

CONTRACT NO. 542-S
SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

QUANTITIES		
ITEM	QUANTITY	AS-BUILT
8" Sewer	12,900 L.F.	12,262 L.F.
12" Sewer	230 L.F.	226 L.F.
14" Sewer	680 L.F.	677 L.F.
15" Sewer	230 L.F.	231 L.F.

AS BUILT
 Stakeout F.B.# 5905
 Diary F.B.# 5904 + 5925



Thomas J. M. [Signature]
 Autumn Hill
 Project No. SP 6038
 Contract No. 542-S

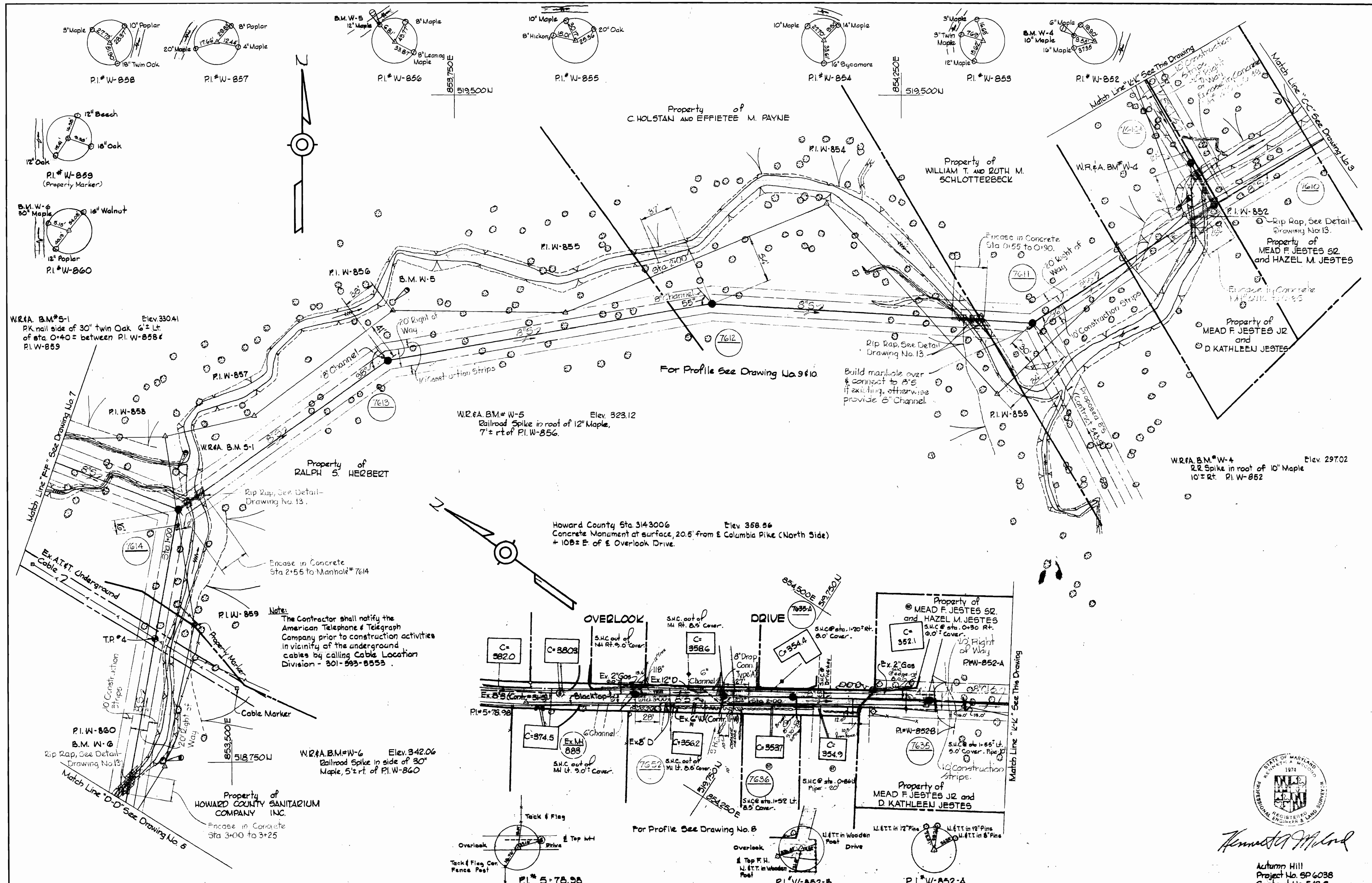
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 11-30-77 CHIEF BUREAU OF ENGINEERING	CONTRACT NO. 542-S	LOCATION MAP	ELECTION DISTRICT ELLICOTT CITY NO.2	DRAWING NO. 1 OF 13 SCALE 1" = 600'
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W. O. 6601-2

AS BUILT October 11, 1977

WS 542-S/1

EDINBURG, MARYLAND



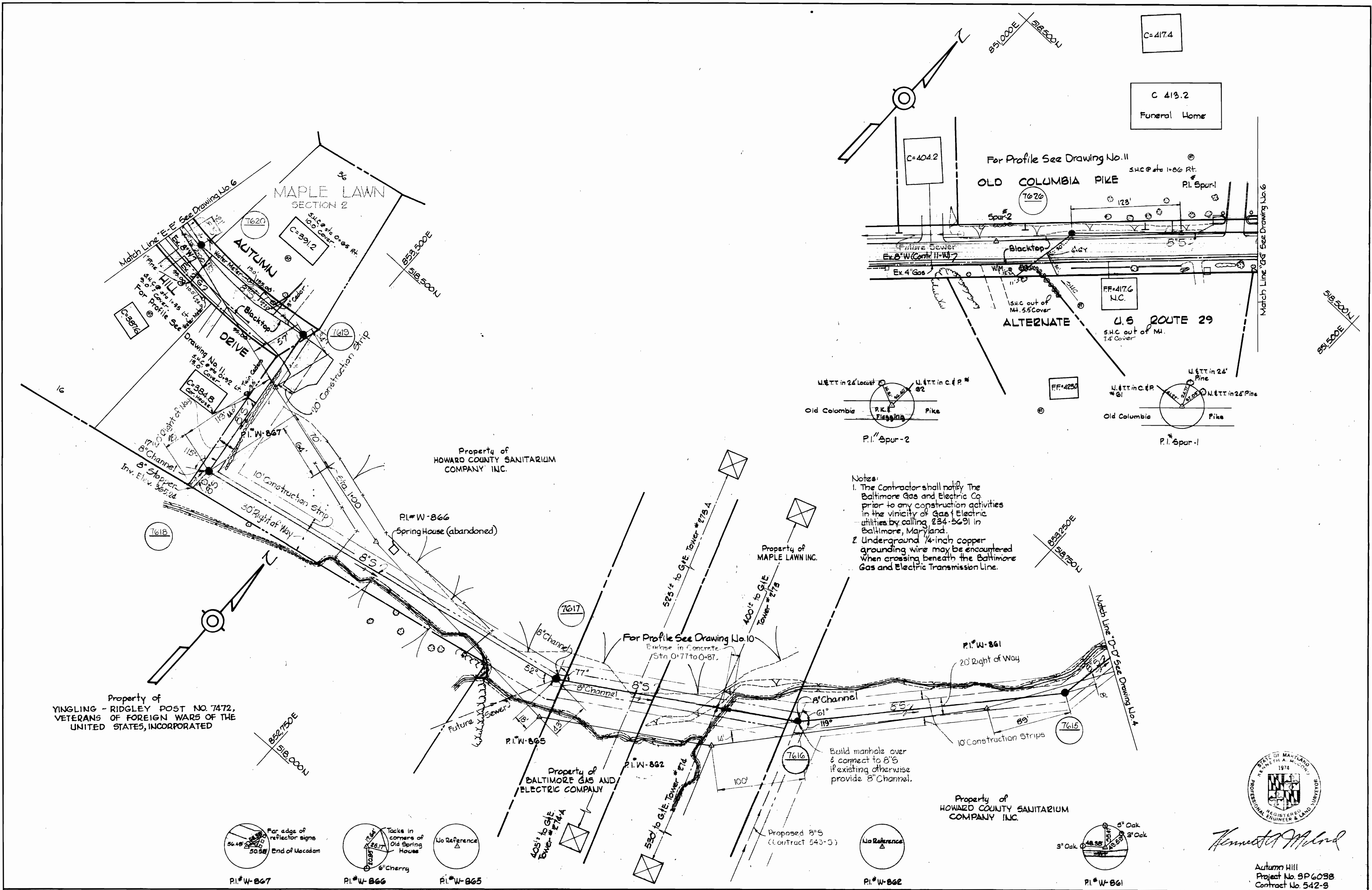
Note:
The Contractor shall notify the American Telephone & Telegraph Company prior to construction activities in vicinity of the underground cables by calling Cable Location Division - 301-593-8553.



Herbert A. Milrod

Autumn Hill
Project No. 89-6038
Contract No. 542-S

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 11-3073 DATE	CONTRACT NO. 542-S	PLAN OF SEWER MAINS	ELECTION DISTRICT ELLICOTT CITY NO. 2	DRAWING NO. 4 OF 12 SCALE 1"=50'
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- Notes:
1. The Contractor shall notify The Baltimore Gas and Electric Co prior to any construction activities in the vicinity of Gas & Electric utilities by calling 234-5691 in Baltimore, Maryland.
 2. Underground 1/4-inch copper grounding wire may be encountered when crossing beneath the Baltimore Gas and Electric Transmission Line.

