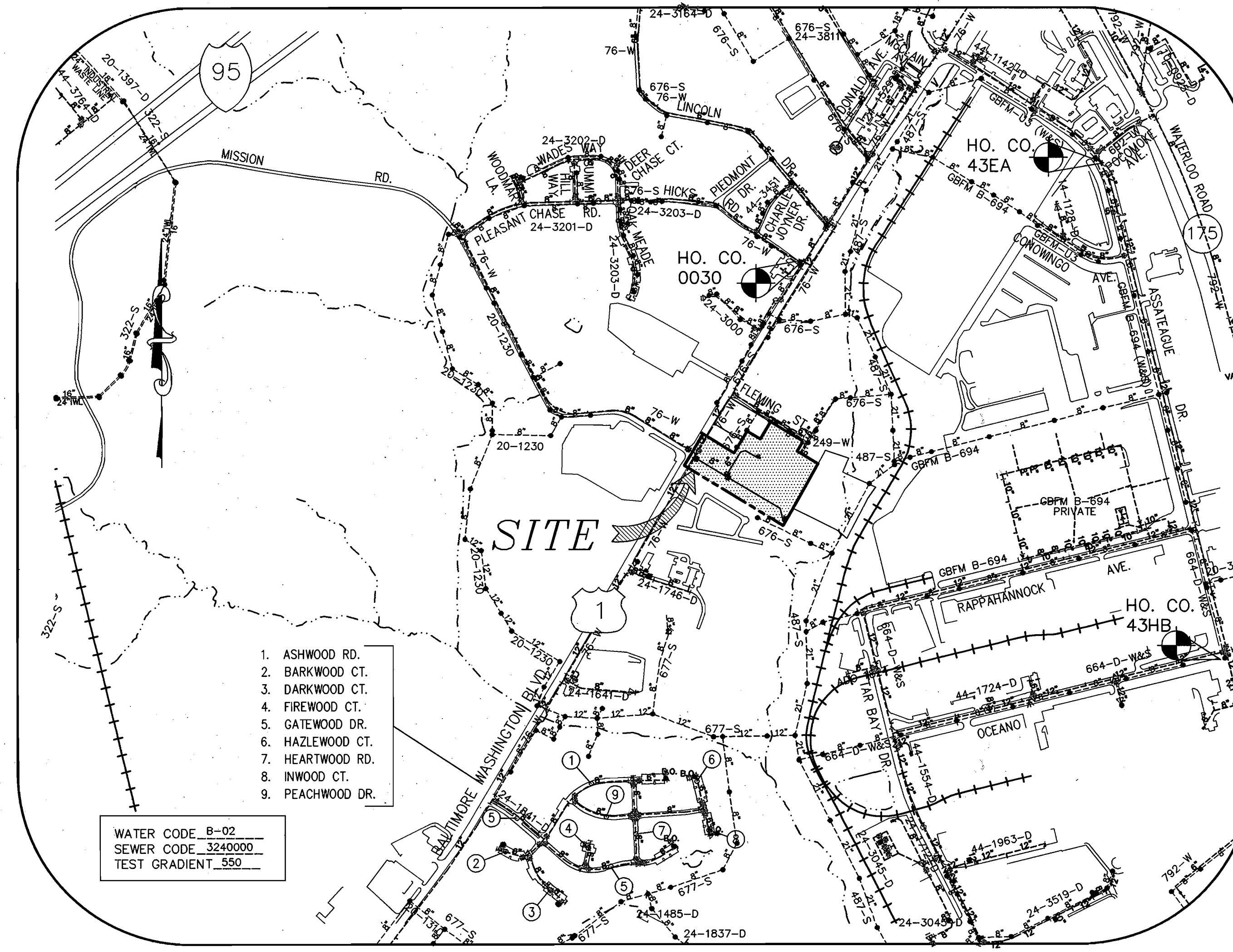


QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES			MANUFACTURER/SUPPLIER
		TYPE	TYPE	TYPE	
8" WATER	1129 LF				
6" WATER	31 LF				
6" WHC	123 LF				
12" X 8" TS&V	1				
8" X 8" T	1				
8" X 6" T	5				
8" CAP & BUTTRESS	2				
1/8 HB	4				
8" V	3				
6" V	5				
FH	3				
NAME OF UTILITY CONTRACTOR:					
SURVEY AND DRAFTING DIVISION AS-BUILT DATE					

