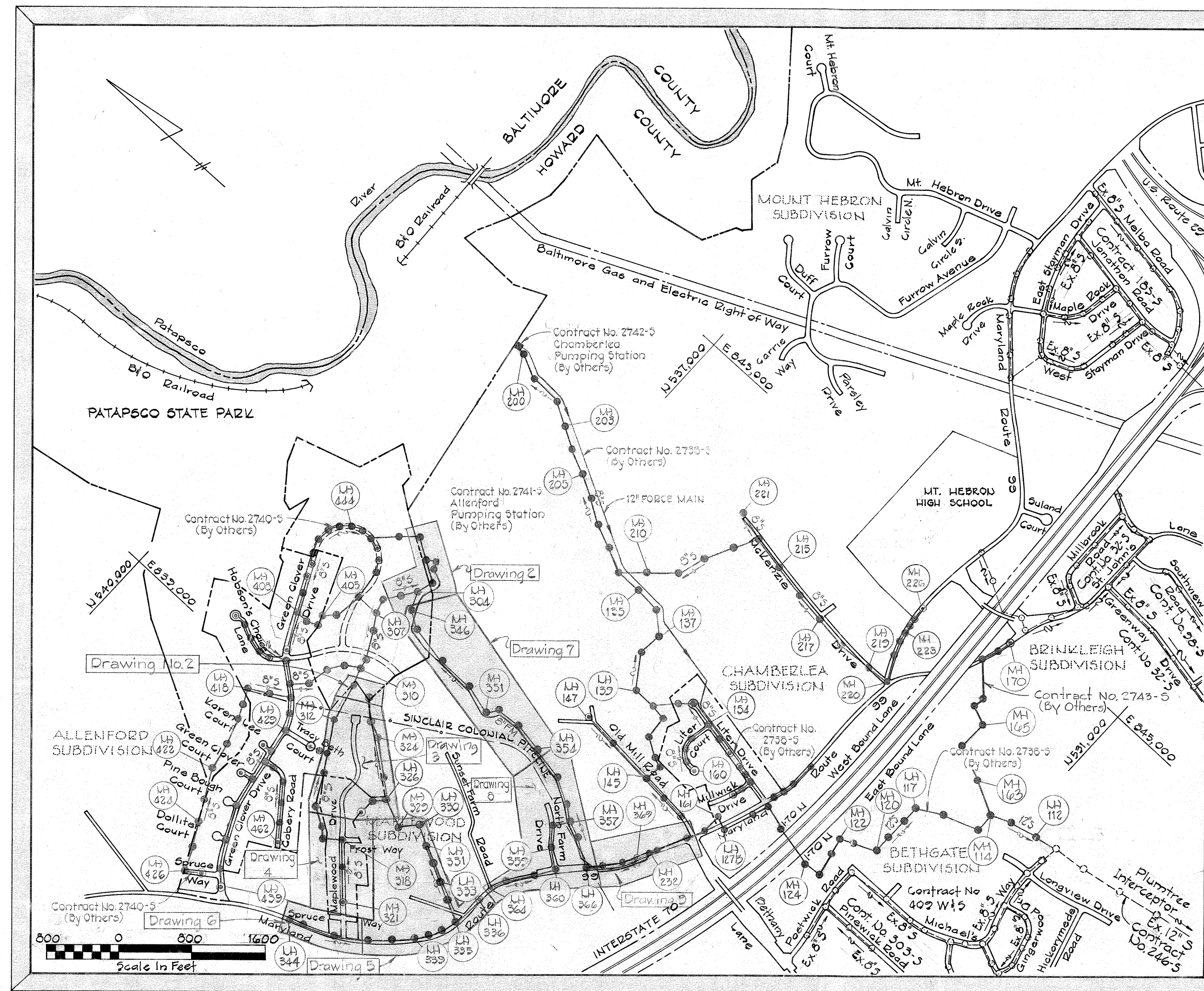


GENERAL NOTES

1. Approximate locations of existing utilities are shown. The Contractor shall take all necessary precautions to protect existing utilities and maintain uninterrupted service. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer by the Contractor at the Contractor's expense.
2. All pipe elevations shown are \odot invert elevations.
3. The contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in the vicinity of utilities. Cost shall be included in the unit prices bid for excavation and backfill for sewer mains.
4. For details not shown on the contract drawings see Standard Details bound in the specifications.
5. Clear all utilities by a minimum of 6". Clear all utility poles by 2'-0" minimum or tunnel as required. Any costs incurred to the contractor for tunneling or bracing at poles shall be included in the unit prices bid for excavation and backfill for sewer mains.
6. Contractor shall notify the following utilities or agencies at least five(5) days before starting work shown on these plans:
 Baltimore Gas & Electric Company - Underground Electric Distribution Engineering - "Damage Control" 234-5691
 Baltimore Gas & Electric Company - Underground Gas Distribution Engineering 234-5533
 Chesapeake and Potomac Telephone Company 725-9976
 Miss Utility 1-559-0100
 Colonial Pipeline Company 781-4641 or 703-282-9771
7. Trees located within the rights of way are to be protected from damage to the maximum extent. Trees located within the construction strips are not to be removed or damaged by the Contractor.
8. Place regulation "Men Working" and warning signs as required to comply with Maryland State Highway Administration Manual of Traffic Control for Highway Construction and Maintenance Operations.
9. All sewer mains shall be C.S.P.X., V.C.P.X., or A.C.P., Class 2400 unless otherwise noted.
10. The Contractor shall provide a joint in each sewer main within 2'-0" of exterior manhole walls.
11. All manholes shall be 4'-0" inside diameter, unless otherwise noted.
12. Watertight manhole frame and cover to be used where indicated on drawings, Standard Detail S-12 (RCR-63A).
13. The Contractor shall remove trees, stumps, and roots along the line of excavation as directed by the Engineer. Cost for such removal shall be included in the unit prices bid for excavation and backfill for sewer mains.
14. Horizontal and Vertical controls are based on the Maryland State Grid Coordinate System.

QUANTITIES		
SIZE	ESTIMATED	"AS BUILT"
8" SEWER	14,375 L.F.	14,127.7 LF
6" SEWER	1,065 L.F.	1,053.5 LF
MANHOLES	605 V.F.	612.5 VF
8" FORCE MAIN	4410 L.F.	3387 LF



ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THESE DRAWINGS AND ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV.

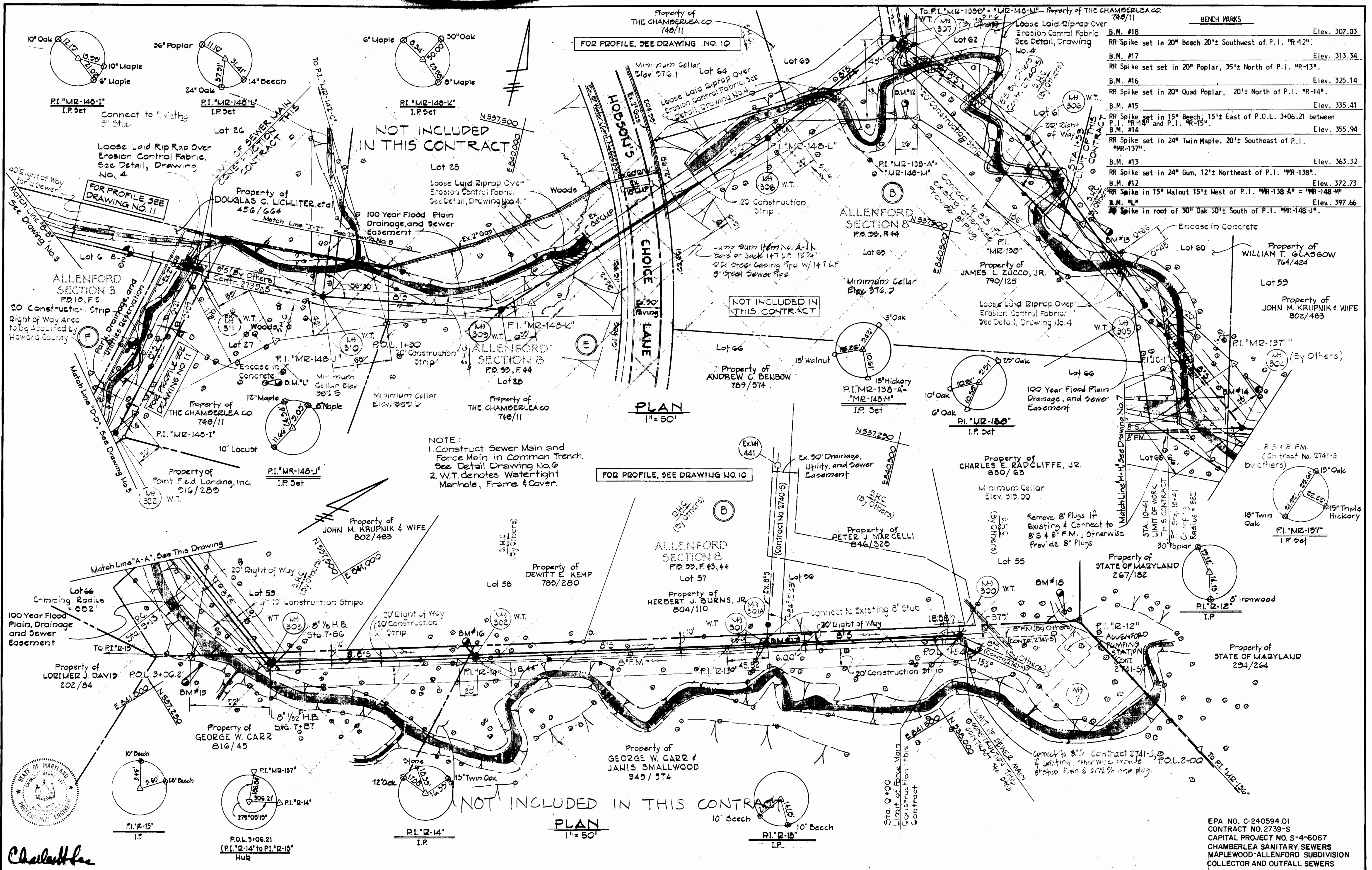
HOWARD SOIL CONSERVATION DISTRICT:
 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 James M. Nelson 8/10/82
 U.S. SOIL CONSERVATION DISTRICT DATE
 THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 William J. Rouse 8-10-82
 HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 2739-S
CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

EPA NO. C-240594.01
 CONTRACT NO. 2739-S
 CAPITAL PROJECT NO. S-4-6067
 CHAMBERLEA SANITARY SEWERS
 MAPLEWOOD-ALLENFORD SUBDIVISIONS
 COLLECTOR AND OUTFALL SEWERS

AS-BUILTS

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 8-31-77 DIRECTOR OF PUBLIC WORKS DATE	CONTRACT NO. 2739-S CAPITAL PROJECT NO. S-4-6067	LOCATION MAP FOR SANITARY SEWERS	CHAMBERLEA SANITARY SEWERS MAPLEWOOD-ALLENFORD SUBDIVISIONS ELECTION DISTRICT NO. 2	DRAWING NO. 1 OF 13	SCALE 1"=800'	MAPS: 234-40, 235-40, 235-41
					AS-BUILT	7/18/73	

