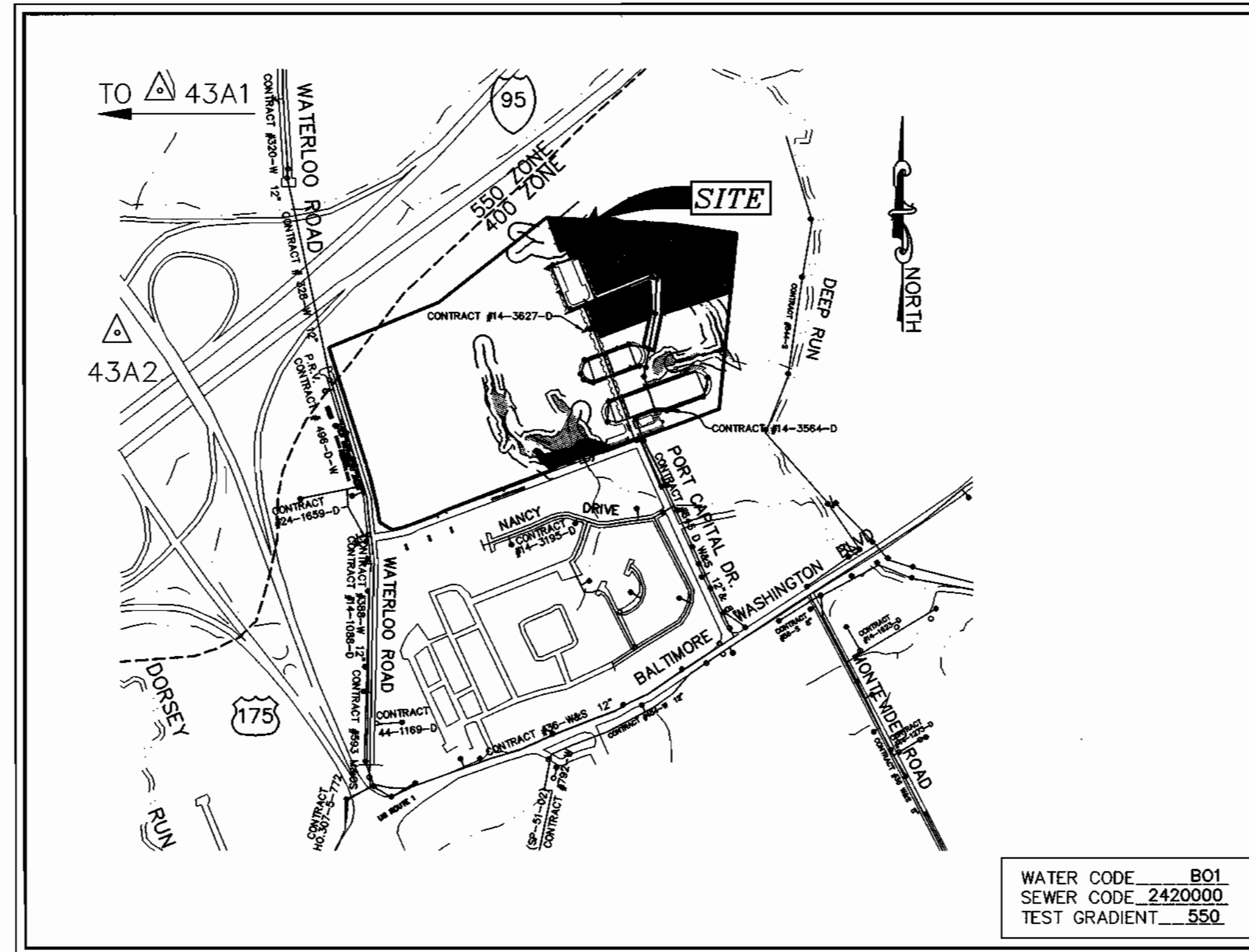


# QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES			MANUFACTURER/SUPPLIER
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER	
STANDARD MH	6	6	CONC.	ATLANTIC CONC. / ATLANTIC PRODUCTS / CONC. PRODUCTS	
DROP MH, TYPE "B"	2	2	CONC.	" "	
INTERMEDIATE LANDING	2	2	CONC.	" "	
8" SEWER MAIN	1,181 L.F.	2061	CL. 52 D.I.P.	J.M. MANUFACTURING / U.S. FILTER	
8" D.I.P. SEWER MAIN	665 L.F.	515	CL. 52 D.I.P.	ATLANTIC STATES / "	
4" SEWER HOUSE CONNECTION	250 L.F.	758	PVC	J.M. MANUFACTURING / U.S. FILTER	
6" SEWER HOUSE CONNECTION	470 L.F.	103	PVC SDR-35	" "	
# SHC	13	13	"	"	
# DHC	1	1	"	"	
# MH CONNECTIONS	4	4	"	"	
# DROP MHC	2	2	"	"	
# TWIN DHC	8	8	"	J.M. MANUFACTURING / U.S. FILTER	
# TWIN SHC	22	22	PVC SDR-35	"	
8" WATER MAIN	2050 L.F.	2061	"	ATLANTIC STATES / U.S. FILTER	
6" WATER MAIN	45 L.F.	42	"	ATLANTIC STATES / U.S. FILTER	
3/4" WHC	310 L.F.	563	"	READING TUBE / U.S. FILTER	
1" WHC	520 L.F.	525	"	"	
# WHC	21	21	"	"	
# TWIN WHC	31	31	"	"	
F.H.	4	4	"	MUELLER CO. / U.S. FILTER	
8"x6" T&V	4	4	"	ROMAC INDUSTRIES / U.S. FILTER	
8" 1/16 H.B.	2	2	"	UNION FOUNDRY / U.S. FILTER	
8"x8" T	4	4	"	"	
8" V	4	4	"	MUELLER CO. / U.S. FILTER	
8" CAP & BUTTRESS	4	4	"	"	

SURVEY AND DRAFTING DIVISION AS-BUILT DATE NOV. 24, 1998  
 NAME OF UTILITY CONTRACTOR: CHESAPEAKE CONC. CO.



VICINITY MAP

SCALE: 1" = 600'

TYPE OF BUILDING	RESIDENTIAL
No. OF UNITS	83
No. OF WATER HOUSE CONNECTIONS	21
No. OF SEWER HOUSE CONNECTIONS	19
No. OF TWIN WATER HOUSE CONNECTIONS	31
No. OF TWIN SEWER HOUSE CONNECTIONS	33
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) 855-3803  
 BG & E CO. CONTRACTOR SERVICES (410) 850-4620  
 BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF UTILITIES (DPW) (410) 313-4900  
 MISS. UTILITY (410) 257-7777  
 COLONIAL PIPELINE CO. (410) 795-1390  
 STATE HIGHWAY ADMINISTRATION (410) 531-5533
- 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.
- 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.
- SPRINKLER SYSTEM FOR ALL TOWNHOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- 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 STATIONING SHOWN IS WATER MAIN 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.
- EXISTING WATER AND SEWER EASEMENT ADJACENT TO PORT CAPITOL DRIVE IS RECORDED UNDER LIBER 727/FOLIO 098.
- SEDIMENT CONTROL APPROVED UNDER SDP-96-20.
- ALL ROADWAYS ARE STD. HOWARD COUNTY P-2 PAVEMENT UNLESS OTHERWISE SHOWN.

CONTRACT NO. 14-3674-D

NEW COLONY VILLAGE

PHASE 3

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
3	WATER PROFILES
4	SEWER PROFILES

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.

*[Signature]* 4/7/98  
 DEVELOPER'S SIGNATURE DATE

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.

*[Signature]* 4/7/98  
 ENGINEER'S SIGNATURE DATE

ENGINEER'S NAME

REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS.