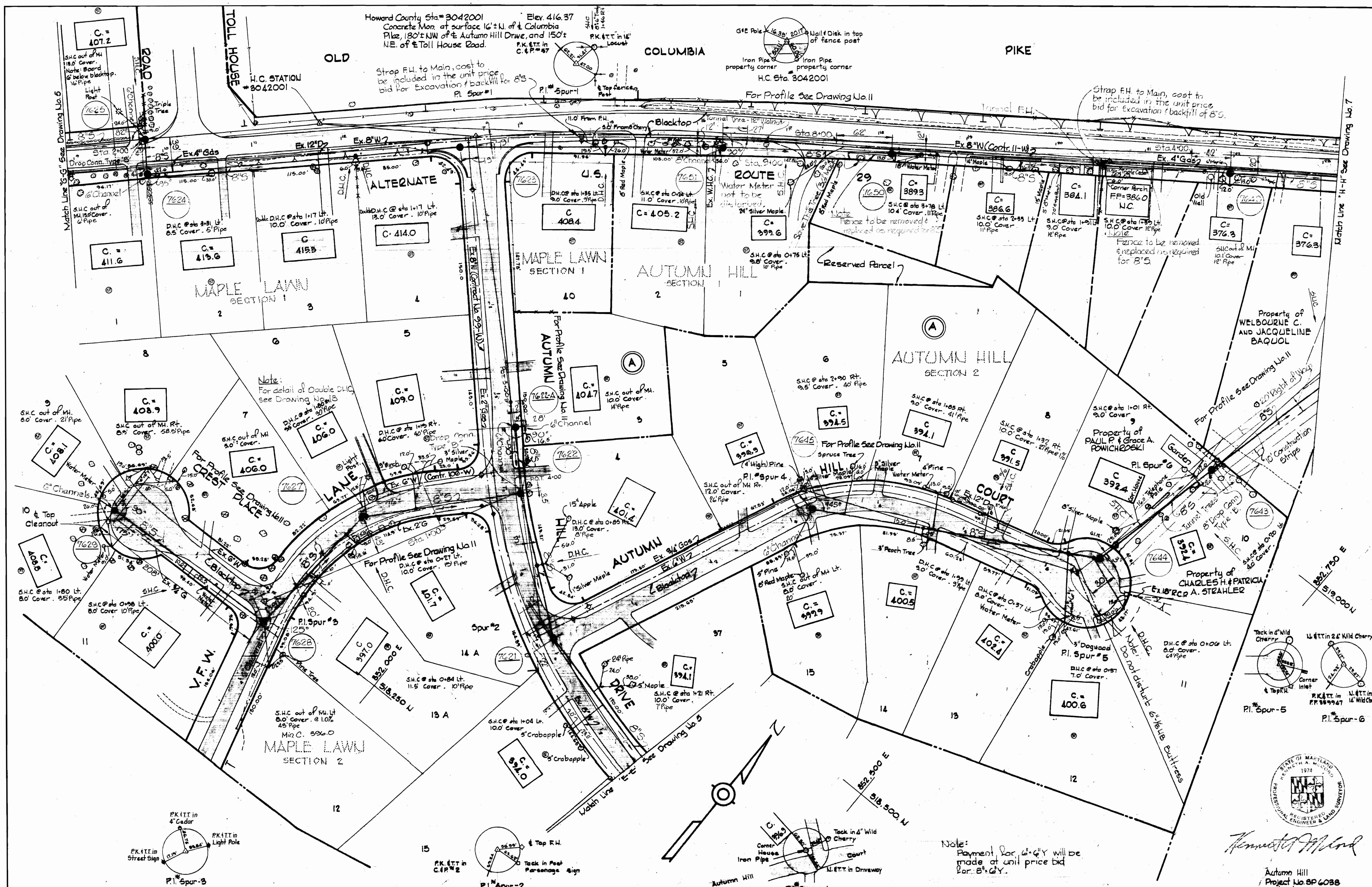


Kenneth A. Wilson

Autumn Hill
Project No. 8P6038
Contract No. 542-S

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 11-30-73 DATE <i>W. O. LaVest</i> CHIEF-BUREAU OF ENGINEERING	CONTRACT NO. <u>542-S</u>	PLAN OF SEWER MAINS	ELECTION DISTRICT ELlicott CITY NO. 2	DRAWING NO. <u>5</u> OF <u>12</u> SCALE 1" = 50' October 11, 1977 P.E. 5266, 6894 5335 AC R1111
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WS 542-5/E



WS 542-S/6

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
11-30-73
W.O. Gilbert
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 542-S

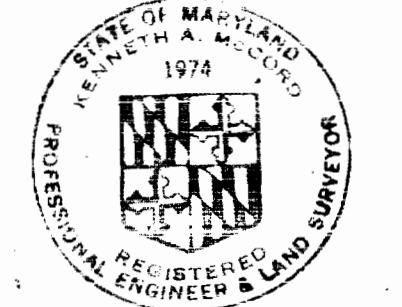
PLAN OF
SEWER MAINS

ELECTION DISTRICT
ELlicOTT CITY NO.2

DRAWING NO. 6
OF 13
SCALE 1"=50'

W. O. 6601-2

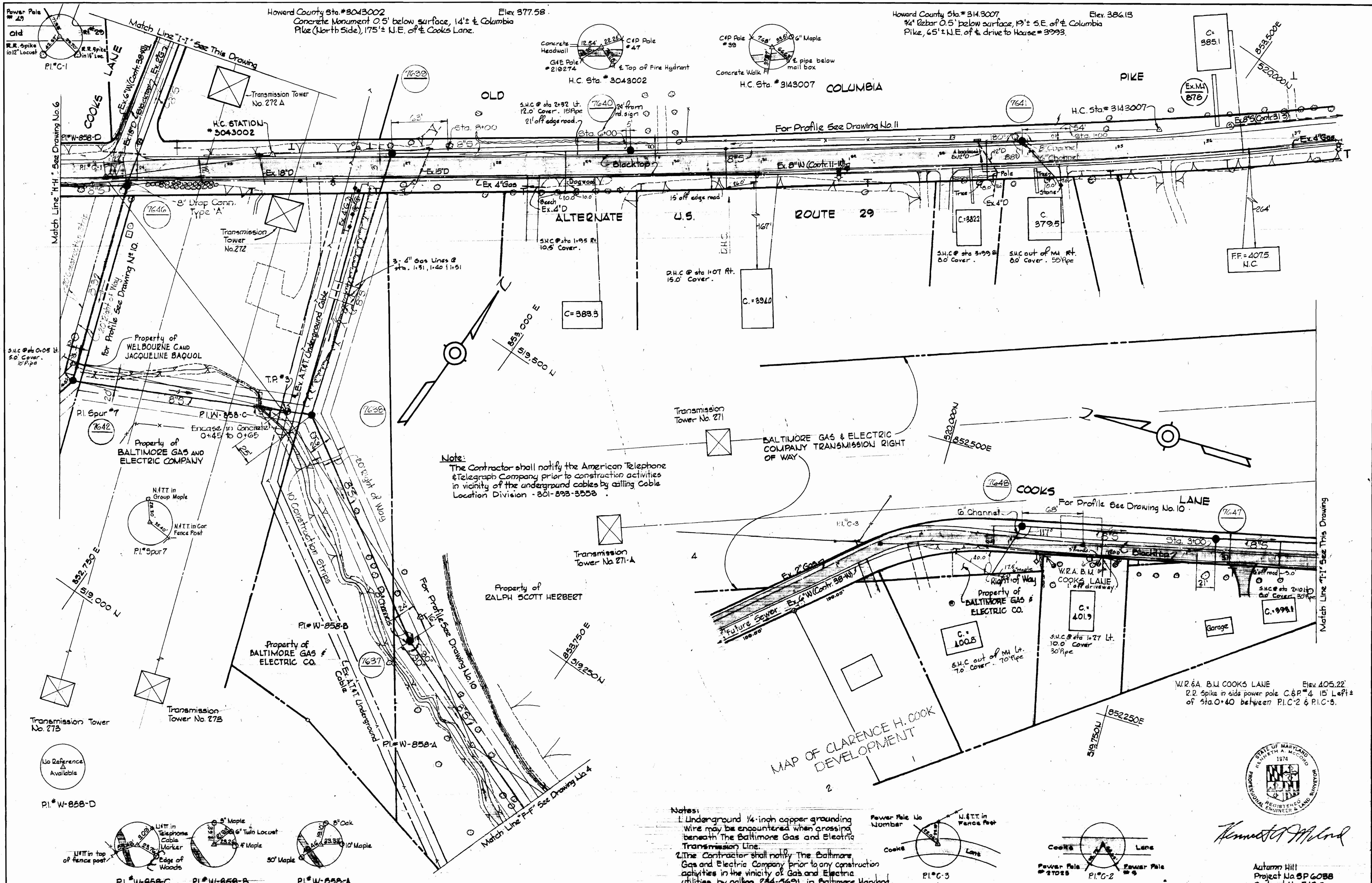
October 11, 1973 AS BUILT
FB# 5256, 5335



Kenneth M. Wood

Autumn Hill
Project No. SP 6038
Contract No. 542-S

Note:
Payment for G & Y will be
made at unit price bid
for B & G Y.