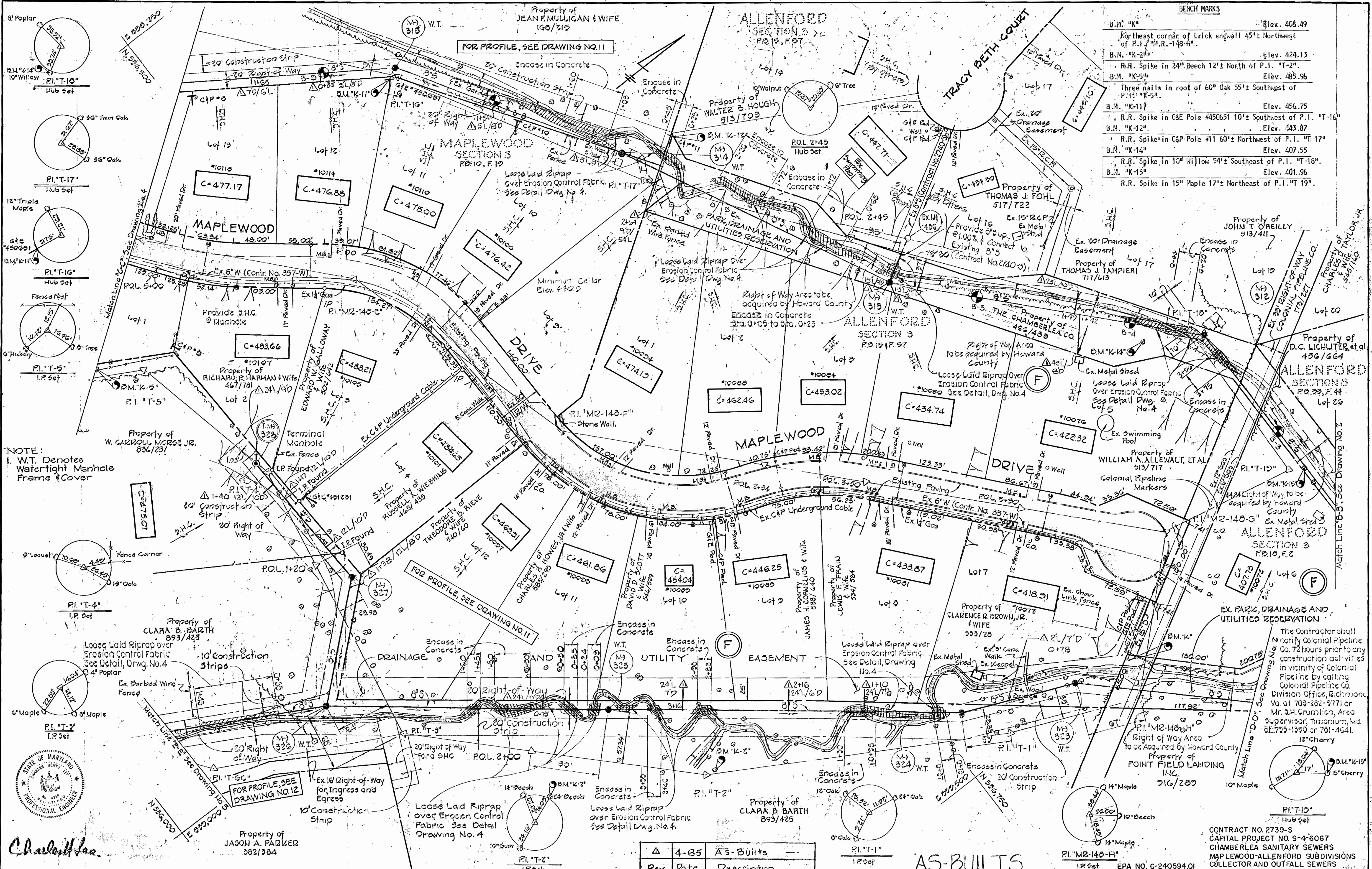


BENCH MARKS

B.M. #18	Elev. 307.03
RR Spike set in 20" Beech 20'± Southwest of P.I. "R-12"	
B.M. #17	Elev. 313.34
RR Spike set in 20" Poplar, 35'± North of P.I. "R-13"	
B.M. #16	Elev. 325.14
RR Spike set in 20" Quad Poplar, 20'± North of P.I. "R-14"	
B.M. #15	Elev. 335.41
RR Spike set in 15" Beech, 15'± East of P.O.L. 3+06.21 between P.I. "R-13" and P.I. "R-15"	
B.M. #14	Elev. 355.94
RR Spike set in 24" Twin Maple, 20'± Southeast of P.I. "MR-137"	
B.M. #13	Elev. 363.32
RR Spike set in 24" Gum, 12'± Northeast of P.I. "MR-138"	
B.M. #12	Elev. 372.73
RR Spike in 15" Walnut 15'± West of P.I. "MR-138-A" = "MR-148-M"	
B.M. #11	Elev. 397.66
RR Spike in roof of 30" Oak 50'± South of P.I. "MR-148-J"	

NOTE:
 1. Construct Sewer Main and Force Main in Common Trench. See Detail Drawing No. 6
 2. W.T. denotes Watertight Manhole, Frame & Cover.

<p>PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND</p>	<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 8-31-77 DIRECTOR OF PUBLIC WORKS DATE</p>	<p>CONTRACT NO. 2739-S CAPITAL PROJECT NO. S-4-6067</p>	<p>PLAN FOR SANITARY SEWERS</p>	<p>CHAMBERLEA SANITARY SEWERS MAPLEWOOD-ALLENFORD SUBDIVISIONS ELECTION DISTRICT NO. 2</p>	<p>DRAWING NO. 2 OF 13</p> <p>SCALE 1" = 50'</p> <p>Designed: REP Drafted: TAW Checked: REP</p>
---	---	--	--	---	---



BENCH MARKS

B.M. "K"	Elev. 406.49
Northeast corner of brick endwall 45'± Northwest of P.I. "T-5"	
B.M. "K-2"	Elev. 424.13
R.R. Spike in 24" Beech 12'± North of P.I. "T-2"	
B.M. "K-5"	Elev. 485.96
Three nails in root of 60" Oak 55'± Southwest of P.I. "T-5"	
B.M. "K-11"	Elev. 456.75
R.R. Spike in 6" Pole #450651 10'± Southwest of P.I. "T-16"	
B.M. "K-12"	Elev. 443.87
R.R. Spike in C&P Pole #11 60'± Northwest of P.I. "T-17"	
B.M. "K-14"	Elev. 407.55
R.R. Spike in 10" Willow 54'± Southeast of P.I. "T-18"	
B.M. "K-15"	Elev. 401.96
R.R. Spike in 15" Maple 17'± Northeast of P.I. "T-19"	

NOTE:
 I. W.T. Denotes Watertight Manhole Frames & Cover



Charaltee

Δ	4-85	A3-Built
Rev.	Date	Description

AS-BUILTS

The Contractor shall notify Colonial Pipeline Co. 72 hours prior to any construction activities in vicinity of Colonial Pipeline by calling Colonial Pipeline Co. Division Office, Richmond, Va. at 703-282-9771 or Mr. J.H. Grumlich, Area Supervisor, Traxionium, Md. at 775-1390 or 701-4641.

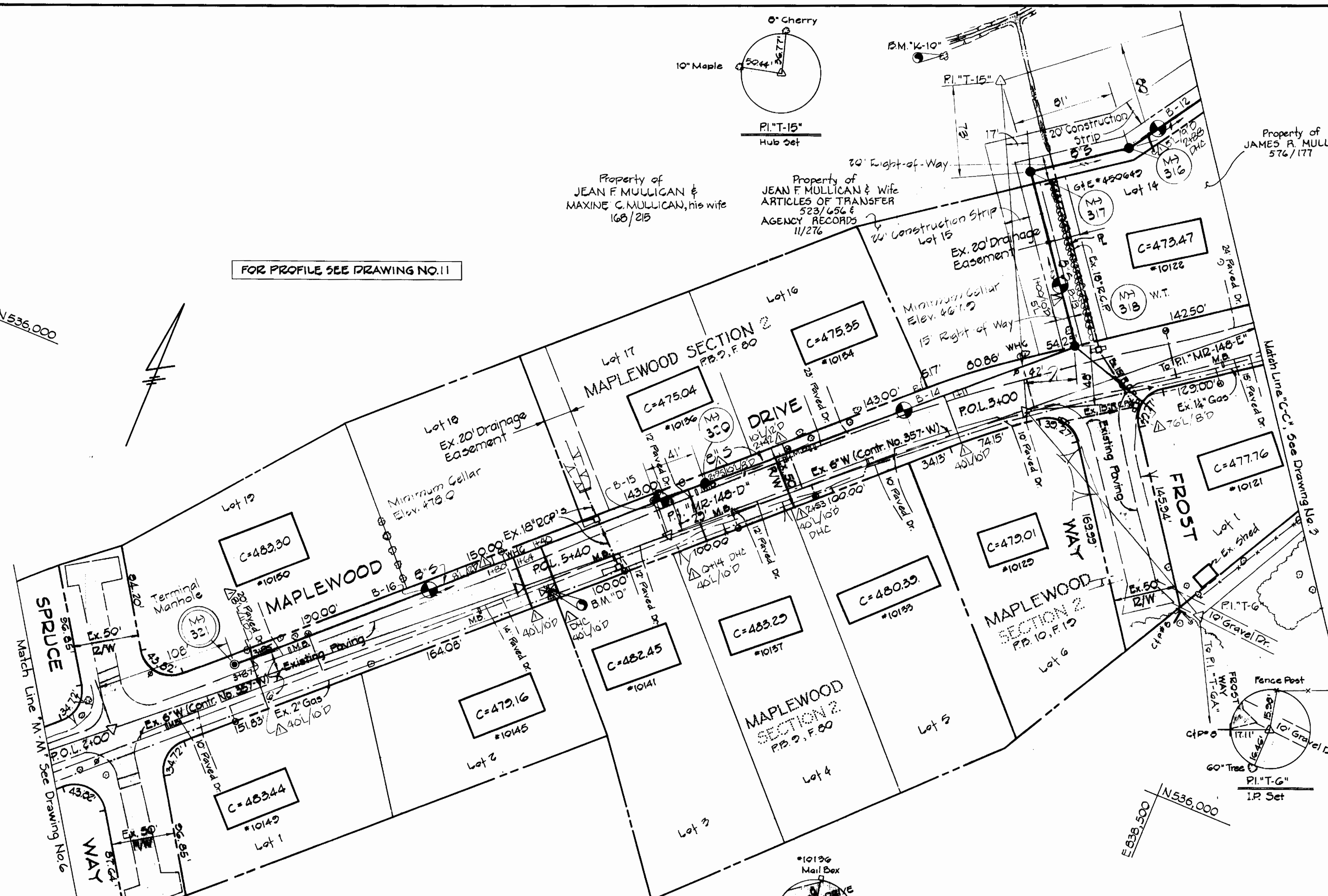
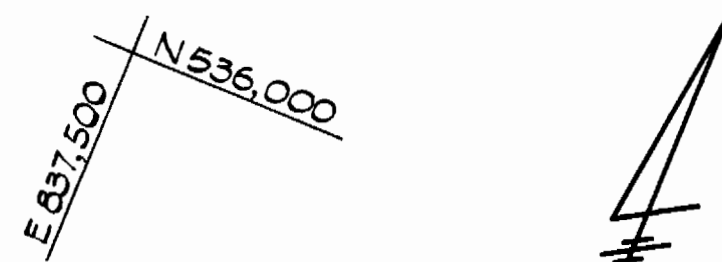
CONTRACT NO. 2739-S
 CAPITAL PROJECT NO. S-4-6067
 CHAMBERLEA SANITARY SEWERS
 MAPLEWOOD-ALLENFORD SUBDIVISIONS
 COLLECTOR AND OUTFALL SEWERS

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 8-31-77 DIRECTOR OF PUBLIC WORKS DATE	CONTRACT NO. 2739-S CAPITAL PROJECT NO. S-4-6067	PLAN FOR SANITARY SEWERS	CHAMBERLEA SANITARY SEWERS MAPLEWOOD-ALLENFORD SUBDIVISIONS ELECTION DISTRICT NO. 2	DRAWING NO. 3 OF 13	SCALE 1" = 50'	Designed: REP & AEL
							Drafted: REC Checked: REP

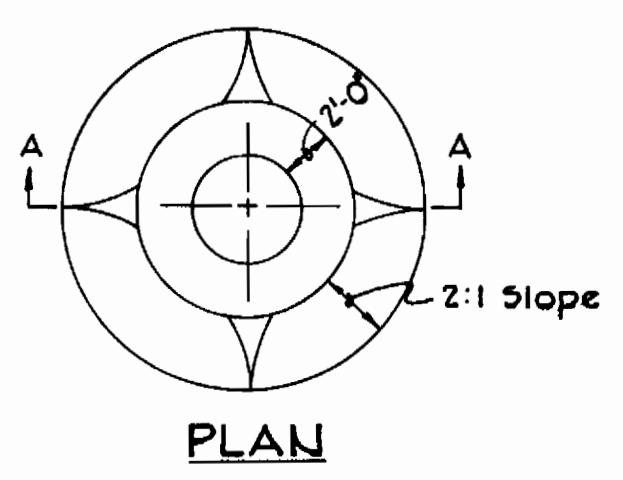
BENCH MARKS

- B.M. "C" Elev. 501.65
Railroad spike set in C & P pole #100 on south-west side of Md. Rte. 99, 35'± northwest of P.I. "MR - 148 - C."
- B.M. "D" Elev. 484.59
Roadside bonnet bolt of fire hydrant on south-east side of Maplewood Drive, 103'± southwest of P.I. "MR - 148 - D."
- B.M. "E" Elev. 475.82
Northwest corner of brick inlet at southeast corner of intersection of Maplewood Drive and Frost Way.
- B.M. "K-10" Elev. 462.63
Railroad spike in 10" Maple 51'± West of P.I. "T-15".