*[Signature]* 4/23/98  
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*[Signature]* 4/23/98  
 HOWARD SCD DATE

#### PLAN REFERENCE NUMBERS

- SDP-97-114
- SDP-97-03
- SDP-96-20

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND

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

5072 Derrey Hall Drive, Suite 202, Elkton City, Maryland 21042  
 (410) 897-0296 Bal. (301) 621-5521 Wash. (410) 897-0298 Fax



engineering	M.P.	illustration	M.P.	approval	J.H.	project	94044	date	APR 98	BY	NO.	REVISION	DATE

TITLE SHEET

NEW COLONY VILLAGE  
 PHASE 3 - UNITS 64-146  
 CONTRACT NO. 14-3674-D  
 FIRST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

scale AS SHOWN  
 1 of 4

**WATER PULLS**

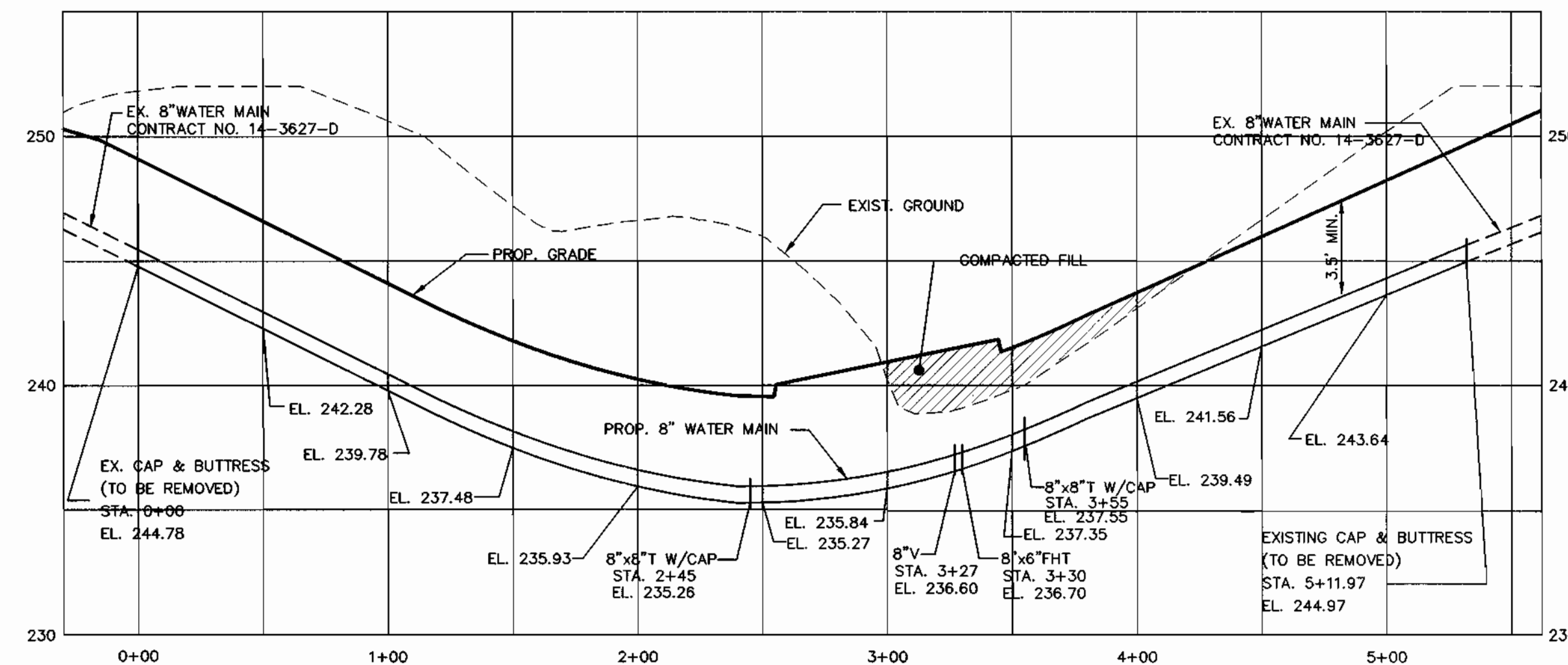
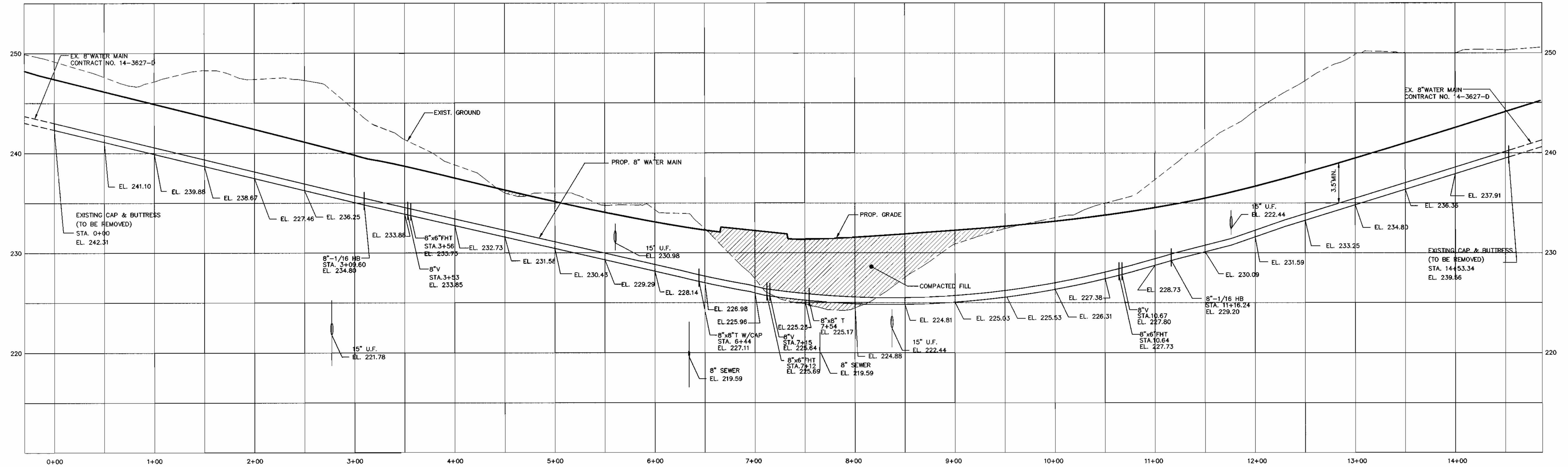
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EX MH 25	LOT 87	72'	EX MH 25	LOT 66	175'	MH 24	LOT 82	70'	LOT 66	LOT 64	98'	F/H	6" F/H VALVE	13'	LOT 75	LOT 76	82'	EX MH 43	145	111.0'	MH 42	139	35.1'	8" VALVE	113	20.0'			
EX MH 25	LOT 86	76'	EX MH 25	LOT 67	179'	MH 24	LOT 83	75'	LOT 85	LOT 86	84'	F/H	8" INLINE VALVE	15'	EX MH 36	LOT 76	35'	8" VALVE	145	94.5'	6" VALVE	139	91.7'	MH 39	113	38.0'			
EX MH 25	LOT 64	77'	LOT 67	LOT 68	86'	MH 24	LOT 67	127'	LOT 85	LOT 87	88'	F/H	LOT 70	38'	EX MH 42	144	117.3'	MH 42	138	10.4'	8" VALVE	112	99.7'						
EX MH 25	LOT 65	82'	LOT 84	LOT 83	73'	MH 24	LOT 66	132'	MH 24	LOT 69	67'	F/H	LOT 69	33'	EX MH 36	LOT 80	105'	8" VALVE	144	101.0'	6" VALVE	138	57.0'	MH 39	112	51.8'			
EX MH 25	LOT 85	158'	LOT 84	LOT 82	78'	MH 24	LOT 84	146'	MH 24	LOT 70	72'	F/H	LOT 71	65'	EX MH 36	LOT 75	116'	EX MH 43	114	42.0'	MH 42	137	13.4'	8" VALVE	111	104.5'			
EX MH 25	LOT 84	164.162'	MH 24	LOT 68	42'	MH 24	LOT 85	150'	MH 24	8" INLINE VALVE	21'	F/H	LOT 72	62'	EX MH 36	LOT 74	123'	8" VALVE	114	20.6'	6" VALVE	137	52.3'	MH 39	111	53.8'			
										6" F/H VALVE	84'	F/H	LOT 73	63'	MH 38	8" INLINE VALVE	42'	EX MH 43	115	118.8'	MH 42	136	82.0'	8" VALVE	88	63.2'			
										6" F/H VALVE	17'	SD I17	LOT 71	59'	F/H	6" F/H VALVE	17'	EX MH 43	116	124.5'	MH 42	135	87.6'	8" VALVE	88	63.7'			
										6" INLINE VALVE	18'	SD I17	LOT 72	69'	F/H	6" INLINE VALVE	18'	8" VALVE	116	108.0'	6" VALVE	135	42.3'	MH 39	89	21.0'			
										6" INLINE VALVE	50'	SD I17	LOT 73	106'	MH 41	8" INLINE VALVE	50'	I 21	143	119.5'	MH 42	121	10.4'	I-19	110	117.0'			
										6" F/H VALVE	54'	SD I17	LOT 81	107'	MH 41	6" F/H VALVE	54'	I 20	143	127.5'	6" VALVE	121	68.0'	I-18	110	120.0'			
										6" F/H VALVE	8'	SD I17	LOT 74	126'	F/H	6" F/H VALVE	8'	I 21	142	113.5'	MH 42	122	117.6'	I-19	109	111.0'			
										6" INLINE VALVE	10'	SD I17	LOT 75	193'	F/H	6" INLINE VALVE	10'	I 20	142	121.7'	6" VALVE	122	82.4'	I-18	109	114.0'			
										6" INLINE VALVE	52'	LOT 81	LOT 80	105'	MH 42	8" INLINE VALVE	52'	I 21	141	40.0'	MH 42	123	123.7'	I-19	108	42.3'			
										6" F/H VALVE	56'	LOT 81	LOT 79	113'	MH 42	6" F/H VALVE	56'	I 20	141	52.0'	6" VALVE	123	87.3'	I-18	108	49.5'			
										F/H	5'				F/H	6" F/H VALVE	5'	I 21	140	34.5'	6" VALVE	134	118.8'	I-19	107	35.5'			
										F/H	8'				EX MH 43	LOT 146	31.3'	I 20	140	47.7'	123	134	130.4'	I-18	107	41.1'			
										8" VALVE	23.4'							I 20	117	96.3'	I-23	133	123.3'	I-18	90	136.5'			
																		I 21	118	50.7'	I-24	132	92.4'	I-19	91	131.8'			
																		I 20	118	91.8'	I-23	132	57.3'	I-18	91	129.3'			
																		I 21	119	30.4'	I-24	131	46'	I-19	92	55.6'			
																		I 20	119	31.0'	I-23	131	58.8'	I-18	92	49.6'			
																		MH 42	120	40.6'	I-24	124	86.8'	I-19	93	51'			
																					I-23	124	82.8'	I-18	93	44.0'			
																					I-24	125	82.8'	MH 38	106	20.0'			
																					I-24	125	78.6'	FH	106	62.7'			
																					I-24	126	34.0'	MH 38	105	58.0'			
																					I-23	126	25.0'	FH	105	30.0'			
																					MH 38	94	36.5'	MH 23	104	59.7'			
																					FH	94	9.2'	FH	104	114.0'			
																					MH 23	103	65.0'	MH 23	95	64.0'			
																					FH	103	120.0'	FH	95	117.4'			
																					MH 23	96	71.0'	MH 40	97	64.2'			
																					I-24	130	34.4'	MH 40	102	65.2'			
																					MH 41	130	27.1'	LOT 97	102	30.4'			
																					I-24	129	21.2'	FH	128	68.7'			
																					MH 41	129	40.8'	MH 41	128	61.4'			
																					FH	127	31.1'	FH	101	34.3'			
																					MH 41	127	64.0'	MH 41	101	70.0'			
																					FH	100	64.6'	FH	99	93.5'			
																					MH 40	100	32.5'	MH 40	99	15.4'			
																					FH	98	36.2'	FH	98	124.6'			
																					MH 40	98	21.2'						

