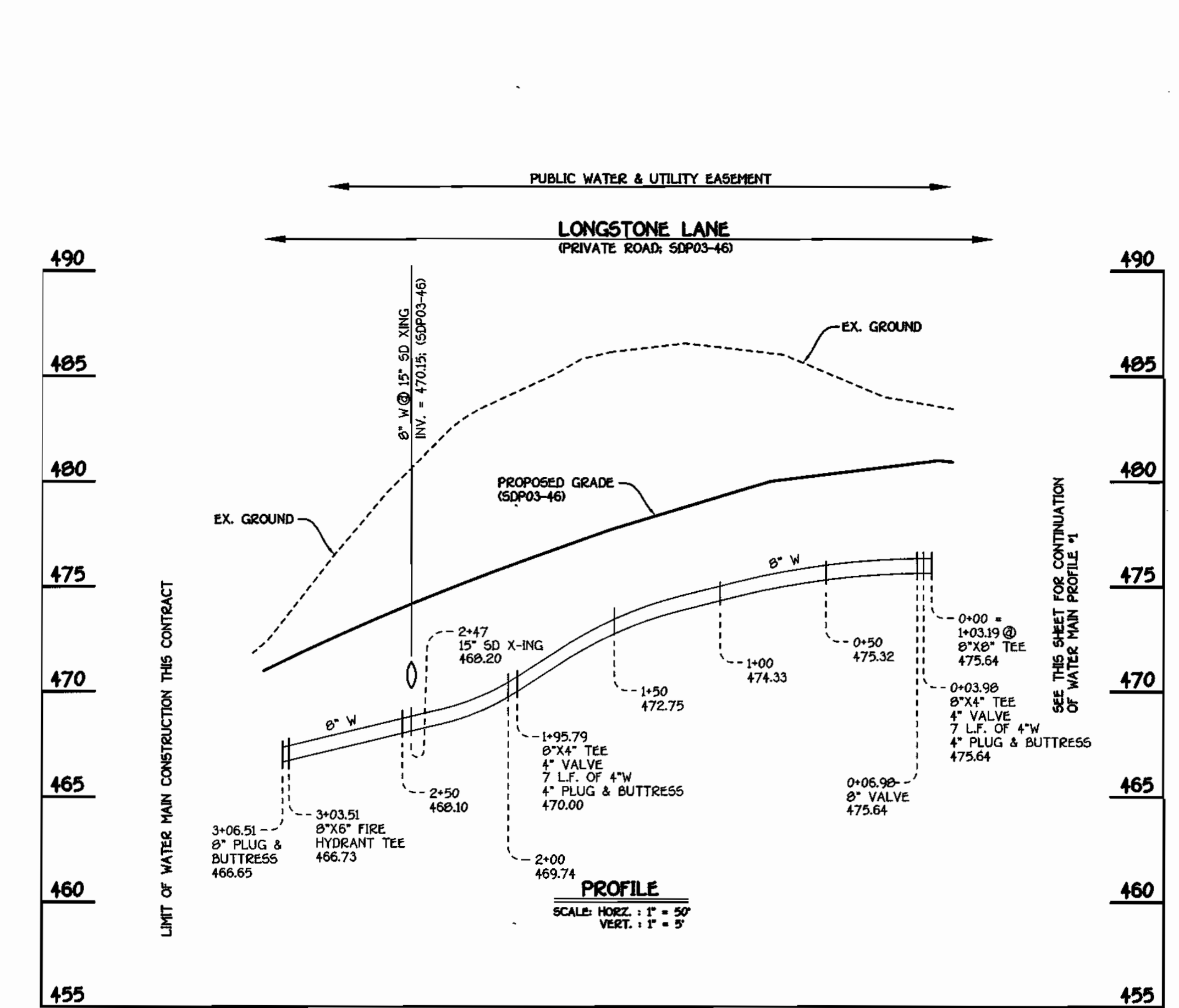
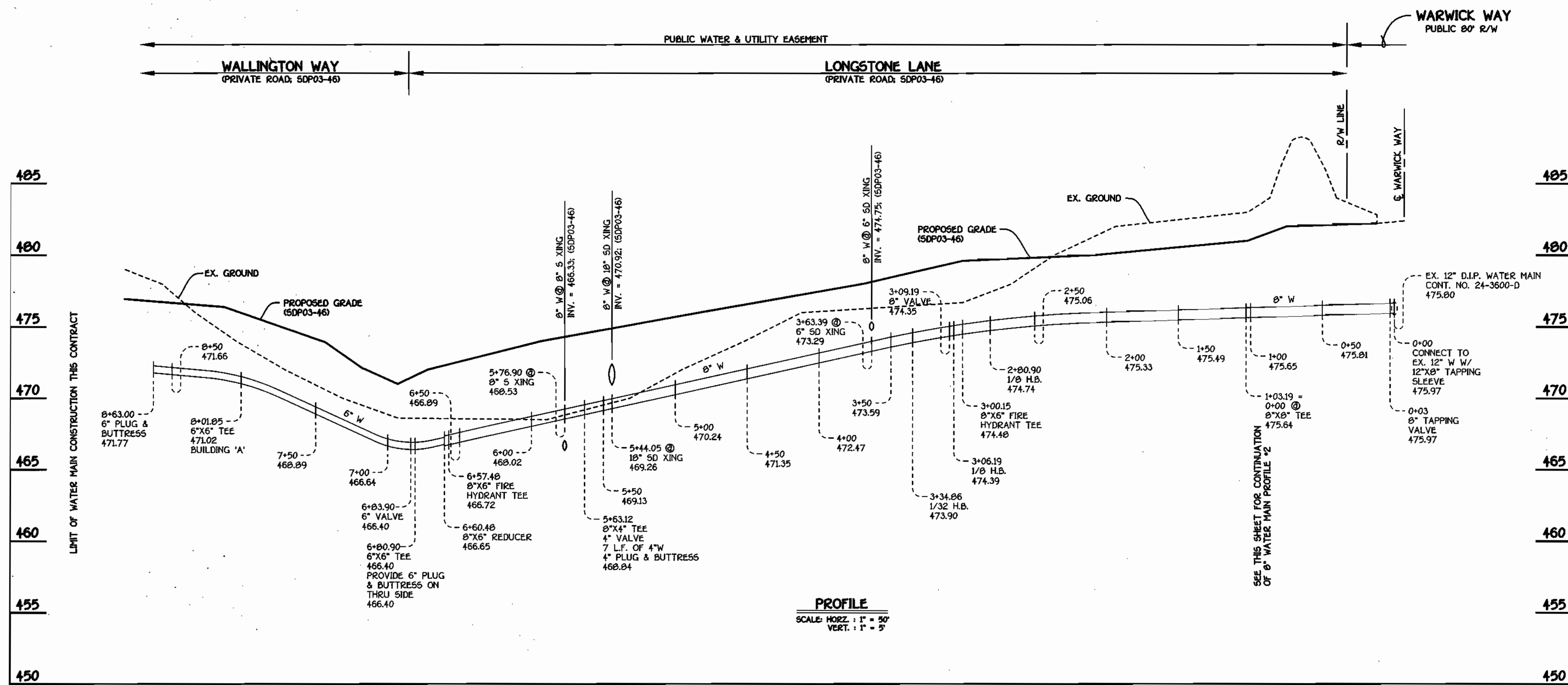
WATER AND SEWER MAINS
 TITLE SHEET & PLAN VIEW

600' SCALE MAP NO. 16 BLOCK NO. 5
 F.C.C. WORK ORDER NO. 40324
 FILE NAME: 40324 PRELIMINARY WATER PLAN

CONTRACT NO. 24-4050-D
 GTW'S WAVERLY WOODS
 SECTION 7; PARCEL 'A-1'
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