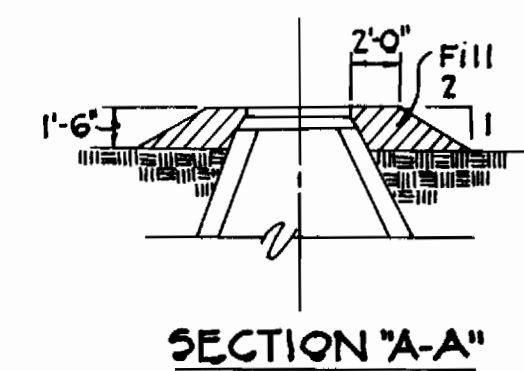
FOR PROFILE SEE DRAWING NO. 11



PLAN
Scale: 1" = 50'

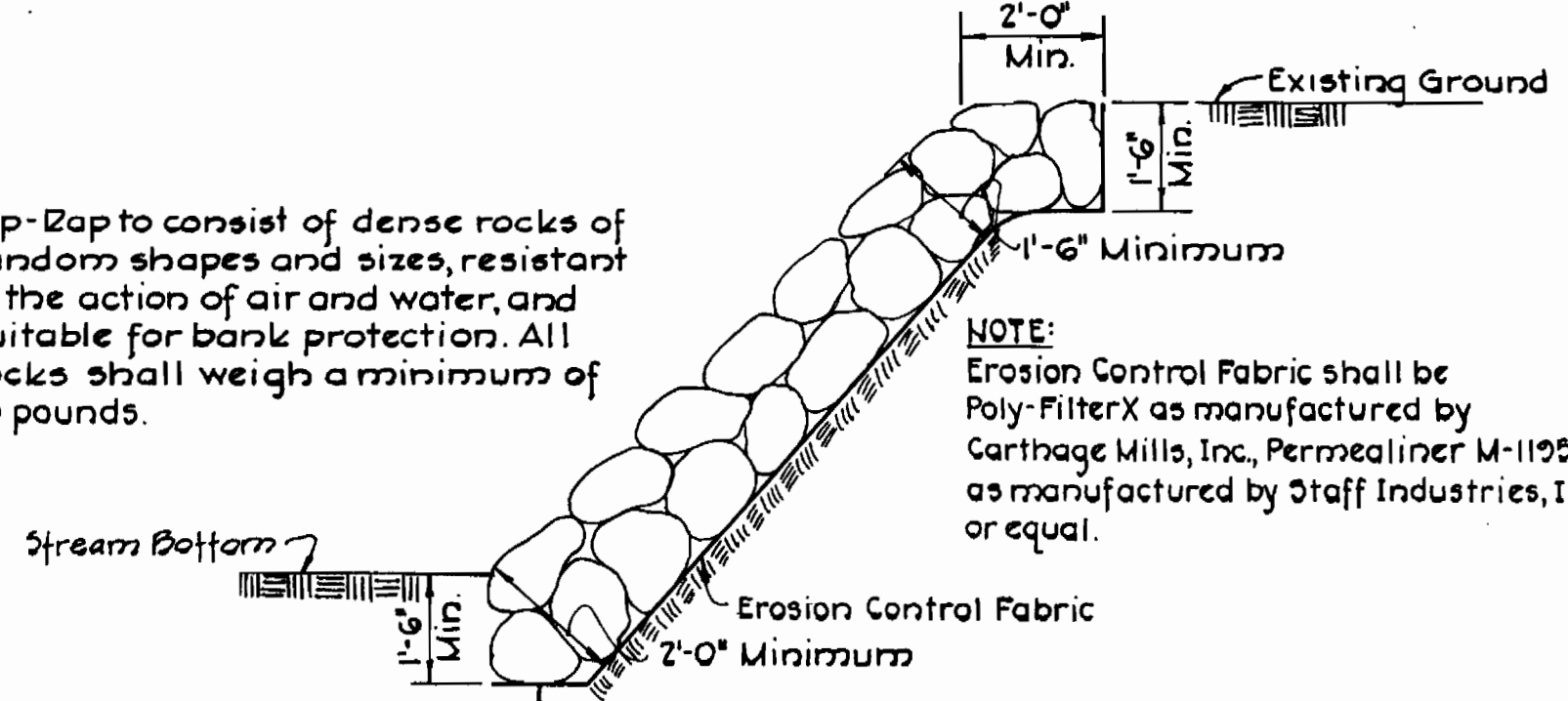


FILL AT MANHOLE
No Scale



SECTION "A-A"

Rip-rap to consist of dense rocks of random shapes and sizes, resistant to the action of air and water, and suitable for bank protection. All rocks shall weigh a minimum of 75 pounds.

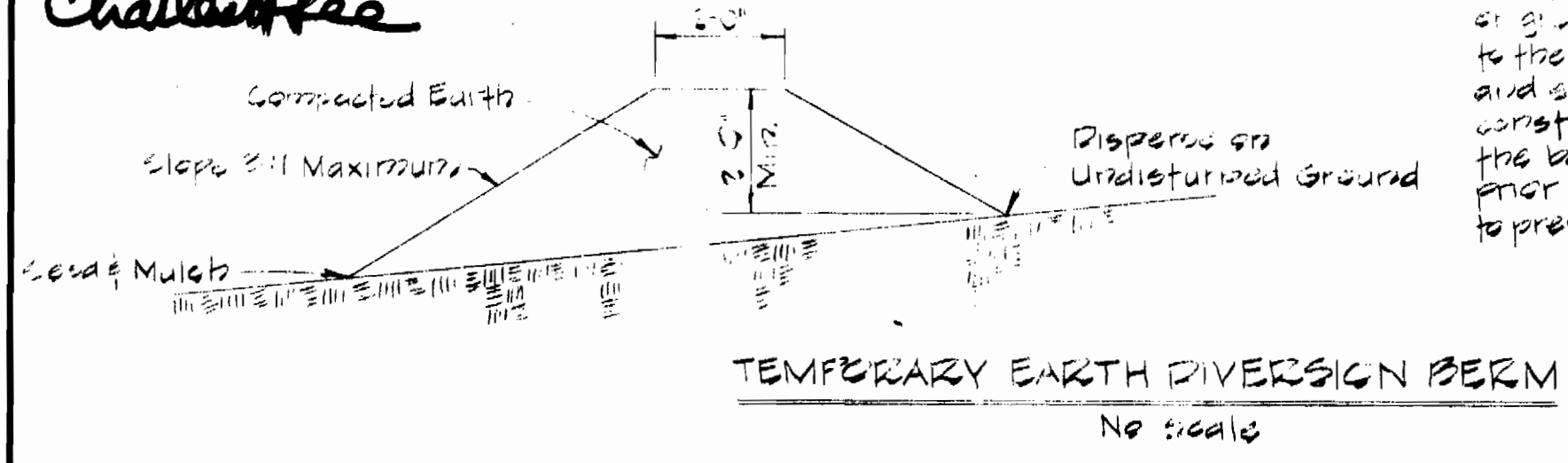


LOOSE LAID RIPRAP DETAIL
Scale: 3/8" = 1'-0"

NOTE:
Erosion Control Fabric shall be Poly-FilterX as manufactured by Carthage Mills, Inc., Permealiner M-1195 as manufactured by Staff Industries, Inc. or equal.



Charlottesville



TEMPORARY EARTH DIVERSION BERM
No Scale

Δ	4-85	As-Builts
Rev.	Date	Description

AS-BUILTS

EPA NO. C-240594.01

CONTRACT NO. 2739-S
CAPITAL PROJECT NO. S-4-6067
CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
COLLECTOR AND OUTFALL SEWERS

PURDUM & JESCHKE
ENGINEERS
1023 N. CALVERT ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
8-31-77
DIRECTOR OF PUBLIC WORKS DATE CHIEF-BUREAU OF ENGINEERING DATE

