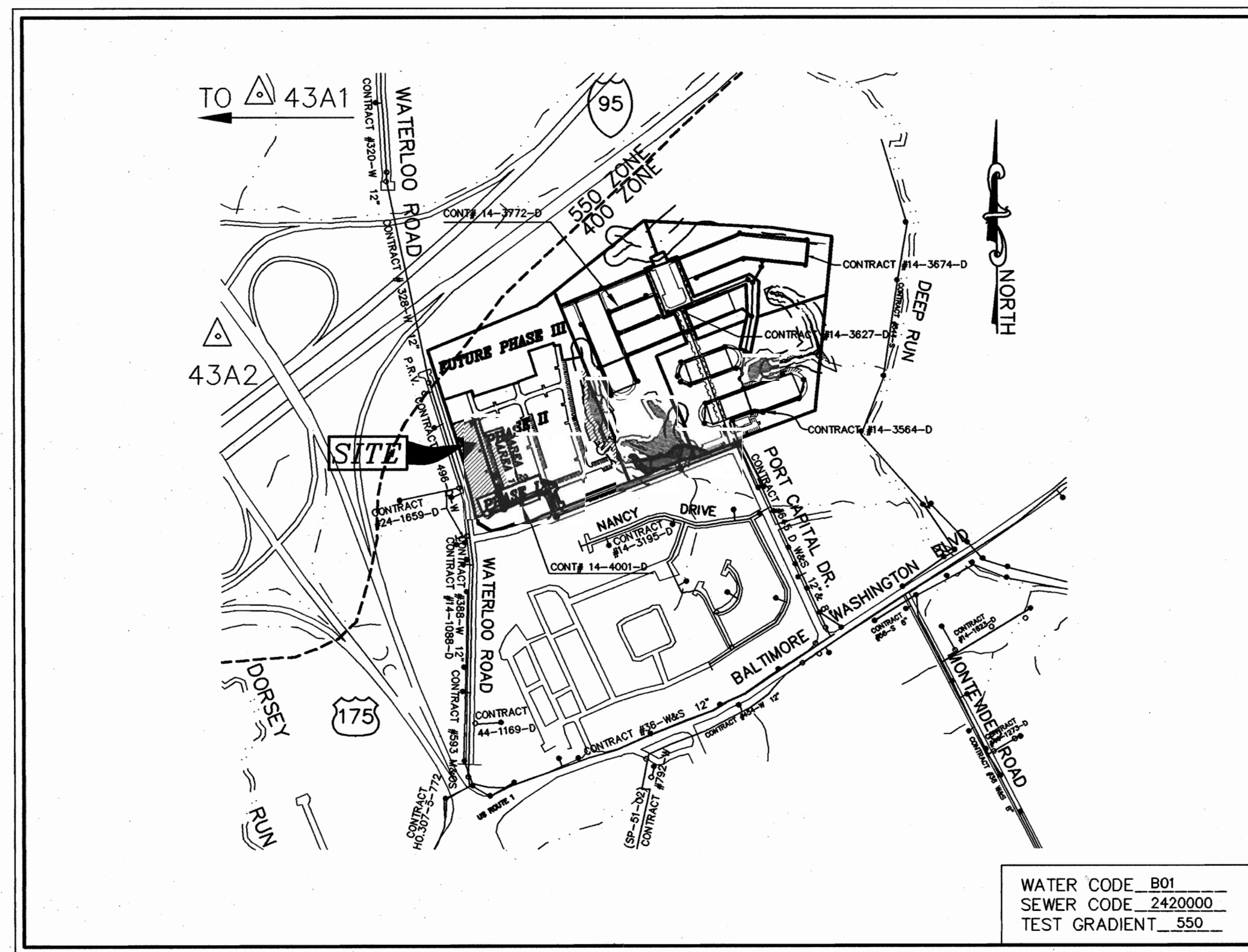


# QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER MAIN	396 L.F.			
6" WATER MAIN	35 L.F.			
1 1/2" WHC	770 L.F.			
# WHC	30			
F.H.	2			
8"x6" T	2			
8"x8" T	1			
8" V	2			
6" V	2			
8" PLUG & BUTTRESS	2			
1/8 HB	2			
SURVEY AND DRAFTING DIVISION AS-BUILT DATE				
NAME OF UTILITY CONTRACTOR:				



VICINITY MAP  
SCALE: 1" = 600'