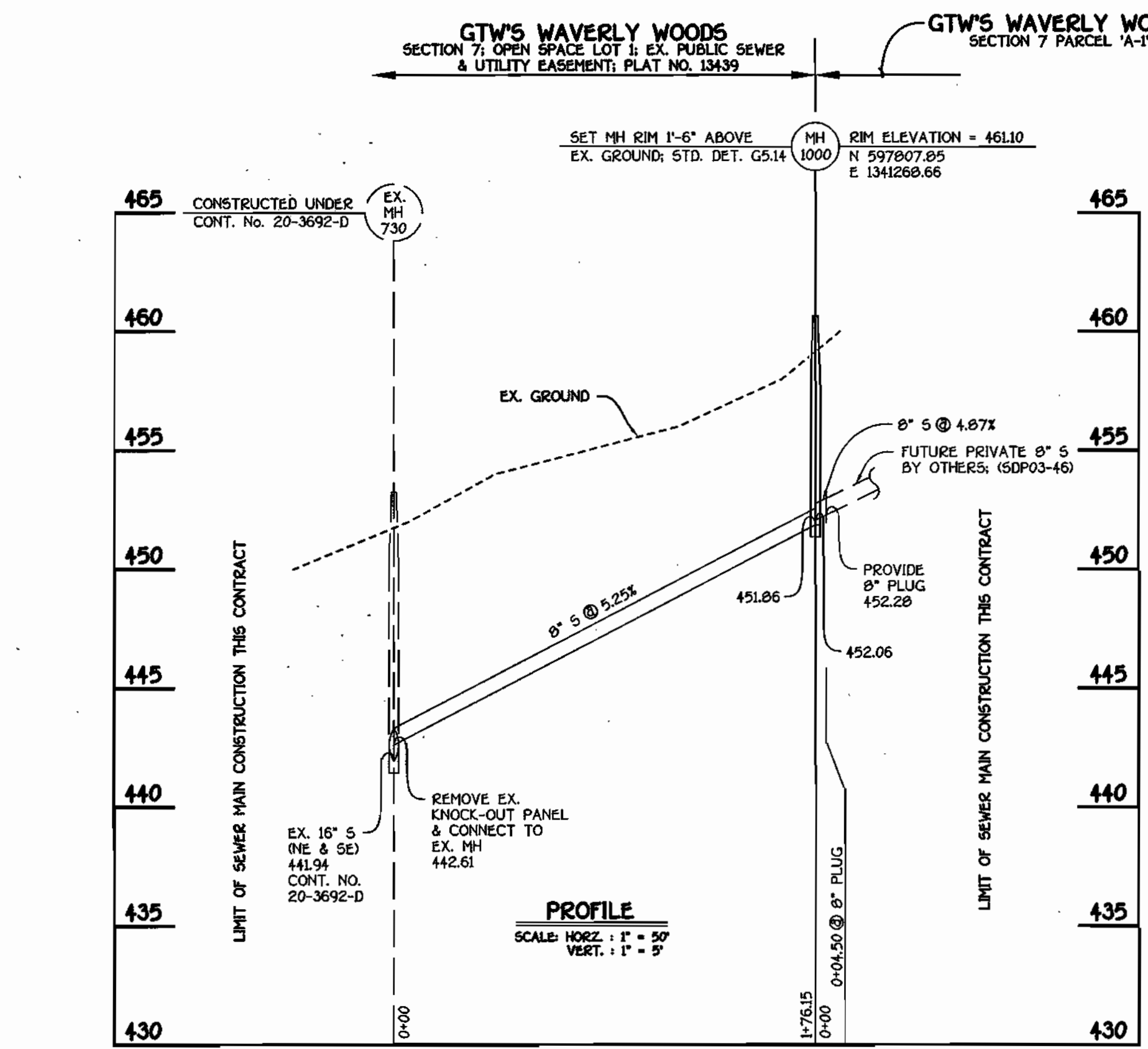
SCALE AS SHOWN

SHEET 1 OF 2



WATER MAIN #1

WATER MAIN #2



SEQUENCE OF CONSTRUCTION

- OBTAIN THE REQUIRED MDE LETTER OF AUTHORIZATION & HOWARD COUNTY GRADING PERMIT.
- NOTIFY MISS UTILITY 48 HOURS BEFORE ANY WORK (1-800-257-7777). NOTIFY HOWARD COUNTY CONSTRUCTION/INSPECTION DIVISION 24 HOURS BEFORE STARTING ANY WORK (410)313-1870.
- INSTALL THE REQUIRED SEDIMENT AND EROSION CONTROL DEVICES AS INDICATED ON SHEET 1 OF THIS CONTRACT.
- SEE SHEET 2 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS AND 100-YEAR FLOODPLAINS. CLEAR AND GRUB AS NECESSARY, ONLY AS REQUIRED FOR EXCAVATION AND INSTALLATION OF THE SEWER MAIN, AND ONLY WITHIN THE DESIGNATED SEWER AND UTILITY EASEMENTS.
- NOTE: THE LENGTH OF OPEN SEWER MAIN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH WILL BE BACKFILLED AND STABILIZED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.
- CONSTRUCT THE SEWER MAIN AND APPURTENANCES.
- STABILIZE, SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES SHOWN ON THIS SHEET.
- FOLLOWING SUCCESSFUL STABILIZATION OF ALL DISTURBED AREAS, AND AFTER PERMISSION HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES.

WATER MAIN TABULATION CHART

W.M. STATION	APPURTENANCE	NORTHING	EASTING
WATER MAIN #1			
0+00.00	12" X 8" TAPPING SLEEVE	998254.29	1341555.94
0+03.00	8" TAPPING VALVE	998251.92	1341554.10
1+03.19	8" X 8" TEE	998172.96	1341492.42
1+07.71	P.C. (CRIMP RADIUS = 499.99')	998170.18	1341495.99
2+21.23	P.T. (CRIMP RADIUS = 499.99')	998090.85	1341576.84
2+80.90	1/8" H.B.	998044.42	1341614.32
3+00.15	8" X 6" FH TEE	998025.17	1341614.32
3+06.19	1/8" H.B.	998019.13	1341614.32
3+09.19	8" VALVE	998017.25	1341611.98
3+34.86	1/32" H.B.	998001.12	1341592.01
3+42.60	P.C. (CRIMP RADIUS = 531.23')	997997.49	1341585.08
5+63.12	8" X 4" TEE	997938.00	1341374.48
5+85.00	P.T. (CRIMP RAD. 531.23')	997936.97	1341352.60
6+57.48	8" X 6" FH TEE	997935.04	1341280.16
6+60.48	8" X 6" REDUCER	997934.96	1341277.16
6+80.90	6" X 6" TEE	997934.42	1341256.74
6+83.90	6" VALVE	997937.42	1341256.66
8+01.85	6" X 6" TEE	998095.33	1341253.53
8+63.00	6" PLUG & BUTTRESS	998116.46	1341251.90
WATER MAIN #2			
0+00.00	8" X 8" TEE	998172.96	1341492.42
0+03.98	8" X 4" TEE	998173.41	1341489.29
0+06.98	8" VALVE	998177.26	1341486.92
0+10.00	P.C. (CRIMP RADIUS = 562.55')	998179.12	1341484.54
1+95.79	8" X 4" TEE	998285.75	1341321.14
3+03.51	8" X 6" FH TEE	998289.92	1341216.33
3+06.51	P.T. (CRIMP RADIUS = 562.55')	998290.31	1341213.36

BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS

- NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- PLACE MATERIALS IN A LOCATION AND MANNER THAT DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
- RECTIFY ANY NONTIDAL WETLANDS, WETLANDS BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
- ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTICOLORUM), HELMET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (UNICOLA SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
- TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM. NOT APPLICABLE, NO IN-STREAM WORK.
- STORMWATER RUNOFF FROM IMPERVIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
- CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPROVE WATER.

MDE TRACKING NUMBER: 20025623

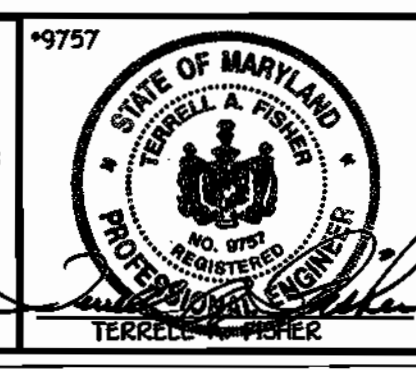
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

5-9-03
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

7/14/03
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS



DESIGNED BY: M.D.T.
DRAWN BY: M.D.T.
CHECKED BY: P.W.K.
DATE: MAY, 2003

7/1/03
DATE

ADD SEQUENCE OF CONSTRUCTION PER MDE COMMENT

WATER AND SEWER MAINS PROFILES

600' SCALE MAP NO. 16 BLOCK NO. 5
F.C.C. WORK ORDER NO. 40354
FILE NAME: 40354.FINAL.WATER.MAIN.PLAN.SHT2

CONTRACT NO. 24-4050-D
GTW'S WAVERLY WOODS
SECTION 7; PARCEL 'A-1'
CONTRACT NO. 24-4050-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 2

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" WATER	966.99 L.F.			
6" WATER	301.12 L.F.			
4" WATER	30.00 L.F.			
1" WATER	895 L.F.			
FIRE HYDRANTS	3 EACH			
12" X 8" TAPPING SLEEVE & VALVE	1 EACH			
8" X 8" TEE	1 EACH			
8" VALVE	2 EACH			
8" X 6" TEE	3 EACH			
6" X 6" TEE	2 EACH			
6" VALVE	5 EACH			
8" X 4" TEE	3 EACH			
4" VALVE	3 EACH			
8" 1/8" H.B.	2 EACH			
8" 1/32" H.B.	1 EACH			
8" X 6" REDUCER	1 EACH			
8" PLUG & BUTTRESS	3 EACH			
6" PLUG & BUTTRESS	3 EACH			
8" PLUG & BUTTRESS	1 EACH			
8" SEWER	180.65 L.F.			
MANHOLES	1 EACH			

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
1000	597807.85	134266.66	461.10'

* SET RIM 1'-6" ABOVE EX. GROUND; STD. DET. G514

NOTES: 1. CURB SERVICE BOXES LOCATED WITHIN PAVED ROADWAYS OR SIDEWALK AREAS SHALL BE CAST IRON W/ CAST IRON COVERS.

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.

Paul W. Keibel FOR: **WAVERLY WOODS DEVELOPMENT CORP. 05-01-03**
 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. Keibel FOR: **05/01/03**
 SIGNATURE OF ENGINEER DATE

