

GENERAL NOTES

PART I

- APPROXIMATE LOCATION 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.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC AERIAL PHOTOGRAMMETRIC SURVEY PERFORMED BY WINGS AERIAL MAPPING COMPANY, DATED MARCH 1995, AND A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC., DATED FEBRUARY 2005.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:**
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM '83/91' AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 43B2 AND 43B6.
ALL VERTICAL CONTROLS ARE BASED ON NAVD '88. VERTICAL CONTROL PROVIDED ON THE DRAWINGS ARE 43B2 AND 43B6.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
- 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 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 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.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTES 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 OPERATION AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
AT AT _____ 1-800-252-1133
BGE (CONTRACTOR SERVICE) _____ 410-850-4620
BGE (EMERGENCY) _____ 410-685-1400
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.
- THE 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 ANY 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(c) OF THE HOWARD COUNTY CODE.

PART II - WATER

- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" 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 INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE 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.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH SITE DEVELOPMENT PLAN SDP-05-078

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

John A. Robertson 10-12-05
HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

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

Jim Meyer 10-12-05
U.S. SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[Signature] 10/18/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature] 10-12-05
CHIEF, BUREAU OF UTILITIES DATE

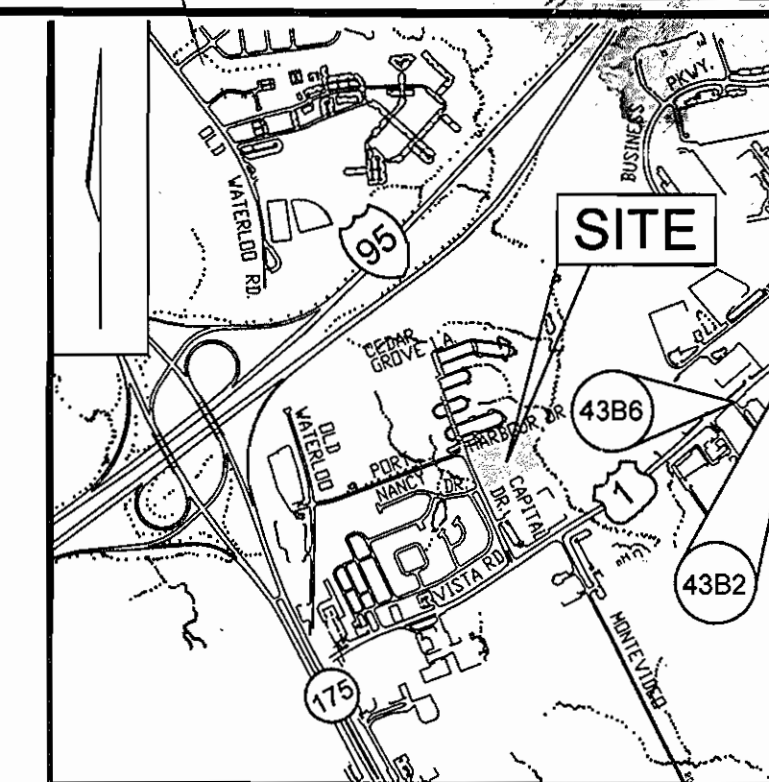
PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAME 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 CELLAR CANNOT BE SERVED.

PORT CAPITAL VILLAGE (THE OAKS AT WATERS EDGE PHASE III)