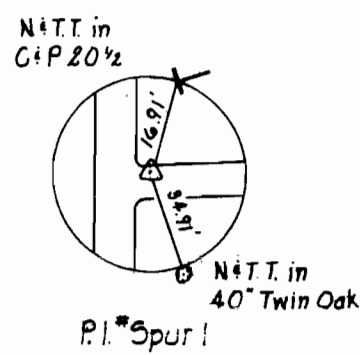
Kenneth Milrod

Autumn Hill
 Project No. SP 6058
 Contract No. 542-S

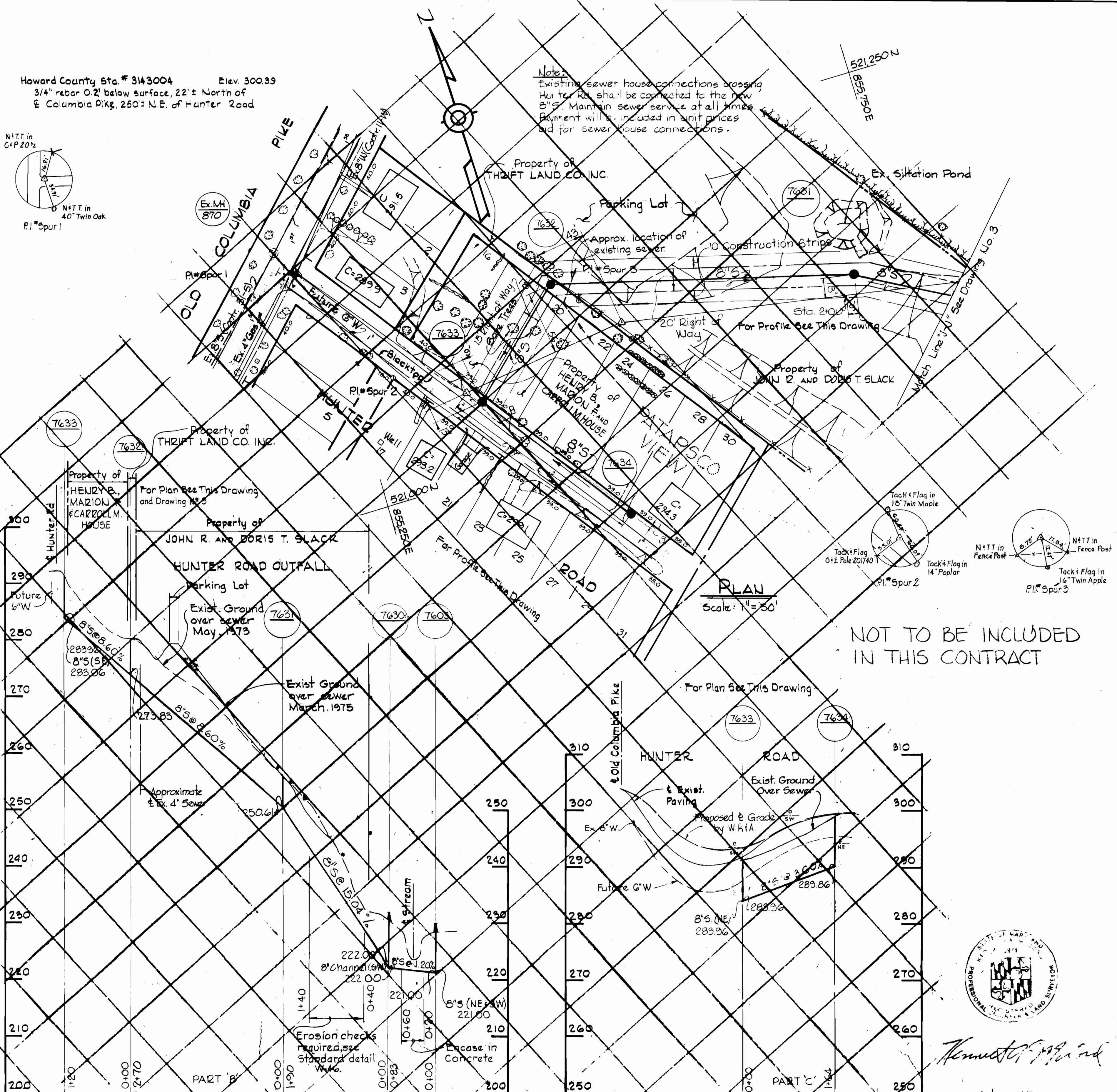
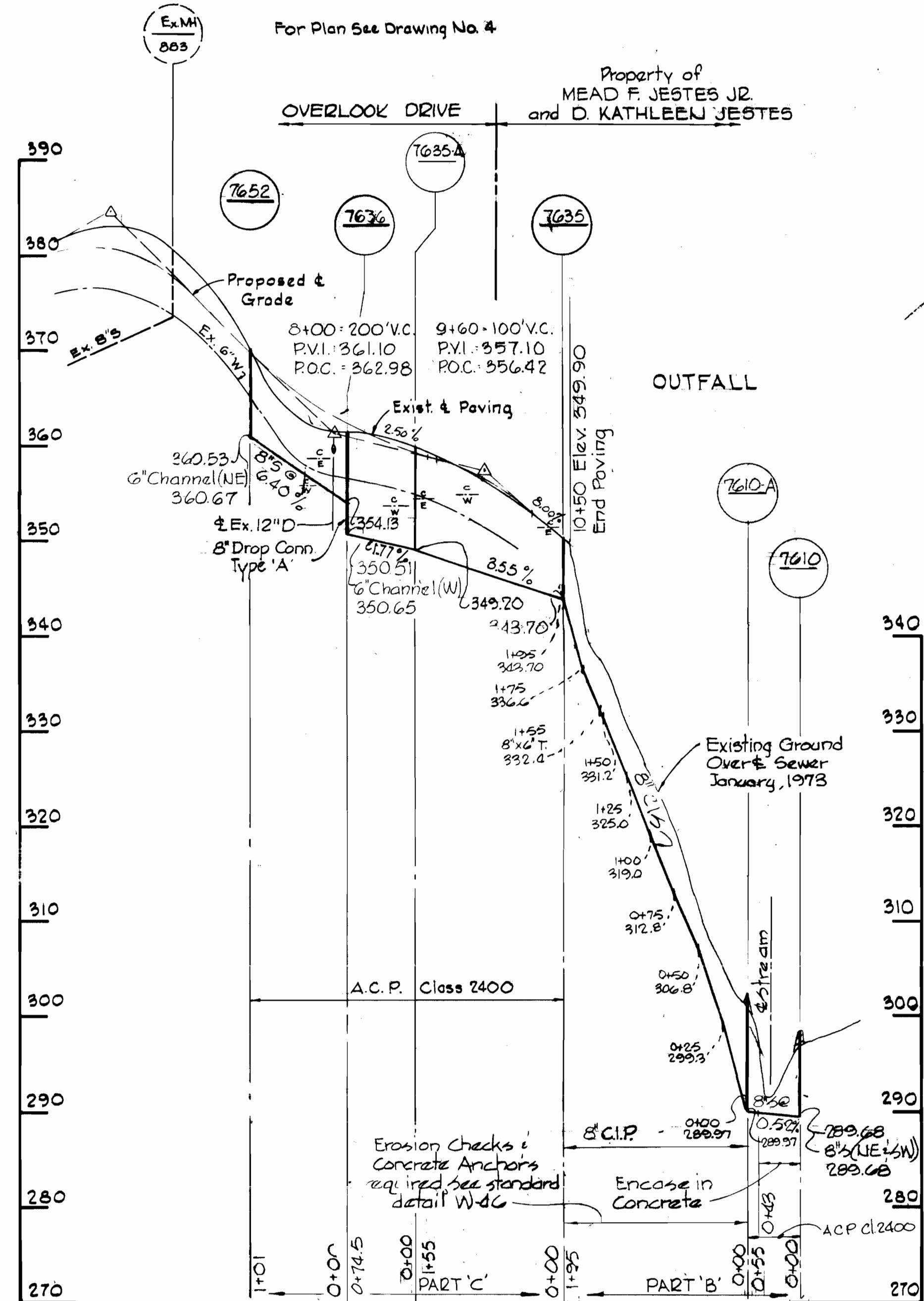
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE 11-30-73 W.D. Falbert CHIEF BUREAU OF ENGINEERING	CONTRACT NO. 542-S	PLAN OF SEWER MAINS	ELECTION DISTRICT ELLICOTT CITY NO. 2	DRAWING NO. 7 OF 13 SCALE 1"=50' AS BUILT October 11, 1977
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WS 542-S/7

Howard County Sta. # 3143004 Elev. 300.39
 3/4" rebar 0.2' below surface, 22' ± North of
 & Columbia Pike, 250' ± N.E. of Hunter Road



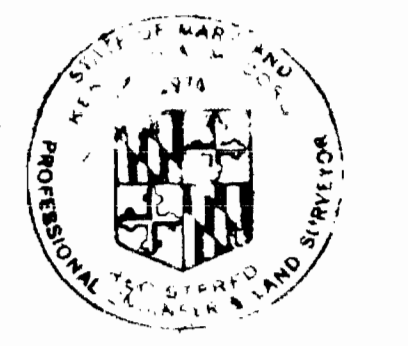
Note:
 Existing sewer house connections crossing
 Hunter Rd. shall be connected to the new
 8" S. Maintain sewer service at all times.
 Payment will be included in unit prices
 bid for sewer house connections.



PROFILE Scale: H=1"=100' V=1"=10'

PLAN Scale: 1"=50'

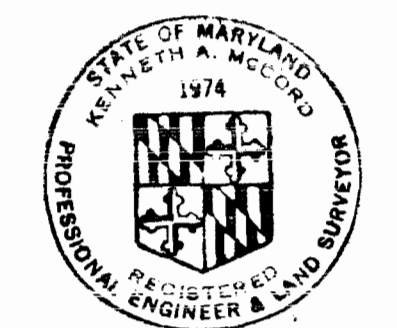
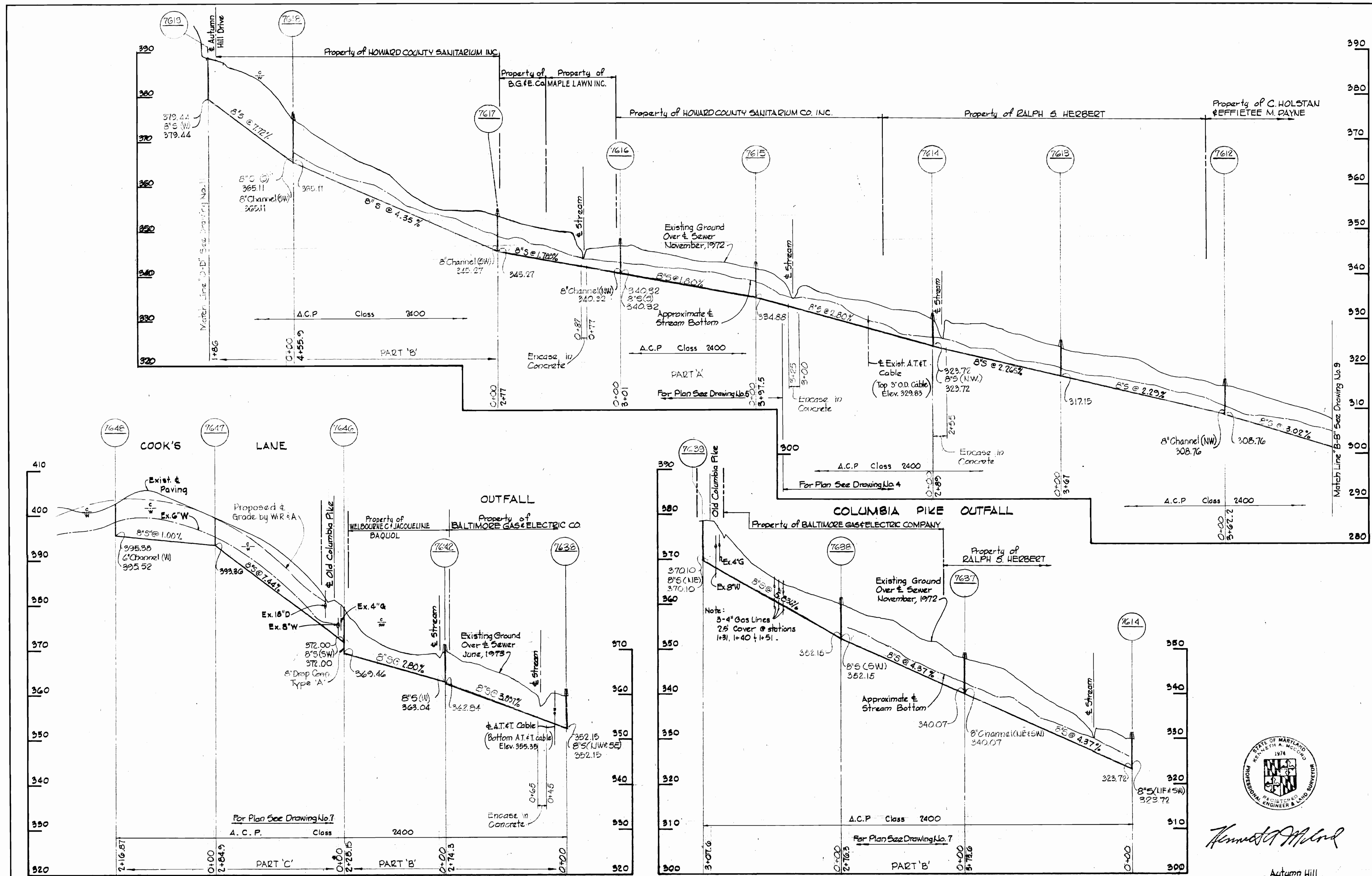
NOT TO BE INCLUDED
 IN THIS CONTRACT



