

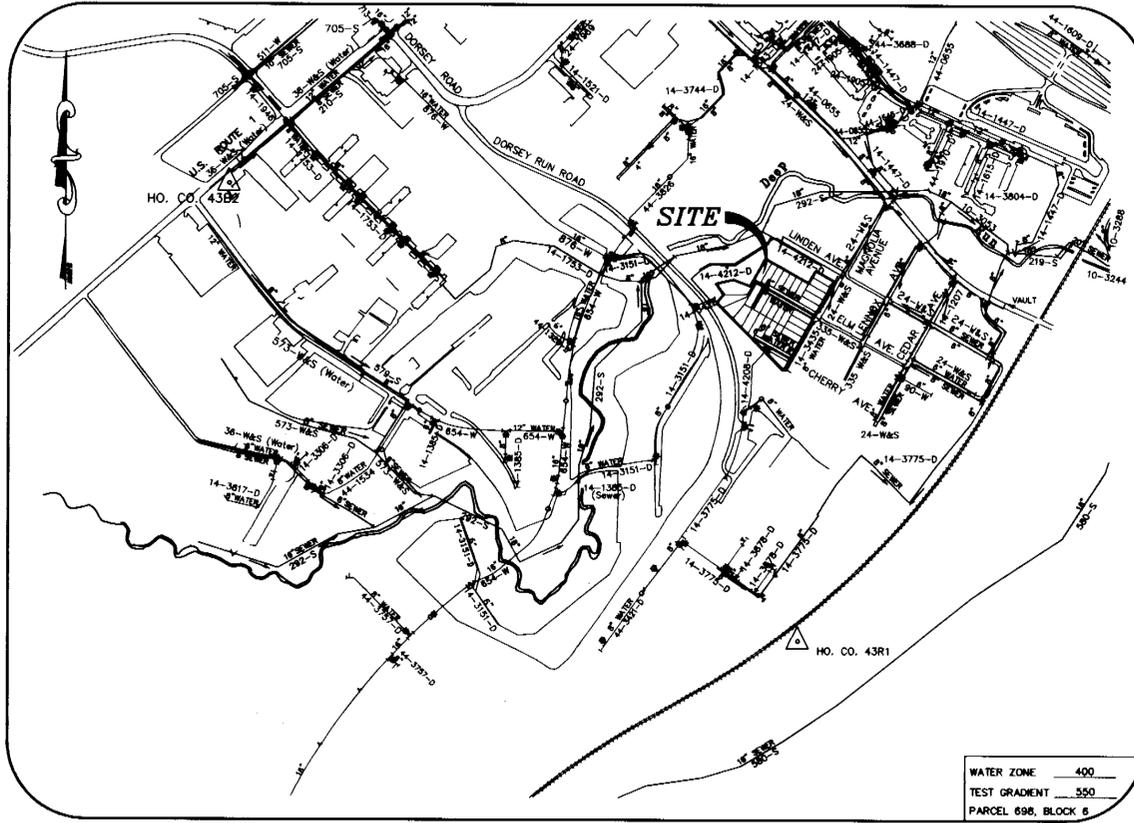
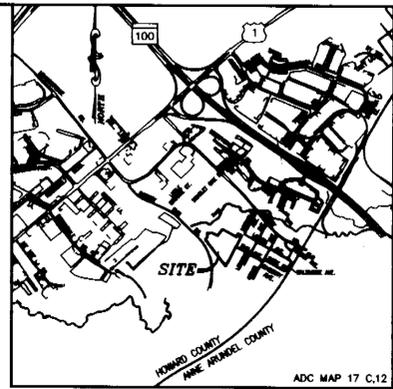
QUANTITY TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
STANDARD MH	9	9	PRECAST	FREDERICK PRECAST
8" SEWER MAIN	1,406 L.F.	1,406 L.F.	SDR-35	NORTH AMERICAN/HD SUPPLY
4" SEWER HOUSE CONNECTION	560 L.F.	560 L.F.	SDR-35	NORTH AMERICAN/HD SUPPLY
# SEWER HOUSE CONNECTIONS	35	35	SDR-35	NORTH AMERICAN/HD SUPPLY
# MH SEWER HOUSE CONNECTIONS	5	5	SDR-35	NORTH AMERICAN/HD SUPPLY
8" WATER	510 L.F.	510 L.F.	DR-14	NORTH AMERICAN/HD SUPPLY
6" WATER	310 L.F.	305 L.F.	DR-14	NORTH AMERICAN/HD SUPPLY
4" WATER	113 L.F.	113 L.F.	DR-14	NORTH AMERICAN/HD SUPPLY
1" WHC	680 L.F.	680 L.F.	COPPER	CAMBRIDGE LEB/HD SUPPLY
# WHC	9			
# TWHC	13			
8"x6" FHT&V	2	1	GATE VALVE	KENNEDY VALVE/HD SUPPLY
FIRE HYDRANTS	2	1	KENNEDY VALVE/HD SUPPLY	
8"x8" TS&V	1	1	TAPPING VALVE	FORD METER BOX/HD SUPPLY
8"x6" TS&V	1	1	" "	" "
4" 1/8 HB	1			
4" 1/16 HB	2			
8"x4" REDUCER	1	1	MJ REDUCER	SIGMA/HD SUPPLY
6" CAP & BUTTRESS	1	1	MJ CAP	SIGMA/HD SUPPLY
4" CAP & BUTTRESS	1	1	MJ CAP	SIGMA/HD SUPPLY
6" DIP WATER		108 L.F.	DIP CL	U.S. PIPE/FOUNDRY/HD SUPPLY