TYPE OF BUILDING	RESIDENTIAL - SFA
No. OF UNITS	30
No. OF WATER HOUSE CONNECTIONS	30
No. OF SEWER HOUSE CONNECTIONS	0
DRAINAGE AREA	DEEP RUN, PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

# 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. [NORTH AMERICAN DATUM OF 1983 (NAD 83)].
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL 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:
 

AT & T	(410) 865-3805
BC & E CO. CONTRACTOR SERVICES	(410) 850-4620
BC & E CO. UNDERGROUND DAMAGE CONTROL	(410) 787-9068
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	(410) 313-4900
BUREAU OF UTILITIES (DPW)	1-800-257-7777
MISS UTILITY	(410) 795-1390
COLONIAL PIPELINE CO.	(410) 795-1390
STATE HIGHWAY ADMINISTRATION	(410) 515-5533
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITH THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114 (a) OF THE HOWARD COUNTY CODE.
- 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.
- ALL FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED 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.
- SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER. SEE NOTES 34 & 36 BELOW.
- ALL PRIVATE 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 STATIONING SHOWN IS WATER MAIN STATIONING.
- HOWARD COUNTY MAINTENANCE RESPONSIBILITIES END AT CLEANOUTS AND BALL VALVE LOCATIONS FOR PUBLIC MAINS.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- EXISTING WATER AND SEWER EASEMENT ADJACENT TO PORT CAPITOL DRIVE IS RECORDED UNDER LIBER 727/FOLIO 098.
- SEDIMENT CONTROL APPROVED UNDER SDP-04-54.
- ALL ROADWAYS ARE STD. HOWARD COUNTY P-2 PAVEMENT UNLESS OTHERWISE SHOWN.
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 43A1 AND 43A2.
 

STATION 43A2	STATION 43A1
NORTHING 550784.342654	NORTHING 552081.810532
EASTING 1372040.182420	EASTING 1370625.809590
ELEVATION 292.55	ELEVATION 306.79
- ALL INDIVIDUAL WHCS SHALL BE 1 1/2" WHC WITH A 1" METER IN A PIT AND ALL INDIVIDUAL SHCS SHALL BE 4" PVC.
- THE FOLLOWING ON-SITE TRAVERSE STATIONS WILL SERVE AS BENCHMARKS:
 

STATION 101 (TRV NAIL)	STATION 102 (TRV R+C)	STATION 905 (TRV R+C)
NORTHING 550,180.485	NORTHING 549,775.812	NORTHING 549,975.527
EASTING 1,373,081.812	EASTING 1,373,246.975	EASTING 1,373,782.940
ELEVATION 304.43	ELEVATION 288.97	ELEVATION 255.51
- ALL 1 1/2" WHCS SHALL BE SUPPLIED WITH A 1" WATER METER WITH AN INSIDE METER SETTING.

PLAN REFERENCE NUMBERS  
SDP-03-102  
SDP-04-54

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER SDP-04-54

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* 4/21/04  
DEVELOPER'S SIGNATURE DATE  
MARK LEVY, VILLA ASSOCIATES, LLC  
DEVELOPER'S NAME

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.

*John B. Miltenberg* 4/22/04  
ENGINEER'S SIGNATURE DATE  
JOHN B. MILTENBERG  
ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

*Jim Meyer* 5/20/04  
TMDA-NATURAL RESOURCES CONSERVATION SERVICES  
DATE

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

*John K. Roberts* 5/20/04  
HOWARD SCD  
DATE

OWNER/DEVELOPER  
VILLA ASSOCIATES, LLC  
C/O ROCK REALTY, INC.  
25 MAIN STREET  
REISTERSTOWN, MARYLAND 21136  
(410) 526-4030

# CONTRACT NO. 14-4125-D

## VILLAGE TOWNS, PHASE II, AREA 1

### UNITS 83 THRU 112

## WATER AND SEWER MAIN EXTENSIONS

## HOWARD COUNTY, MARYLAND

## DEPARTMENT OF PUBLIC WORKS

### INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN & PROFILE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND.

*Rita M. Berman* 5-10-04  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND.