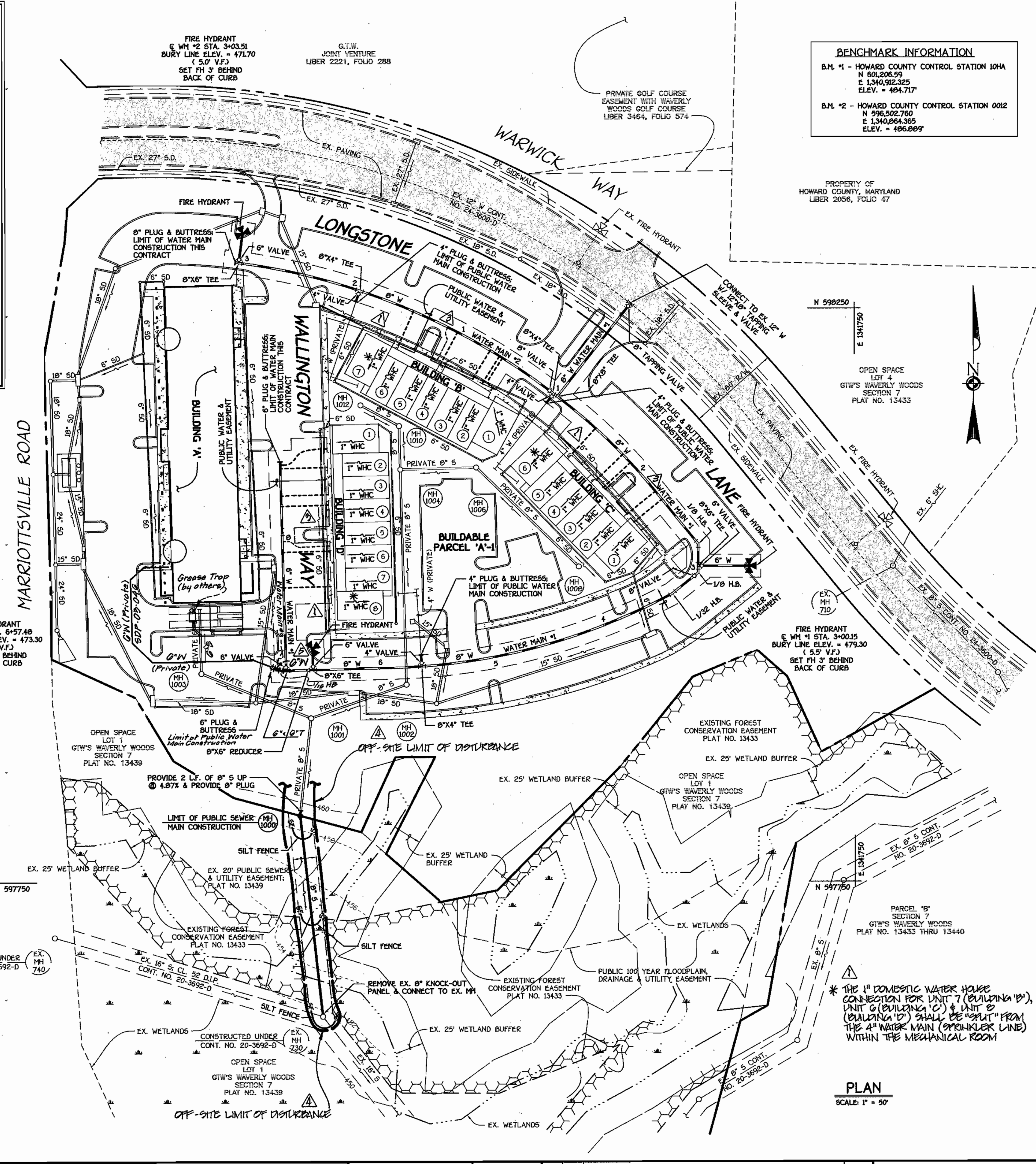
MDE TRACKING NUMBER: 20025623

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

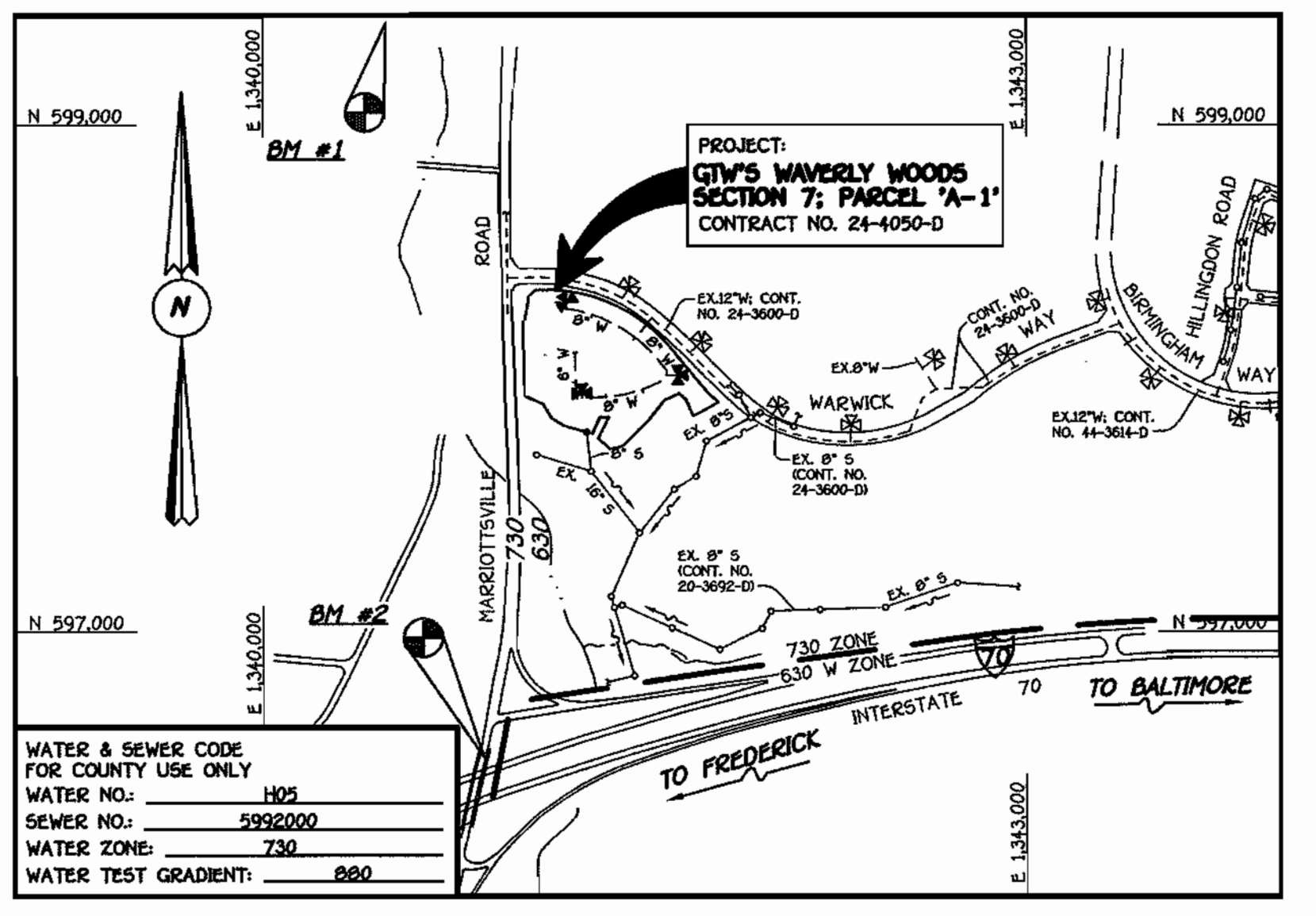
U.S. NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: **John R. Kelton 5/19/03**
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT 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 SDP 03-46 AND AS SHOWN ON THESE PLANS.
 Paul W. Keibel FOR: **05/01/03**
 SIGNATURE OF DEVELOPER DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 FISHBE, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 18772 BALTIMORE NATIONAL Pk
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2555
 STATE OF MARYLAND
 TERRILL S. FISHER
 PROFESSIONAL ENGINEER
 NO. 8781
 DESIGNED BY: M.D.T.
 DRAWN BY: M.D.T.
 CHECKED BY: P.W.K.
 DATE: MAY, 2003
 BY NO. REVISION



BENCHMARK INFORMATION
 B.M. #1 - HOWARD COUNTY CONTROL STATION 10HA
 N 601,206.59
 E 1,340,912.325
 ELEV. = 484.717'
 B.M. #2 - HOWARD COUNTY CONTROL STATION 0012
 N 596,502.760
 E 1,340,854.365
 ELEV. = 496.929'



TYPE OF BUILDING: COMMERCIAL RETAIL CENTER AND OFFICE CONDOMINIUMS
 NUMBER OF LOTS & PARCELS: 21
 NO. OF WATER HOUSE CONNECTIONS: -2-
 NO. OF SEWER HOUSE CONNECTIONS: -2-
 DRAINAGE AREA: LITTLE PATUXENT
 TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT

VICINITY MAP
 SCALE: 1" = 600'

GENERAL NOTES

- PART I
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 83.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 SITE.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL @ AT THE LOCATIONS OF THE TEST PITS. 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.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 AT&T 1-800-252-1133
 BGE (CONTRACTOR SERVICES) 410-850-4620
 BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9068
 BUREAU OF UTILITIES 410-313-4900
 COLONIAL PIPELINE CO 410-795-1390
 MISS UTILITY 1-800-297-7777
 STATE HIGHWAY ADMINISTRATION 410-531-5533
 VERIZON 1-800-743-0033/410-224-9210
 - 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.
 - 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.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING 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 REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.
- PART II: WATER
- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 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 STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- 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 18" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.92. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

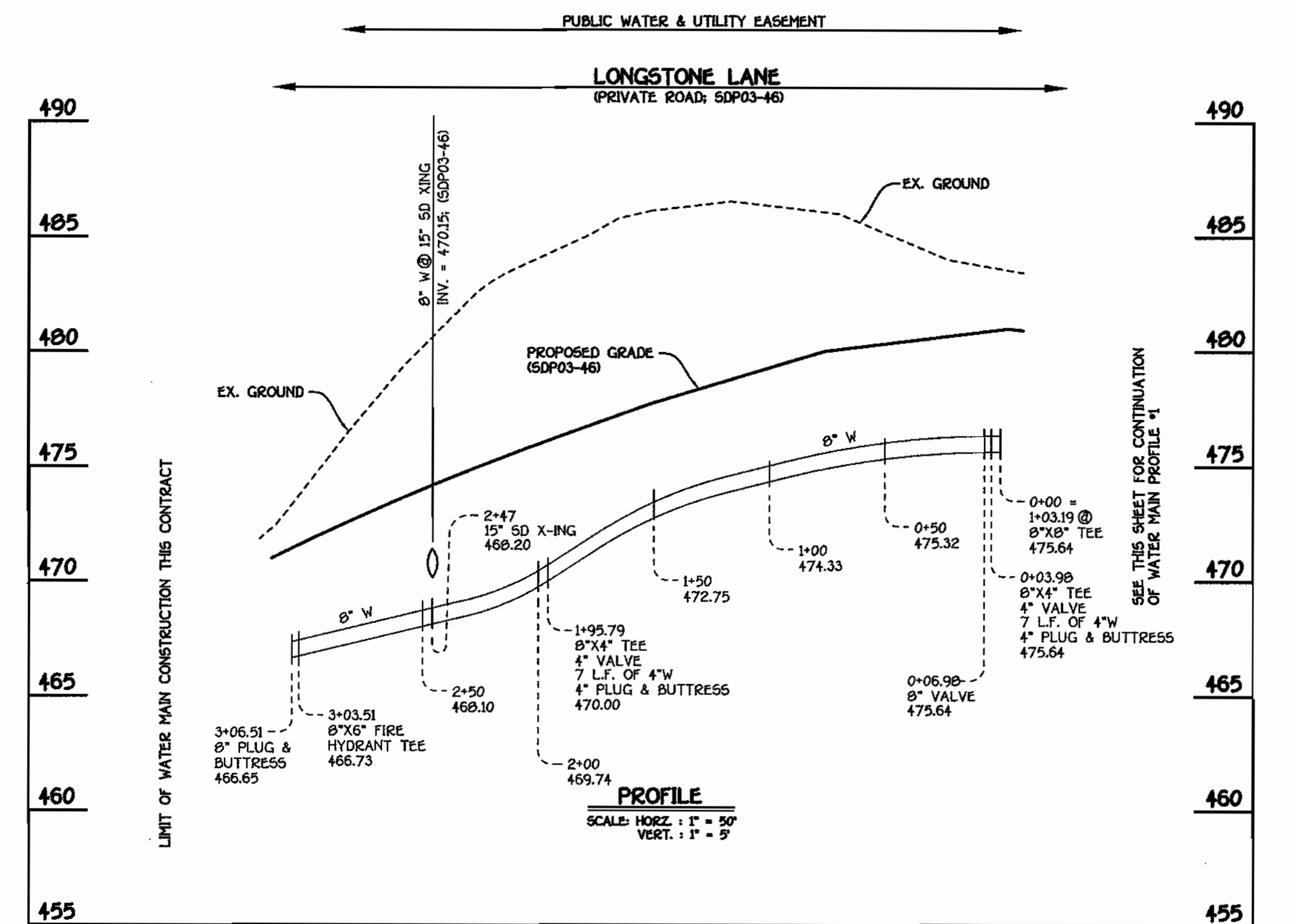
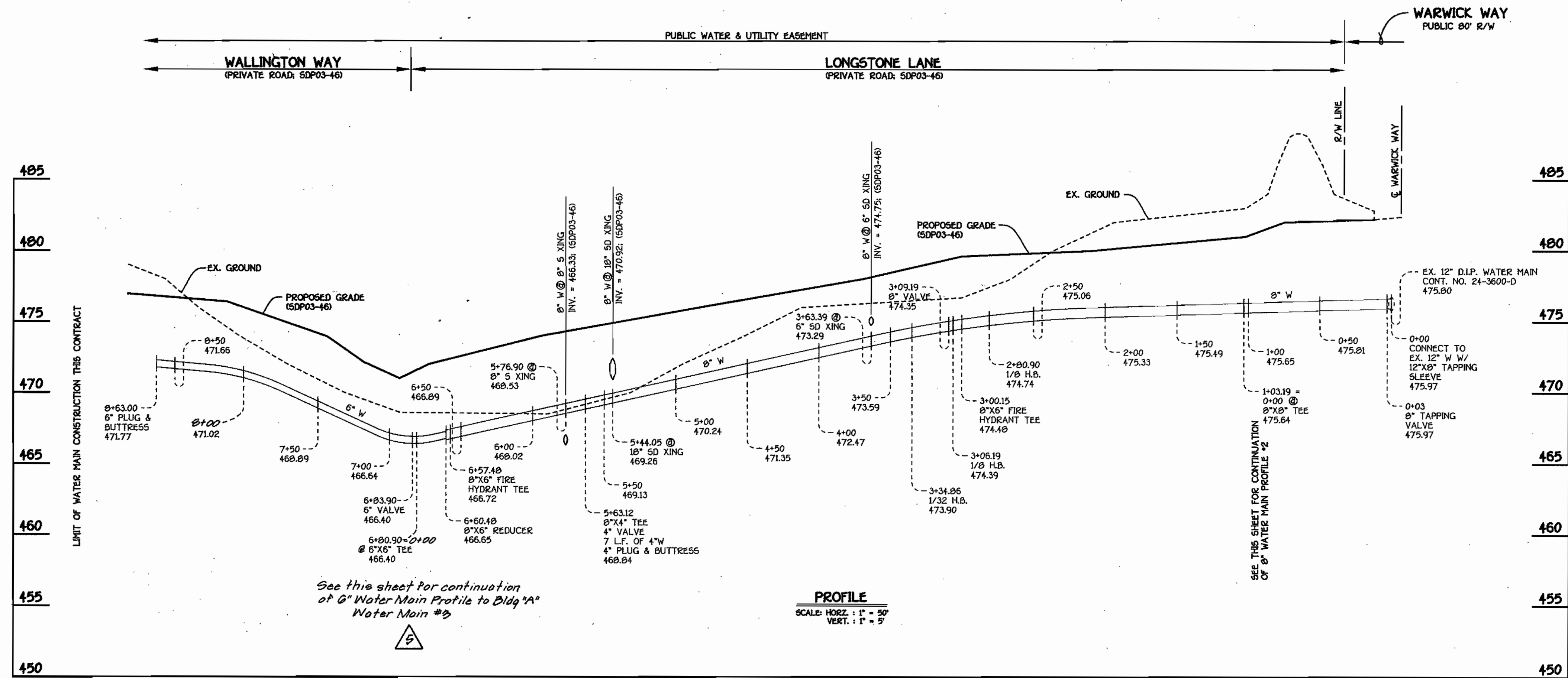
SEE SHEET 2 OF 2 FOR WATER MAIN TABULATION CHART