MH #	ROAD	CL STATION	OFFSET	MH TYPE
22	CEDAR GROVE LANE	4+37	37' RT.	STD. MH (65.01)
23	CEDAR GROVE LANE	4+37	5' RT.	DROP MH TYPE B (S1.32)
24	POINT PATIENCE WAY	2+91.4	23' RT.	STD. MH (65.01)
38	CEDAR GROVE LANE	3+37.6	1.3' RT.	STD. MH (65.01)
39	CEDAR GROVE LANE	0+72	5' RT.	STD. MH (65.01)
40	CEDAR GROVE LANE	6+57	10' RT.	STD. MH (65.01)
41	CEDAR GROVE LANE	8+00	10' RT.	STD. MH (65.01)
42	CEDAR GROVE LANE	11+50	10' RT.	STD. MH (65.01)

CEDAR GROVE LANE		
WATER STA.	APPURTENANCE	OFFSET
3+9.6	8"-1/16 H.B.	0
3+36	8"x6" FHT	0
3+56	F.H.	17' RT.
6+44	8"x8" W/CAP	0
7+12	8"x6" FHT	10' RT.
7+12	F.H.	17' RT.
7+54	8"x8" T	0
10+65	8"x6" FHT	0
10+65	F.H.	7' LT.
11+16	8"-1/16 HB	0
POINT PATIENCE WAY		
WATER STA.	APPURTENANCE	OFFSET
2+45	8"x8" W/CAP	0
3+30	8"x6" FHT	0
3+30	F.H.	14' RT.
3+55	8"x8" W/CAP	0

UNIT #	% SLOPE	INV. @ EASE	SERVICEABLE ELEV.	TYPE OF CONNECTION
64	2	238.2	241.3	DHC TYPE 'B'
65 & 66	2	233.9	237.0	TDHC TYPE 'A'
67 & 68	2	231.9	235.0	TDHC TYPE 'A'
69	2	229.9	233.0	MHHC
70	2	229.05	232.15	SHC
71	2	229.25	232.35	SHC
72	2	231.37	234.47	SHC
73 & 74	2	234.08	237.18	TSHC
75 & 76	2	237.16	240.26	TSHC
77	2	242.43	245.53	SHC
78 & 79	2	238.12	241.22	TSHC
80 & 81	2	234.48	237.58	TSHC
82	5	227.78	231.78	SHC
83 & 84	2	231.9	235.0	TDHC TYPE 'A'
85 & 86	2	234.90	238.00	TDHC TYPE 'A'
87	2	238.4	241.5	DHC TYPE 'B'
88	2	237.90	240.00	MHHC
89 & 90	2	234.58	237.68	TSHC
91 & 92	2	232.43	235.53	TSHC
93 & 94	2	229.68	232.78	TSHC
95	2	227.00	230.10	MHHC
96 & 97	5	223.00	227.00	TDHC
98	5	223.00	227.00	DHC
99 & 100	2	221.90	225.00	MHHC
101	5	222.00	226.00	SHC
102 & 103	5	222.50	226.50	TDHC
104 & 105	2	226.4	229.5	TDHC TYPE 'A'
106	2	229.1	232.20	SHC
107	2	230.62	233.72	TSHC
108 & 109	2	232.18	235.28	TSHC
110 & 111	2	234.08	237.18	TSHC
112 & 113	2	236.90	240.00	MHHC
114 & 115	2	232.57	235.67	TSHC
116 & 117	2	230.39	233.49	TSHC
118 & 119	2	228.03	231.13	TSHC
120	2	225.59	228.69	SHC
121 & 122	2	222.79	225.89	TSHC
123 & 124	2	222.20	225.30	TSHC
125 & 126	2	221.82	224.92	TSHC
127	5	221.00	225.00	SHC
128 & 129	2	221.15	224.25	MHHC
130	2	221.05	224.15	SHC
131	2	221.18	224.28	SHC
132 & 133	2	221.78	224.88	TSHC
134 & 135	2	222.43	225.53	TSHC
136 & 137	2	223.02	226.12	TSHC
138 & 139	2	225.55	228.65	TSHC
140	2	226.91	230.01	SHC
141 & 142	2	228.85	231.95	TSHC
143 & 144	2	230.88	233.98	TSHC
145 & 146	2	233.57	236.67	TSHC