*Chad Harrison* 5/26/04  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

MILDENBERG, BOENDER & ASSOC., INC.  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21422  
(410) 997-0296 Bal. (301) 621-5521 Wash. (410) 997-0298 Ind.

engineering	SJD
illustration	SJD
approval	JBM
project	2002-056
date	APR 2004

TITLE SHEET

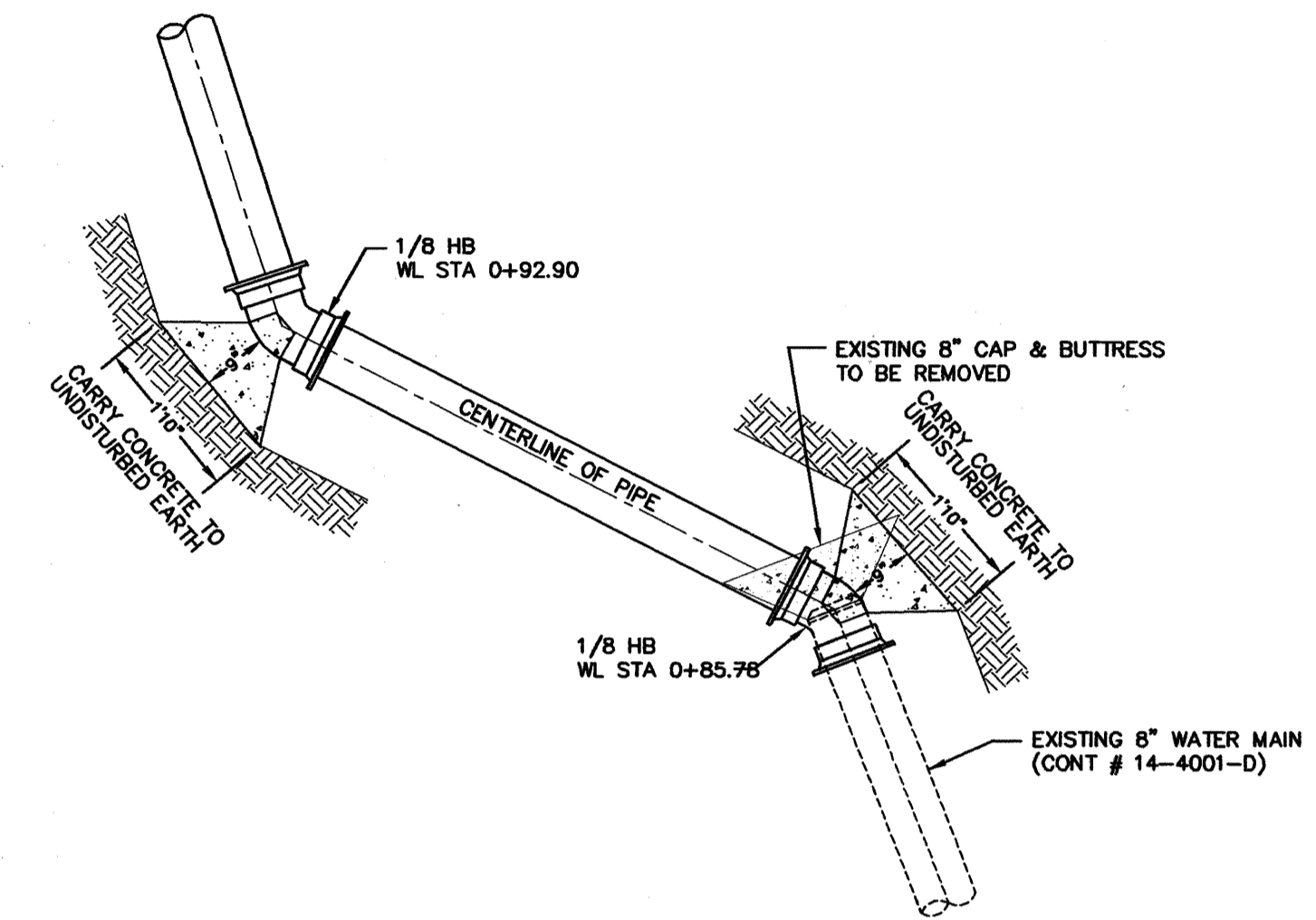
600' SCALE MAP NO. 43 BLOCK NO. 3

VILLAGE TOWNS, PHASE II, AREA 1  
UNITS 83 THRU 112  
CONTRACT NO. 14-4125-D  
FIRST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