PLAN
 SCALE: 1" = 60'

CONTRACT NO. 24-4050-D
 GTW'S WAVERLY WOODS
 SECTION 7; PARCEL 'A-1'
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

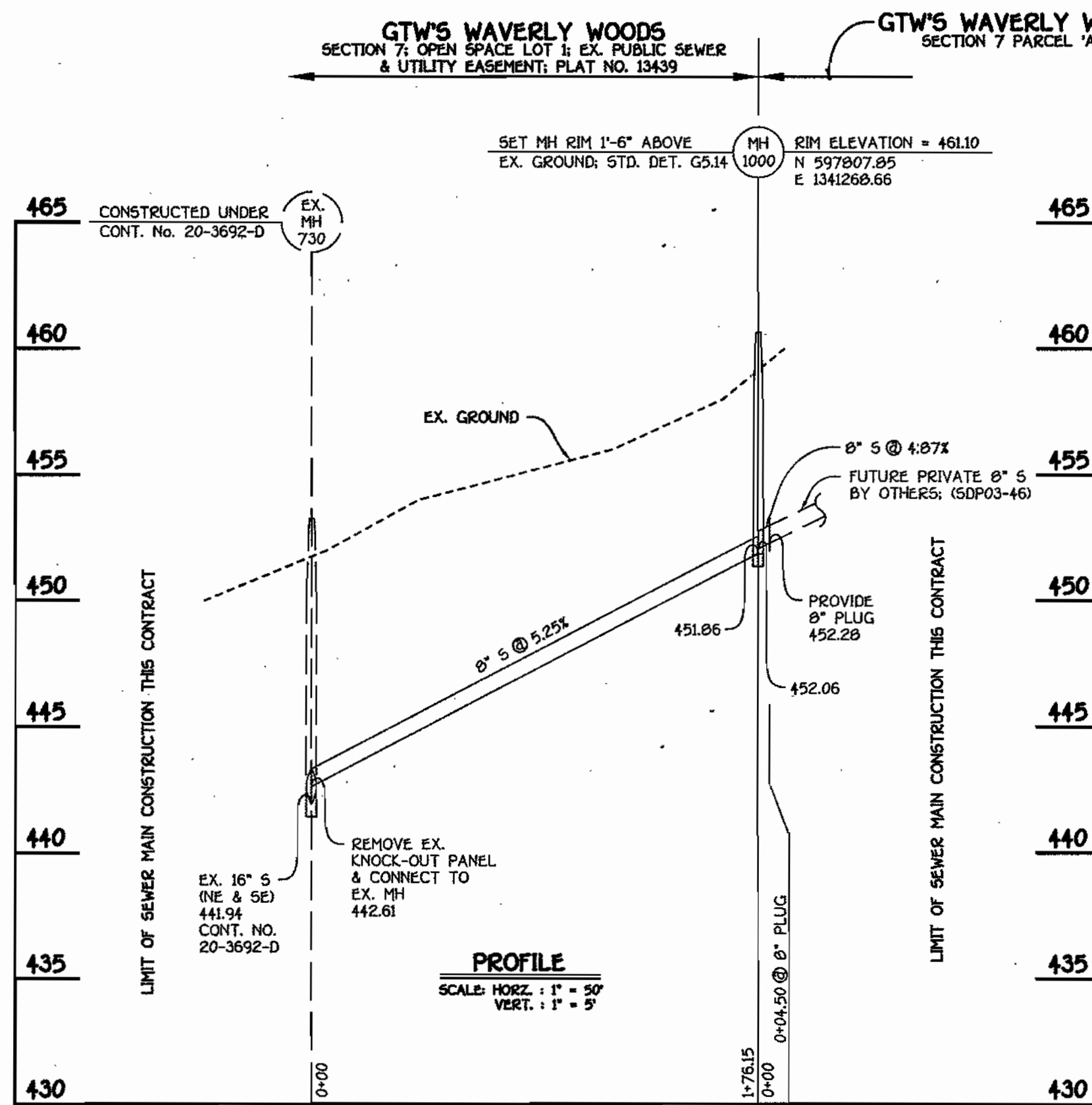
WATER AND SEWER MAINS TITLE SHEET & PLAN VIEW
 600' SCALE MAP NO. 16 BLOCK NO. 5
 F.C.C. WORK ORDER NO. 40354
 FILE NAME: 40354 PRELIMINARY WATER PLAN

GTW'S WAVERLY WOODS
 SECTION 7; PARCEL 'A-1'
 CONTRACT NO. 24-4050-D
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 1 OF 2



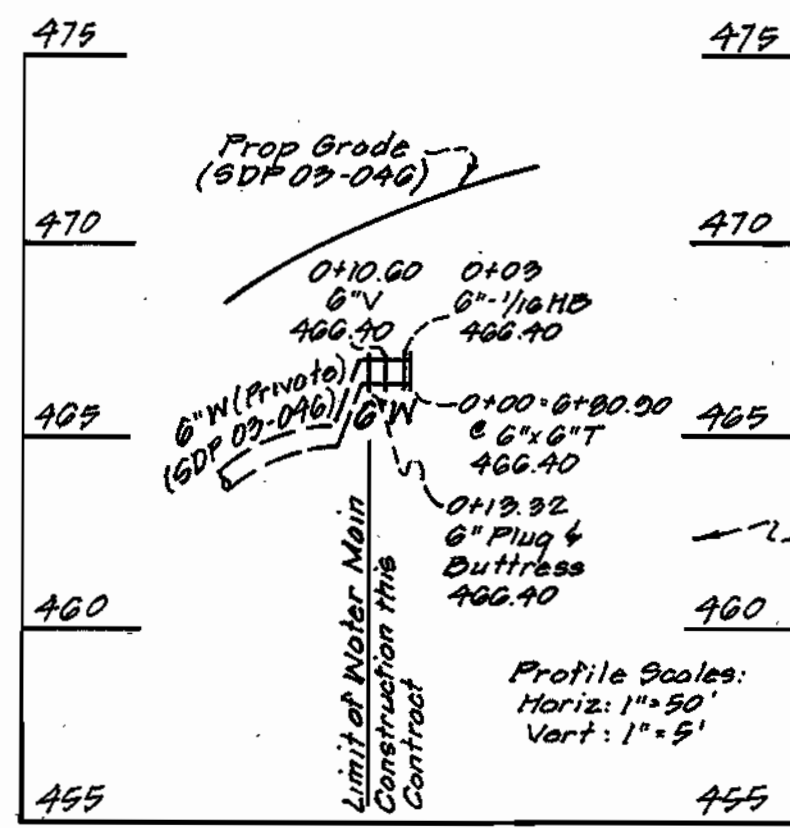
WATER MAIN #1

WATER MAIN #2



SEQUENCE OF CONSTRUCTION

- OBTAIN THE REQUIRED MDE LETTER OF AUTHORIZATION & HOWARD COUNTY GRADING PERMIT.
- NOTIFY MISS UTILITY 48 HOURS BEFORE ANY WORK (1-800-257-7177). NOTIFY HOWARD COUNTY CONSTRUCTION/INSPECTION DIVISION 24 HOURS BEFORE STARTING ANY WORK (410)313-1870.
- INSTALL THE REQUIRED SEDIMENT AND EROSION CONTROL DEVICES AS INDICATED ON SHEET 1 OF THIS CONTRACT.
- SEE SHEET 2 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS AND 100-YEAR FLOODPLAINS. CLEAR AND GRUB AS NECESSARY, ONLY AS REQUIRED FOR EXCAVATION AND INSTALLATION OF THE SEWER MAIN, AND ONLY WITHIN THE DESIGNATED SEWER AND UTILITY EASEMENTS.
- NOTE: THE LENGTH OF OPEN SEWER MAIN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH WILL BE BACKFILLED AND STABILIZED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.
- CONSTRUCT THE SEWER MAIN AND APPURTENANCES.
- STABILIZE, SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES SHOWN ON THIS SHEET.
- FOLLOWING SUCCESSFUL STABILIZATION OF ALL DISTURBED AREAS, AND AFTER PERMISSION HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES.