NAME OF UTILITY CONTRACTOR: S.E.H. EXCAVATING, INC.
SURVEY AND DRAFTING DIVISION AS-BUILT DATE: OCTOBER 2010

INDEX OF DRAWINGS

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



VICINITY MAP

SCALE: 1" = 600'
ADC MAP 17 C,12

WATER / SEWER MAIN TABULATION CHART

APURTENANCE	ROAD	STATION	OFFSET
MH 1	MAGNOLIA	3244.70	6.11
MH 2	MAGNOLIA	3244.70	7.00 R
MH 3	ELM	1+57.77	5.14 R
MH 4	ELM	4+77.00	4.80 R
MH 5	MAGNOLIA	7+05.25	7.00 R
MH 6	CHERRY	7+97.00	5.00 R
8" TS&V	MAGNOLIA	32+56.68	23.12 L
8" FHT&V	ELM	0+23.88	20.74 L
8" FHT&V	ELM	4+76.00	18.50 L
8" TEE & 6" V	MAGNOLIA	6+95.25	7.00 R
8" REDUCER	ELM	4+77.32	22.50 L
4" 1/8 HB	ELM	4+65.84	5.40 L
4" 1/16 HB	ELM	4+74.05	13.35 L
8" TS&V	MAGNOLIA	6+95.25	10.19 L

APURTENANCE	NORTHING	EASTING
8" 1/32 HB	N 550.397	E 1,382.015
8" TS&V	N 550.383	E 1,382.001
4" 1/16 HB	N 550.836	E 1,381.892
4" CAP AND BUTTRESS	N 550.780	E 1,381.861
6" CAP AND BUTTRESS	N 550.497	E 1,381.925
MH 7	N 550.842	E 1,381.884
MH 8	N 550.793	E 1,381.756
MH 9	N 664.284	E 1,381.146

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER : GP-09-05

LEGEND

- 8" S EXISTING SEWER MAIN AND MANHOLE
- 8" W EXISTING WATER MAIN AND VALVE
- EXISTING FIRE HYDRANT
- PROPOSED SEWER MAIN
- PROPOSED WATER MAIN, TAPPING SLEEVE AND VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED TEE AND VALVES
- PROPOSED HALF BEND
- PROPOSED WATER AND SEWER EASEMENT
- PROPOSED SEWER HOUSE CONNECTION
- PROPOSED WATER HOUSE CONNECTION
- PROPOSED TWIN SEWER HOUSE CONNECTION
- PROPOSED SEWER MANHOLE
- PROPOSED TWIN WATER HOUSE CONNECTION
- PROPOSED END CAP AND BUTTRESS

TYPE OF BUILDING: SFD

No. OF UNITS: 28
No. OF WATER HOUSE CONNECTION: 9
No. OF SEWER HOUSE CONNECTIONS: 35
No. OF TWIN WATER HOUSE CONNECTION: 16
No. OF TWIN SEWER HOUSE CONNECTIONS: 0
DRAINAGE AREA: PATAPSCO
TREATMENT PLANT: PATAPSCO

OWNER
LENNOX PARK LIMITED PARTNERSHIP
6800 DEERPATH ROAD
SUITE 100
ELKBRIDGE MARYLAND 21075-6200

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 SOIL EROSION AND SEDIMENTATION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S SIGNATURE: [Signature]
DATE: 5/16/09

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.