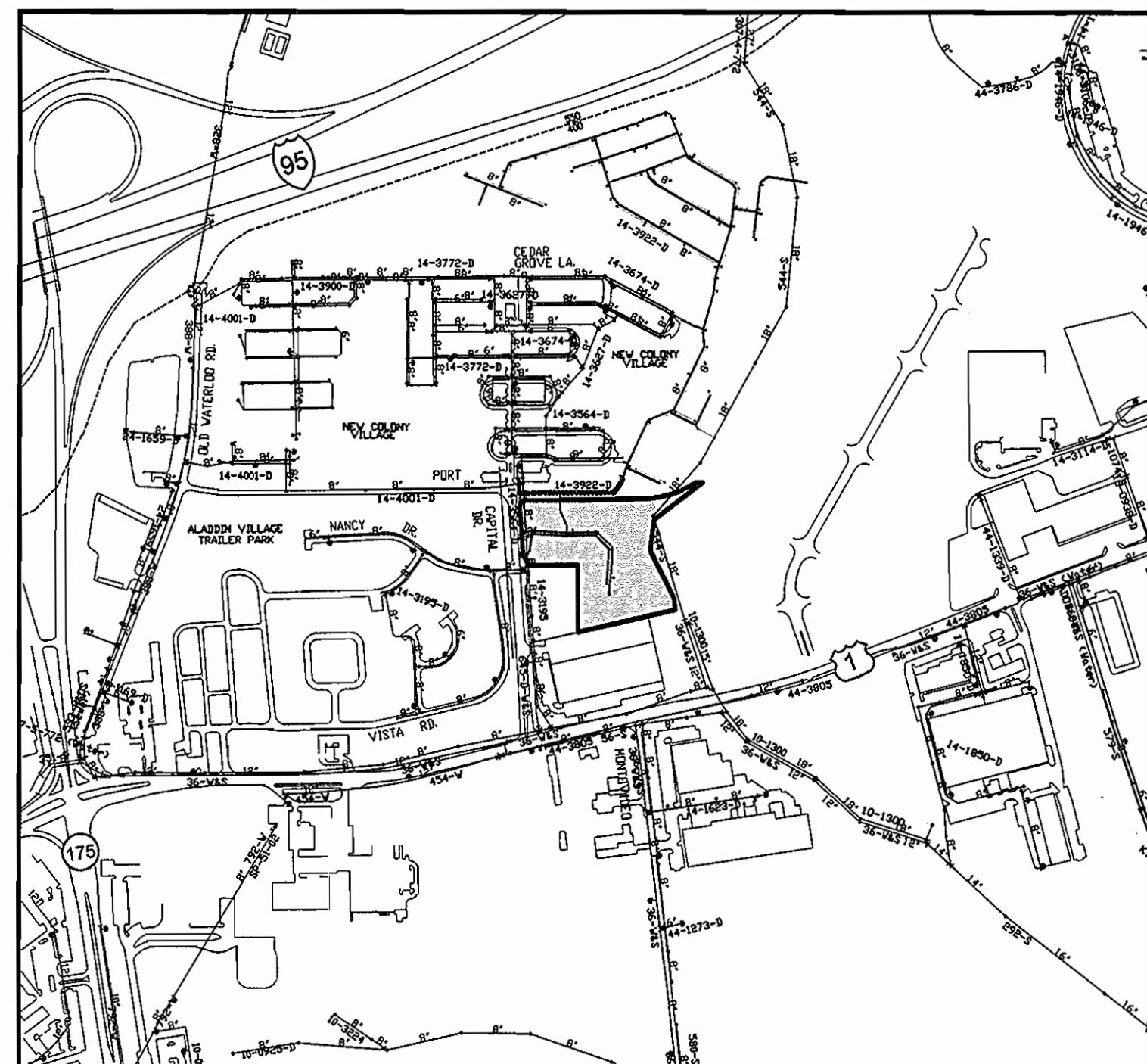
CONTRACT NO. 14-4303-D

BENCHMARKS			
NO.	NORTHING	EASTING	ELEVATION
43B2	551,655.009	1,378,176.941	209.605'
43B6	550,601.593	1,376,866.047	210.560'



VICINITY MAP

SCALE: 1"=2000'



LOCATION PLAN
SCALE: 1"=600'

WATER CODE: B01
SEWER CODE: 2420000
WATER TEST GRADIENT: .550

TYPE OF BUILDING:	APARTMENT
NO. OF BUILDINGS:	8
NO. OF WATER HOUSE CONNECTIONS:	8
NO. OF SEWER HOUSE CONNECTIONS:	0
DRAINAGE AREA:	PATAPSCO
TREATMENT PLANT:	PATAPSCO WASTEWATER TREATMENT