W.M. STATION	APPURTENANCE	NORTHING	EASTING
WATER MAIN #1			
0+00.00	12" X 8" TAPPING SLEEVE	598254.29	1341555.94
0+03.00	8" TAPPING VALVE	598251.92	1341554.10
1+03.19	8" X 8" TEE	598172.95	1341492.42
1+07.71	P.C. (CRIMP RADIUS = 489.99')	598170.18	1341495.99
2+21.23	P.T. (CRIMP RADIUS = 489.99')	598090.85	1341576.84
2+80.90	1/8" H.B.	598044.42	1341814.32
3+00.15	8" X 6" FH TEE	598025.17	1341814.32
3+06.19	1/8" H.B.	598019.13	1341814.32
3+09.19	8" VALVE	598017.25	1341811.98
3+34.86	1/32" H.B.	598001.12	1341992.01
3+42.68	P.C. (CRIMP RADIUS = 531.23')	597977.49	1341505.05
5+63.12	8" X 4" TEE	597938.00	1341374.46
5+85.00	P.T. (CRIMP RAD. 531.23')	597938.97	1341352.60
6+57.48	8" X 6" FH TEE	597935.04	1341280.16
6+60.48	8" X 6" REDUCER	597934.96	1341277.16
6+80.90	8" X 6" TEE	597934.42	1341256.74
6+83.90	6" VALVE	597937.42	1341256.68
8+01.85	8" X 6" TEE	598055.33	1341253.53
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0+03.00	1/8" H.B.	597934.90	1341252.24
0+10.00	8" VALVE	597934.14	1341242.14
0+19.32	8" Plug & Buttress	597935.95	1341243.71

BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS

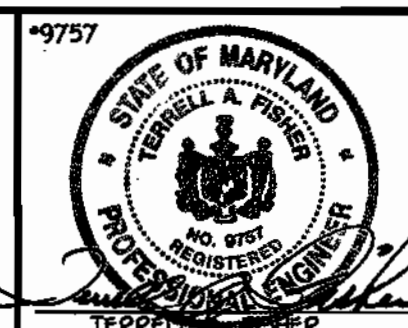
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- PLACE MATERIALS IN A LOCATION AND MANNER THAT DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
- RECTIFY ANY NONTIDAL WETLANDS, WETLANDS BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
- ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (Avena SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
- TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM. NOT APPLICABLE; NO IN-STREAM WORK.
- STORMWATER RUNOFF FROM IMPERVIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
- CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER.

MDE TRACKING NUMBER: 20025623

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTONAL SQUARE, OFFICE PARK - 18722 BALTIMORE NATIONAL PARK
ELICOTT CITY, MARYLAND 21042
410 461 - 2955



DESIGNED BY:
M.D.T.
DRAWN BY:
M.D.T.
CHECKED BY:
P.W.K.
DATE:
MAY, 2003

WATER AND SEWER MAINS
PROFILES

600' SCALE MAP NO. 15 BLOCK NO. 5
F.C.C. WORK ORDER NO. 40354

FILE NAME: 40354 FINAL WATER MAINS PLAN SH2

WATER AND SEWER MAINS
PROFILES

GTW'S WAVERLY WOODS
SECTION 7; PARCEL 'A-1'
CONTRACT NO. 24-4050-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN
SHEET
2 of 2

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
8" WATER	966.99 L.F.		CL 52 DIP	GRIFFIN
6" WATER	301.12 L.F.		"	"
4" WATER	30.00 L.F.		"	"
1" WATER	855 L.F.		TYPE K COPPER	CAMBRIDGE / LEE
FIRE HYDRANTS	3 EACH		"	MUELLER
12" X 8" TAPPING SLEEVE & VALVE	1 EACH		DIP	SDM / MUELLER
8" X 8" TEE	1 EACH		DIP	U.S. PIPE
8" VALVE	2 EACH		RSEV / OR	MUELLER
8" X 6" TEE	3 EACH		DIP	U.S. PIPE
6" X 6" TEE	2 EACH		"	"
6" VALVE	5 EACH		RSEV / OR	MUELLER
8" X 4" TEE	3 EACH		DIP	U.S. PIPE
4" VALVE	3 EACH		RSEV / OR	MUELLER
8" 1/8 H.B.	2 EACH		"	"
8" 1/32 H.B.	1 EACH		"	"
8" X 6" REDUCER	1 EACH		DIP	U.S. PIPE
8" PLUG & BUTTRESS	3 EACH		"	"
6" PLUG & BUTTRESS	3 EACH		"	"
8" PLUG & BUTTRESS	1 EACH		"	"
8" SEWER	100.65 L.F.		PVC / SDR 35	BRISTOL
MANHOLES	1 EACH		PRE CAST	ATLANTIC

NAME OF UTILITY CONTRACTOR: CCS
SURVEY & DRAFTING DIVISION AS-BUILT DATE:

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
1000	597907.85	1341266.66	461.10*

* SET RIM 1'-6" ABOVE EX. GROUND; STD. DET. G5.14

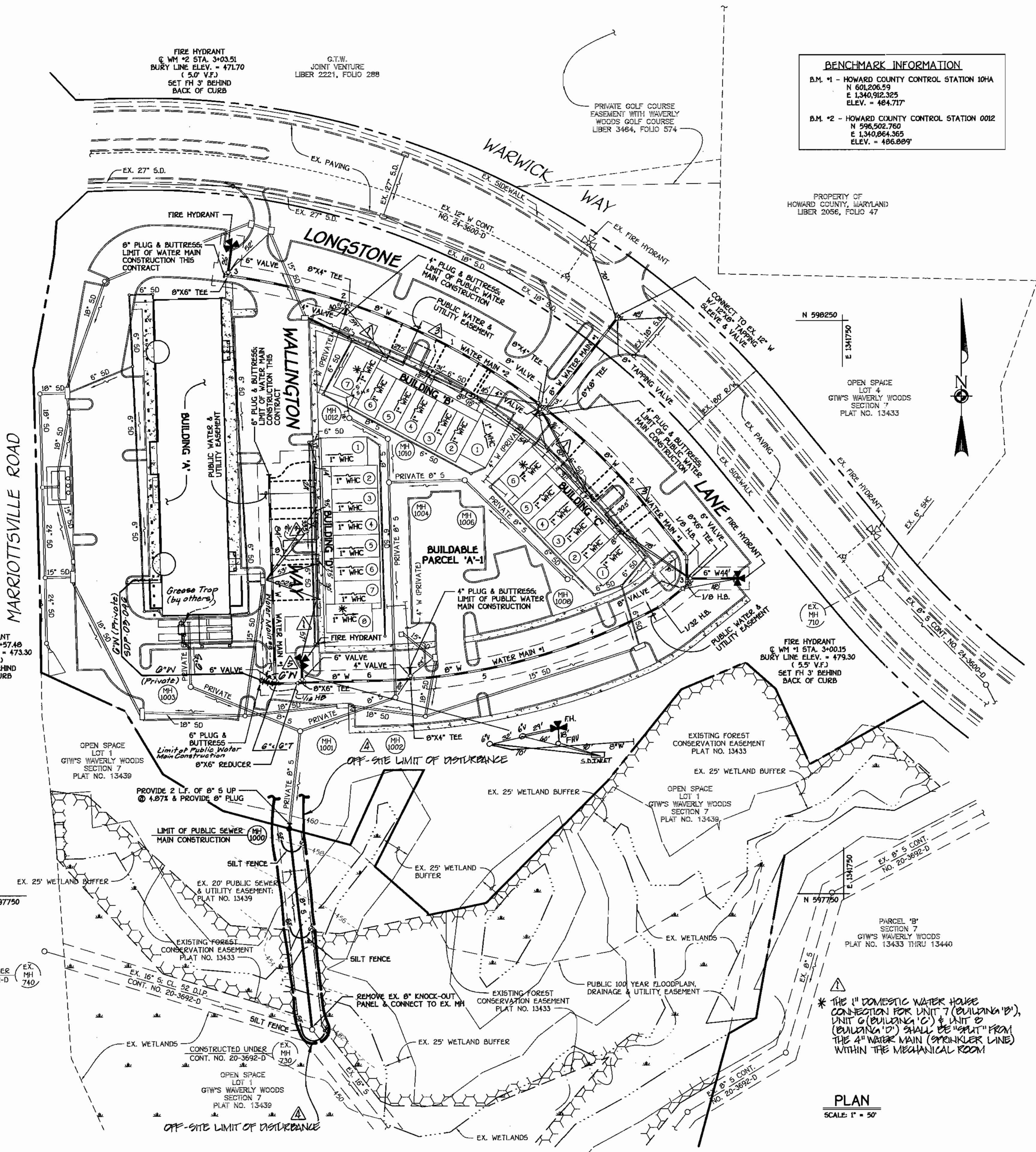
NOTES: 1. CURB SERVICE BOXES LOCATED WITHIN PAVED ROADWAYS OR SIDEWALK AREAS SHALL BE CAST IRON W/ CAST IRON COVERS.

DEVELOPER'S CERTIFICATION
I 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 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 AGE DEMAND NECESSARY.
Paul W. Koebel FOR: **WAVERLY WOODS DEVELOPMENT CORP. 05-01-03**
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. Koebel 05/01/03
SIGNATURE OF ENGINEER DATE

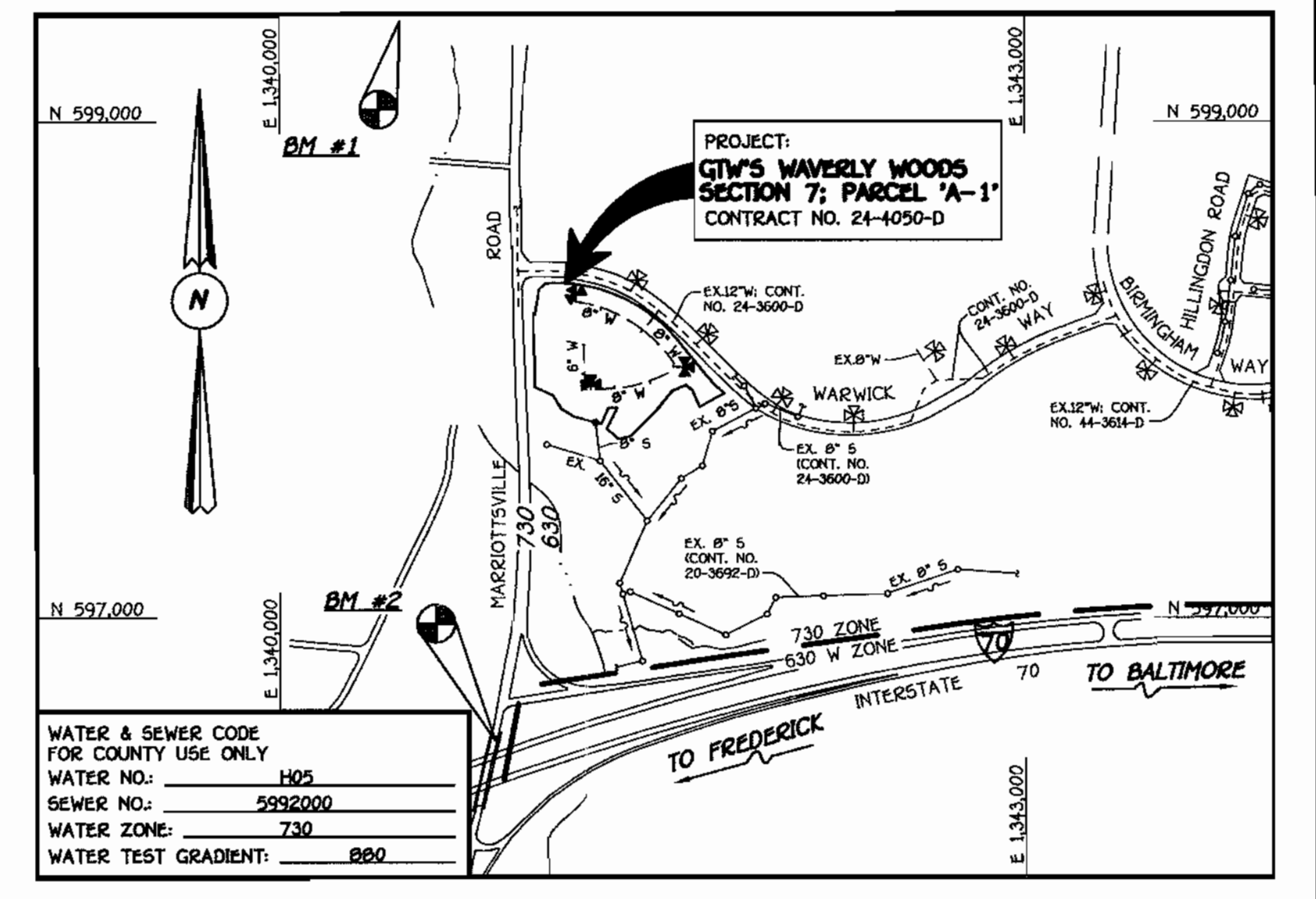
MDE TRACKING NUMBER: 20025623
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Jim Meyer 5/19/03
U.S.D. NATURAL RESOURCES CONSERVATION SERVICE DATE
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
John K. Reardon 5/19/03
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT 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 SDP 03-46 AND AS SHOWN ON THESE PLANS.
Paul W. Koebel FOR: **WAVERLY WOODS DEVELOPMENT CORP. 05/01/03**
SIGNATURE OF DEVELOPER DATE