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER PLAN
3	WATER PROFILES



VICINITY MAP

SCALE : 1" = 600'

TYPE OF BUILDING	HYBRID INDUSTRIAL/OFFICE
No. OF UNITS	2
No. OF WATER HOUSE CONNECTION	2
No. OF TWIN WATER HOUSE CONNECTION	N/A
No. OF SEWER HOUSE CONNECTIONS	2
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLANT	LITTLE PATUXENT WATER RECLAMATION PLANT

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.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS 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 THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

STATE HIGHWAY ADMINISTRATION	(410) 531-5533
BG & E CO. CONTRACTOR SERVICES	(410) 850-4620
BG & E CO. UNDERGROUND DAMAGE CONTROL	(410) 787-9068
MISS UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	(410) 795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	(410) 313-4900
BUREAU OF UTILITIES	(410) 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE 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.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH 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 PLANS OR IN SPECIFICATIONS.
- ALL SEWER MAINS SHALL BE P.V.C. OR D.I.P. 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.
- 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.
- ALL WATER METERS TO BE LOCATED INSIDE PROPOSED UNITS.
- STATIONING SHOWN IS WATER MAIN AND CENTER LINE STATIONING.
- ALL CLEANOUTS AND BALL VALVES ARE TO BE LOCATED AT THE WATER, SEWER AND UTILITY EASEMENT LINE.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- ON-SITE SEDIMENT CONTROL TO BE PROVIDED UNDER SDP-02-06.
- ALL WATER HOUSE CONNECTIONS TO BE 1" IN SIZE UNLESS OTHERWISE NOTED.
- ALL WATER MAINS TO BE 8", 6", OR 4" DIP CLASS 52.
- STORM DRAIN SYSTEM INDICATED FOR INFORMATIONAL PURPOSES ONLY, SEE SITE DEVELOPMENT PLANS FOR CONSTRUCTION DATA.
- COMPACTION IN FILL AREAS TO BE 95% AS DETERMINED PER AASHTO T-180.
- IF MATERIAL IS WITHIN 8% OF OPTIMUM MOISTURE, WORKING THE MATERIAL UNTIL REQUIRED COMPACTION IS ACHIEVED IS CONTRACTOR'S RESPONSIBILITY.
- THE CONSTRUCTION IS TO BE LIMITED TO THAT WHICH CAN BE BACKFILLED AND STABILIZED IN ANY ONE WORKING DAY.

CONTRACT NO.: 24-4051-D
ROUTE ONE BUSINESS PARK
WATER & SEWER CONSTRUCTION PLANS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

OWNER

JESSUP ROCK, LLC
 25 MAIN STREET
 REISTERSTOWN, MARYLAND 21136
 (410) 526-4030

ROUTE ONE BUSINESS PARK
 WATER & SEWER MAIN EXTENSION
 HOWARD COUNTY, MARYLAND
 CONTRACT No. 24-4051-D

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 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.

Mark Levy 5/22/02
 DEVELOPER'S SIGNATURE DATE
 MARK LEVY, JESSUP ROCK, LLC
 DEVELOPER'S NAME

John Mildenberg 5/21/02
 ENGINEER'S SIGNATURE DATE
 JOHN MILDENBERG
 ENGINEER'S NAME

Jim Mgrus 6/14/02
 USDA-NATURAL RESOURCE CONSERVATION SERVICE DATE

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

John K. Robertson 6/14/02
 HOWARD SCD DATE

DPZ FILE NOS.
 SDP-02-06

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors

5972 Dorey Hall Drive, Suite 202, Ellicott City, Maryland 21043
 (410) 997-0296 Ball. (301) 621-5221 Wash. (410) 997-0296 Fax

engineering SJD
 illustration SJD
 approval SJD
 project 98091
 date MAY 2002

TITLE SHEET

ROUTE ONE BUSINESS PARK

CONTRACT NO. 24-4051-D
 TAX MAP 43 PARCEL 219 & P/O 541
 (WATERLOO ADDITION, BLOCK C, LOTS 7 - 10;
 BLOCK D, LOTS 1 - 10; BLOCK E, LOTS 7 - 9)
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