**SANITARY PULLS**



8" WATER MAIN PROFILE  
(EASEMENT AREA- CEDAR GROVE LANE STA.7+54)

SCALE: HOR. 1"=50'  
VER. 1"=5'

WATER & SEWER AS-BUILTS

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

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

5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 987-0286 Bulk (301) 621-5321 Wash (410) 987-0286 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.H.				
project	94044				
date	APR 98	BY	NO.	REVISION	DATE

WATER  
PROFILES

NEW COLONY VILLAGE  
PHASE 3-UNITS 64-146  
CONTRACT NP.:14-3674-D  
FIRST ELECTION DISTRICT  
HOWARD COUNTY

scale  
HOR. 1"=50'  
VER. 1"=5'

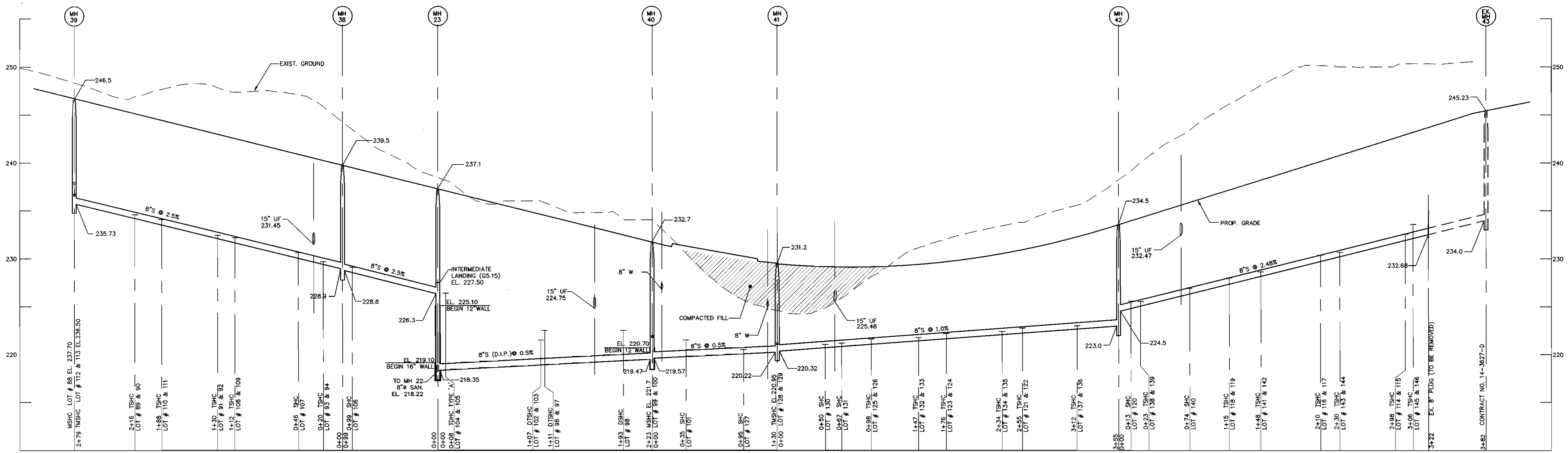
3 of 4

94044.DWG PHASE3\WS\W-PROF.DWG

*R. J. ...* 4-20-98  
CHIEF, BUREAU OF UTILITIES DATE

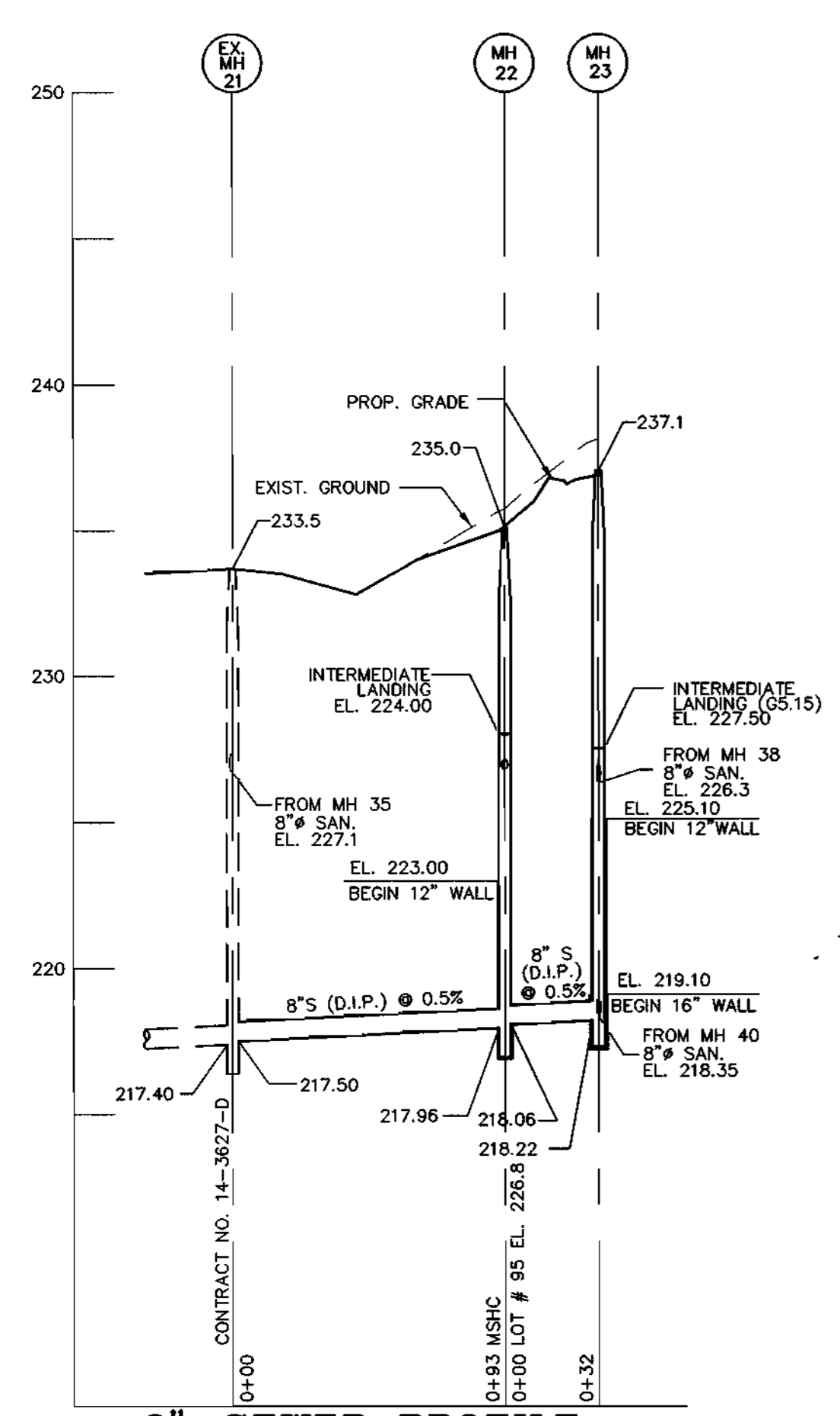
*M. ...* 4/20/98  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