BENCHMARK INFORMATION

B.M. #1 - HOWARD COUNTY CONTROL STATION 10HA	N 601.206.59	E 1.340.912.325	ELEV. = 484.717'
B.M. #2 - HOWARD COUNTY CONTROL STATION 0012	N 598.902.760	E 1.340.864.365	ELEV. = 486.809'



TYPE OF BUILDING: COMMERCIAL RETAIL CENTER AND OFFICE CONDOMINIUMS
NUMBER OF LOTS & PARCELS: 1
NO. OF WATER HOUSE CONNECTIONS: 2
NO. OF SEWER HOUSE CONNECTIONS: 0
DRAINAGE AREA: LITTLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT

PLAN REFERENCE NUMBERS: SDP03-46

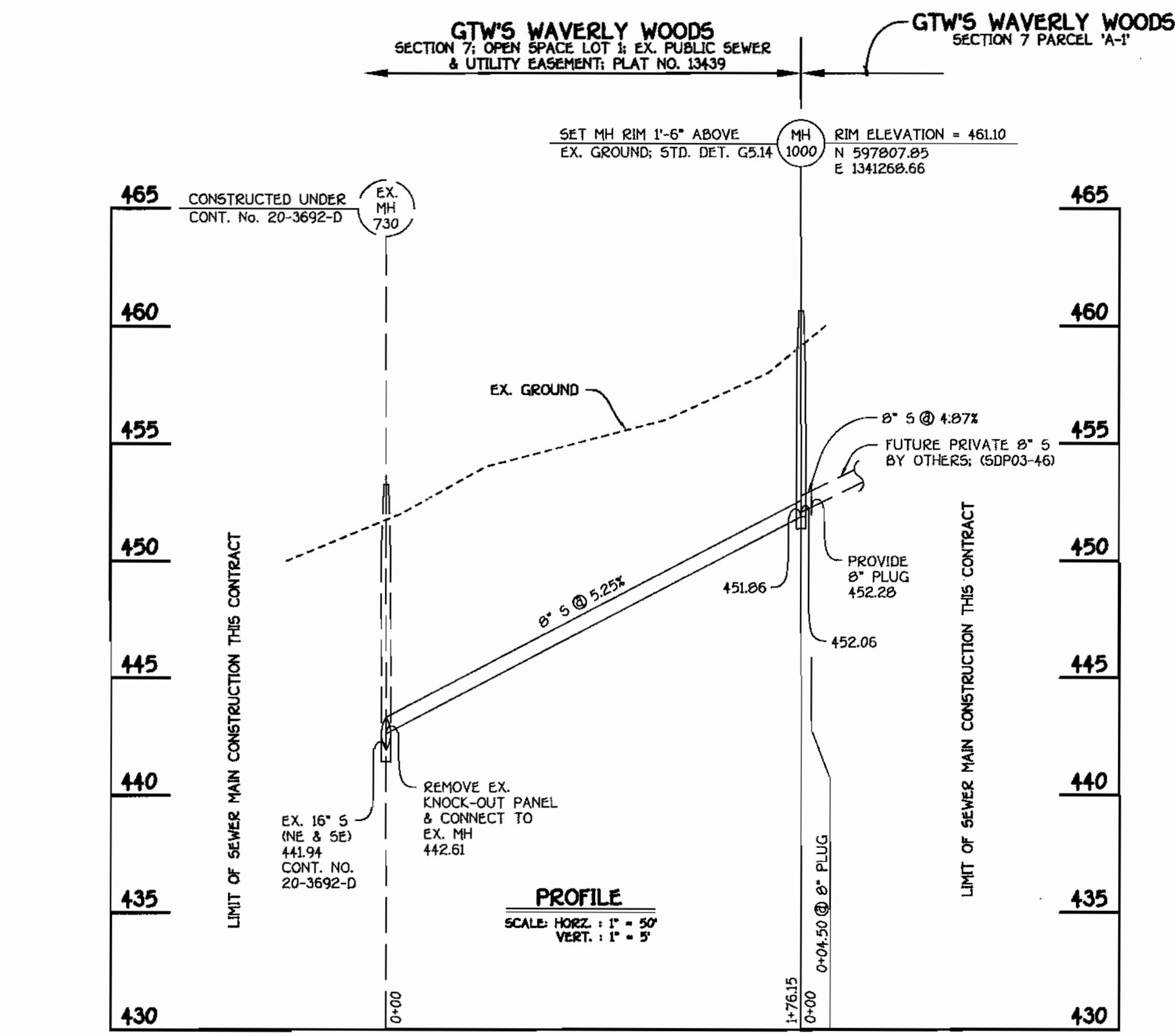
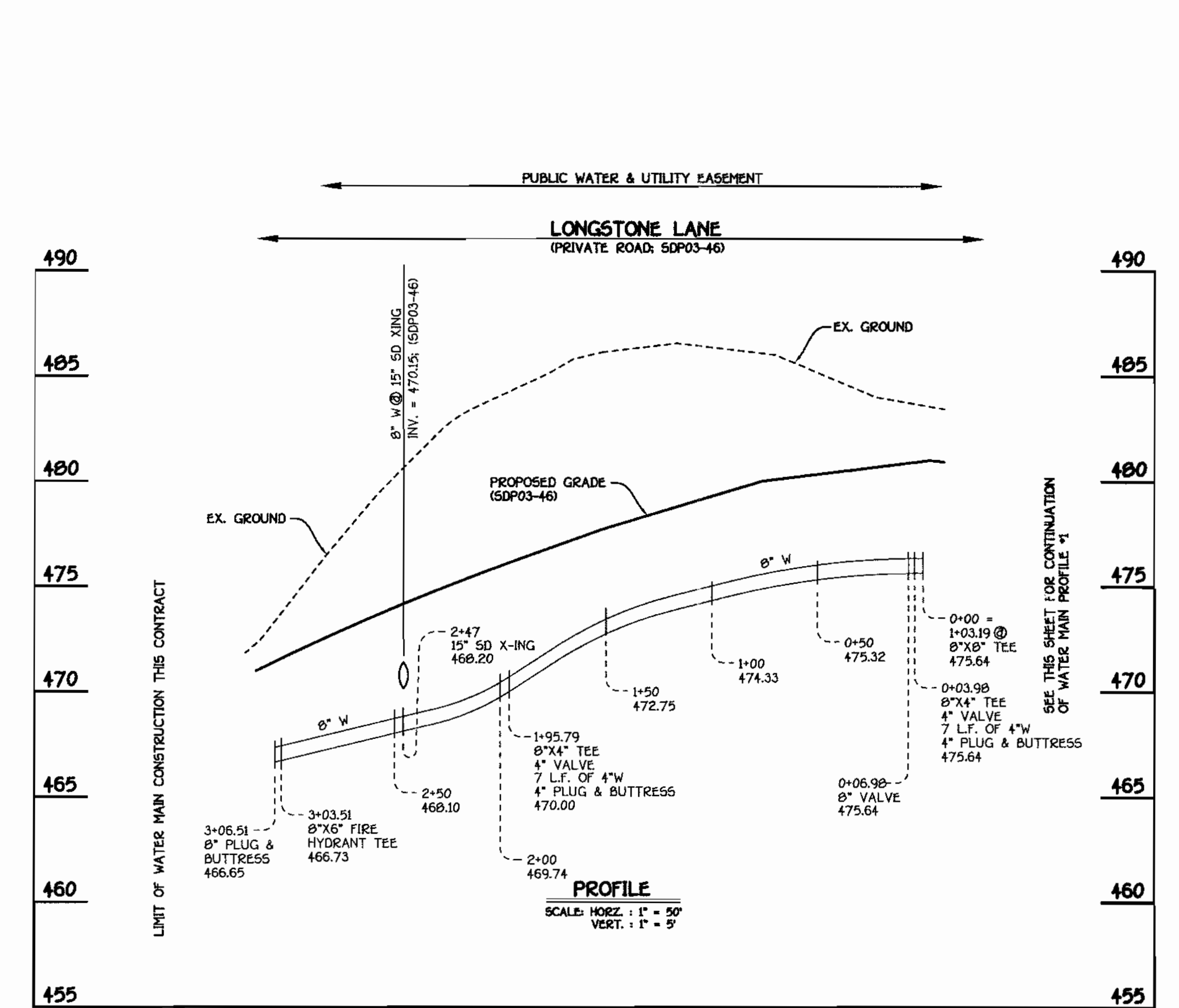
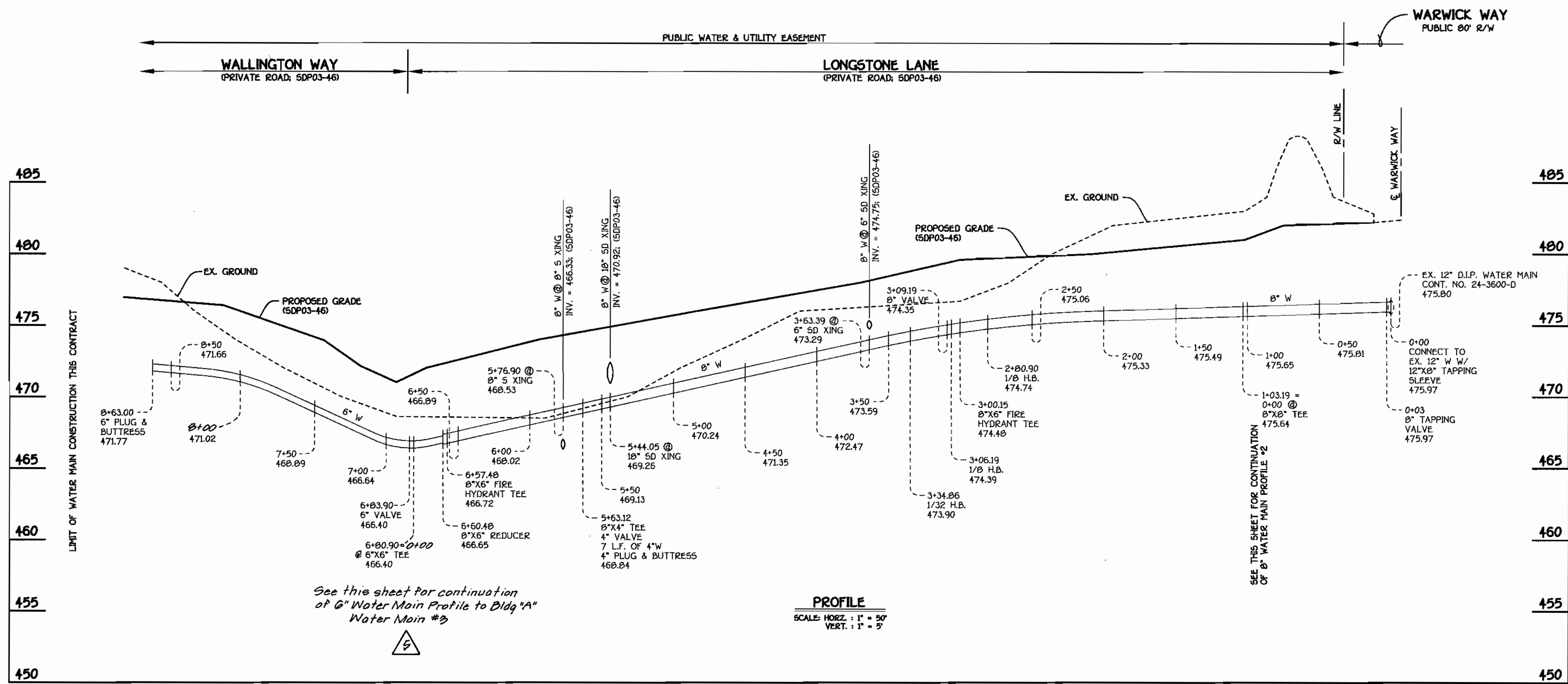
GENERAL NOTES