ENGINEER'S SIGNATURE: [Signature]
DATE: 5/17/09

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO.: 17942, EXPIRATION DATE: 9/3/10

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

HOWARD SCD
DATE: 6/18/09

CONTRACT NO.: 14-4559-D
LENNOX PARK,
LOTS 1174, 1175, 1178, 1179, 1182-1193, & 1196-1206,
355, 358, 361, 873, 875, 877, 891, 893
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

AS BUILT
DATE: OCTOBER 2010

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
S. C. [Signature]
CHIEF, BUREAU OF UTILITIES
DATE: 6/18/09

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
W. [Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 6/22/09

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hill Drive, Suite 202, Elkridge City, Maryland 21042
(410) 997-0236 Cell (410) 997-0230 Fax



engineering	JJO				
illustration	JJO				
approval	RJH				
project	1998-078	NRA	1	UPDATE TABLES	11/6/09
date	MAR 2009	BY	NO.	REVISION	DATE

TITLE SHEET
600' SCALE MAP NO. 43
BLOCK NO. 6

LENNOX PARK,
LOTS 1174, 1175, 1178, 1179, 1182-1193, & 1196-1206,
355, 358, 361, 873, 875, 877, 891, 893
CONTRACT NO. 14-4559-D
TAX MAP 43 PARCEL 698
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

scale AS SHOWN
1 of 3

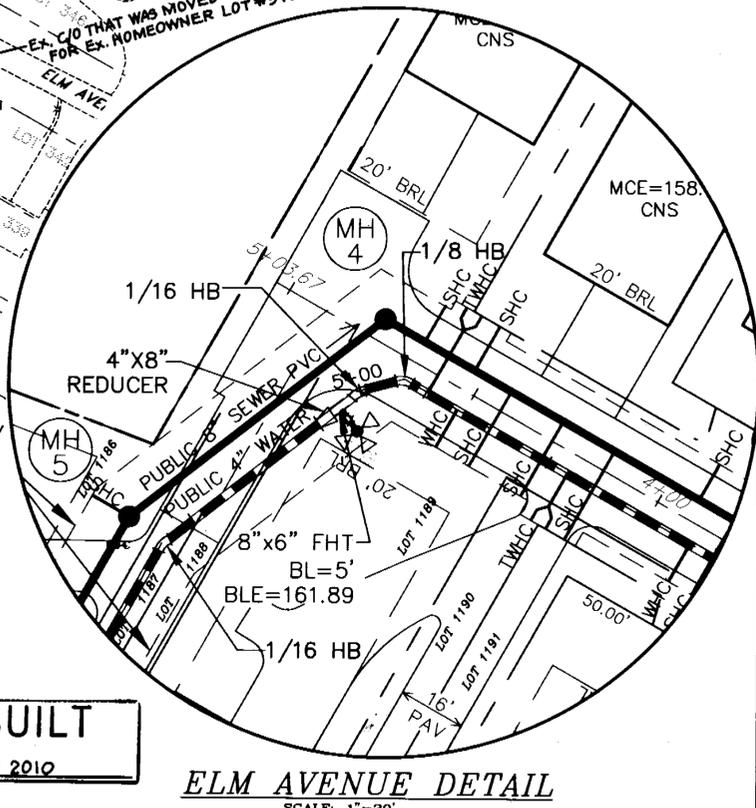
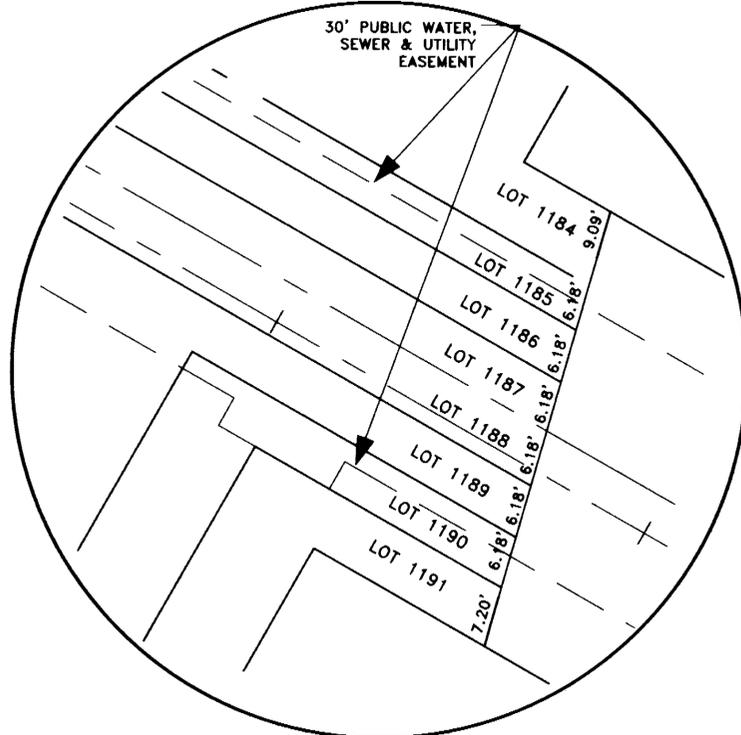
SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE

WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE

SEWER HOUSE CONNECTION TABLE

LOT	ADDRESS	FROM	TO	FEET	LOT	ADDRESS	FROM	TO	FEET
1174	6932 MAGNOLIA AVE	SHC	I-1	105.2	1174	6932 MAGNOLIA AVE	T-WNC	I-1	95.2
1175	6834 MAGNOLIA AVE	SHC	I-1	60.0	1175	6834 MAGNOLIA AVE	T-WNC	I-1	90.8
1178	6940 MAGNOLIA AVE	SHC	SMH-2	40.0	1178	6940 MAGNOLIA AVE	WNC	SMH-2	36.9
1179	6995 ELM AVE	SHC	SMH-3	48.5	1179	6995 ELM AVE	WNC	SMH-3	42.3
1182	6989 ELM AVE	SHC	I-4	101.2	1182	6989 ELM AVE	T-WNC	I-4	101.9
1183	6987 ELM AVE	SHC	I-4	100.0	1183	6987 ELM AVE	T-WNC	I-4	113
1184	6985 ELM AVE	SHC	SMH-4	41.3	1184	6985 ELM AVE	T-WNC	SMH-4	39.5
1185	6983 ELM AVE	SHC	SMH-4	16	1185	6983 ELM AVE	T-WNC	SMH-4	20
1186	6974 ELM AVE	SHC	SMH-5	12	1186	6974 ELM AVE	T-WNC	SMH-5	40.0
1187	6976 ELM AVE	SHC	SMH-5	60.9	1187	6976 ELM AVE	T-WNC	SMH-5	51
1188	6978 ELM AVE	SHC	SMH-6	24	1188	6978 ELM AVE	WNC	SMH-6	20
1189	6980 ELM AVE	SHC	SMH-4	39.3	1189	6980 ELM AVE	WNC	SMH-4	39.5
1190	6982 ELM AVE	SHC	SMH-4	51	1190	6982 ELM AVE	T-WNC	SMH-4	60
1191	6984 ELM AVE	SHC	SMH-4	39.7	1191	6984 ELM AVE	T-WNC	SMH-4	44.4
1192	6986 ELM AVE	SHC	SMH-4	32.5	1192	6986 ELM AVE	WNC	SMH-4	31
1193	6988 ELM AVE	SHC	I-5	90.0	1193	6988 ELM AVE	WNC	I-5	84.7
1196	6994 ELM AVE	SHC	I-4	92	1196	6994 ELM AVE	WNC	I-4	89.9
1197	6944 MAGNOLIA AVE	SHC	I-3	23.9	1197	6944 MAGNOLIA AVE	T-WNC	I-3	32.2
1198	6946 MAGNOLIA AVE	SHC	I-3	62	1198	6946 MAGNOLIA AVE	T-WNC	I-3	36
1199	6948 MAGNOLIA AVE	SHC	I-3	123.3	1199	6948 MAGNOLIA AVE	T-WNC	I-3	132
1200	6950 MAGNOLIA AVE	SHC	SMH-7	41	1200	6950 MAGNOLIA AVE	T-WNC	SMH-7	34.5
1201	6952 MAGNOLIA AVE	SHC	SMH-7	91.4	1201	6952 MAGNOLIA AVE	T-WNC	SMH-7	89.2
1202	6954 MAGNOLIA AVE	SHC	SMH-7	59.5	1202	6954 MAGNOLIA AVE	T-WNC	SMH-7	79.5
1203	6937 CHERRY AVE	SHC	SMH-8	77	1203	6937 CHERRY AVE	T-WNC	SMH-8	60
1204	6935 CHERRY AVE	SHC	SMH-8	45.5	1204	6935 CHERRY AVE	T-WNC	SMH-8	64.0
1205	6933 CHERRY AVE	SHC	SMH-8	39.7	1205	6933 CHERRY AVE	T-WNC	SMH-8	51.7
1206	6931 CHERRY AVE	SHC	SMH-8	47.0	1206	6931 CHERRY AVE	T-WNC	SMH-8	62
355	6735 MAGNOLIA AVE	SHC	EX.FH	78.7	355	6735 MAGNOLIA AVE	WNC	EX.FH	88.2
356	6733 MAGNOLIA AVE	SHC	EX.FH	33.9	356	6733 MAGNOLIA AVE	WNC	EX.FH	27
361	6731 MAGNOLIA AVE	SHC	EX.FH	23.1	361	6731 MAGNOLIA AVE	T-WNC	EX.FH	24.7
673	6751 MAGNOLIA AVE	SHC	SMH-7	117.4	673	6751 MAGNOLIA AVE	T-WNC	SMH-7	127.0
675	6753 MAGNOLIA AVE	SHC	SMH-7	169	675	6753 MAGNOLIA AVE	T-WNC	SMH-7	131.7
677	6755 MAGNOLIA AVE	SHC	SMH-7	66	677	6755 MAGNOLIA AVE	WNC	SMH-7	72.5
679	6757 MAGNOLIA AVE	SHC	SMH-7	28	679	6757 MAGNOLIA AVE	T-WNC	SMH-7	67.7
683	6763 MAGNOLIA AVE	SHC	SMH-7	78	683	6763 MAGNOLIA AVE	T-WNC	SMH-7	72