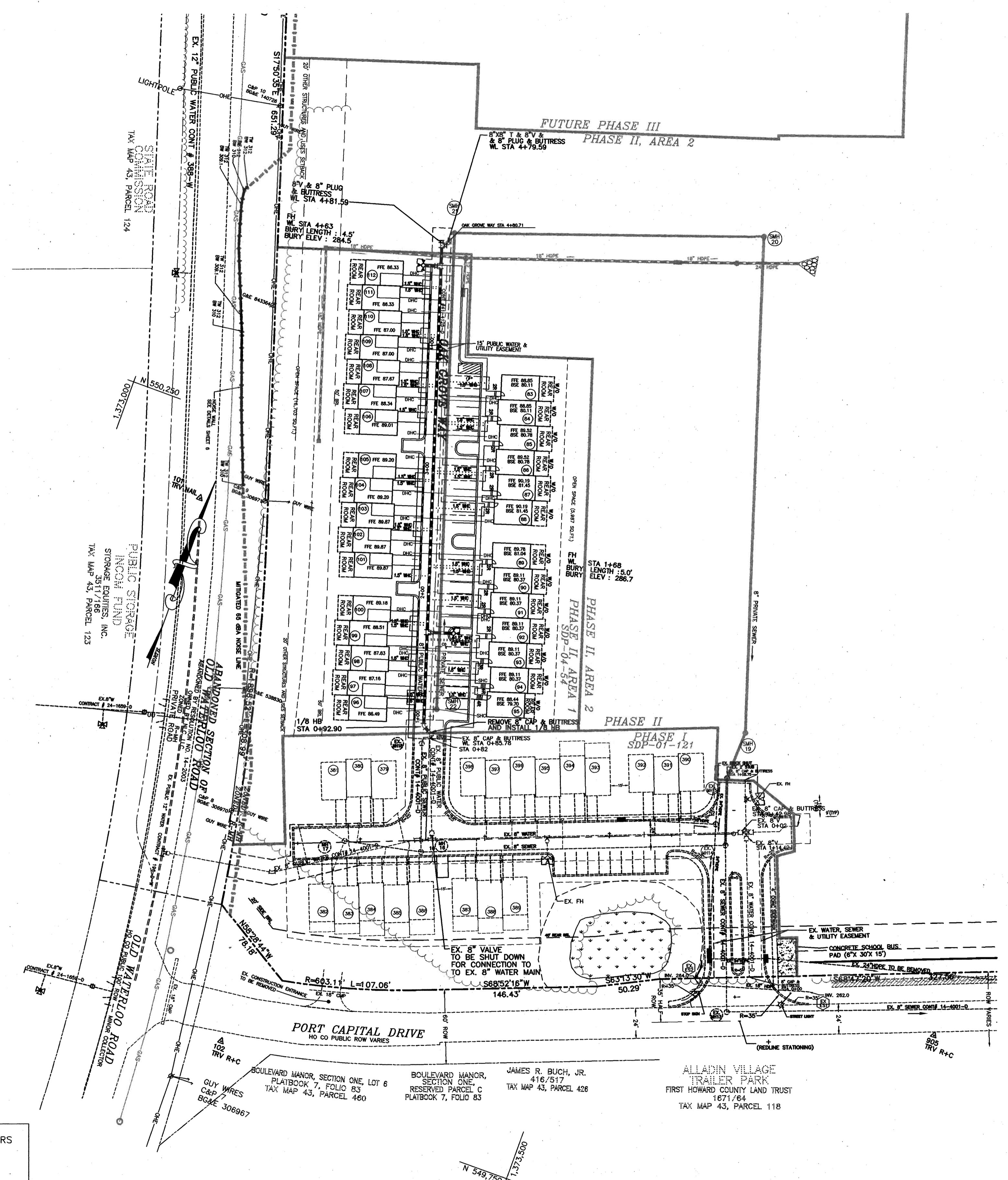
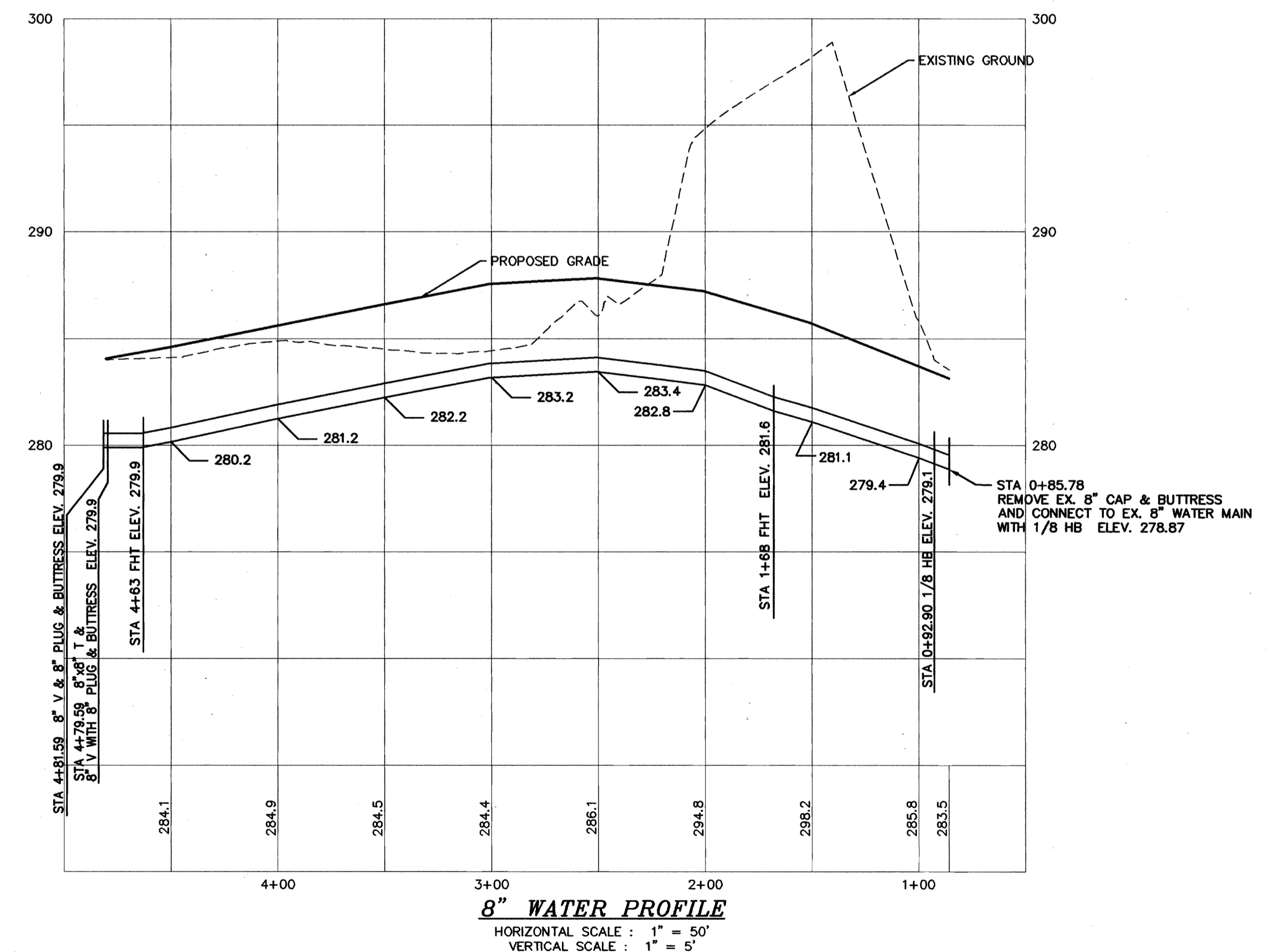
scale AS SHOWN  
1 OF 2