Ernest G. ...

Autumn Hill
 Project No. SP 6088
 Contract No. 542-S

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 11-30-73 DATE	CONTRACT NO. 542-S	PLAN AND PROFILES OF SEWER MAINS	ELECTION DISTRICT ELLICOTT CITY NO. 2	DRAWING NO. 8 OF 13 SCALE AS SHOWN
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Kenneth J. McLeod

Autumn Hill
Project No. 80 6088
Contract No. 542-S

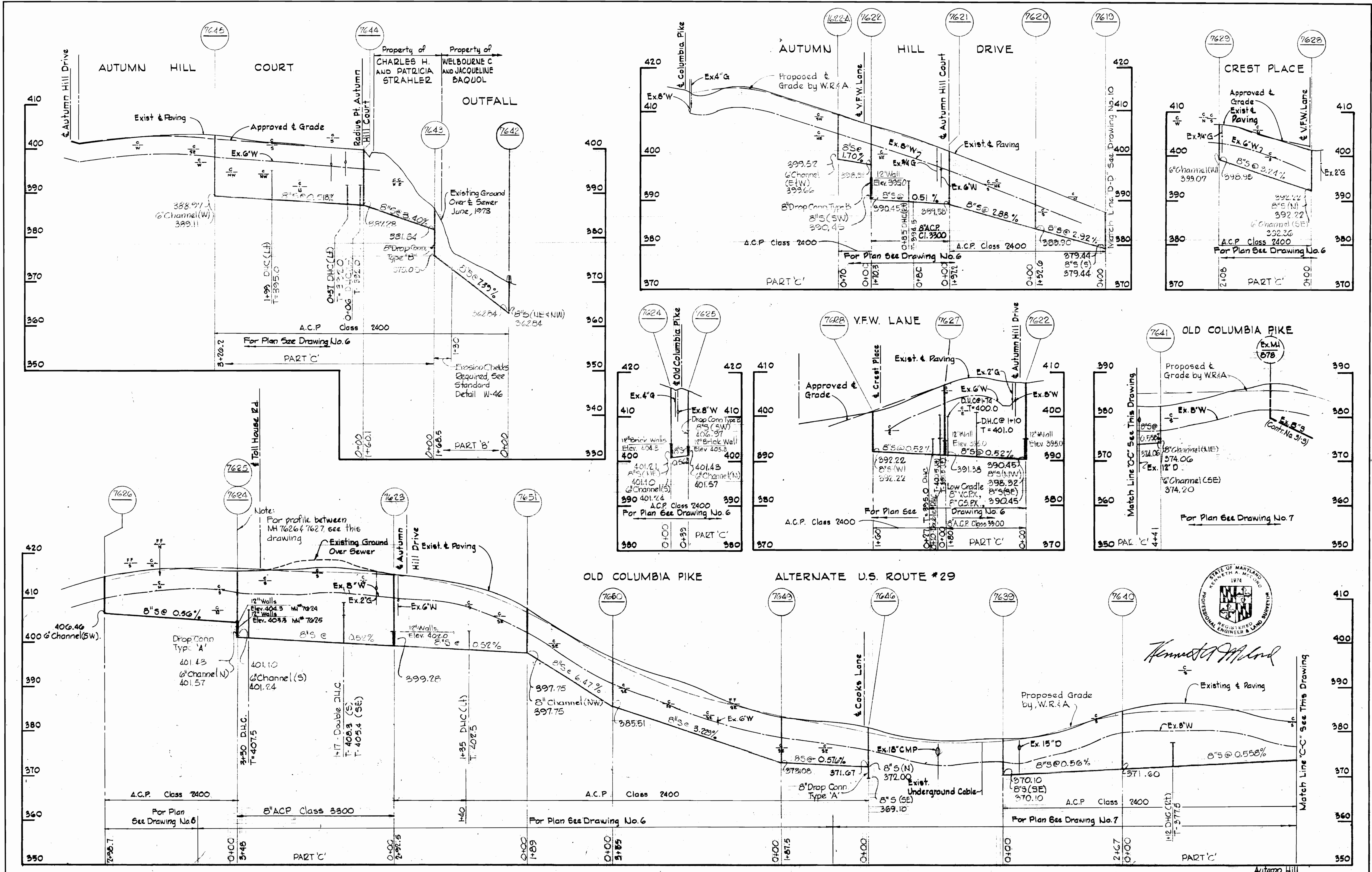
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 11-30-73 DATE <i>W.D. Laibert</i> CHIEF BUREAU OF ENGINEERING	CONTRACT NO. 542-S	PROFILES OF SEWER MAINS	ELECTION DISTRICT ELLICOTT CITY NO. 2	DRAWING NO. 10 OF 13 SCALE: H:1"=100' V:1"=10'
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W. O. 6601-2

October 11, 1977 AS BUILT

W.S. 542-S/10

RIP, PG. 44, 510, 18892



WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL ST.
 BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 11-30-73
 DATE

CONTRACT NO. 542-S

PROFILES OF
 SEWER MAINS

ELECTION DISTRICT
 ELLICOTT CITY NO. 2

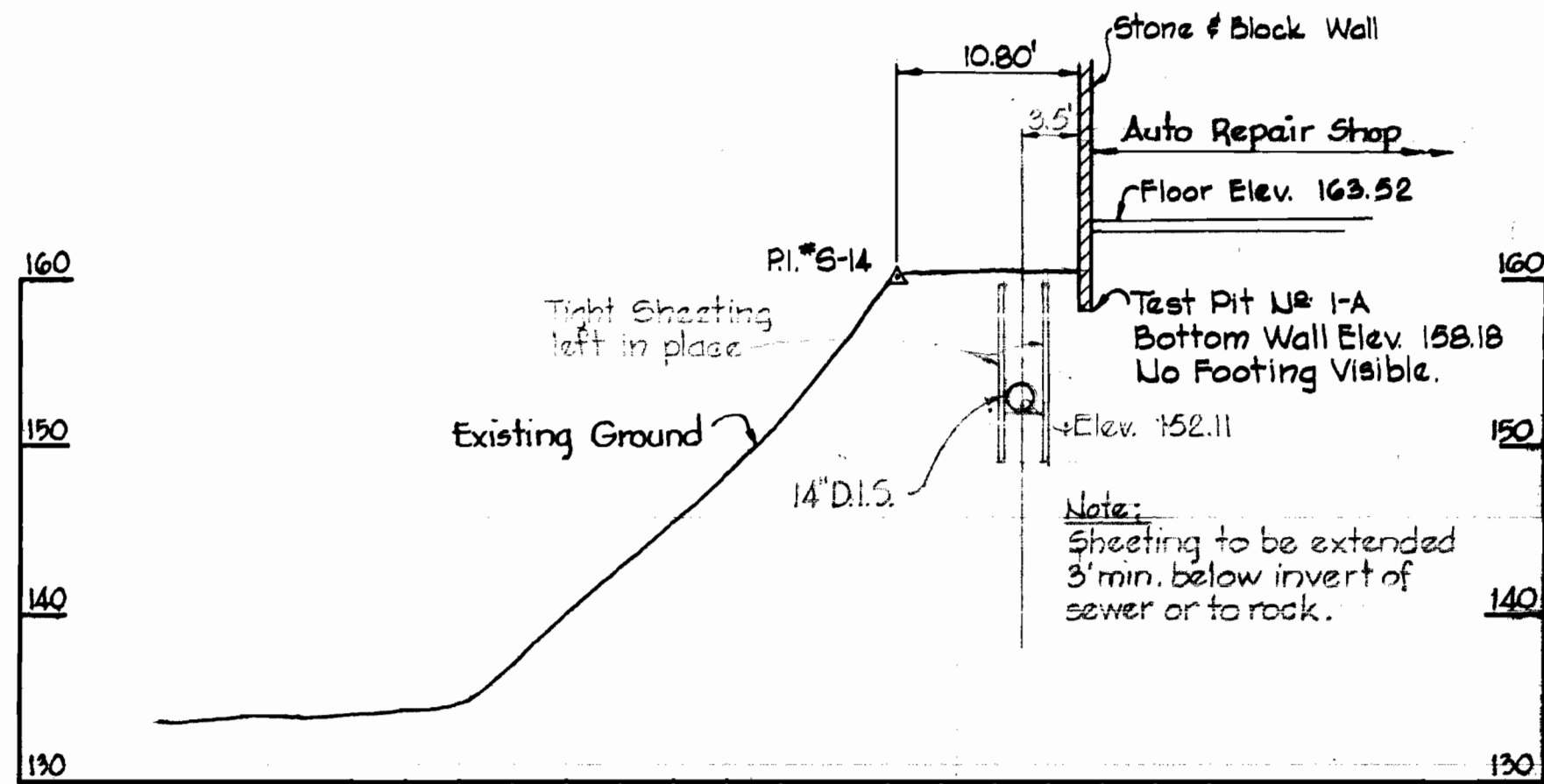
DRAWING NO. 11
 OF 13
 SCALE H:V = 1\"/>