600' SCALE MAP NO. 43 BLOCK NO. 3



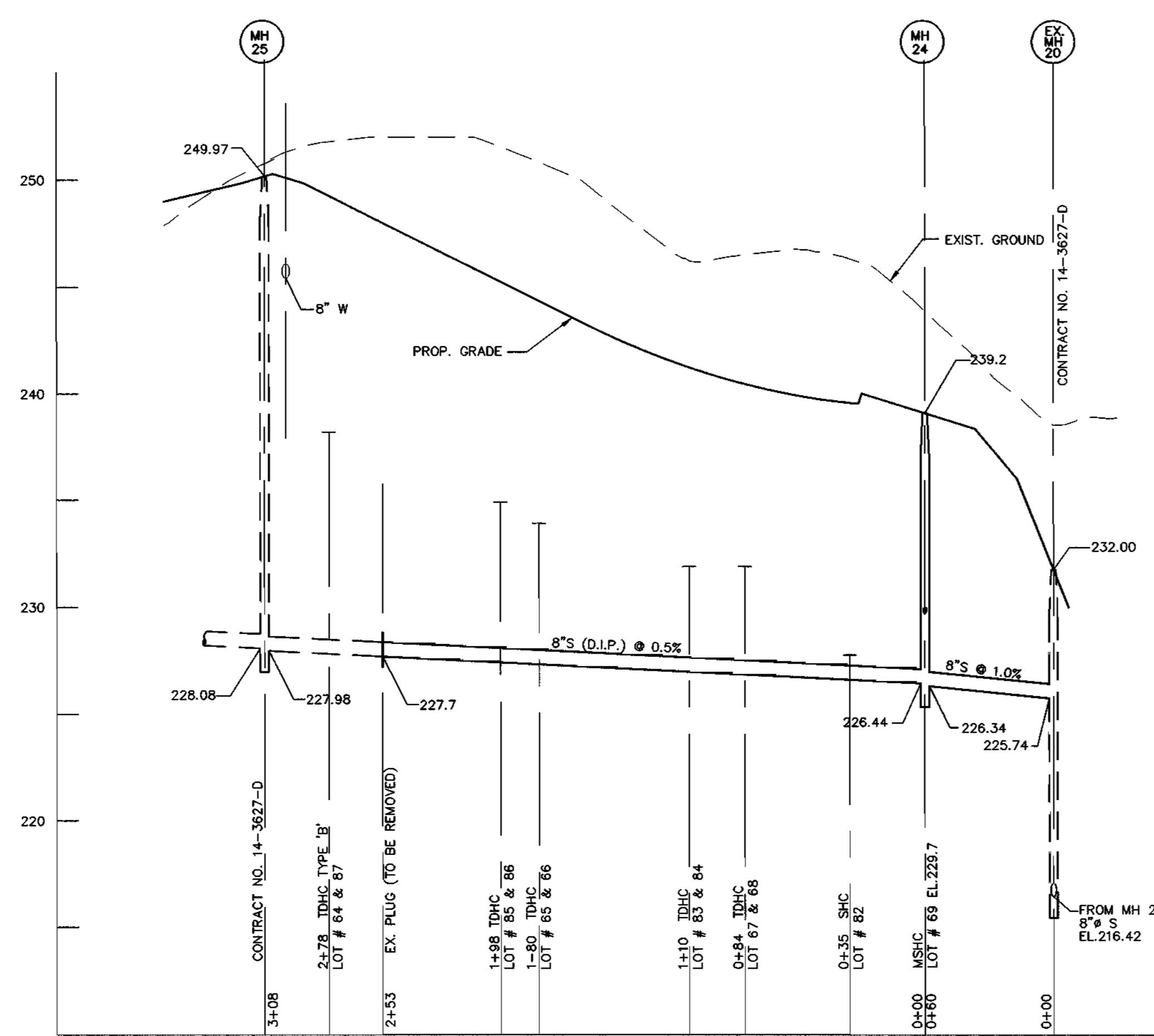
**8" SEWER PROFILE**

SCALE: HOR. 1"=50'  
VER. 1"=5'



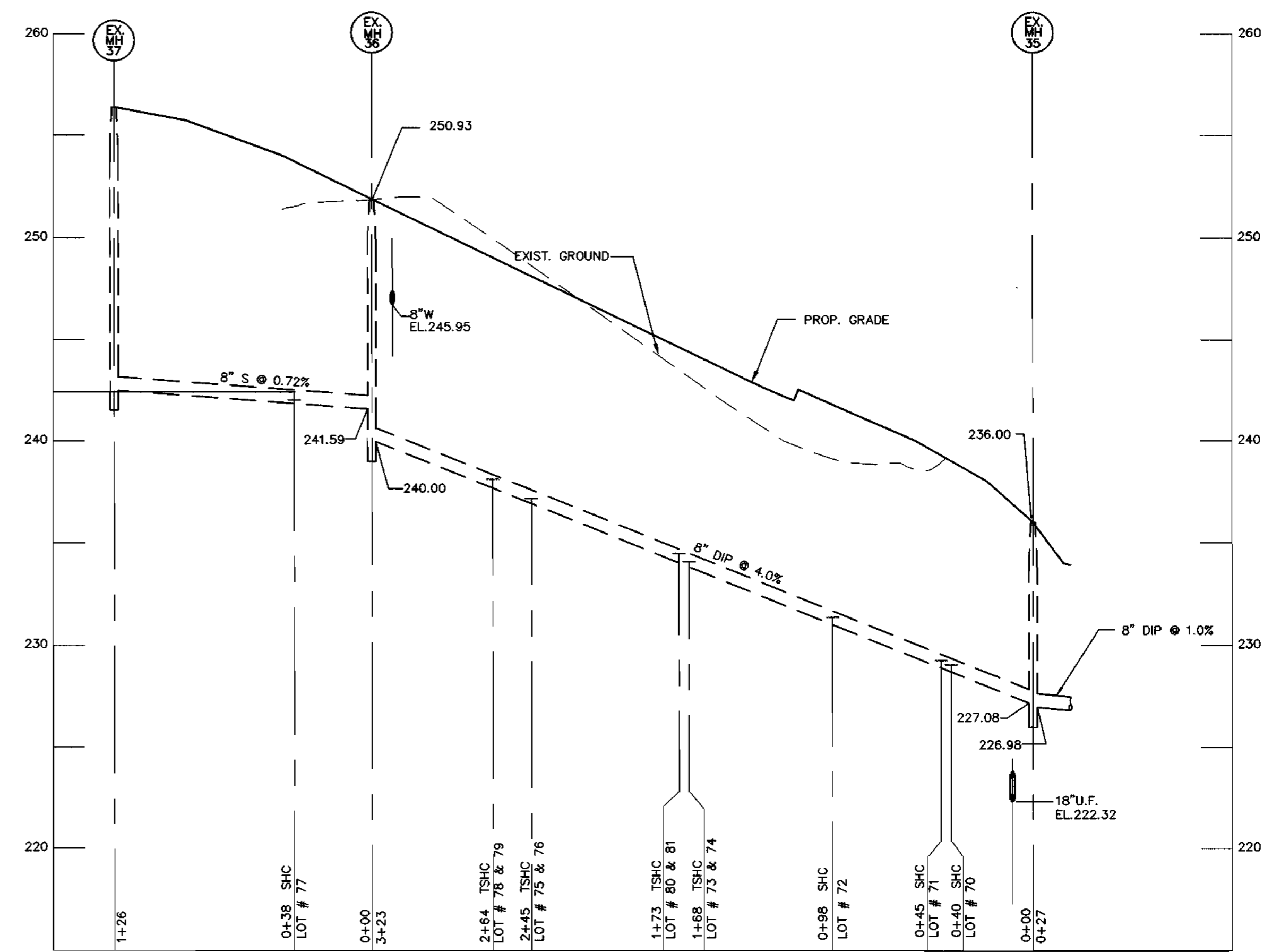
**8" SEWER PROFILE**

SCALE: HOR. 1"=50'  
VER. 1"=5'