scale
 AS SHOWN

1 OF 3

WATER MAIN TABULATION CHART

PARKING LOT / WATER & UTILITY EASEMENT

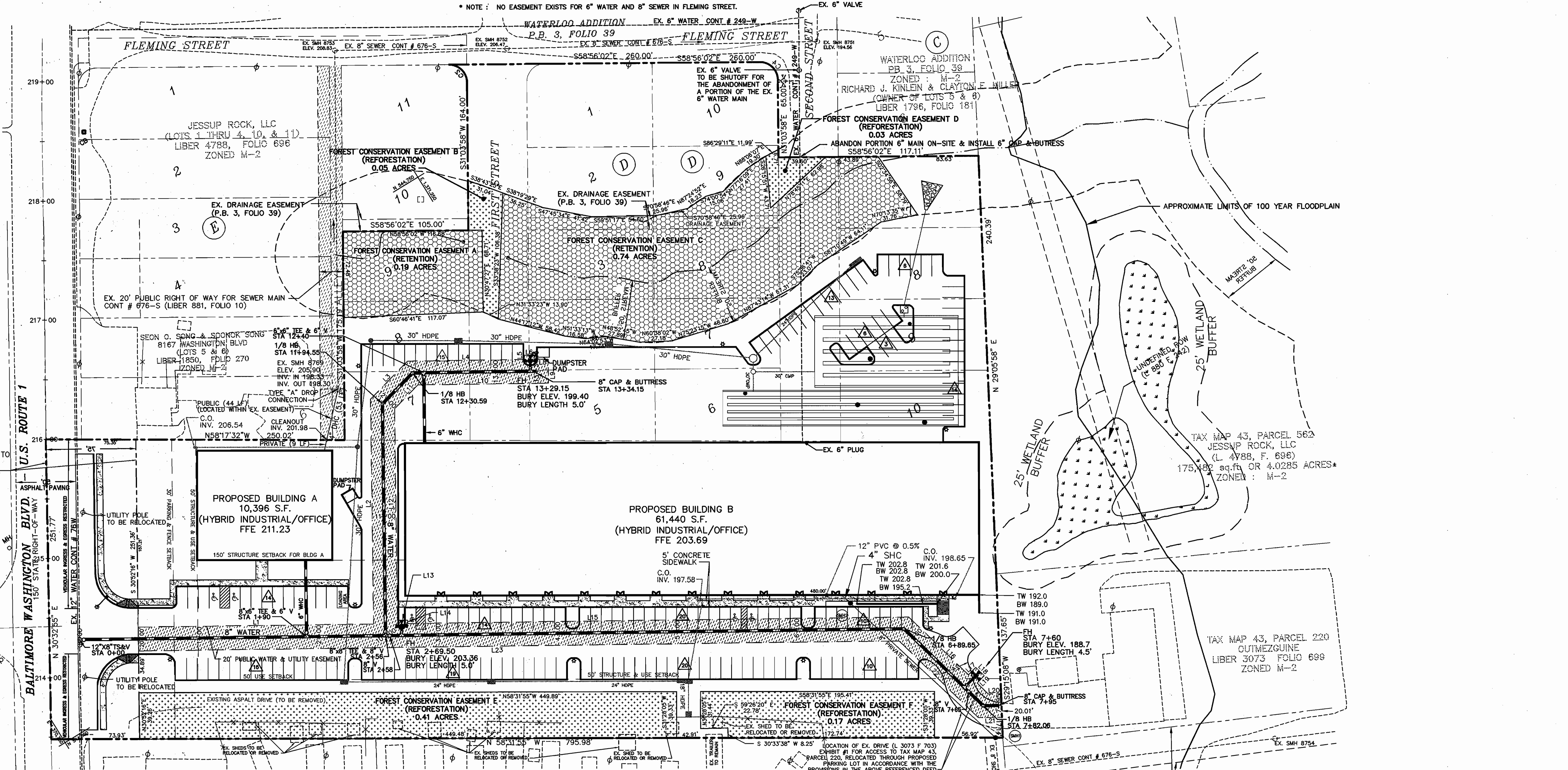
NORTHING & EASTING	APPURTENANCE
N 544,567.220	12"x8" TS&V
E 1,370,805.688	8"x6" TEE
N 544,469.898	8"x6" TEE
E 1,370,968.866	6" V
N 544,471.615	8"x8" TEE
E 1,370,969.890	8" V
N 544,436.092	8"x6" FHT
E 1,371,025.547	6" V
N 544,435.068	8" V
E 1,371,027.264	8"x6" FHT
N 544,429.175	6" V
E 1,371,037.144	1/8 HB
N 544,430.893	8"x6" FHT
E 1,371,038.169	6" V
N 544,435.967	FH
E 1,371,041.195	1/8 HB
N 544,213.958	8"x6" FHT
E 1,371,397.992	6" V
N 544,145.753	8"x6" FHT
E 1,371,415.235	6" V
N 544,146.243	6" V
E 1,371,417.174	FH
N 544,149.133	8" V
E 1,371,428.604	1/8 HB
N 544,140.906	8" V
E 1,371,416.460	1/8 HB
N 544,124.366	8" CAP & BUTRESS
E 1,371,420.641	8" V
N 544,117.737	1/8 HB
E 1,371,431.755	1/8 HB
N 544,437.810	8" V
E 1,371,026.571	8" V
N 544,603.125	1/8 HB
E 1,371,125.259	1/8 HB
N 544,612.017	8"x6" TEE
E 1,371,160.139	6" V
N 544,607.196	8"x6" FHT
E 1,371,168.222	6" V
N 544,605.478	6" V
E 1,371,167.197	8"x6" FHT
N 544,561.508	6" V
E 1,371,244.926	6" V
N 544,563.230	FH
E 1,371,245.843	8" CAP & BUTRESS
N 544,568.935	
E 1,371,249.256	
N 544,558.967	
E 1,371,249.086	