- PART I**
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 08.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 3'-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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 SITE.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL (P) AT THE LOCATIONS OF THE TEST PITS. 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.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T 1-800-252-1133
BGE (CONTRACTOR SERVICES) 410-850-4620
BGE UNDERGROUND DAMAGE CONTROL 410-787-9068
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO. 410-795-1390
MISS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-5533
VERIZON 1-800-743-0033/410-224-9210
 - 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.
 - 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.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING 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 REQUIREMENTS PER SECTION 18.10(A) OF THE HOWARD COUNTY CODE.
- PART II: WATER**
- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEE'S SHALL BE STRAPPED TO TEE'S.
 - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED IN ACCORDANCE WITH 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 STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- 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 18" 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'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

SEE SHEET 2 OF 2 FOR WATER MAIN TABULATION CHART

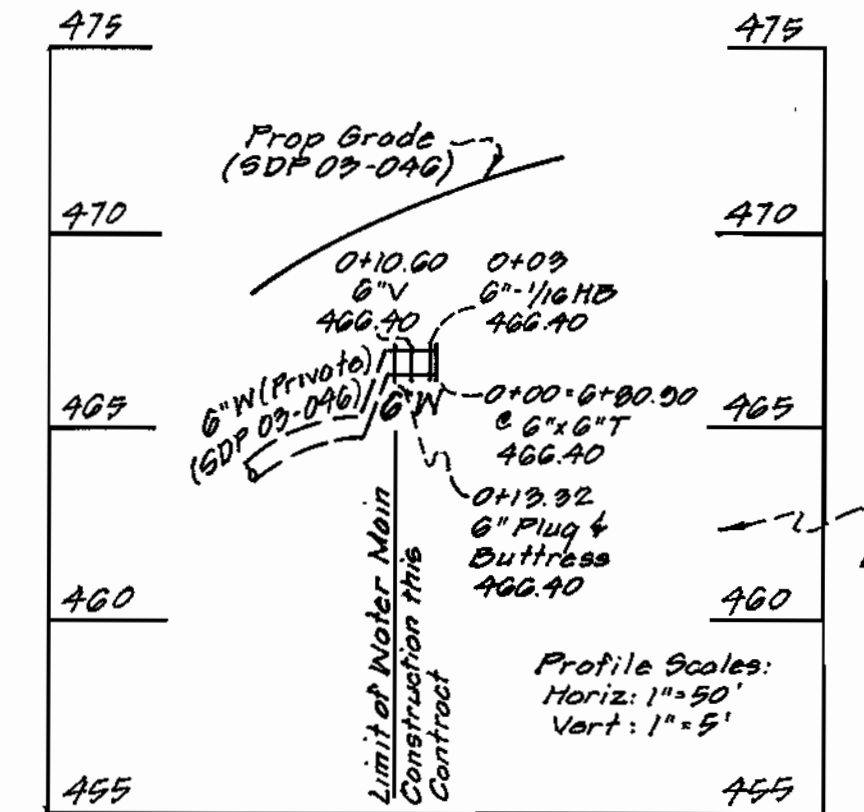
PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>John K. Reardon</i> 5/9-03 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND <i>Jim Meyer</i> 5/19/03 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	DESIGNED BY: KCI M.D.T. DRAWN BY: FCC M.D.T. CHECKED BY: P.W.K. DATE: MAY, 2003 BY NO.	ASBUILT DATA Revise 0" W alignment to Building 9A INDICATE LIMIT OF DISTURBANCE PER WDR COMMENT REVISE PUBLIC WATER & UTILITY EASEMENT LIMITS REVISE QUANTITY OF 1" WMC INDICATE 1" WMC FOR DOMESTIC SERVICE FROM 4" W	10/6/04 7/19/04 7/19/03 7/19/03 7/19/03 7/19/03	WATER AND SEWER MAINS TITLE SHEET & PLAN VIEW 600' SCALE MAP NO. 16 BLOCK NO. 5 F.C.C. WORK ORDER NO. 40354 FILE NAME: 40354 PRELIMINARY WATER PLAN	GTW'S WAVERLY WOODS SECTION 7; PARCEL 'A-1' CONTRACT NO. 24-4050-D THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 1 OF 2
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SEQUENCE OF CONSTRUCTION

- OBTAIN THE REQUIRED MDE LETTER OF AUTHORIZATION & HOWARD COUNTY GRADING PERMIT.
- NOTIFY MISS UTILITY 48 HOURS BEFORE ANY WORK (1-800-257-7777). NOTIFY HOWARD COUNTY CONSTRUCTION/INSPECTION DIVISION 24 HOURS BEFORE STARTING ANY WORK (410-313-1870).
- INSTALL THE REQUIRED SEDIMENT AND EROSION CONTROL DEVICES AS INDICATED ON SHEET 1 OF THIS CONTRACT.
- SEE SHEET 2 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS AND 100-YEAR FLOODPLAINS. CLEAR AND GRUB AS NECESSARY, ONLY AS REQUIRED FOR EXCAVATION AND INSTALLATION OF THE SEWER MAIN, AND ONLY WITHIN THE DESIGNATED SEWER AND UTILITY EASEMENTS.
- NOTE: THE LENGTH OF OPEN SEWER MAIN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH WILL BE BACKFILLED AND STABILIZED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.
- CONSTRUCT THE SEWER MAIN AND APPURTENANCES.
- STABILIZE, SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES SHOWN ON THIS SHEET.
- FOLLOWING SUCCESSFUL STABILIZATION OF ALL DISTURBED AREAS, AND AFTER PERMISSION HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES.



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5+85.00	P.T. (CRMP RAD. 531.23')	597936.97	1341592.60
6+57.48	8" X 6" FH TEE	597935.04	1341280.16
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0+10.00	8" VALVE	597934.14	1341246.14
0+19.32	8" PLUG & BUTTRESS	597935.95	1341249.71

BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS

- NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- PLACE MATERIALS IN A LOCATION AND MANNER THAT DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
- RECTIFY ANY NONTIDAL WETLANDS, WETLANDS BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
- ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTICOLOR), MELLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (UNOLA SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION, KENTUCKY. FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
- TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM. NOT APPLICABLE; NO IN-STREAM WORK.
- STORMWATER RUNOFF FROM IMPERVIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
- CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER.

MDE TRACKING NUMBER: 20025623

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

DESIGNED BY: M.D.T.

DRAWN BY: M.D.T.

CHECKED BY: P.W.K.

DATE: MAY, 2003

WATER AND SEWER MAINS PROFILES

GTW'S WAVERLY WOODS SECTION 7; PARCEL 'A-1' CONTRACT NO. 24-4050-D THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN SHEET 2 OF 2

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
8" WATER	986.99 L.F.		CL52 DIP	GRIFFIN
6" WATER	301.12 L.F.		"	"
4" WATER	30.00 L.F.		"	"
1" WATER	855 L.F.		TYPE K COPPER	CAMBRIDGE / LEE
FIRE HYDRANTS	3 EACH			MUELLER
12" X 8" TAPPING SLEEVE & VALVE	1 EACH		DIP	SDM / MUELLER
8" X 8" TEE	1 EACH		DIP	U.S. PIPE
8" VALVE	2 EACH		RSEV / OR	MUELLER
8" X 6" TEE	3 EACH		DIP	U.S. PIPE
6" X 6" TEE	2 EACH		"	"
6" VALVE	5 EACH		RSEV / OR	MUELLER
8" X 4" TEE	3 EACH		DIP	U.S. PIPE
4" VALVE	3 EACH		RSEV / OR	MUELLER
8" 1/8" H.B.	2 EACH		"	"
8" 1/32" H.B.	1 EACH		"	"
8" X 6" REDUCER	1 EACH		DIP	U.S. PIPE
8" PLUG & BUTTRESS	3 EACH		"	"
6" PLUG & BUTTRESS	3 EACH		"	"
8" PLUG & BUTTRESS	1 EACH		"	"
8" SEWER	180.65 L.F.		PVC / SDR 35	BRISTOL
MANHOLES	1 EACH		PRE CAST	ATLANTIC

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
1000	597907.85	1341266.65	461.10'

* SET RIM 1'-6" ABOVE EX. GROUND, STD. DET. G5.14

NOTES: 1. CURB SERVICE BOXES LOCATED WITHIN PAVED ROADWAYS OR SIDEWALK AREAS SHALL BE CAST IRON W/ CAST IRON COVERS.

DEVELOPER'S CERTIFICATION

I 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.