W. O. 6601-2

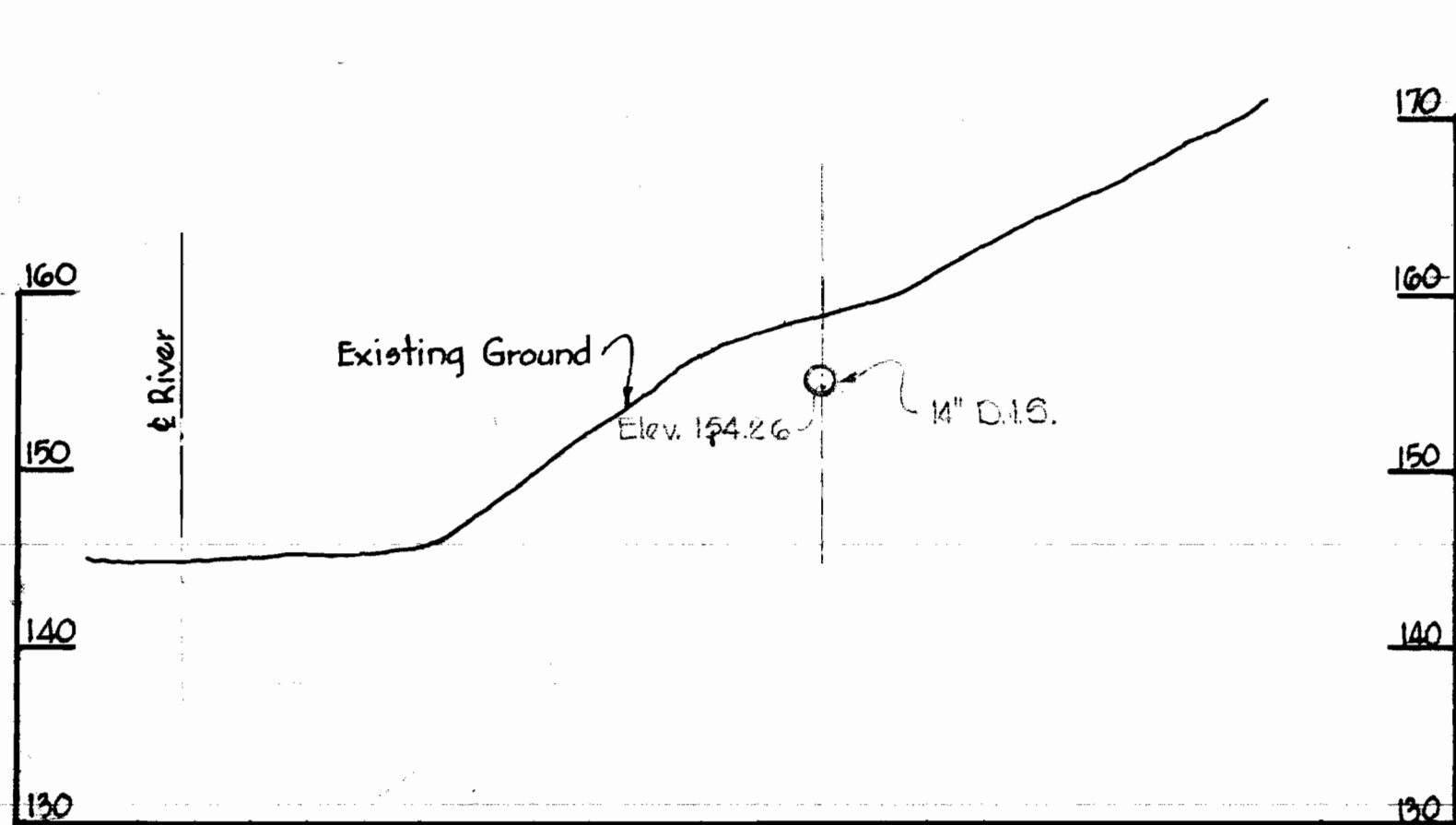
October 11, 1977 AS BUILT

WS 542-S/11

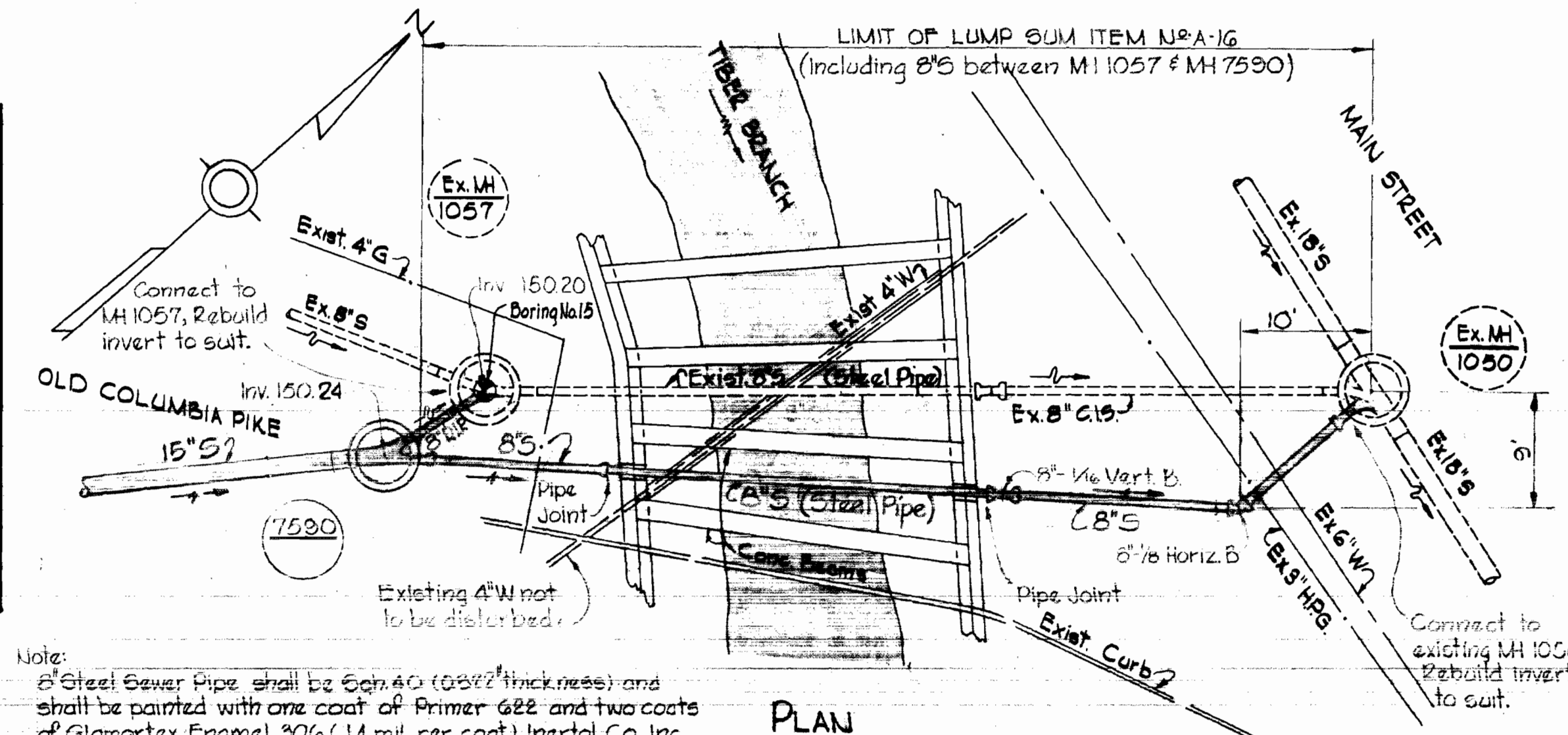
BRINING 44510 16342



SECTION 'A'

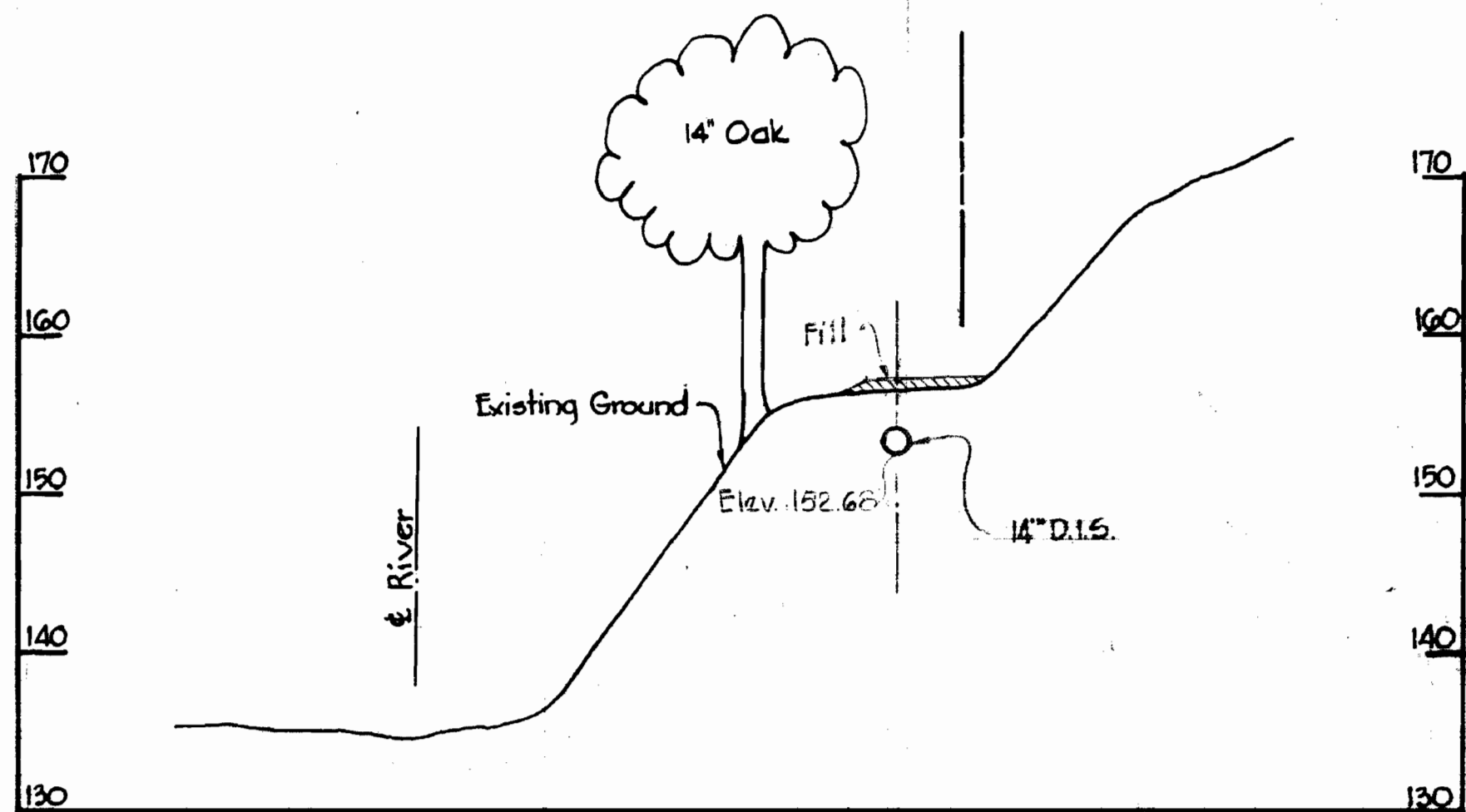


SECTION 'D'