NOTE: - CONTRACTOR TO VERIFY THE LOCATION OF APPURTENANCES WITHIN EASEMENTS.

EASEMENT LINE TABLE

LINE	BEARING & DISTANCE
L1	S59°11'14"E 196.90'
L2	N30°48'46"W 188.70'
L3	N75°48'46"E 44.32'
L4	S59°11'14"E 97.75'
L5	N30°48'46"E 3.65'
L6	S59°11'14"E 10.00'
L7	N30°48'46"E 3.95'
L8	S59°11'14"E 9.96'
L9	S30°48'46"W 20.00'
L10	N59°11'14"E 109.42'
L11	S75°48'46"W 27.75'
L12	S30°48'46"W 177.50'
L13	S59°11'14"E 8.50'
L14	S30°48'46"W 2.91'
L15	S59°11'14"E 419.30'
L16	S14°11'14"E 69.49'
L17	N75°48'46"E 8.79'
L18	S14°11'14"E 10.00'
L19	S75°48'46"W 8.79'
L20	S59°11'14"E 10.85'
L21	N59°11'14"E 19.68'
L22	N14°11'14"W 28.41'
L23	N59°11'14"W 636.44'

NOTE: NO EASEMENT EXISTS FOR 6" WATER AND 8" SEWER IN FLEMING STREET.



PROCEDURES FOR ABANDONMENT OF A PORTION OF THE EXISTING 6" WATER MAIN

1. SHUT OFF THE EXISTING 6" VALVE AS NOTED ON THE PLAN.
2. REMOVE APPROXIMATELY 135 LF OF EXISTING 6" WATER MAIN AND ABANDON IN PLACE THE 105 LF PORTION LOCATED WITHIN THE FOREST CONSERVATION AREA.
3. INSTALL A 6" CAP & BUTRESS AT THE PROPERTY LINE AND PROVIDE BUTRESSING INTO UNDISTURBED EARTH.

DPZ FILE NOS. SDP-02-06

98091 (Vend) (wp) 091-ans.dwg 5-21-02 2:29:33 pm EST

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. H. Benjamin 6-3-02
CHIEF, BUREAU OF UTILITIES