Paul W. Keibel FOR: Waverly Woods Development Corp. 05-01-03
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. Keibel 05/01/03
SIGNATURE OF ENGINEER DATE

MDE TRACKING NUMBER: 20025623

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

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

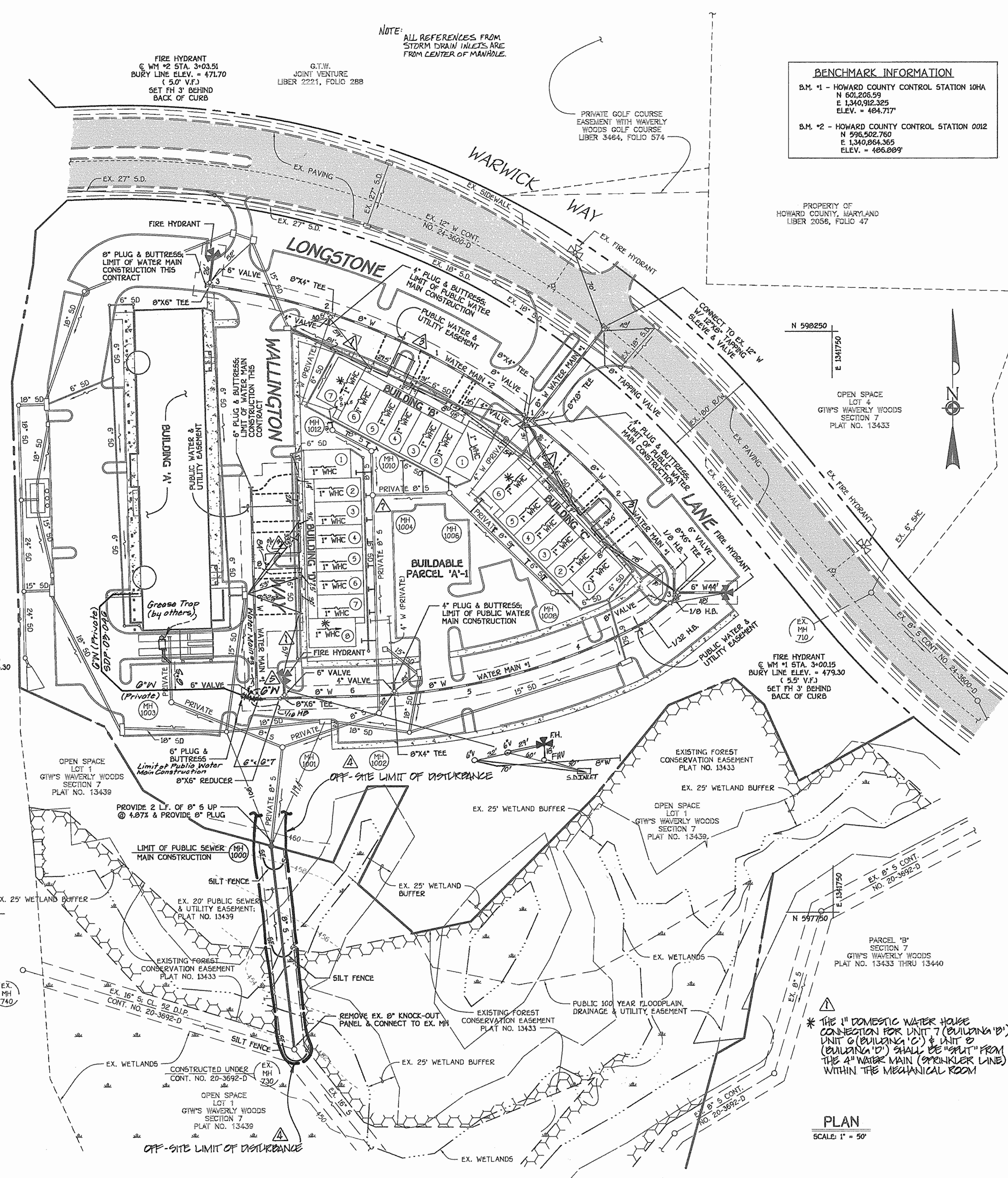
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: Howard Soil Conservation District 5/19/03
DATE

SEDMENT 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 SDP 03-16 AND AS SHOWN ON THESE PLANS.

Paul W. Keibel FOR: Waverly Woods Development Corp. 05/01/03
SIGNATURE OF DEVELOPER DATE

MARRIOTTVILLE ROAD



NOTE: ALL REFERENCES FROM STORM DRAIN INLETS ARE FROM CENTER OF MANHOLE.

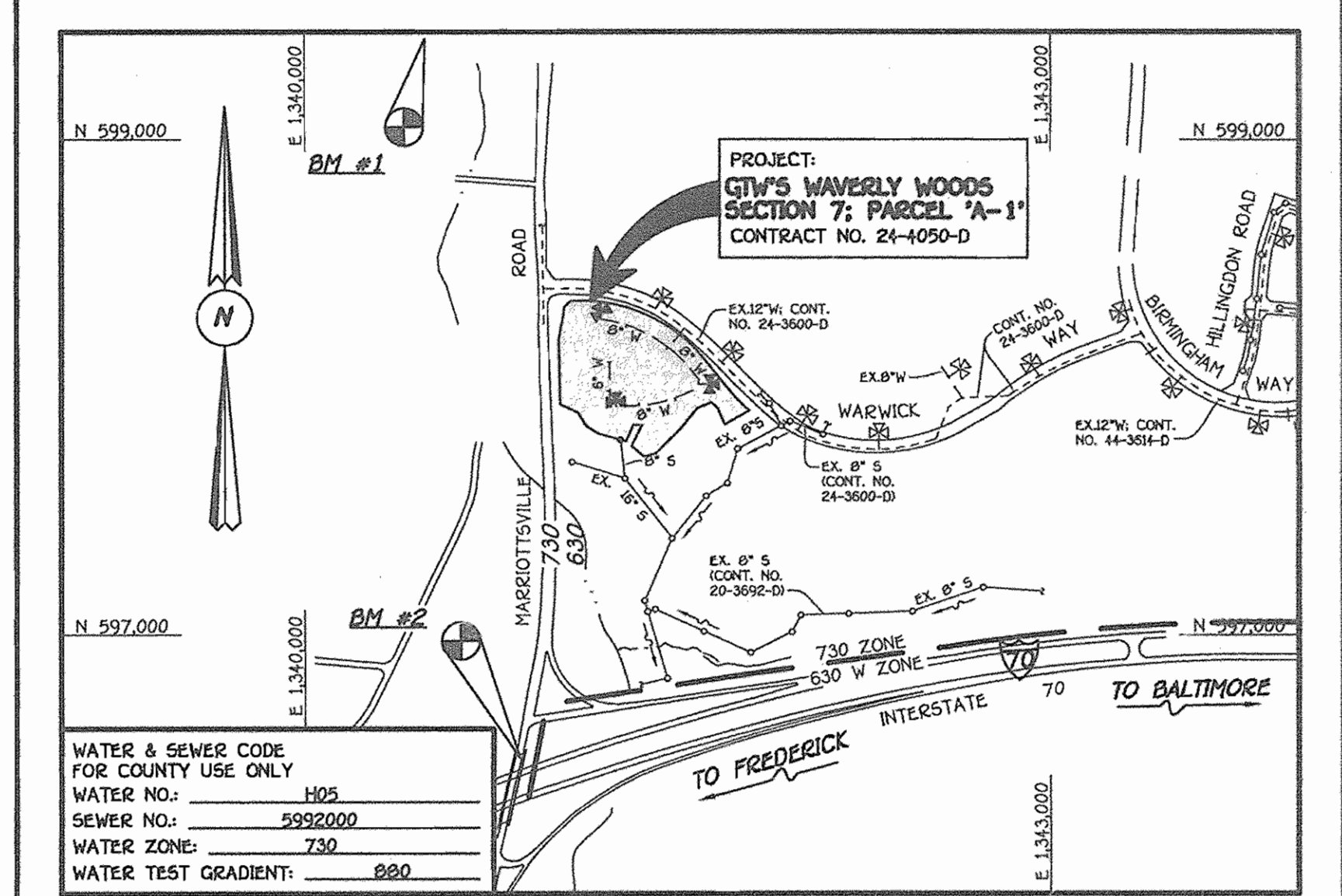
BENCHMARK INFORMATION

B.M. #1 - HOWARD COUNTY CONTROL STATION 10HA
N 601.206.59
E 1340.912.325
ELEV. = 484.717'

B.M. #2 - HOWARD COUNTY CONTROL STATION 0002
N 596.502.760
E 1340.864.365
ELEV. = 486.009'

PROPERTY OF HOWARD COUNTY, MARYLAND
LIBER 2056, FOLIO 47

OPEN SPACE LOT 4
GTW'S WAVERLY WOODS SECTION 7
PLAT NO. 13433



WATER & SEWER CODE FOR COUNTY USE ONLY	
WATER NO.:	H05
SEWER NO.:	5992000
WATER ZONE:	730
WATER TEST GRADIENT:	880

TYPE OF BUILDING: COMMERCIAL, RETAIL CENTER AND OFFICE CONDOMINIUMS
NUMBER OF LOTS & PARCELS: 21
NO. OF WATER HOUSE CONNECTIONS: 21
NO. OF SEWER HOUSE CONNECTIONS: 21
DRAINAGE AREA: LITTLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT

VICINITY MAP

SCALE: 1" = 600'

GENERAL NOTES

- PART I
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 83.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 SITE.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL @ AT THE LOCATIONS OF THE TEST PITS. 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.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - AT&T 1-800-252-1133
 - BCE (CONTRACTOR SERVICES) 410-850-4620
 - BCE UNDERGROUND DAMAGE CONTROL 410-787-9080
 - BUREAU OF UTILITIES 410-313-4900
 - COLONIAL PIPELINE CO. 410-795-1390
 - MISS UTILITY 1-800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
 - VERIZON 1-800-743-0033/410-224-9210
 - 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.
 - 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.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING 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 REQUIREMENTS PER SECTION 10.114(D) OF THE HOWARD COUNTY CODE.
- PART II: WATER
- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 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 STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- 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 18" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.I.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATER-TIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSES WITH THE SYMBOL "CNS-" INDICATES THAT THE CELLAR CANNOT BE SERVED.

SEE SHEET 2 OF 2 FOR WATER MAIN TABULATION CHART

PLAN
SCALE: 1" = 50'

CONTRACT NO. 24-4050-D
GTW'S WAVERLY WOODS
SECTION 7; PARCEL 'A-1'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 5/9/03 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND DATE: 5/16/03 CHIEF, DEVELOPMENT ENGINEERING DIVISION	DESIGNED BY: M.D.T. DRAWN BY: M.D.T. CHECKED BY: P.W.K. DATE: MAY, 2003 BY NO.	INDICATE PRIVATE SEWER HOUSE CONNECTIONS TO ALL UNITS AS-BUILT DATA REVISE G'W ALIGNMENT TO BUILDING 'A' INDICATE LIMIT OF DISTURBANCE PER WIDE COMMENT REVISE PUBLIC WATER & UTILITY EASEMENT LIMITS REVISE QUANTITY OF 1" WMC INDICATE 1" WMC FOR DOMESTIC SERVICE FROM A-W	10/14/03 7/19/04 7/16/03 7/16/03 7/16/03 7/16/03	WATER AND SEWER MAINS TITLE SHEET & PLAN VIEW 600' SCALE MAP NO. 15 BLOCK NO. 5 F.C.C. WORK ORDER NO. 40354 FILE NAME: 40354.PRELIMINARY WATER PLAN	SCALE AS SHOWN SHEET 1 OF 2
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K:\Drawings\410354\Waverly Woods Section 7 Parcel A\WaterSewer\40354-Final Water Plan REV. 26-03.dwg, 5/11/2003 2:17:24 PM