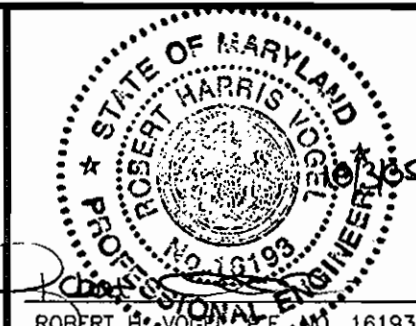
AS BUILT
DATE: SEPT. 3, 2008

QUANTITIES

NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER MAIN	858 LF	858 L.F.	CL 52 D.I.P.	GRIFFIN PIPE / NATIONAL WATERWORK
6" WATER MAIN	29 LF	29 L.F.	CL 52 D.I.P.	" / "
FIRE HYDRANT	2 EACH	2	ADD HYD	MULLER CO. / "
8"x 8" TAPPING SLEEVE AND VALVE	2 EACH	2	"	" / "
8"x 6" FIRE HYDRANT TEE AND VALVE	2 EACH	2	"	UNION FOUNDRY / "
4" WHC	10 LF	10 L.F.	CL 52 D.I.P.	GRIFFIN PIPE / "
1/8 HB	4 EACH	"	"	UNION FOUNDRY / "
8"x4" TEE	8 EACH	8 EA	"	UNION FOUNDRY / "
4" VALVE	8 EACH	8 EA	"	MUELLER CO. / "
8" VALVE	3 EACH	3 EA	"	" / "
8" SEWER MAIN	20 LF	20 L.F.	PVC	J.M. MANUFACT / "
6" WHC	70 LF	"	CL 52 D.I.P.	MUELLER / "
6" x 8" TEE	1 EA	1 EA	"	NATIONAL WATER / UNION FOUNDRY
6" x 4" REDUCER	1 EA	1 EA	"	" / "

OWNER
HOWARD COUNTY HOUSING COMMISSION
6751 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046
(410) 313-6320

DEVELOPER
MBI DEVELOPMENT CO., INC.
C/O THE INGERMAN GROUP
1100 PENNSYLVANIA AVE. SUITE 700
WILMINGTON, DE 19806
(302) 661-1560



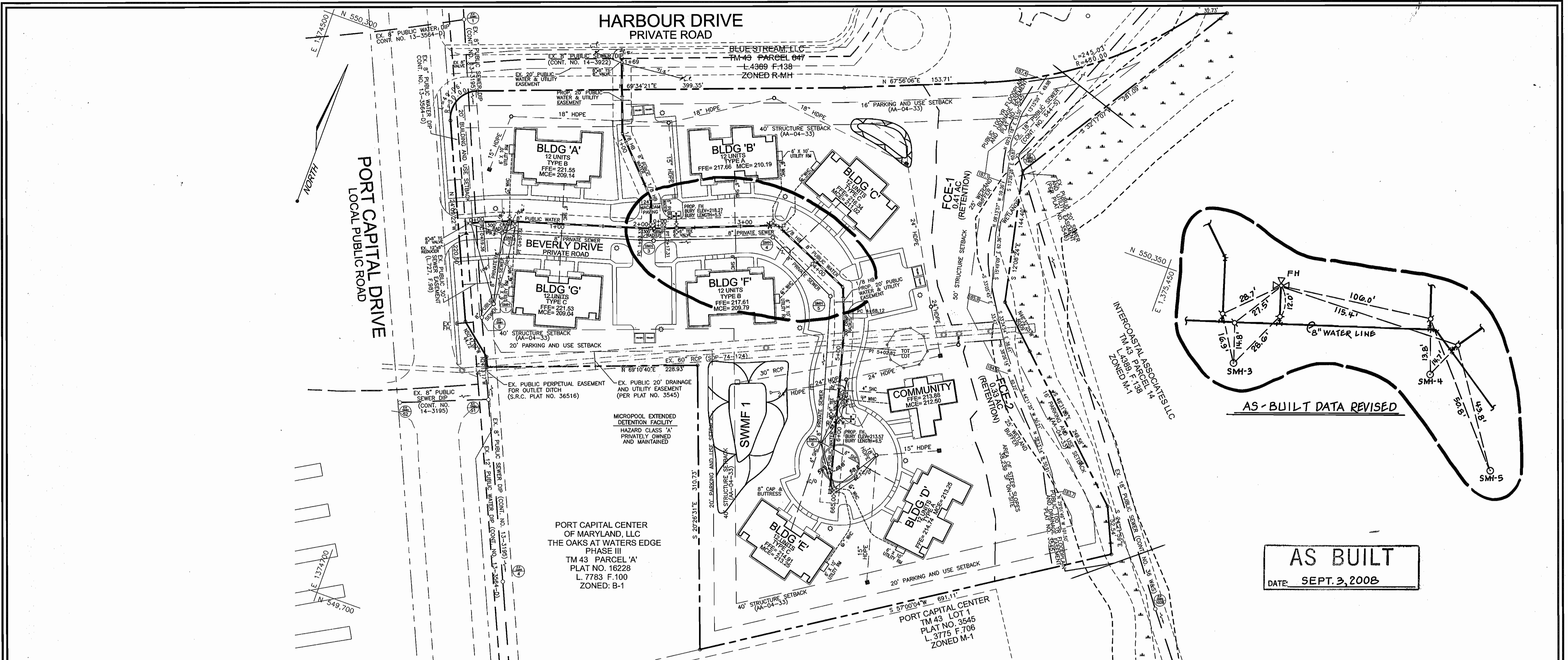
DESIGN BY:	LJT		
DRAWN BY:	LJT		
CHECKED BY:	RHV	KCI 2	ASBUILT DATA 2/20/06
DATE:	10.04.05	BY NO	REVISION DATE
			1 REVISE WHC'S FROM 4" & 1" TO 6" & 4" 4/4/06