**8" SEWER PROFILE**

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VER. 1"=5'



**8" SEWER PROFILE**

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WATER & SEWER AS-BUILTS

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
4-20-98  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
4/21/98  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5972 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 987-0286 Fax (301) 621-5521 Wash. (410) 987-0286 Fax



engineering	M.P.				
illustration	M.P.				
approval	J.H.				
project	94044				
date	APR 98	BY	NO.	REVISION	DATE

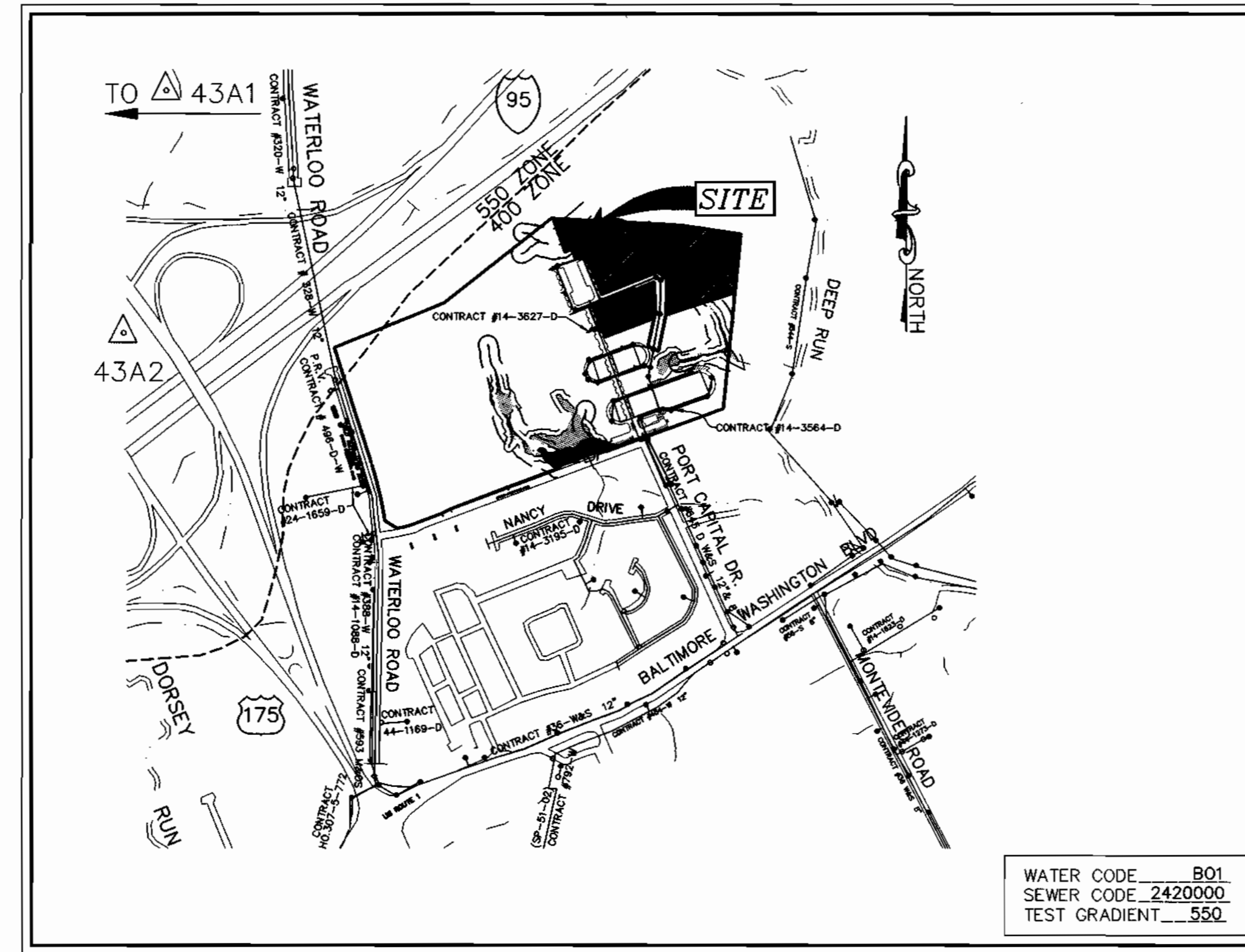
**SEWER PROFILES**  
600' SCALE MAP NO. 13 BLOCK NO. 3

**NEW COLONY VILLAGE**  
PHASE 3-UNITS 64-146  
CONTRACT NO.: 14-3674-D  
FIRST ELECTION DISTRICT  
HOWARD COUNTY

**QUANTITY TABLE**

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
STANDARD MH	6	6	CONC.	ATLANTIC CONC. / ATLANTIC PRODUCTS
DROP MH, TYPE "B"	2	2	CONC.	" "
INTERMEDIATE LANDING	2	2	CONC.	" "
8" SEWER MAIN	1,181 L.F.	2061	CL. 52 D.I.P.	J.M. MANUFACTURING / U.S. FILTER
8" D.I.P. SEWER MAIN	665 L.F.	515	CL. 52 D.I.P.	ATLANTIC STATES / "
4" SEWER HOUSE CONNECTION	250 L.F.	758	PVC	J.M. MANUFACTURING / U.S. FILTER
6" SEWER HOUSE CONNECTION	470 L.F.	103	PVC SDR-35	" "
# SHC	15	13	PVC SDR-35	" "
# DHC	1	1	"	"
# MH CONNECTIONS	4	4	"	"
# DROP MHC	2	2	"	"
# TWIN DHC	8	8	"	J.M. MANUFACTURING / U.S. FILTER
# TWIN SHC	20	22	PVC SDR-35	" "
8" WATER MAIN	2050 L.F.	2061		ATLANTIC STATES / U.S. FILTER
6" WATER MAIN	45 L.F.	42		ATLANTIC STATES / U.S. FILTER
3/4" WHC	310 L.F.	563		READING TUBE / U.S. FILTER
1" WHC	520 L.F.	525		" "
# WHC	21	21		
# TWIN WHC	30	31		
F.H.	4	4		MUELLER CO. / U.S. FILTER
8"x6" T&V	4	4		ROMAC INDUSTRIES / U.S. FILTER
8" 1/16 H.B.	2	2		UNION FOUNDRY / U.S. FILTER
8"x8" T	4	4		" "
8" V	4	4		MUELLER CO. / U.S. FILTER
8" CAP & BUTTRESS	4	4		

SURVEY AND DRAFTING DIVISION AS-BUILT DATE NOV. 24, 1998  
 NAME OF UTILITY CONTRACTOR: CHESAPEAKE CONC. CO.



**VICINITY MAP**  
SCALE: 1" = 600'

TYPE OF BUILDING	RESIDENTIAL
No. OF UNITS	83
No. OF WATER HOUSE CONNECTIONS	21
No. OF SEWER HOUSE CONNECTIONS	19
No. OF TWIN WATER HOUSE CONNECTIONS	31
No. OF TWIN SEWER HOUSE CONNECTIONS	33
DRAINAGE AREA	DEEP RUN PATAPSCO
TREATMENT PLANT	PATAPSCO WASTEWATER TREATMENT PLANT, BALTIMORE

WATER CODE...BOL  
SEWER CODE...2420000  
TEST GRADIENT...550.

**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) 865-3803  
 BG & E CO. CONTRACTOR SERVICES (410) 850-4620  
 BG & E CO. UNDERGROUND DAMAGE CONTROL (410) 787-9068  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS (410) 313-4900  
 BUREAU OF UTILITIES (DPW) (410) 313-4900  
 MISS UTILITY (410) 795-1390  
 COLONIAL PIPELINE CO. (410) 795-1390  
 STATE HIGHWAY ADMINISTRATION (410) 531-5533
- 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 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 (g) 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.
- 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 WATER 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.
- 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 CS.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.
- 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.
- EXISTING WATER AND SEWER EASEMENT ADJACENT TO PORT CAPITOL DRIVE IS RECORDED UNDER LIBER 727/FOLIO 098.
- SEDIMENT CONTROL APPROVED UNDER SDP-96-20.
- ALL ROADWAYS ARE STD. HOWARD COUNTY P-2 PAVEMENT UNLESS OTHERWISE SHOWN.