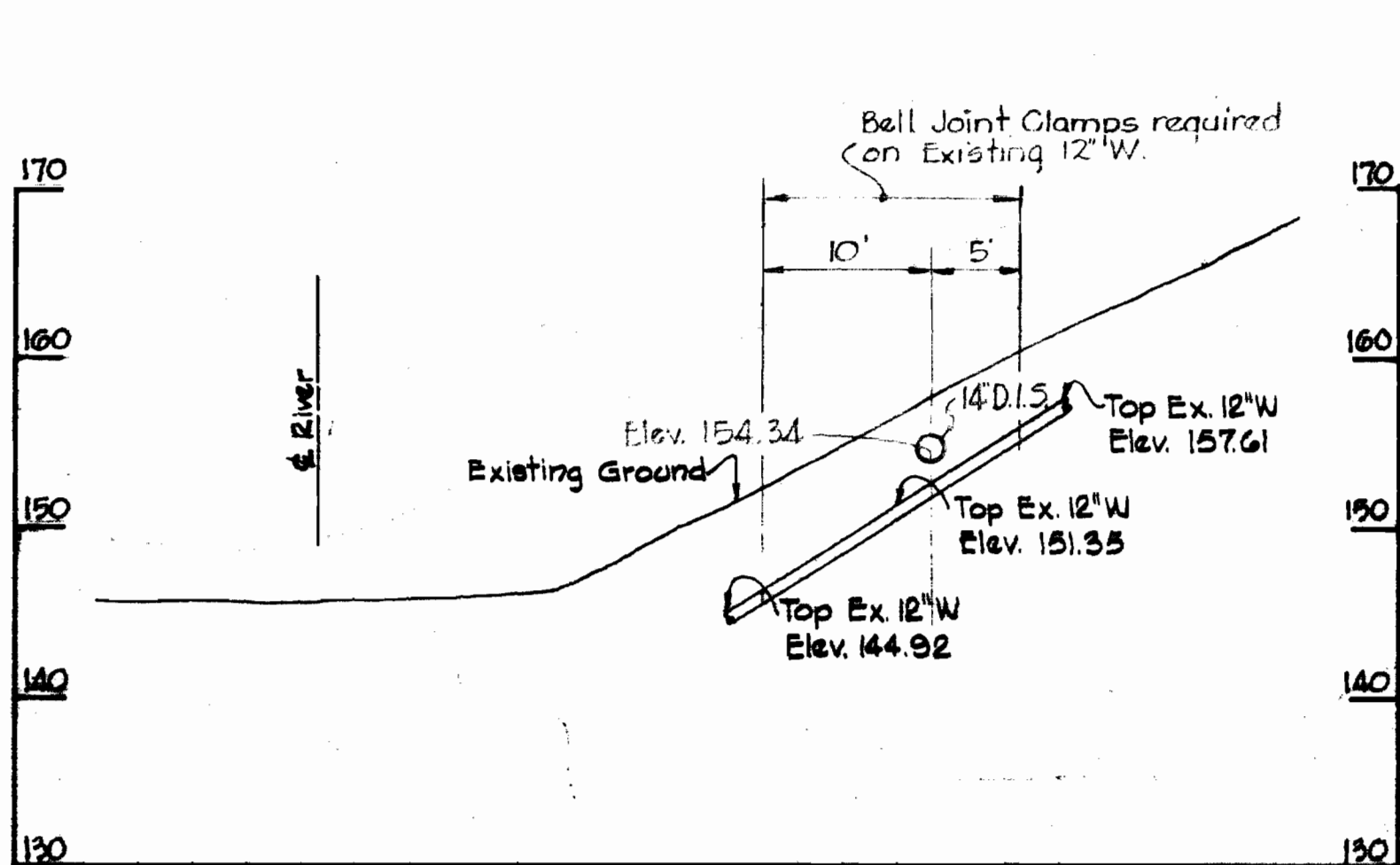


PLAN
Scale: 1"=10'

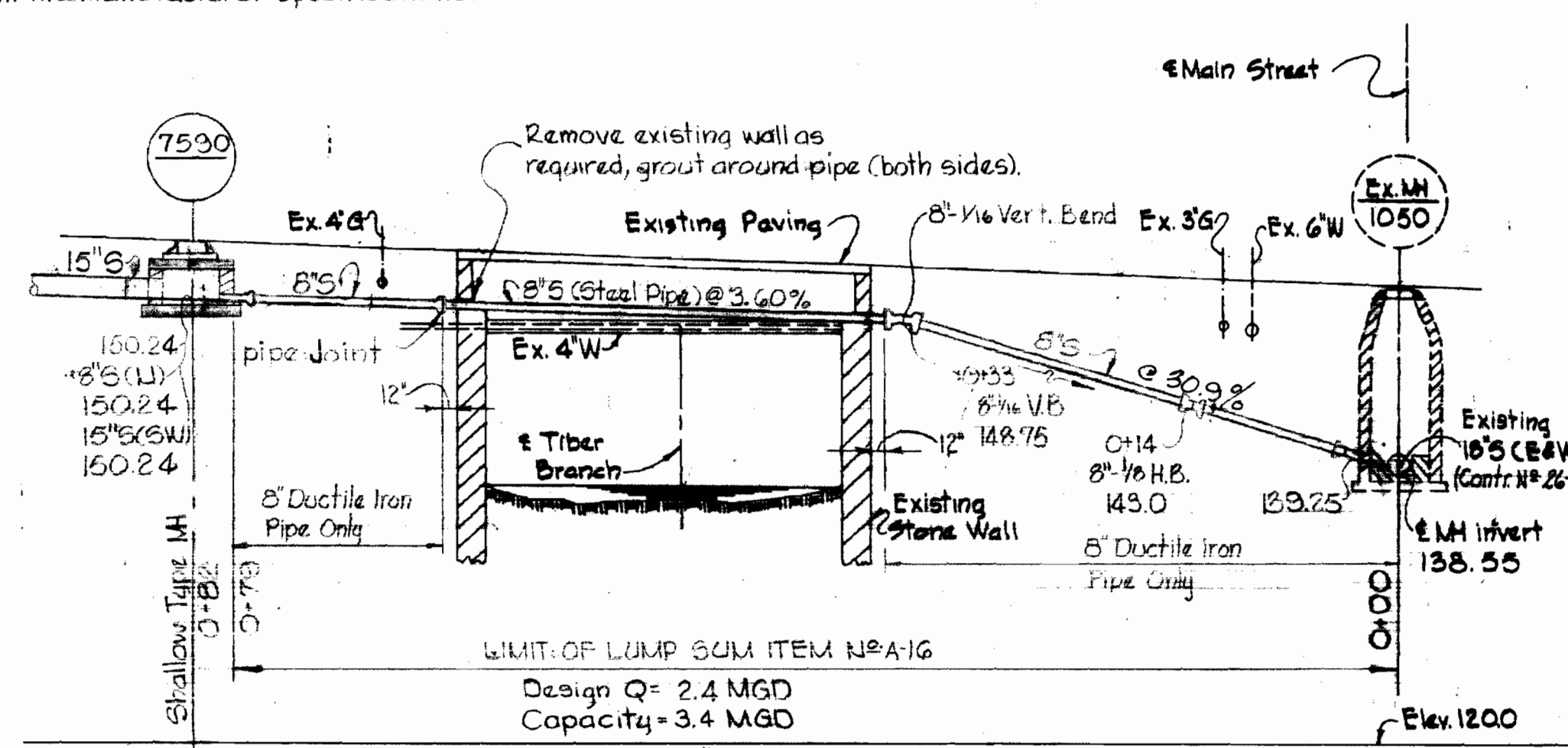
Note:
8" Steel Sewer Pipe shall be Sch. 40 (0.287" thickness) and shall be painted with one coat of Primer 622 and two coats of Glamortax Enamel 30% (1.4 mil. per coat) Inertol Co. Inc. or approved equal. Inside of steel sewer pipe shall be given three coats of Gulgley Triple A No. 20 Heavy Duty Black paint or approved equal and shall be applied in accordance with the manufacturer specifications.