CONTRACT NO. 739-S
CAPITAL PROJECT NO. S-4-6067

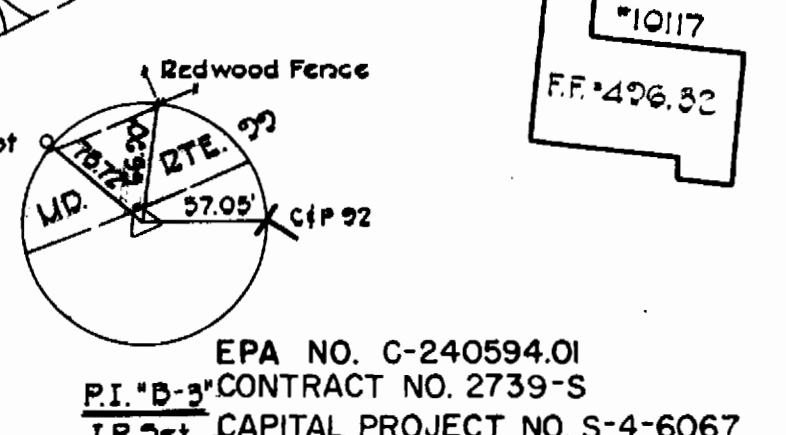
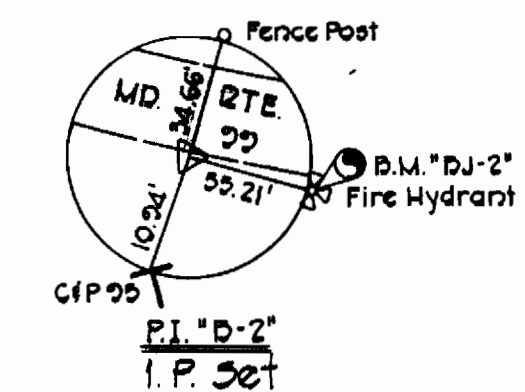
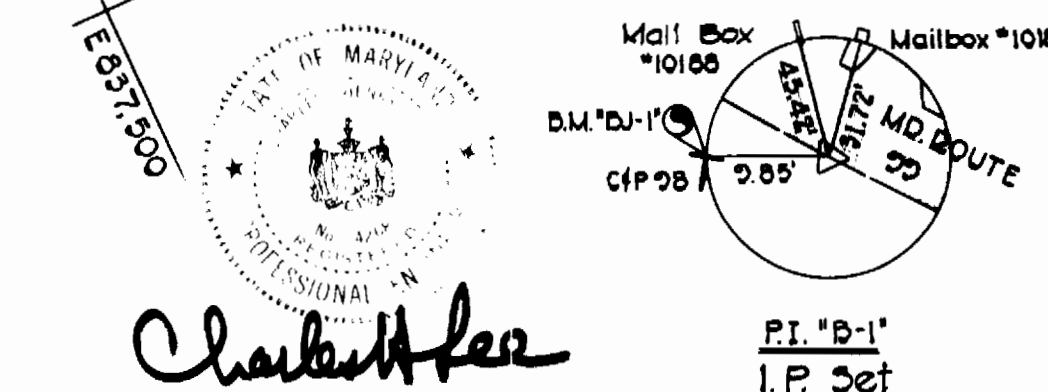
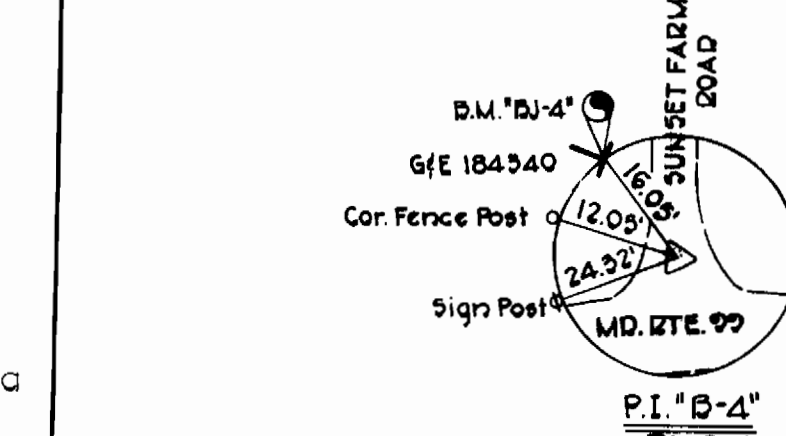
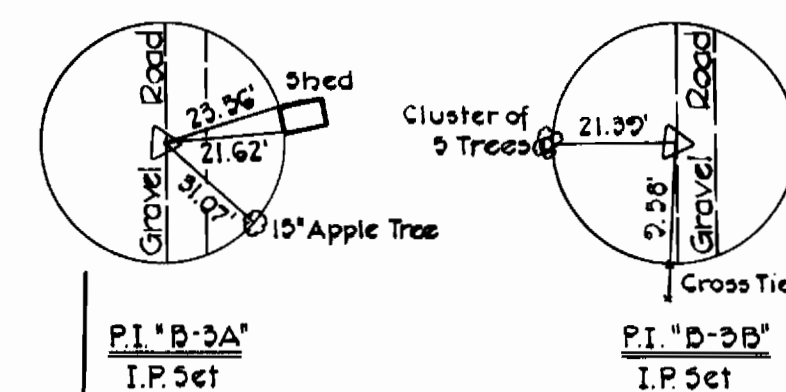
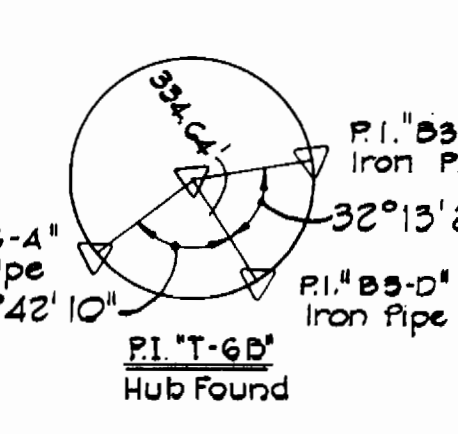
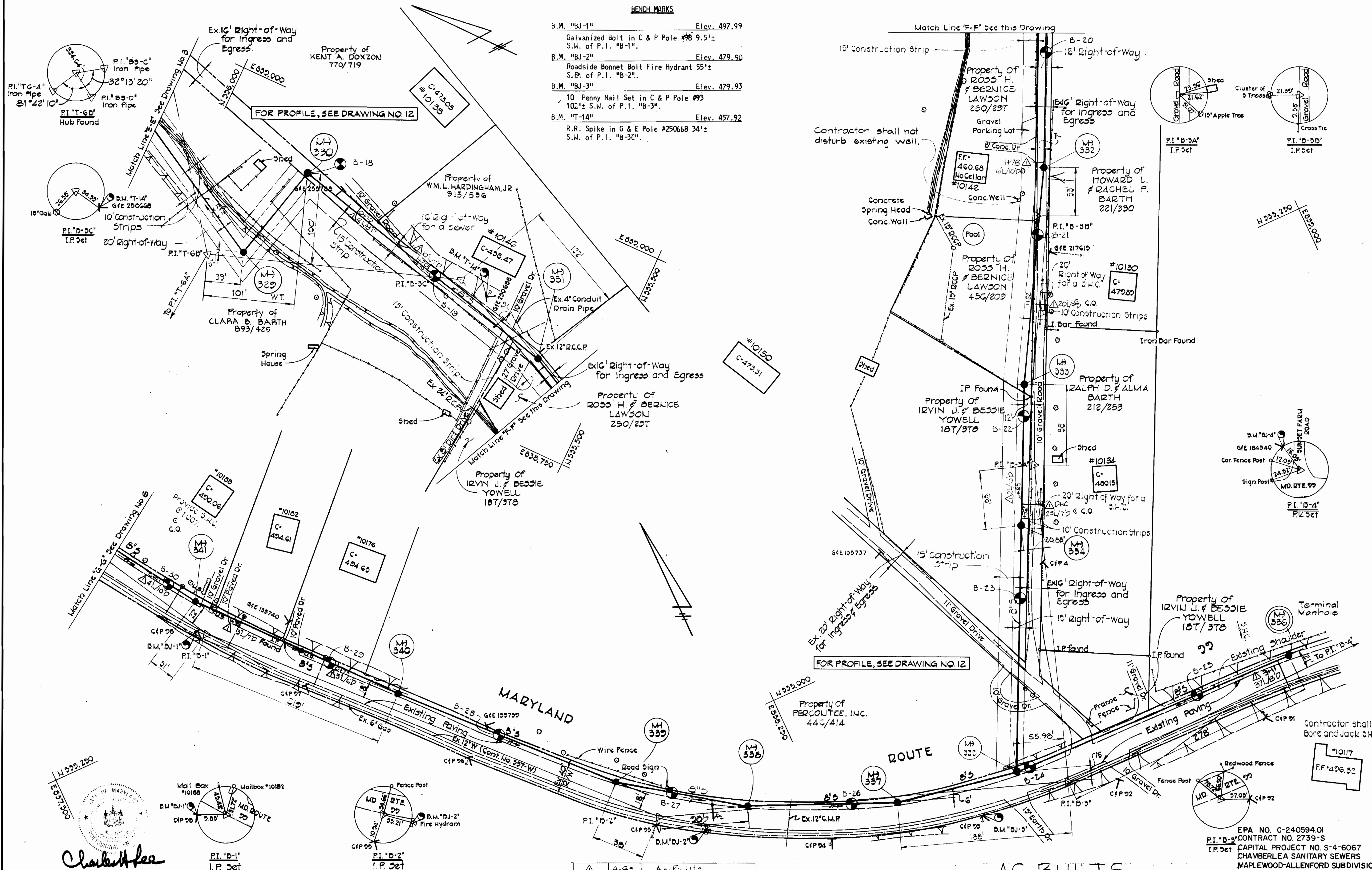
PLAN AND DETAILS
FOR SANITARY SEWERS

CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
ELECTION DISTRICT NO. 2

DRAWING NO. 4	SCALE AS SHOWN	Designed: REP
OF 13		Drafted: TAW
		Checked: REP

BENCH MARKS

- B.M. "BJ-1" Elev. 497.99
Galvanized Bolt in C & P Pole #98 9.5'±
S.W. of P.I. "B-1".
- B.M. "BJ-2" Elev. 479.90
Roadside Bonnet Bolt Fire Hydrant 55'±
S.E. of P.I. "B-2".
- B.M. "BJ-3" Elev. 479.93
10 Penny Nail Set in C & P Pole #93
102'± S.W. of P.I. "B-3".
- B.M. "T-14" Elev. 457.92
R.R. Spike in G & E Pole #250668 34'±
S.W. of P.I. "B-3C".



Rev.	Date	Description
4-85		As-Built

PURDUM & JESCHKE
ENGINEERS
1023 N. CALVERT ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
8-31-77
DIRECTOR OF PUBLIC WORKS DATE CHIEF BUREAU OF ENGINEERING DATE

CONTRACT NO. **2739-S**
CAPITAL PROJECT NO. **S-4-6067**

PLAN FOR
SANITARY SEWERS

CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
ELECTION DISTRICT NO. 2

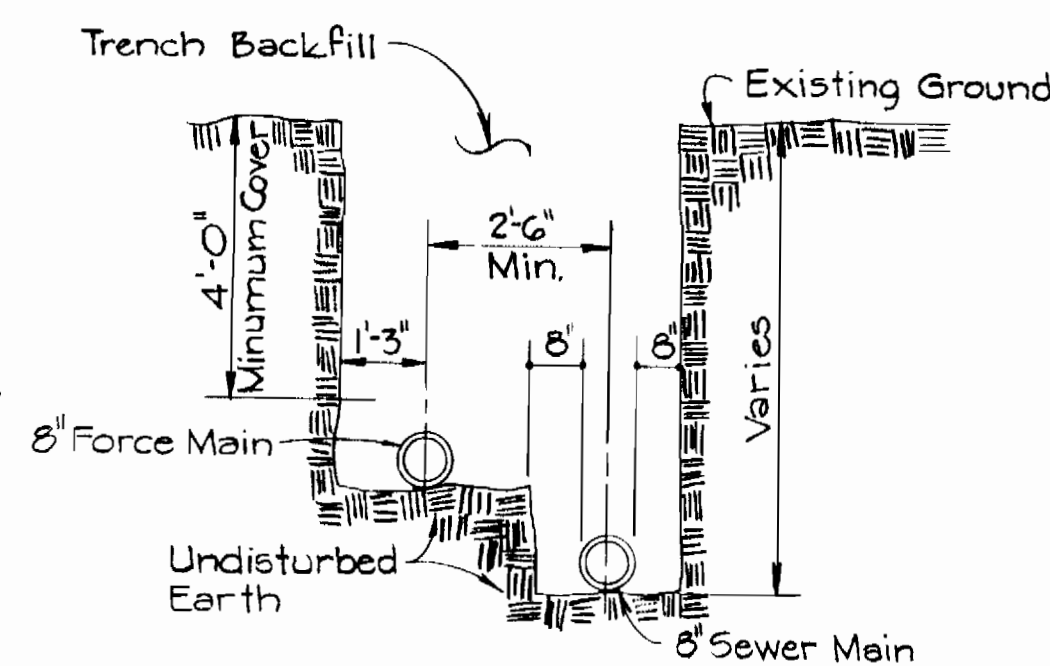
DRAWING NO. **5**
OF **13**
SCALE **1" = 50'**
Designed: TAF
Drafted: ARZ
Checked: REP