**CONTRACT NO. 14-3674-D**  
**NEW COLONY VILLAGE**  
**PHASE 3**  
**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
3	WATER PROFILES
4	SEWER PROFILES

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.

*David Lusk* 4/7/98  
DEVELOPER'S SIGNATURE DATE

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.

*R. Jacob Hikmat* 4/7/98  
ENGINEER'S SIGNATURE DATE

REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS.  
*Charles Simmons* 4/23/98  
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.  
*John R. Whitson* 4/23/98  
HOWARD SCD DATE

PLAN REFERENCE NUMBERS

SDP-97-114
SDP-97-03
SDP-96-20

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**MILDENBERG, BOENDER & ASSOC., INC.**  
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engineering	M.P.		
illustration	M.P.		
approval	J.H.		
project	RM	1	REVISED SHC'S AND WHC'S TO REFLECT THE REVISED LAYOUT OF UNITS 106 THRU 120.
date	APR 98	BY NO.	REVISION

**TITLE SHEET**

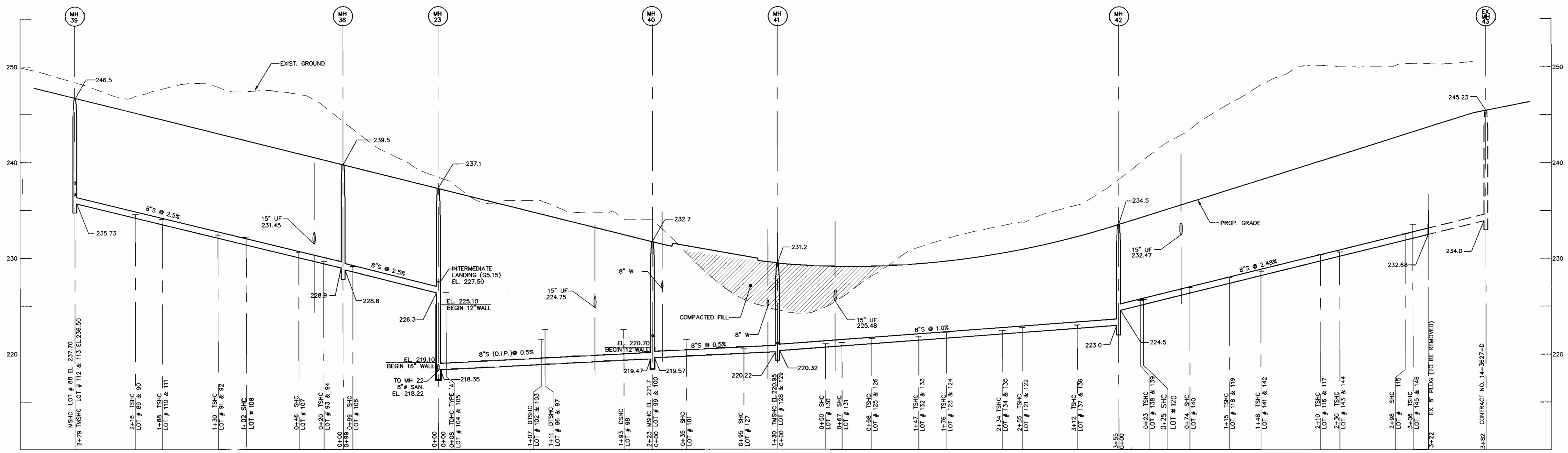
600' SCALE MAP NO. 43 BLOCK NO. 3

**WATER & SEWER AS-BUILT**  
**NEW COLONY VILLAGE**  
 PHASE 3 - UNITS 64-146  
 CONTRACT NO. 14-3674-D  
 FIRST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