SECTION 'B'



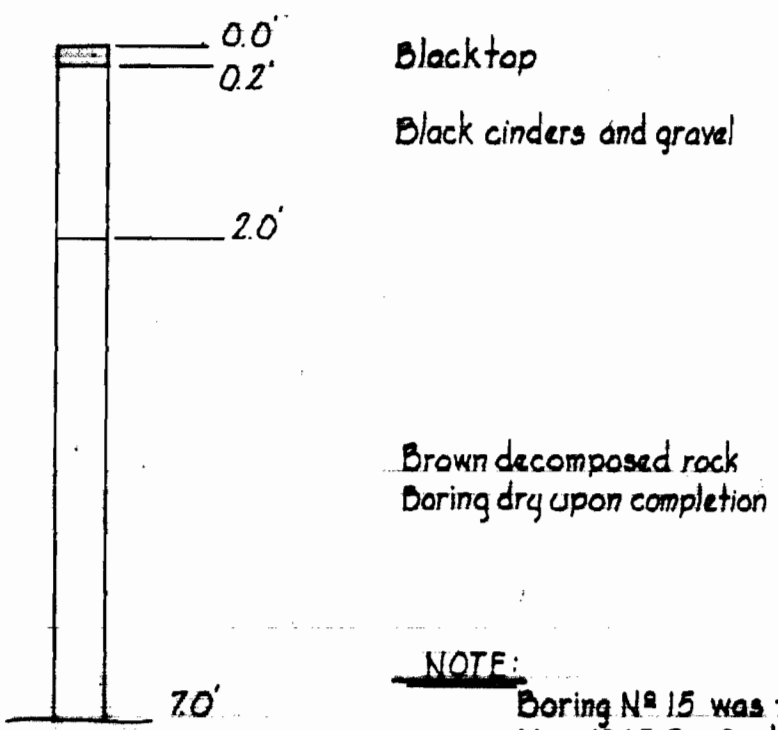
SECTION 'E'



PROFILE
Scale: 1"=10' Hor. & Vert

Note:
For method of joining Cast Iron to Steel Pipe see Standard Detail S-44 bound in Specifications.

DETAIL OF TIBER BRANCH CROSSING
Scale: As Shown



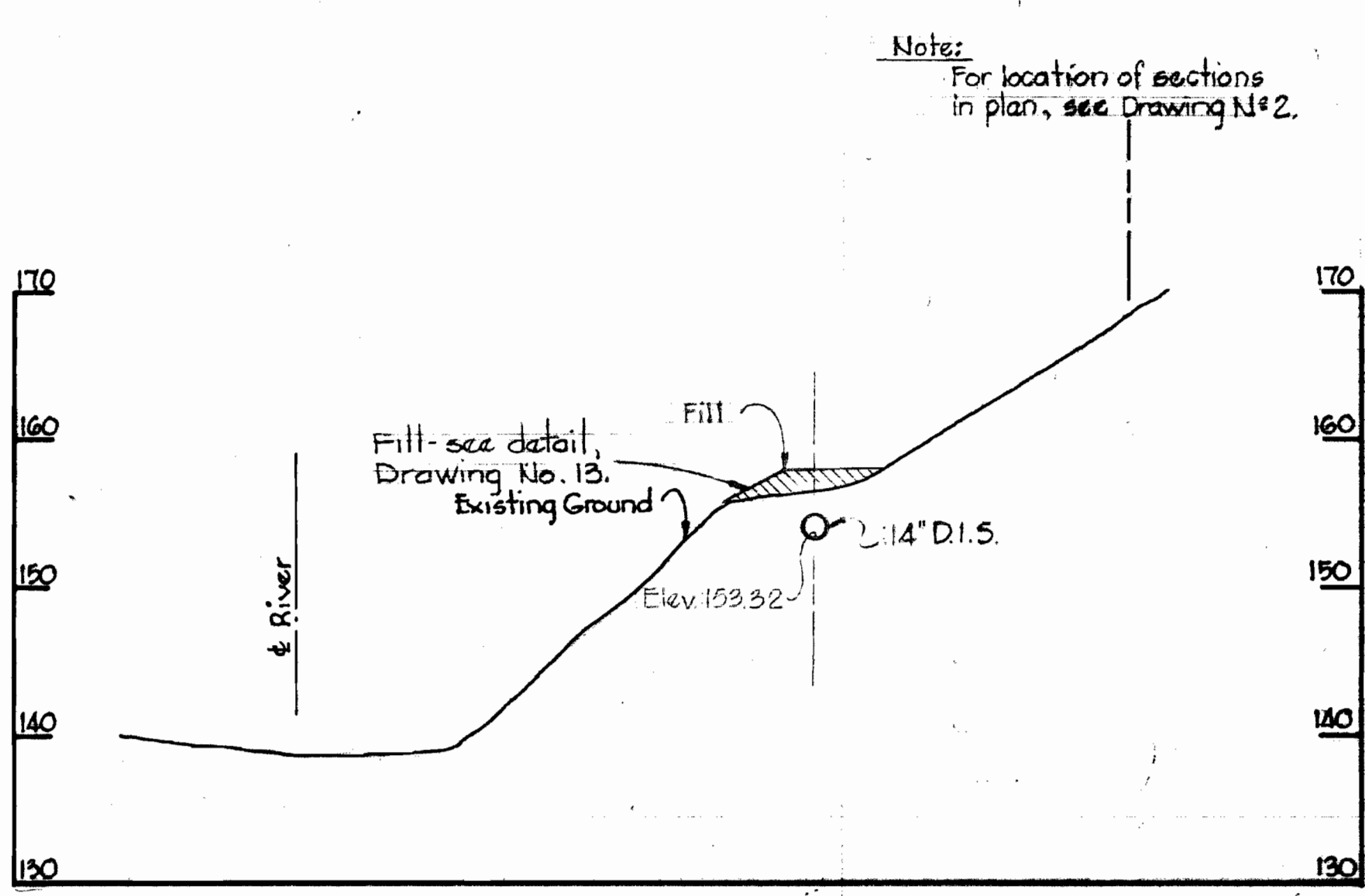
NOTE:
Boring No. 15 was taken in May, 1965 For Contr. No. 24-9.

BORING No. 15
Scale: 1/2"=1'-0'

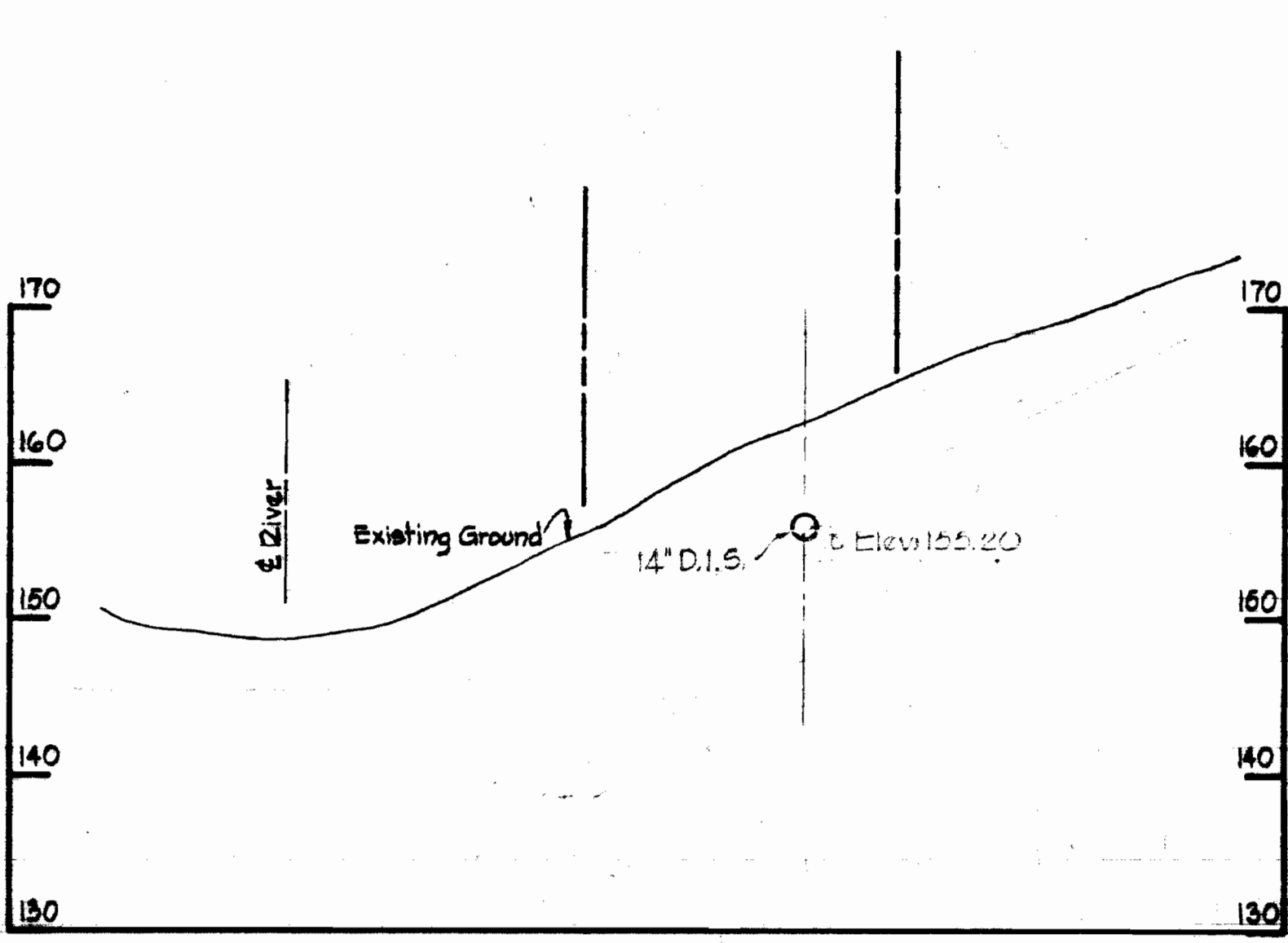


Kenneth A. McLeod

Autumn Hill
Project No. 9P6038
Contract No. 542-5



SECTION 'C'



SECTION 'F'

SECTIONS THRU SLOPE AREA - MANHOLE 7593 TO 7595
Scale: Horiz. 1"=10' Vert. 1"=10'