BENCH MARKS

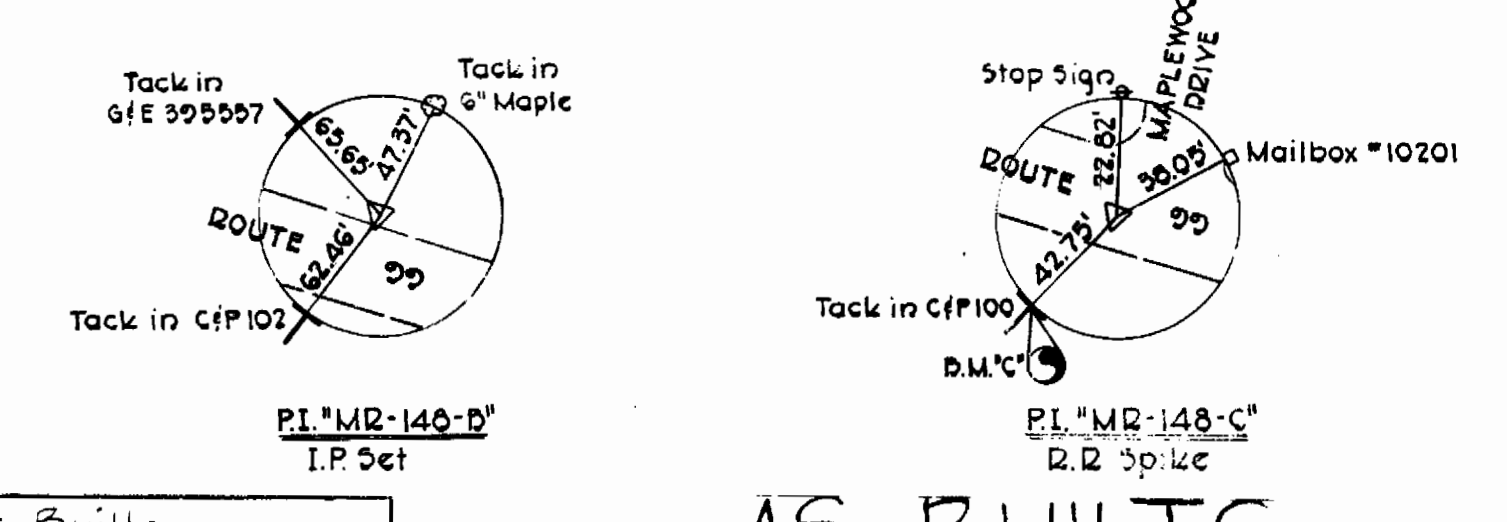
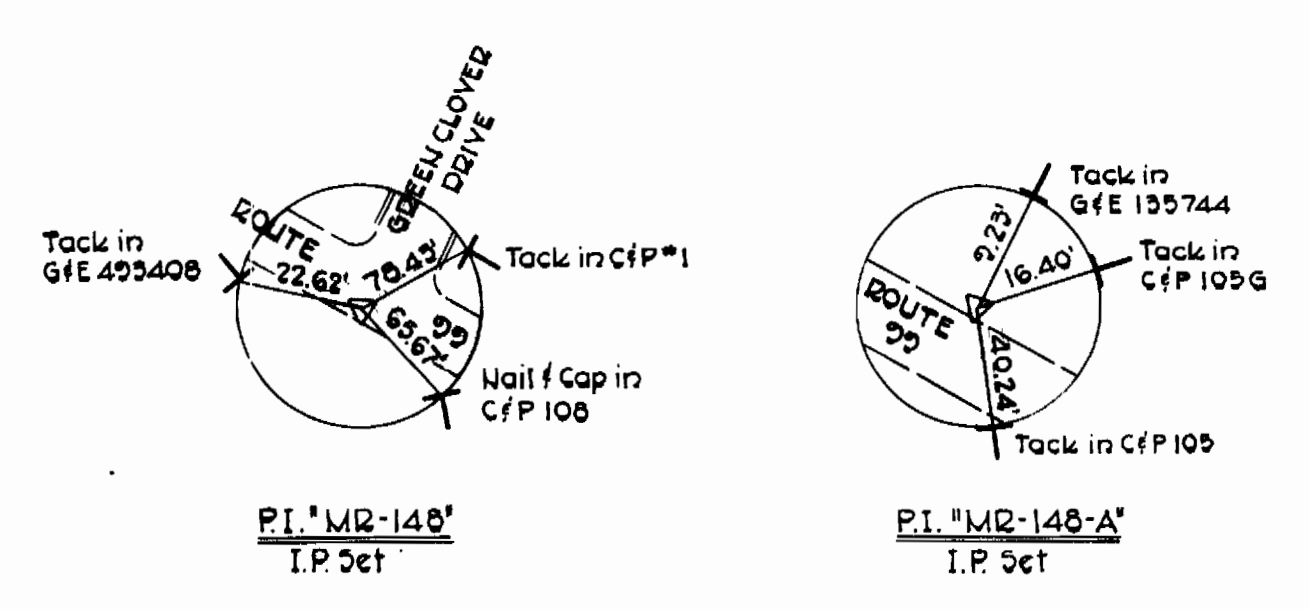
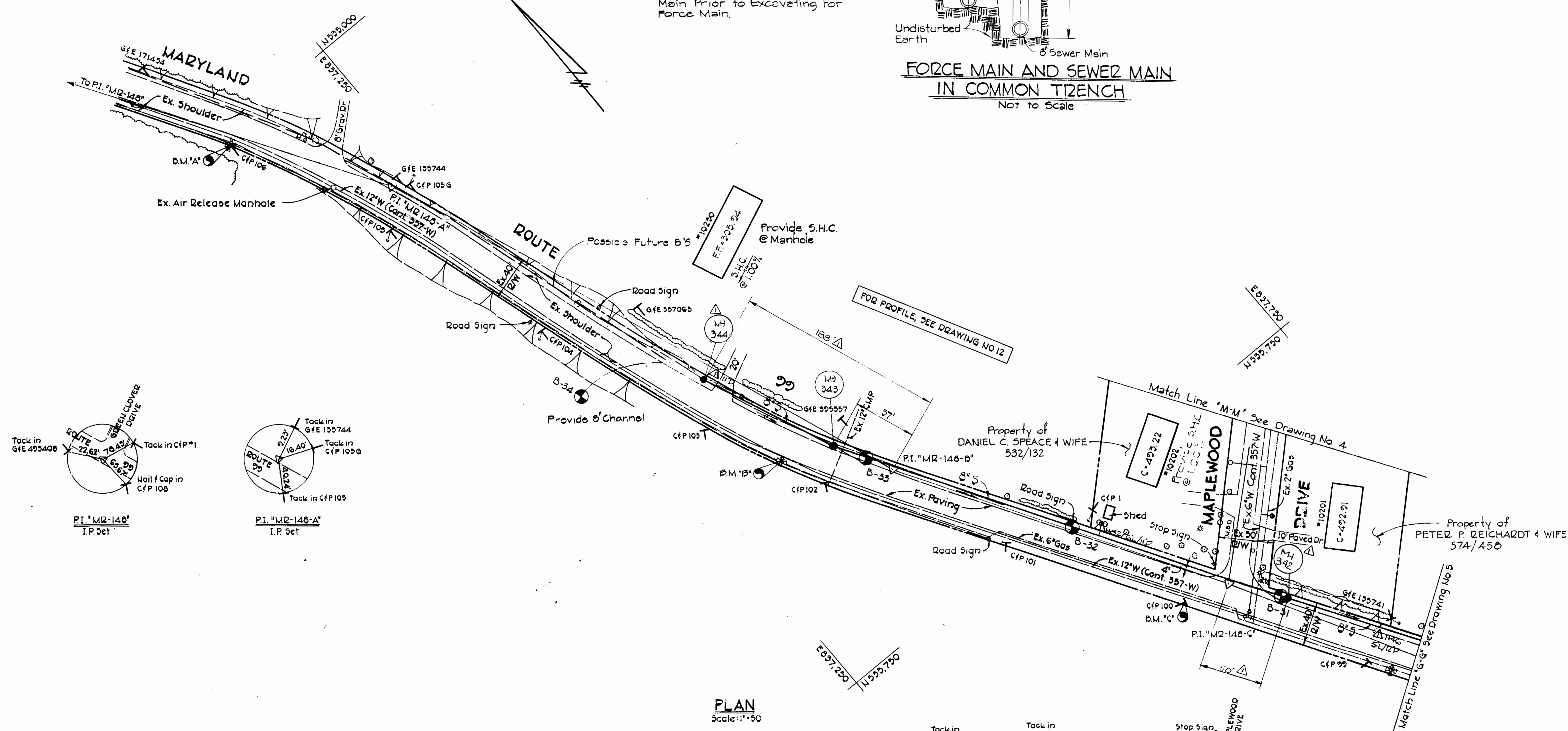
- BM "A" ELEV. 515.84
Roadside bonnet bolt of fire hydrant southside of Route 99 250'± East of Green Clover Drive @ C&P Pole #106.
- BM "B" ELEV. 505.59
Roadside bonnet bolt of fire hydrant' south edge of Route 99 45'± West of C&P Pole #102.
- BM "C" ELEV. 501.65
Railroad Spike in C&P Pole #100 on edge of Route 99 40'± West of P.I. "MR-148-C".

NOTE:

1. Trench shall be Braced or Sheeted as Required
2. Provide Bearing Full Length of Barrel-Dig Bell Moles.
3. Contractor shall Excavate, Install Sewer Main and Backfill Trench to Invert of Force Main Prior to Excavating for Force Main.



FORCE MAIN AND SEWER MAIN IN COMMON TRENCH
NOT TO SCALE



PLAN
Scale: 1"=50'

AS-BUILTS

EPA NO. C-240594.01
CONTRACT NO. 2739-S
CAPITAL PROJECT NO. S-4-6067
CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
COLLECTOR AND OUTFALL SEWERS



PURDUM & JESCHKE
ENGINEERS
1023 N. CALVERT ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE CHIEF-BUREAU OF ENGINEERING DATE

CONTRACT NO. 2739-S
CAPITAL PROJECT NO. S-4-6067

PLAN FOR
SANITARY SEWERS

CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
ELECTION DISTRICT NO. 2

DRAWING NO. 6 OF 13
SCALE 1"=50'
Designed: TAW
Drafted: ARZ
Checked: REP

Rev	Date	Description
4-B5		A-BUILTS

WS 739 S/7

AS-BUILTS

BENCH MARKS

BM "T-20"	ELEV. 426.26
30 penny nail in root of 12" Poplar 23'± Southwest of P.I. "0-4".	
BM "T-21"	ELEV. 413.08
Railroad spike in 12" Oak 10'± Southeast of P.I. "B4-B5".	
BM "T-22"	ELEV. 392.88
30 Penny nail in root of 30" Beech 10'± Northwest of P.I. "JC-6".	
BM "T-23"	ELEV. 376.52
30 penny nail in 10" Triple Oak 20'± Northeast of P.I. "JC-5".	
BM "T-24"	ELEV. 364.40
30 penny nail in root of 18" Poplar 29'± Southwest of P.I. "JC-4".	
BM "T-25"	ELEV. 351.26
30 penny nail in root of 18" Twin Poplar 21'± Southwest of P.I. "JC-2".	

NOTE:
 1. Construct Force Main and Sewer Main in Common Trench. See Detail Drawing No.6
 2. W.T. Denotes Watertight Manhole, Frame & Cover.



PURDUM & JESCHKE
 ENGINEERS
 1023 N. CALVERT ST.
 BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 P. J. Regan
 DIRECTOR OF PUBLIC WORKS

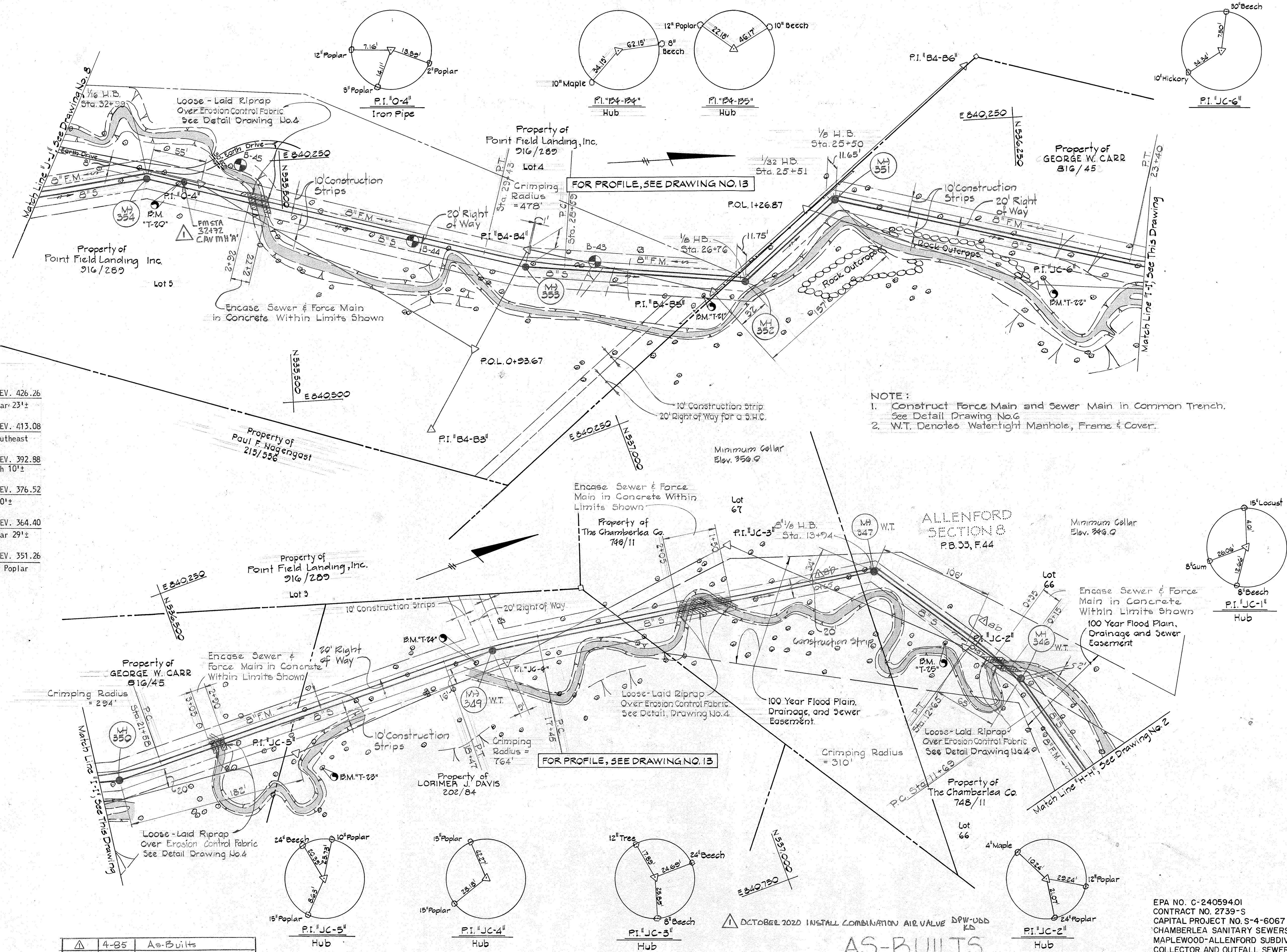
CONTRACT NO. 739-S
 CAPITAL PROJECT NO. S-4-6067