WATER MAIN APPURTENANCE LOCATION CHART

OAK GROVE WAY		
ROAD CL STA.		APPURTENANCE
0+86.94	0.04' RT	1/8" HB
0+91.97	5' LT	1/8" HB
1+67.07	5' LT	FHT
1+67.07	3' LT	6" V
1+67.07	16.1' RT	FH
4+62.07	5' LT	FHT
4+62.07	7' LT	6" V
4+62.07	19.1' LT	FH
4+78.66	5' LT	8"x8" T
4+78.66	3' LT	8"V WITH 8" P&B
4+80.66	5' LT	8"V WITH 8" P&B



DETAIL - CONNECTION TO EXISTING 8" WATER MAIN  
SCALE: 1" = 2'



PLAN REFERENCE NUMBERS  
SDP-03-102  
SDP-04-54

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND R. H. Berman 5-10-04 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND [Signature] 5/26/04 CHIEF, DEVELOPMENT ENGINEERING DIVISION	MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors 5072 Dorsey Hall Drive, Suite 302, Ellicott City, Maryland 21043 (410) 997-0286 Bldg. (301) 621-5521 Wash. (410) 997-0288 Fax	engineering SJD illustration SJD approval JBM project 2002-056 date APR 2004	WATER AND SEWER PLAN & PROFILE	VILLAGE TOWNS, PHASE II, AREA 1 UNITS 83 THRU 112 CONTRACT NO. 14-4125-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	scale 1" = 50' 2 OF 2
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