LOT	SHC TYPE	INV. @ EASEMENT	MCE	SLOPE
1174	SHC	148.18	151.52	1%
1175	SHC	149.07	152.47	1%
1178	SHC	151.45	155.45	2%
1179	CNS	152.91	157.19	2%
1182	CNS	153.67	157.99	2%
1183	CNS	153.87	158.07	2%
1184	CNS	153.98	158.08	2%
1185	CNS	154.25	158.75	2%
1186	SHC	154.95	160.35	2%
1187	SHC	155.49	160.79	2%
1188	SHC	155.69	160.39	2%
1189	SHC	154.33	159.25	2%
1190	DSHC	154.25	162.25	2%
1191	DSHC	154.19	162.38	2%
1192	SHC	153.02	158.72	2%
1193	SHC	153.67	157.99	2%
1196	SHC	152.96	156.53	1%
1197	SHC	156.64	160.54	2%
1198	SHC	159.45	163.25	2%
1199	SHC	163.55	166.74	1%
1200	SHC	166.47	170.29	2%
1201	SHC	170.46	174.36	2%
1202	SHC	173.23	177.13	2%
1203	SHC	181.52	185.62	2%
1204	SHC	181.89	186.09	2%
1205	SHC	182.22	186.20	2%
1206	SHC	182.04	186.74	2%
355	SHC	148.83	153.35	2%
356	SHC	148.00	152.50	2%
361	SHC	147.00	161.50	1%
673	SHC	190.10	194.00	1%
675	SHC	184.16	187.76	1%
677	SHC	172.46	178.00	2%
679	SHC	169.00	174.46	1%
683	SHC	165.93	171.40	2%



WATER VALVES AND CLEAN-OUTS AS-BUILT

UNIT	FROM	TO	FEET
TSV @ ELM & MAGNOLIA	VALVE	SMH-1 22	Ex. FH 17
TSV @ CHERRY & MAGNOLIA	VALVE	SMH-7 15.3	SMH-9 54
FHV @ STA. 5+05 ELM AVE.	VALVE	FH 7.2	SMH-4 23.4
Ex. 8" VALVE @ LINDEN & MAGNOLIA	UNDER ASPHALT CANNOT LOCATE		
Ex. 3/4" C/O	Ex. 4" C/O	Ex. M905 23	SMH-2 59
Ex. LOT 342	Ex. 4" C/O	SMH-1 50	I-3 29.3
TEST STATION @ FH STA. 5+05 ELM AVE.	TEST STATION	FH 2	FHV 7
TEST STATION @ STA. 12+85 CHERRY AVE. LT. OF SMH-8	TEST STATION	SMH-8 17.5	SHC LOT 1206 38
TEST STATION/ BLOWOFF @ STA. 0+50 ELM AVE. FRONT OF LOT 1188	TEST STATION/ BLOWOFF	SMH-6 8	WNC LOT 1188 14

LOT 1205/1206 TEST STATION IS LEFT OF SMH-8 AND AT THE END OF THE V ON CHERRY AVENUE

OWNER
LENNOX PARK LIMITED PARTNERSHIP
6800 DEERPATH ROAD
SUITE 100
ELK RIDGE MARYLAND 21075-6200

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6872 Derry Hill Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (410) 997-0296