PLAN FOR
 SANITARY SEWERS

CHAMBERLEA SANITARY SEWERS
 MAPLEWOOD-ALLENFORD SUBDIVISIONS
 ELECTION DISTRICT NO. 2

DRAWING NO. 7 OF 13
 SCALE 1"=50'
 Designed: EDC
 Drafted: REC
 Checked: REP

Rev.	Date	Description
1	4-85	As-Builts

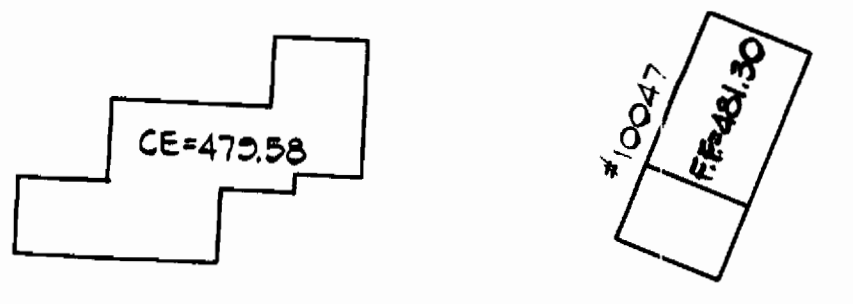


Invert of Sewer Main higher than first floor elevation. Sewer service not provided to home.

C.E. 464.01

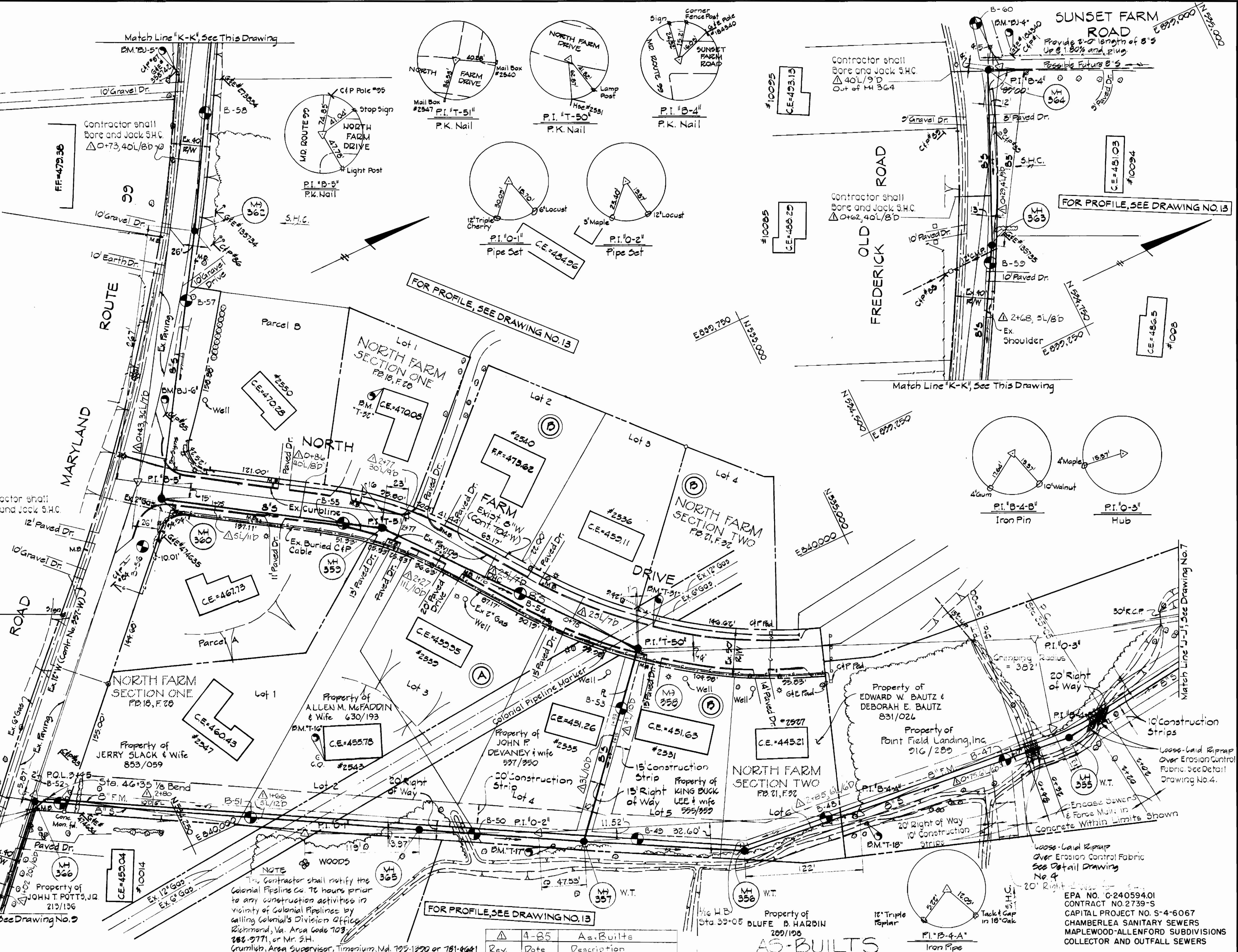
BENCH MARKS

BM "BJ-4"	ELEV. 485.96
Railroad Spike found in G&E Pole #184340 16'± Northeast of P.I. "B-4"	
BM "BJ-5"	ELEV. 481.19
2-10 Penny Nails set in C&P Pole #87362± Southeast of P.I. "B-4"	
BM "T-32"	ELEV. 476.74
Southwest corner of patio, rear, North end of house #2546.	
BM "T-31"	ELEV. 460.68
P.K. set top west curb, North Farm Drive, 31'± Northwest of P.I. "T-50"	
BM "T-16"	ELEV. 462.63
Southeast corner of concrete pad rear house #2543, 75'± Northwest of P.I. "O-1"	
BM "T-17"	ELEV. 444.91
30 Penny Nail in root 12" Locust 21'± Northeast of P.I. "O-2"	
BM "T-18"	ELEV. 437.00
30 Penny Nail in root of 18" Oak 1'± Northeast of P.I. "B-4-A"	
BM "T-19"	ELEV. 431.95
30 Penny Nail in root of 10" Twin Walnut 20'± Northeast of P.I. "B-4-B"	



Barn

Charles Lee



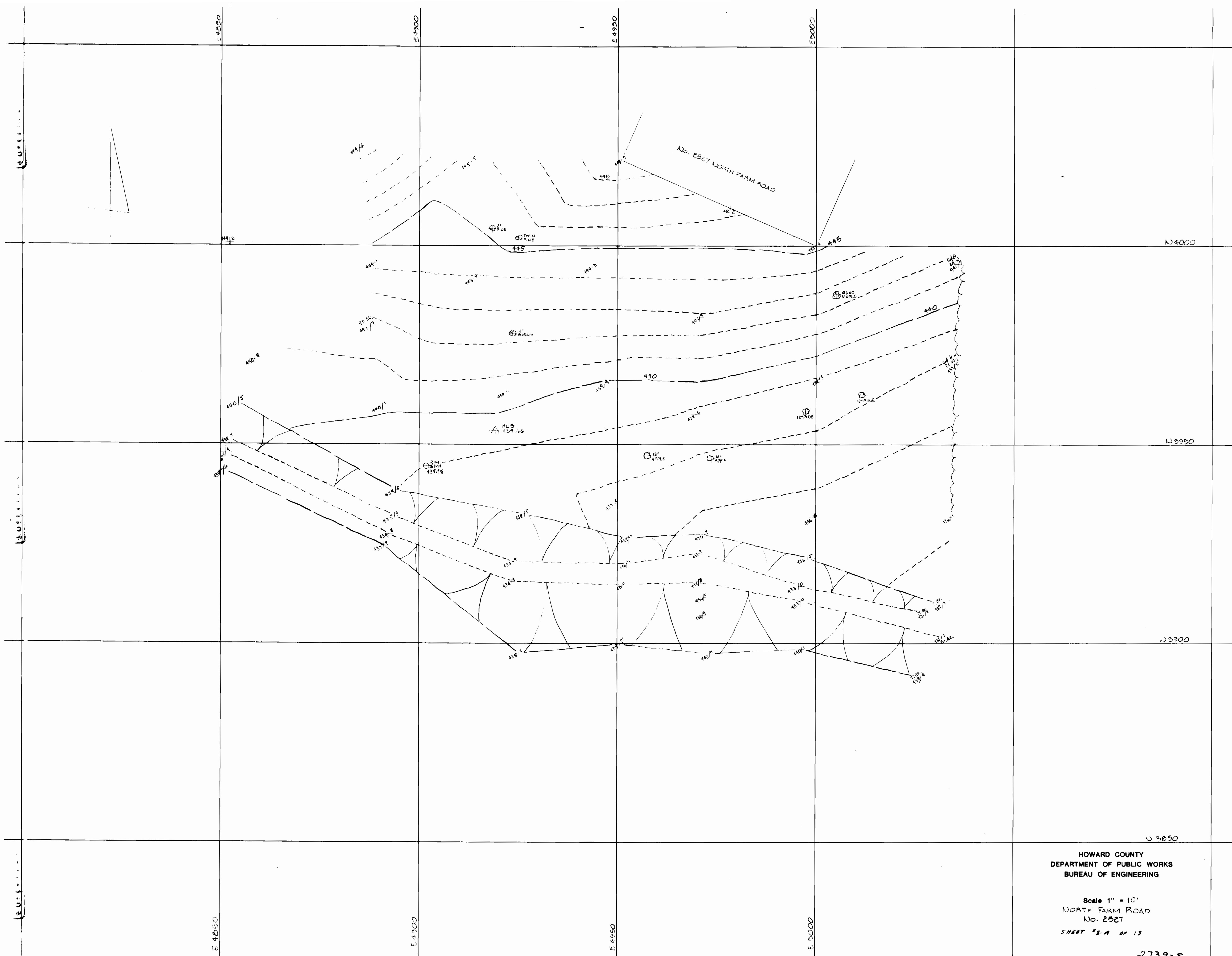
NOTE
The Contractor shall notify the Colonial Pipeline Co. 72 hours prior to any construction activities in vicinity of Colonial Pipelines by calling Colonial's Division Office, Richmond, Va. Area Code 703-386-9771, or Mr. S.H. Grumlich, Area Supervisor, Timonium, Md. 793-1390 or 781-4641