FINAL WATER CONSTRUCTION PLAN

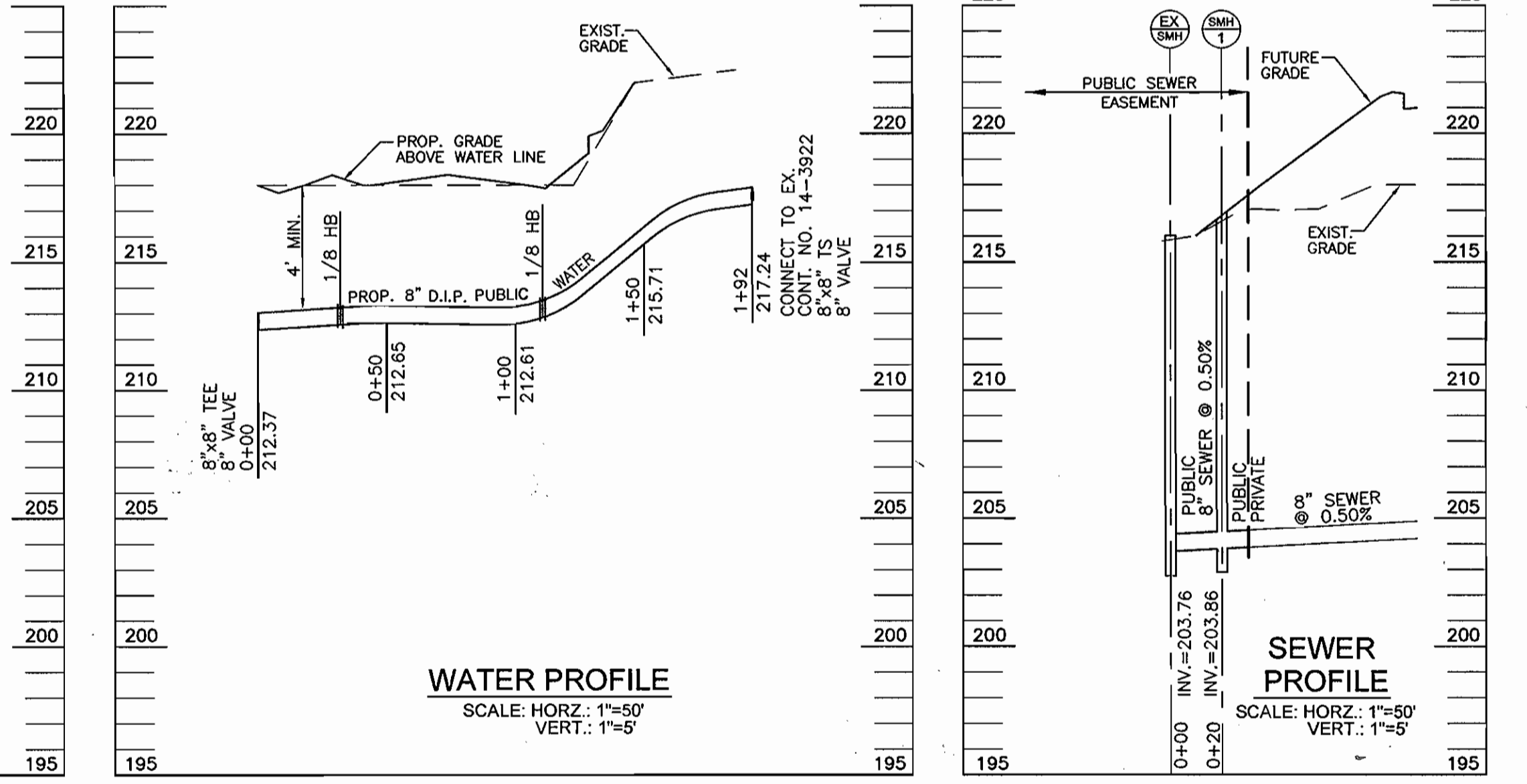
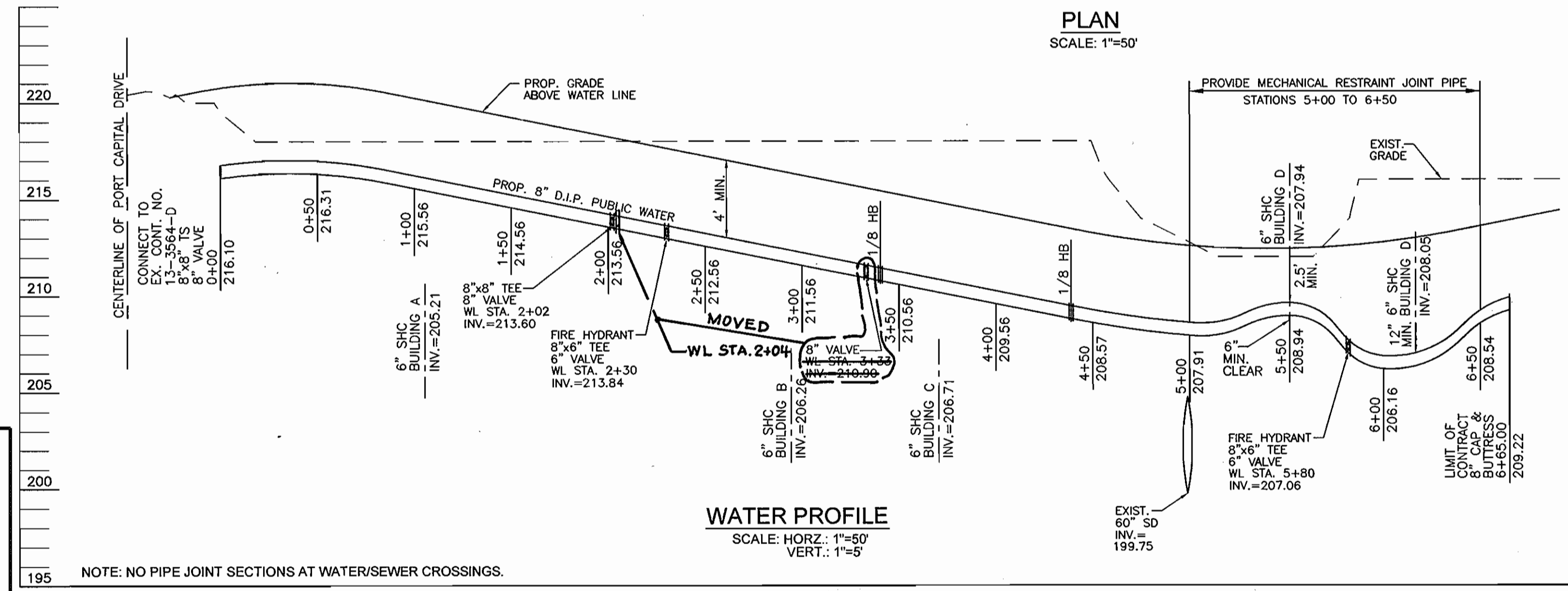
**PORT CAPITAL VILLAGE
(THE OAKS AT WATERS EDGE PHASE III)
CONTRACT NO. 14-4303-D**