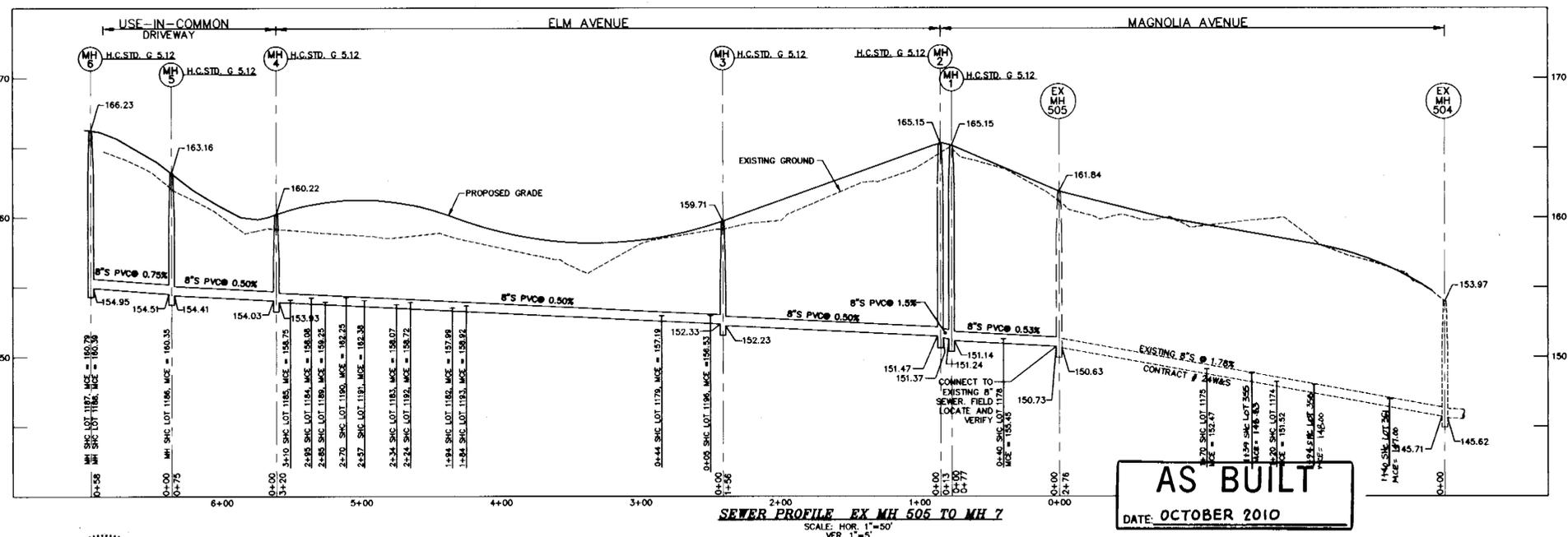
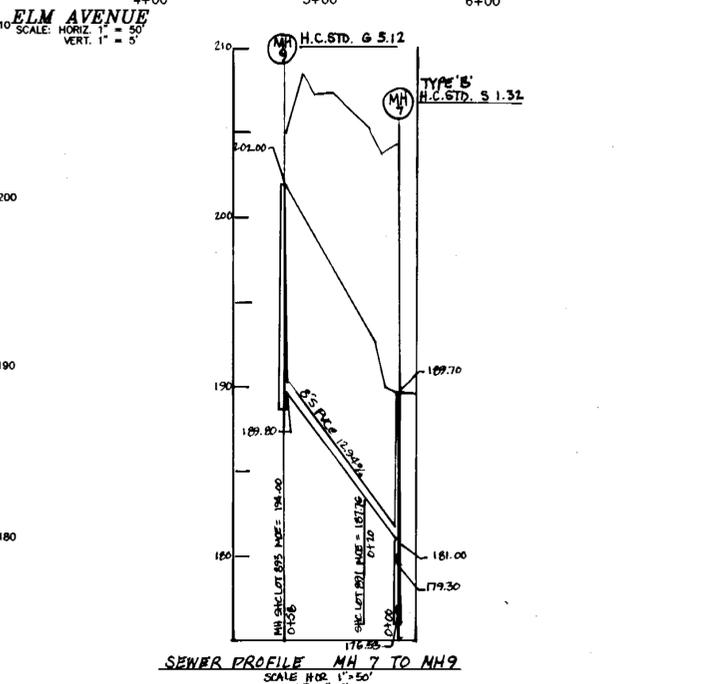
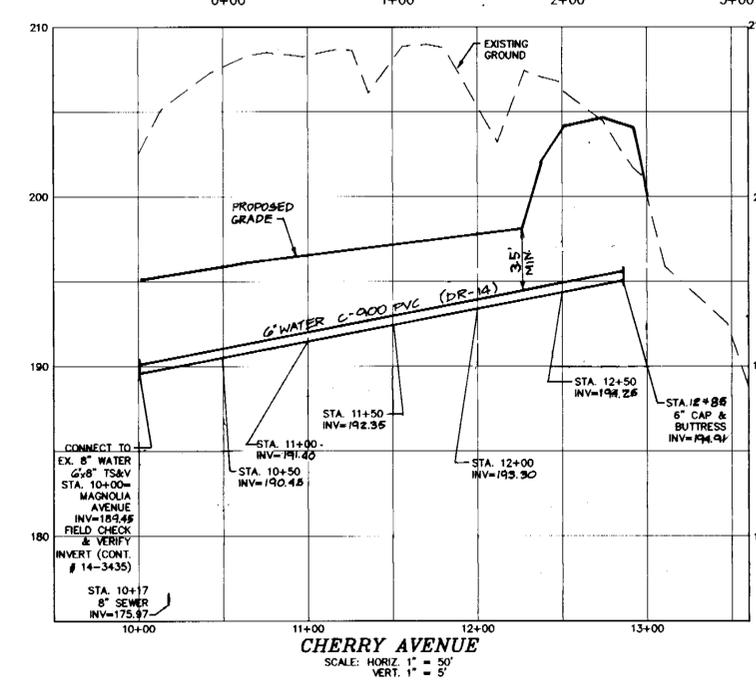