Rev	Date	Description
1	4-85	As-Builts

EPA No. G-240594.01
CONTRACT NO. 2739-S
CAPITAL PROJECT NO. S-4-6067
CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
COLLECTOR AND OUTFALL SEWERS

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 8-31-77 DIRECTOR OF PUBLIC WORKS DATE	CONTRACT NO. 2739-S CAPITAL PROJECT NO. S-4-6067	PLAN FOR SANITARY SEWERS	CHAMBERLEA SANITARY SEWERS MAPLEWOOD-ALLENFORD SUBDIVISIONS ELECTION DISTRICT NO. 2	DRAWING NO. 8 OF 13	SCALE 1" = 50' Designed: EDC Drafted: TAW Checked: REP

WS 739 S/8-A



HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

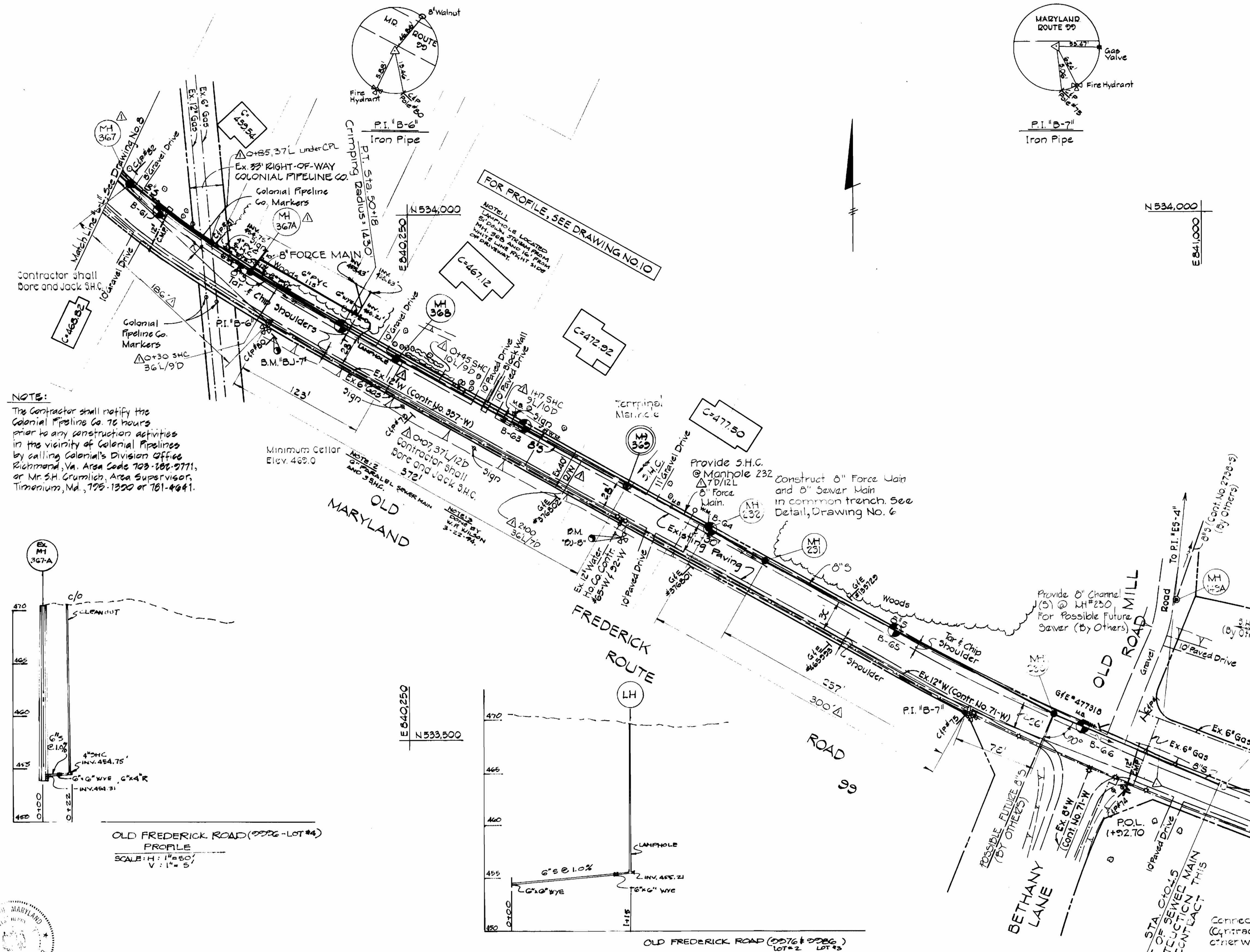
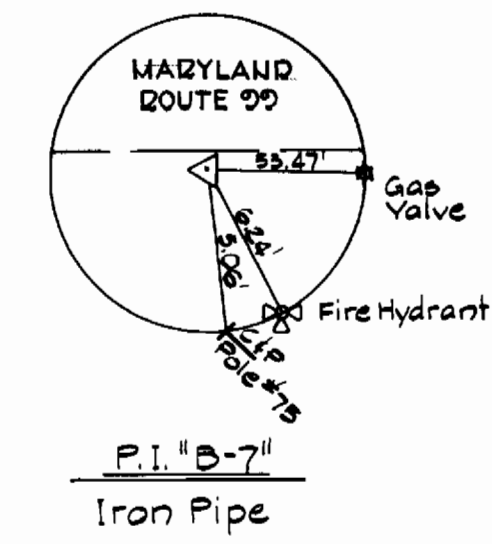
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NORTH FARM ROAD
No. 2527

SHEET "8-A" OF 13

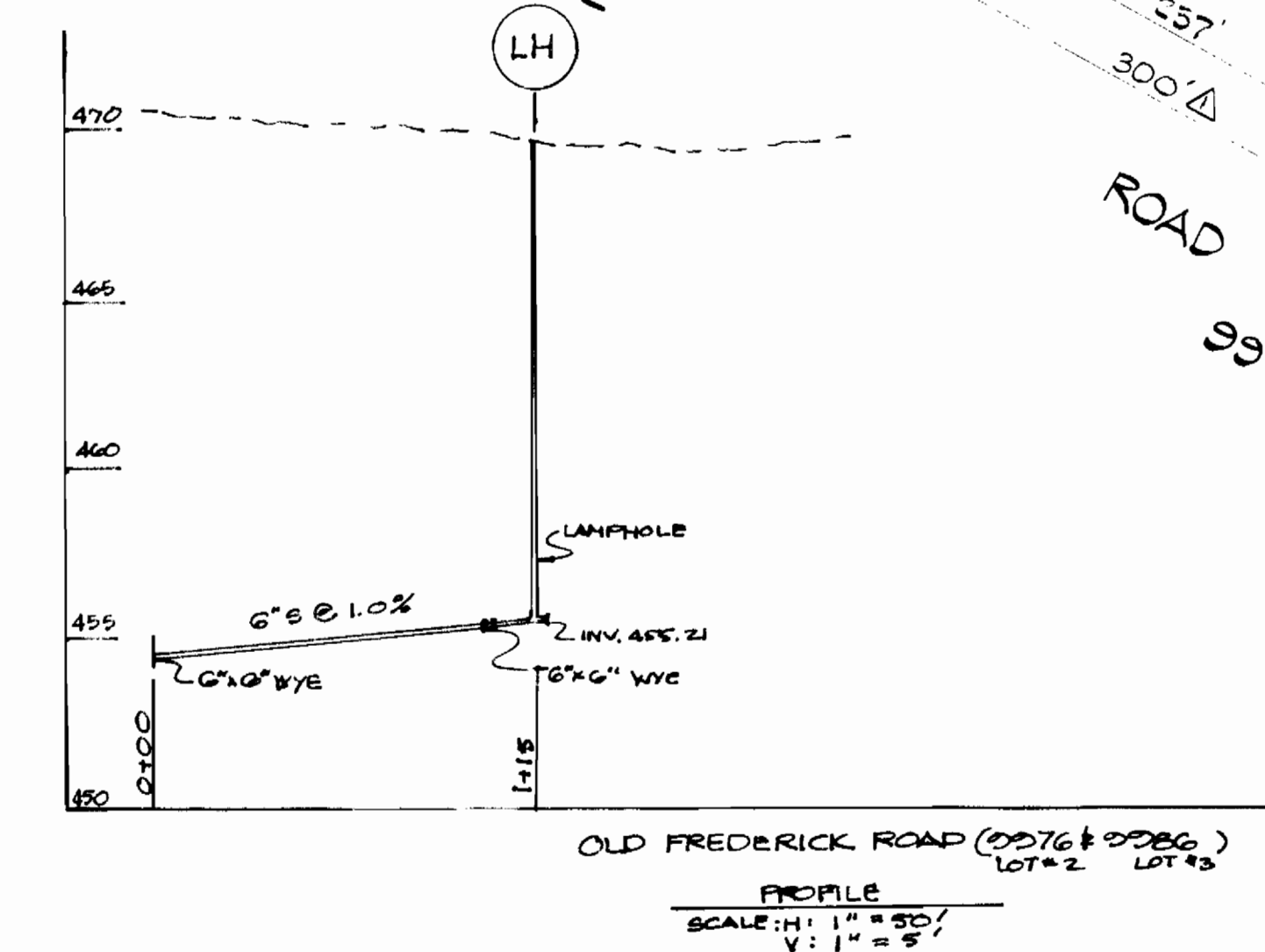
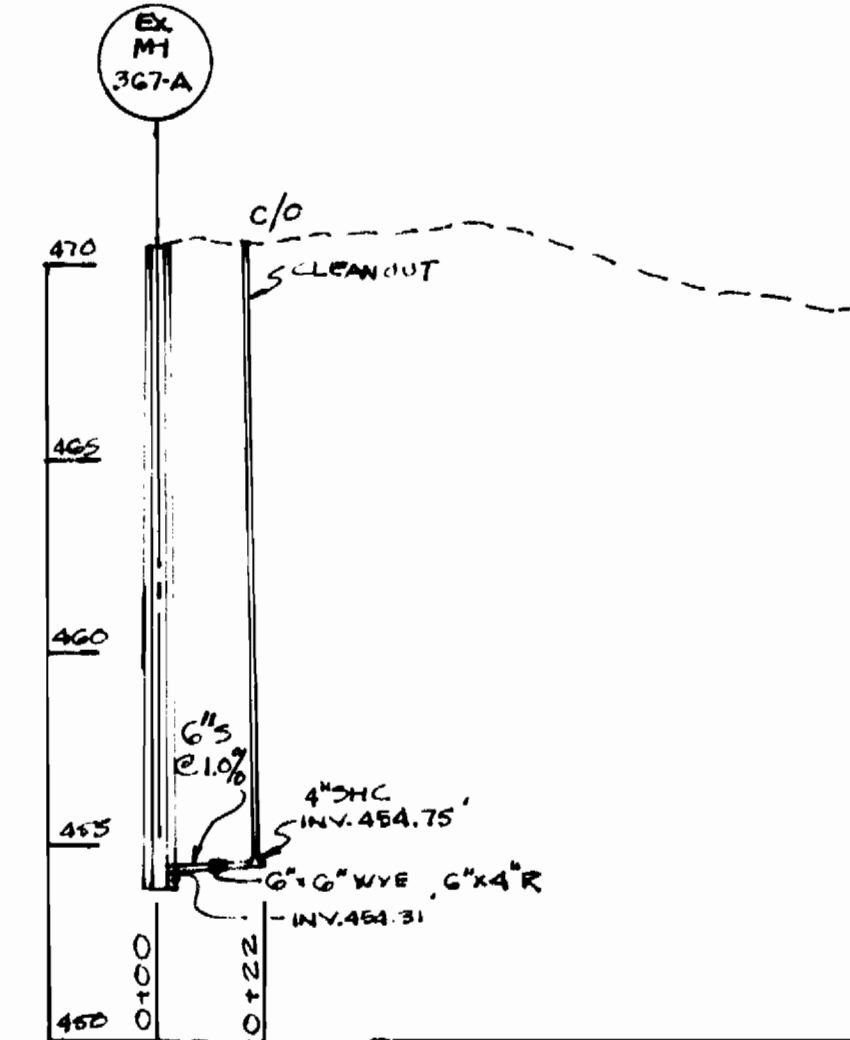
2739-S

BENCH MARKS

BM "BJ-7" ELEV. 472.96
Galvanized Bolt set in C & P Pole #80 13.5'± Southeast of P.I. "B-6",
BM "BJ-8" ELEV. 483.169
Roadside Bonnet Bolt on fire hydrant southside of Route 99 and 390'± East of P.I. "B-6".