TAX MAP 43 1ST ELECTION DISTRICT
PARCEL 644 LOT 4
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 2



PLAN
SCALE: 1"=50'



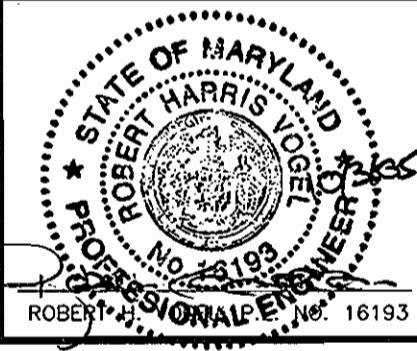
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Howard 10/18/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Robert H. Vogel 10-12-05
CHIEF, BUREAU OF UTILITIES DATE

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961



DESIGN BY: LJT			
DRAWN BY: LJT			
CHECKED BY: RHV			
DATE: 10.04.05			
BY NO		REVISION	DATE
		1 AS-BUILT DATA REVISED	9/3/08
		2 AS-BUILT DATA	9/21/08
		1 REVISE WHCS FROM 4" to 6" to 8" to 4"	4/14/06

FINAL WATER CONSTRUCTION PLAN

600' SCALE MAP NO. 43 BLOCK NO. 4

PORT CAPITAL VILLAGE (THE OAKS AT WATERS EDGE PHASE III) CONTRACT NO. 14-4303-D

TAX MAP 43 1ST ELECTION DISTRICT

PARCEL 644 LOT 4 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 2 OF 2