scale AS SHOWN

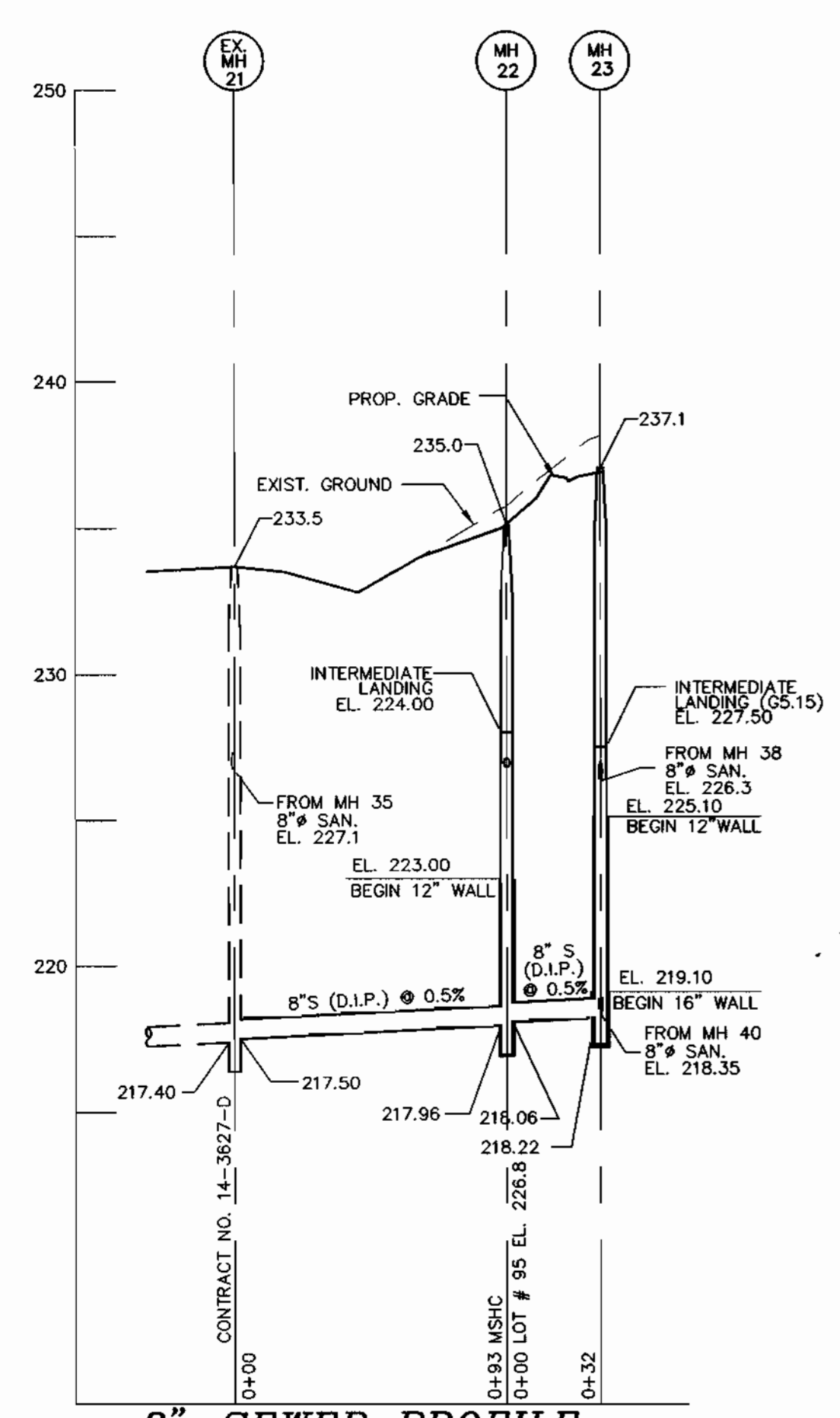
1 OF 4





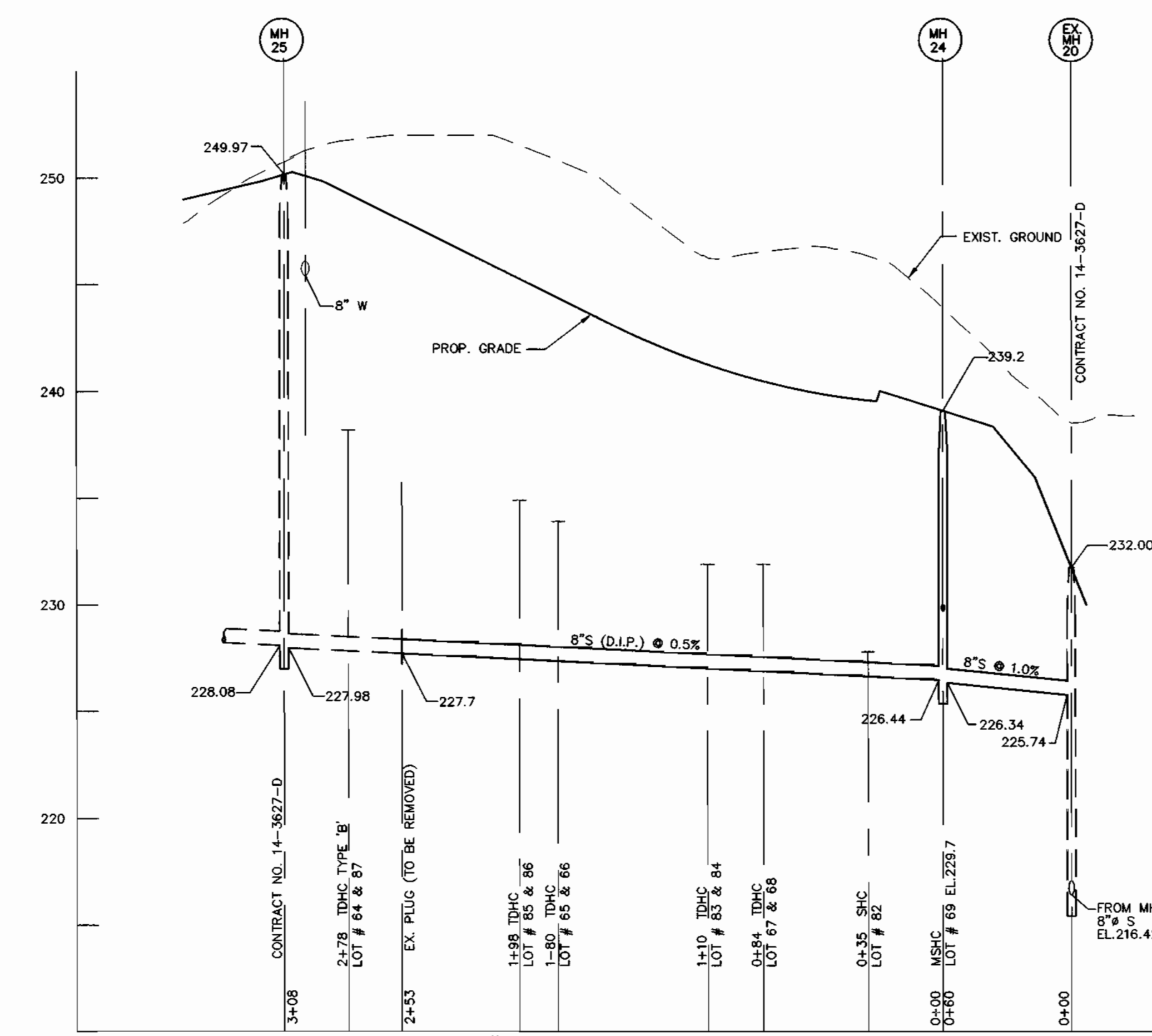
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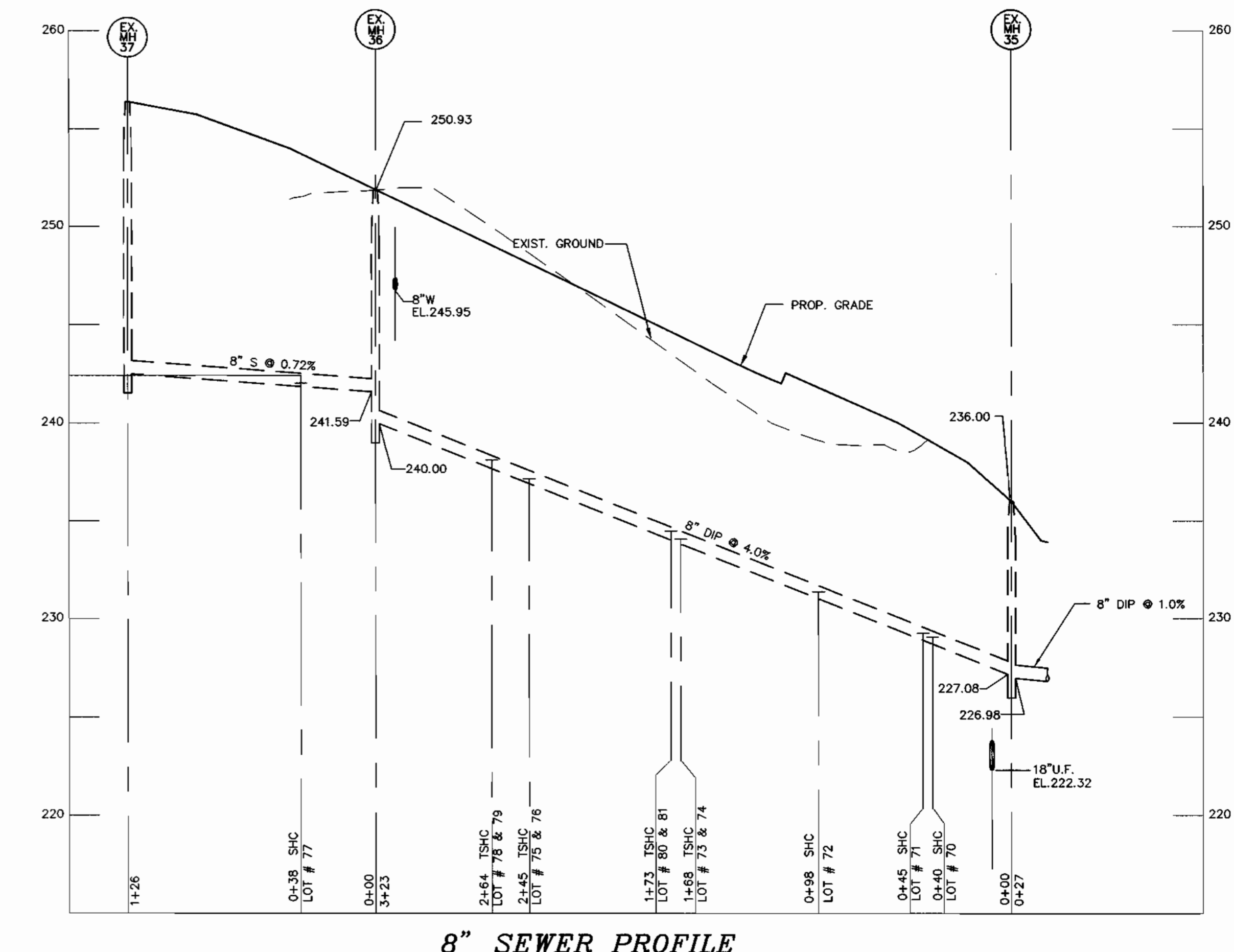
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WATER & SEWER AS-BUILTS

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
Robert J. ... 4-20-98  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
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date	APR. 98	BY	NO.	REVISION	DATE

**SEWER PROFILES**  
600' SCALE MAP NO. 13 BLOCK NO. 3

**NEW COLONY VILLAGE**  
PHASE 3-UNITS 64-146  
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