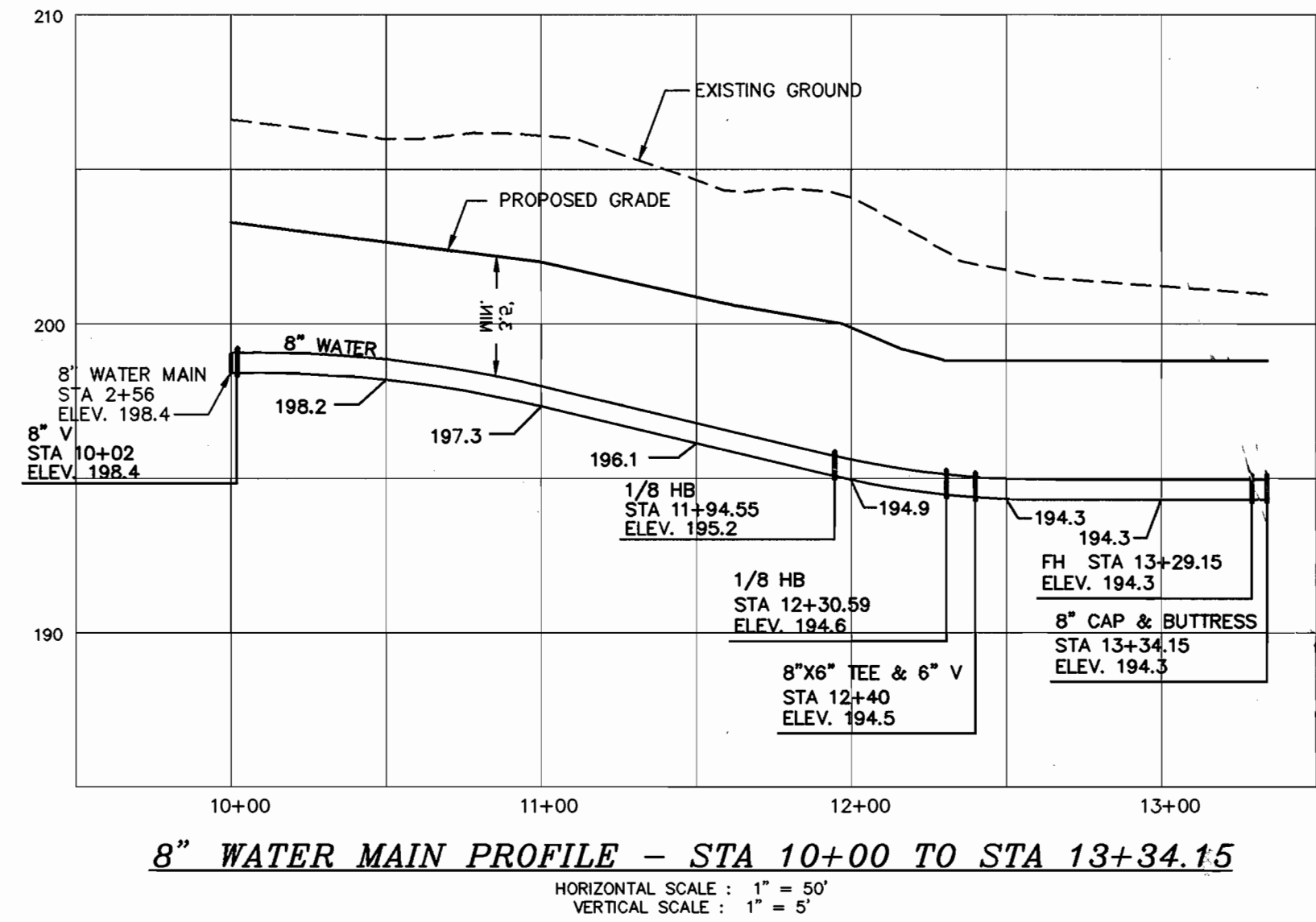
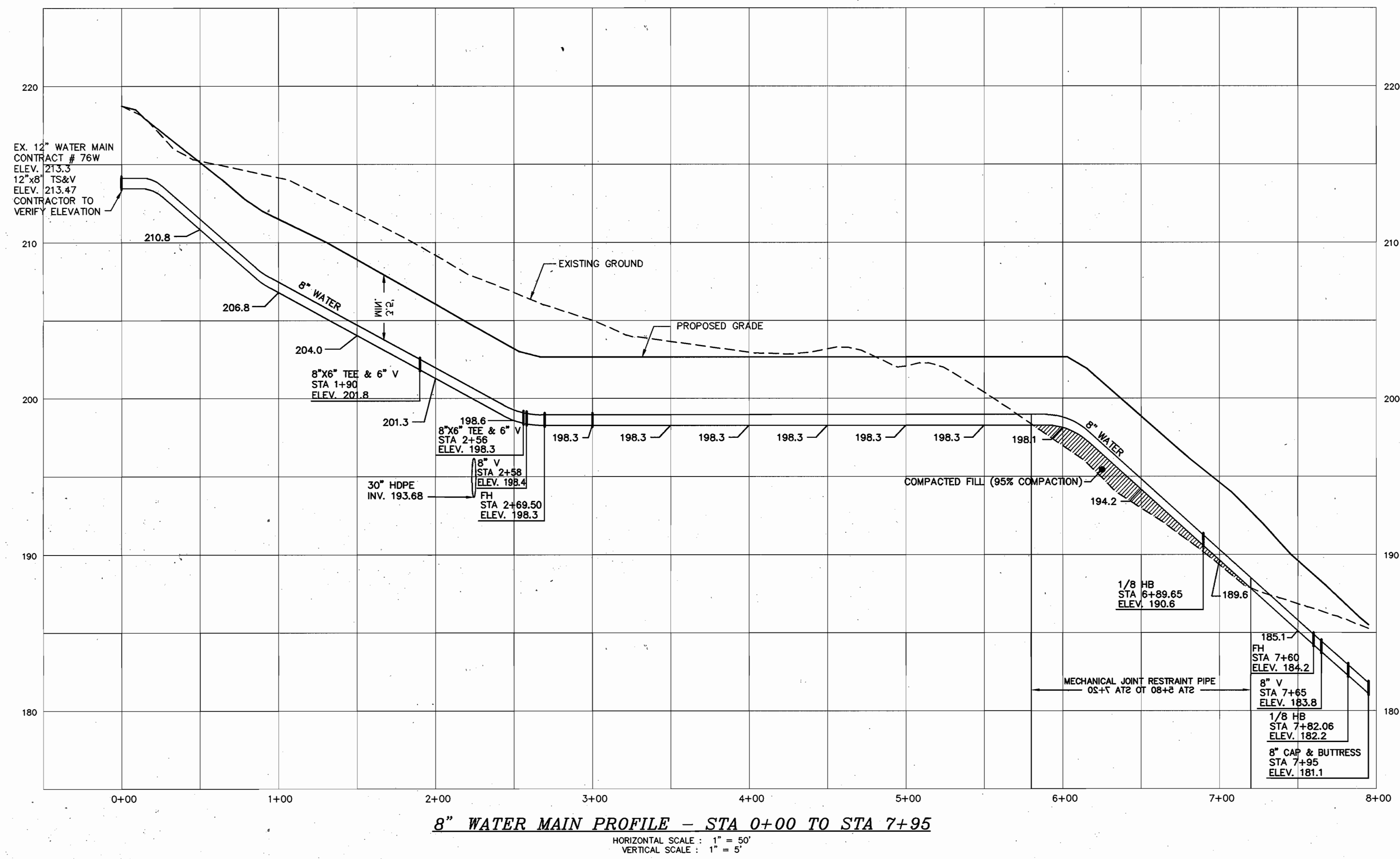
DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
John P. ... 6/14/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21044
(410) 987-0286 Ball. (301) 821-5521 Wash. (410) 987-0288 Fax