NOTE:
The Contractor shall notify the Colonial Pipeline Co. 72 hours prior to any construction activities in the vicinity of Colonial Pipelines by calling Colonial's Division Office, Richmond, Va., Area Code 703-201-9771, or Mr. S.H. Grumlich, Area Supervisor, Timonium, Md., 725-1320 or 761-4641.



Professional Engineer
Charles Lee

REV.	DATE	DESCRIPTION	REV.	DATE	DESCRIPTION
2	5/26/24	AS-BUILT - 6" SAN. SEWER EXTENSION - OLD FREDERICK RD. (4976, 4986, 4996).	4-85		As-Built

PURDUM & JESCHKE
ENGINEERS
1023 N. CALVERT ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
8-31-77
DIRECTOR OF PUBLIC WORKS

CONTRACT NO. 739-S
CAPITAL PROJECT NO. S-4-6067

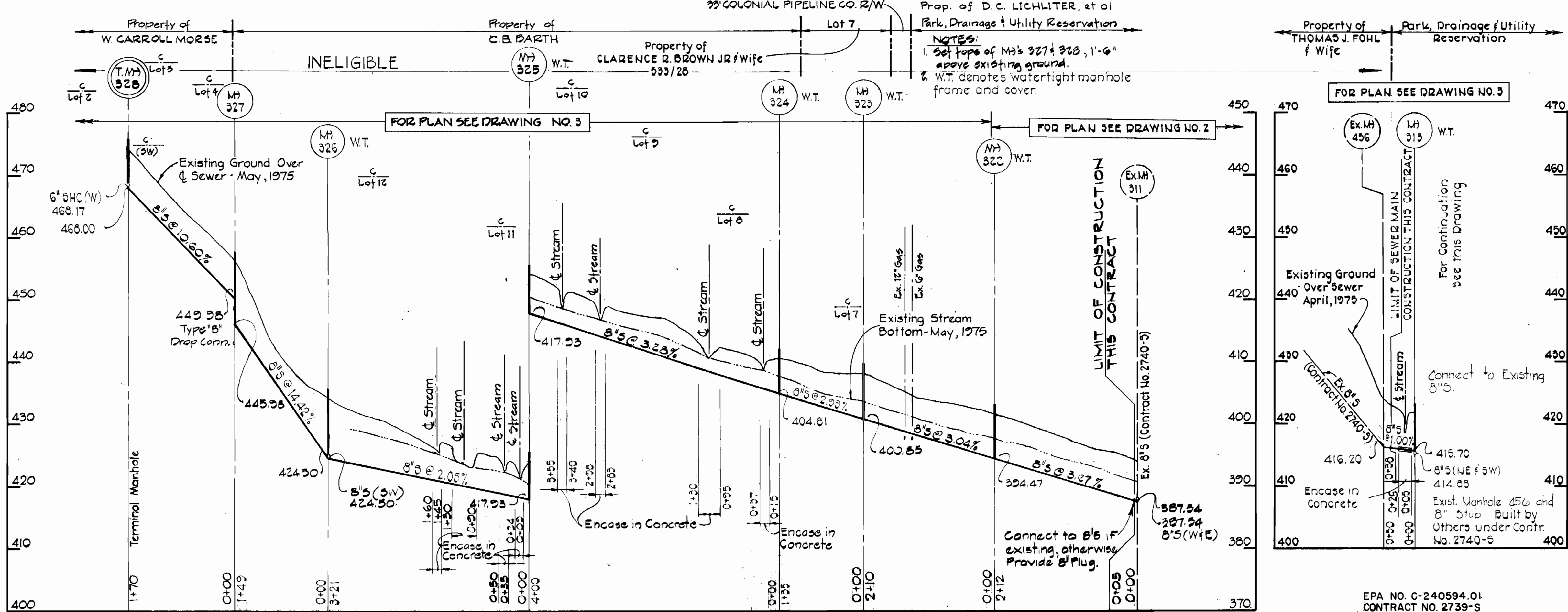
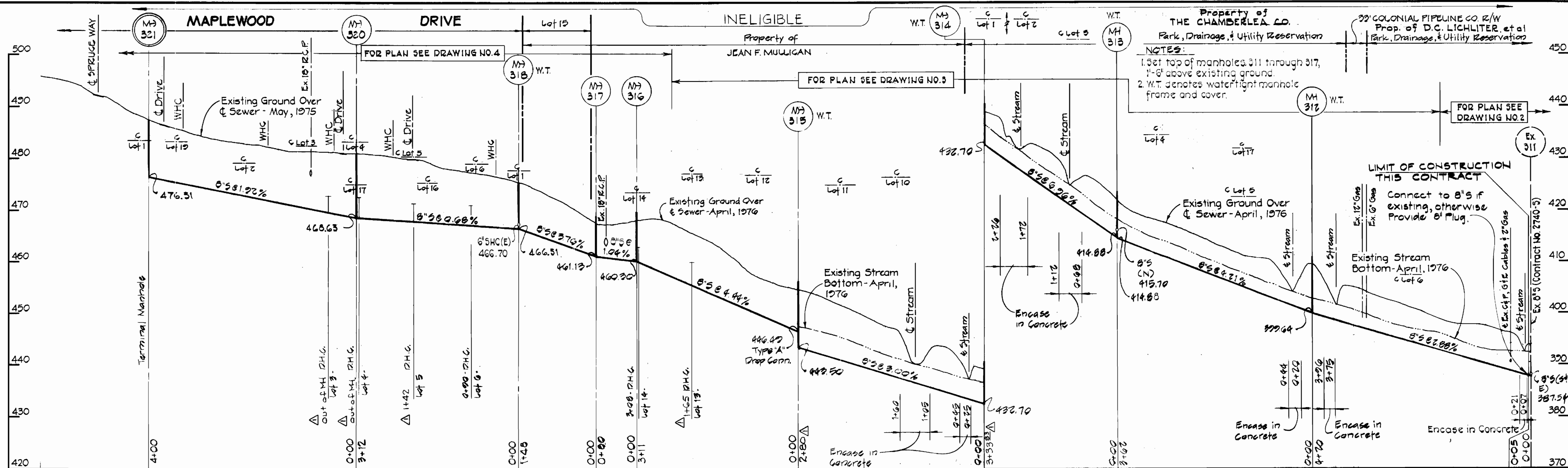
PLAN FOR
SANITARY SEWERS

CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
ELECTION DISTRICT NO. 2

DRAWING NO. 9 OF 13
SCALE 1"=50'
Designed: EDC
Drafted: REC
Checked: REP

AS-BUILTS

EPA NO. C-240594.01
CONTRACT NO. 2739-S
CAPITAL PROJECT NO. S-4-6067
CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
COLLECTOR AND OUTFALL SEWERS



Charles Lee

Rev	Date	Description
Δ 4-85	As-Built	

AS-BUILTS

PURDUM & JESCHKE
ENGINEERS
1023 N. CALVERT ST.
BALTIMORE, MARYLAND

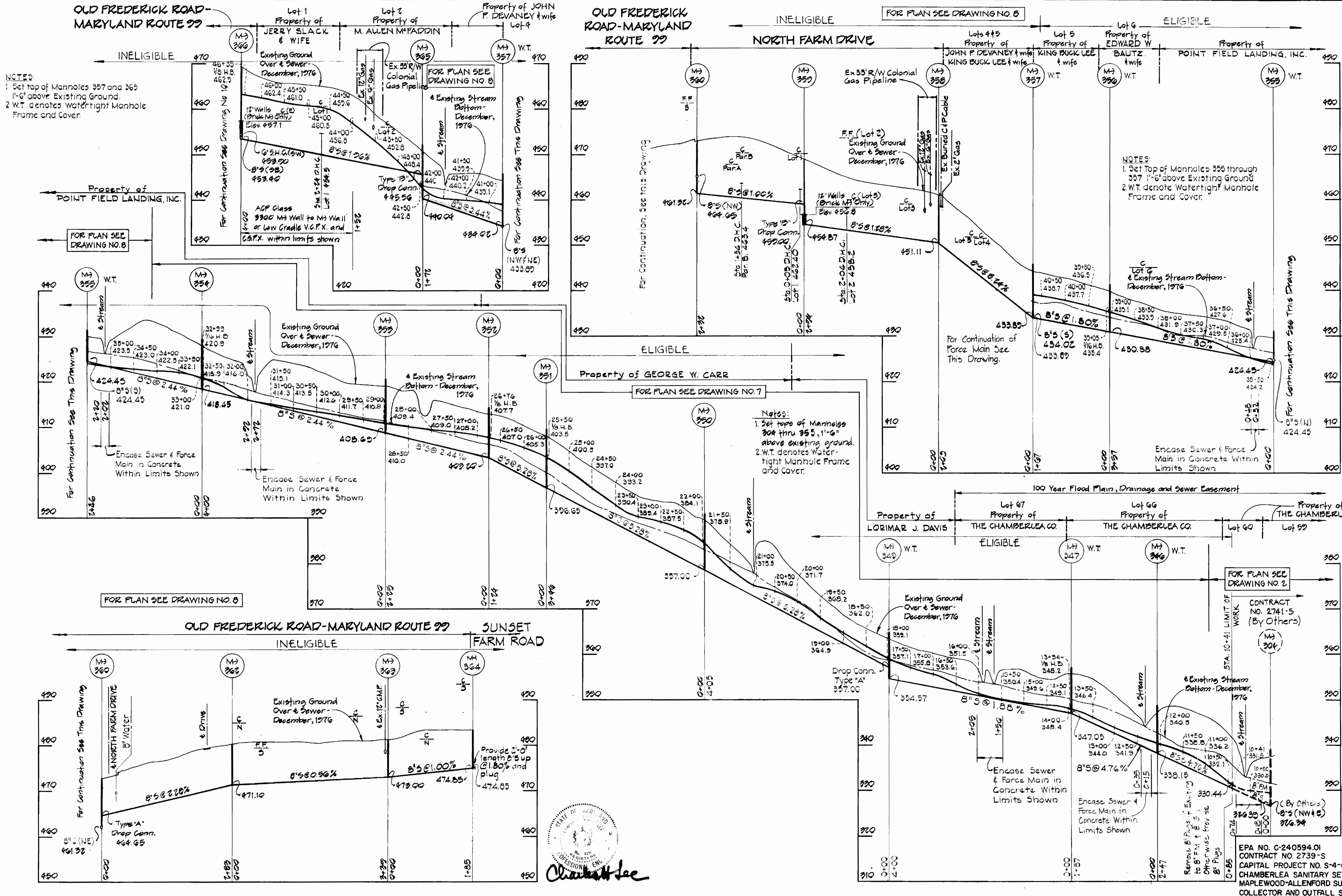
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
8-31-77
DATE: 8-31-77
DATE: 8-31-77

CONTRACT NO. 739-S
CAPITAL PROJECT NO. S-4-6067

PROFILES FOR
SANITARY SEWERS

CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
ELECTION DISTRICT NO. 2

DRAWING NO. 11 OF 13
SCALE: HORIZONTAL 1"=100' VERTICAL 1"=10'
Designed: REP
Drafted: REC
Checked: REP



PURDUM & JESCHKE
 ENGINEERS
 1023 N. CALVERT ST.
 BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 8-31-77
 DATE

CONTRACT NO. 2739-S
CAPITAL PROJECT NO. S-4-6067

PROFILES FOR
SANITARY SEWERS

CHAMBERLEA SANITARY SEWERS
MAPLEWOOD-ALLENFORD SUBDIVISIONS
ELECTION DISTRICT NO. 2

DRAWING NO. 13 OF 13
SCALE: HOR. 1"=100' VERT. 1"=10'
 Designed: REP
 Drafted: REC
 Checked: REP