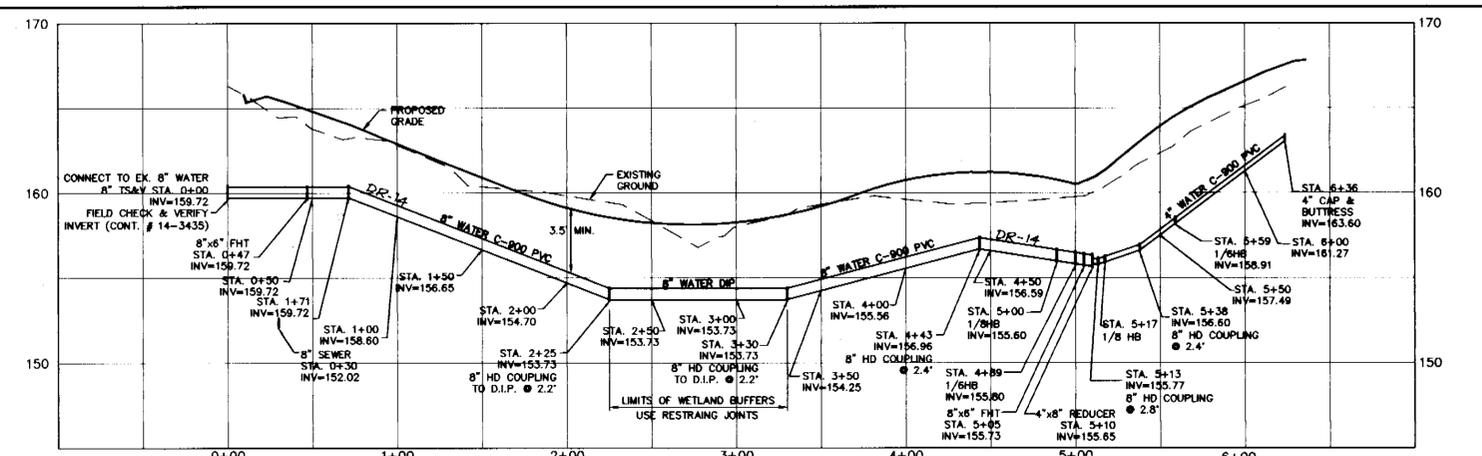
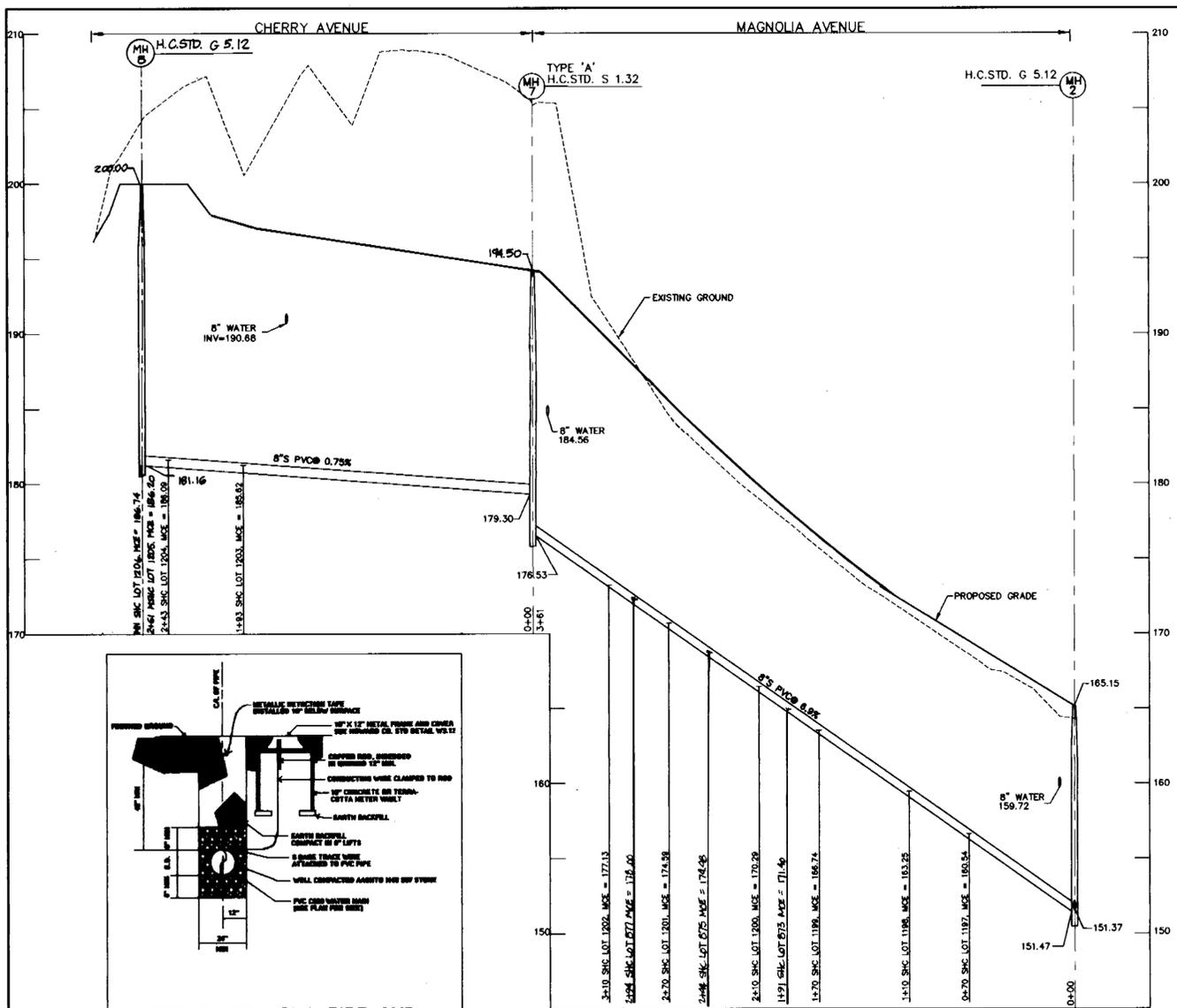