engineering	SJD				
illustration	SJD				
approval					
project	98091				
date	MAY 2002	BY	NO.	REVISION	DATE

WATER PLAN
DATE 600' SCALE MAP NO. 43 BLOCK NO. 14

ROUTE ONE BUSINESS PARK
CONTRACT NO. 24-4051-D
TAX MAP 43, PARCEL 219 & P/O 541
(WATERLOO ADDITION, BLOCK C, LOTS 7 - 10;
BLOCK D, LOTS 1 - 10; BLOCK E, LOTS 7 - 9)
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
scale 1" = 50'
2 of 3



DPZ FILE NOS.
SDP-02-06

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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Rick Bauer
CHIEF, BUREAU OF UTILITIES
DATE: 6-7-02

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
Michael...
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 6/14/02

MILDENBERG, BOENDER & ASSOC., INC.
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(410) 997-0296 Ball. (301) 621-5221 Wash. (410) 997-0299 Fax



engineering	SJD				
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approval					
project	98091				
date	MAY 2002	BY	NO.	REVISION	DATE

WATER PROFILES
600' SCALE MAP NO. 43 BLOCK NO. 14

ROUTE ONE BUSINESS PARK
CONTRACT NO. 24-4051-D
TAX MAP 43 PARCEL 219 & P/O 541
(WATERLOO ADDITION, BLOCK C, LOTS 7 - 10;
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SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale
AS SHOWN
3 of 3

ROUTE ONE BUSINESS PARK
WATER & SEWER MAIN EXTENSION
HOWARD COUNTY, MARYLAND
CONTRACT No. 24-4051-D