engineering	JJO				
illustration	JJO				
approval	RJH				
project	1998-076	MBA	Z	REVISE HORIZONTAL WATER ALIGNMENT	
date	MAY 2008	BY	NO.	REVISION	DATE

WATER AND SEWER PLAN

600' SCALE MAP NO. 43 BLOCK NO. 6

LENNOX PARK,
LOTS 1174, 1175, 1178, 1179, 1182-1183, & 1196-1206,
355, 356, 361, 673, 675, 677, 679, 683
CONTRACT NO. 14-4559-D
TAX MAP 43 PARCEL 698
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



AS BUILT
 DATE: OCTOBER 2010

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

Chief, Bureau of Utilities
 Chief, Development Engineering Division

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Cell (410) 997-0296 Fax



engineering	JJO				
illustration	JJO				
approval	RJH				
project	1998-076	NO.	2	REVISION WATER PROFILE, RELOCATE MH 5	08/10/10
date	MAY 2009	BY	NO.	1	REVISION SEWER PROFILE
					11/04/10

WATER AND SEWER PROFILES

600' SCALE MAP NO. 43 BLOCK NO. 6

LENNOX PARK,
 LOTS 1174, 1175, 1176, 1179, 1182-1193, & 1196-1206,
 35555, 361, 675, 675, 677, 691, 693
 CONTRACT NO. 14-4559-D
 TAX MAP 43 PARCEL 698
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

scale AS SHOWN
 3 of 3