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

11-30-73
DATE

W.D. Albert
CHIEF-BUREAU OF ENGINEERING

CONTRACT NO. 542-S

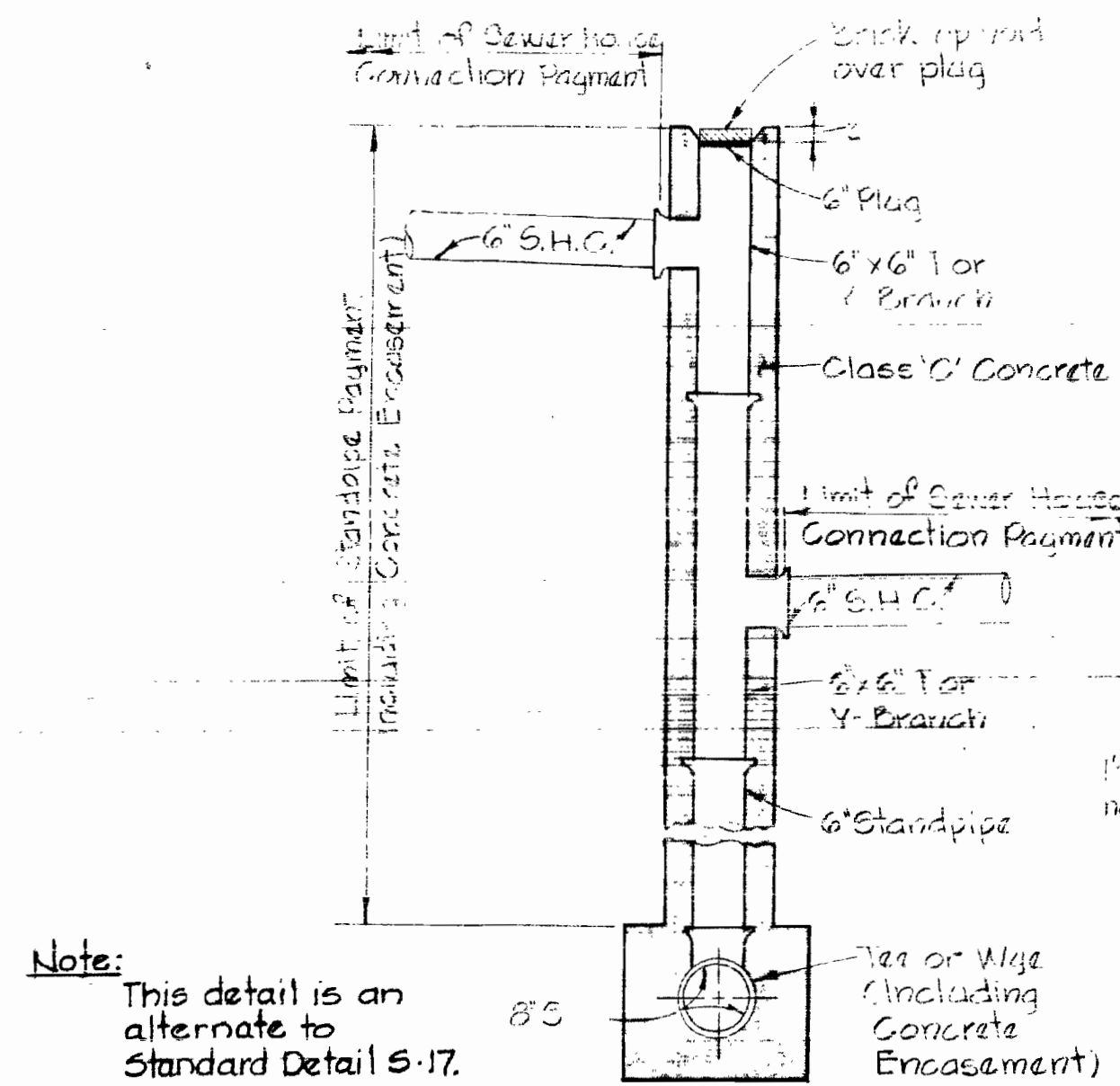
DETAILS

ELECTION DISTRICT
ELLICOTT CITY NO. 2

DRAWING NO. 12 OF 13
SCALE AS SHOWN

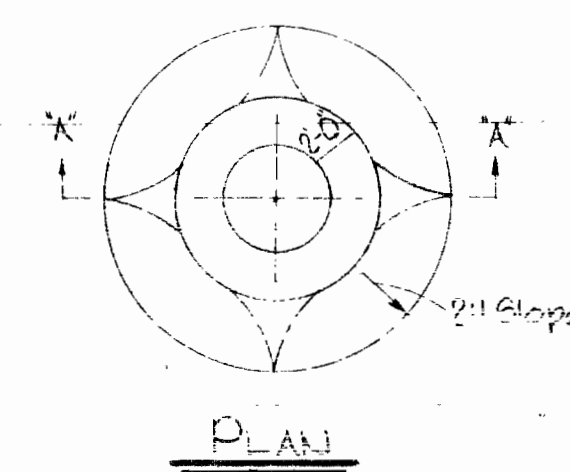
NS 542-5/12

44-510 18992

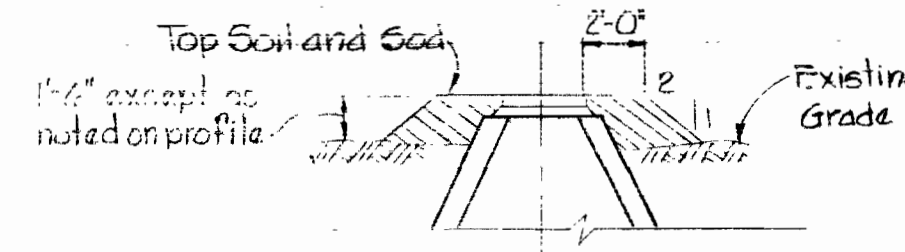


DETAIL OF DOUBLE DROP HOUSE CONNECTION
Scale: 1/2" = 1'-0"

Note: Fill around Manholes required at manholes where rim elevations are to be more than 3" above existing grade, see profiles.

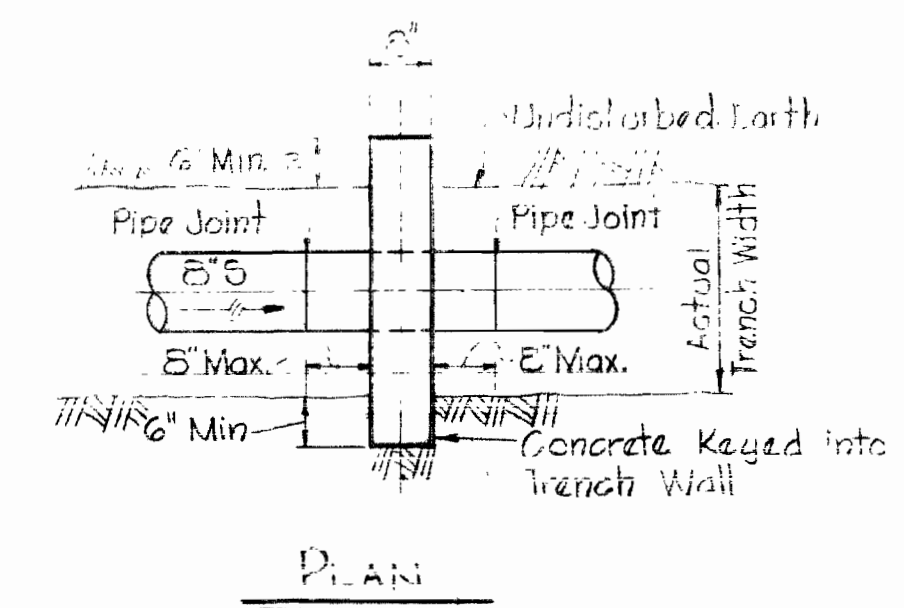


PLAN

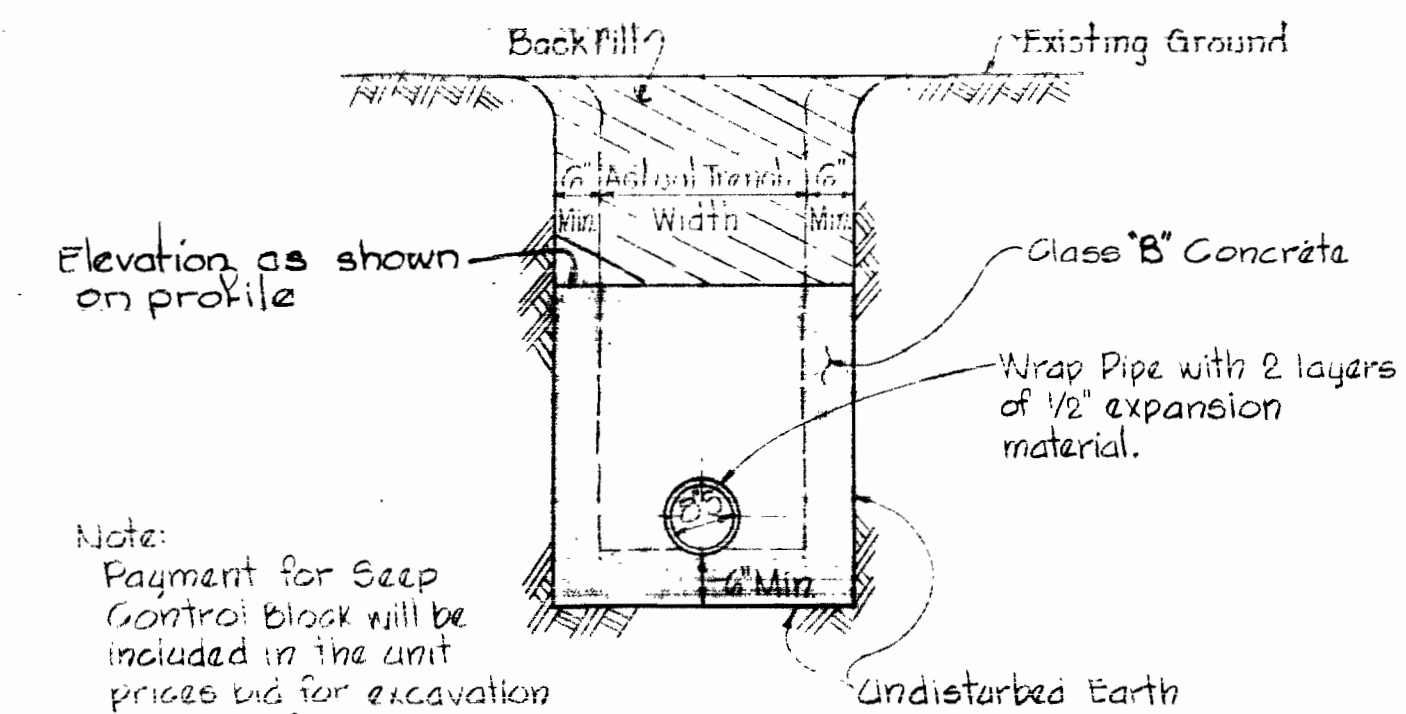


SECTION "A-A"

FILL AT MANHOLES
Scale: 1/8" = 1'-0"

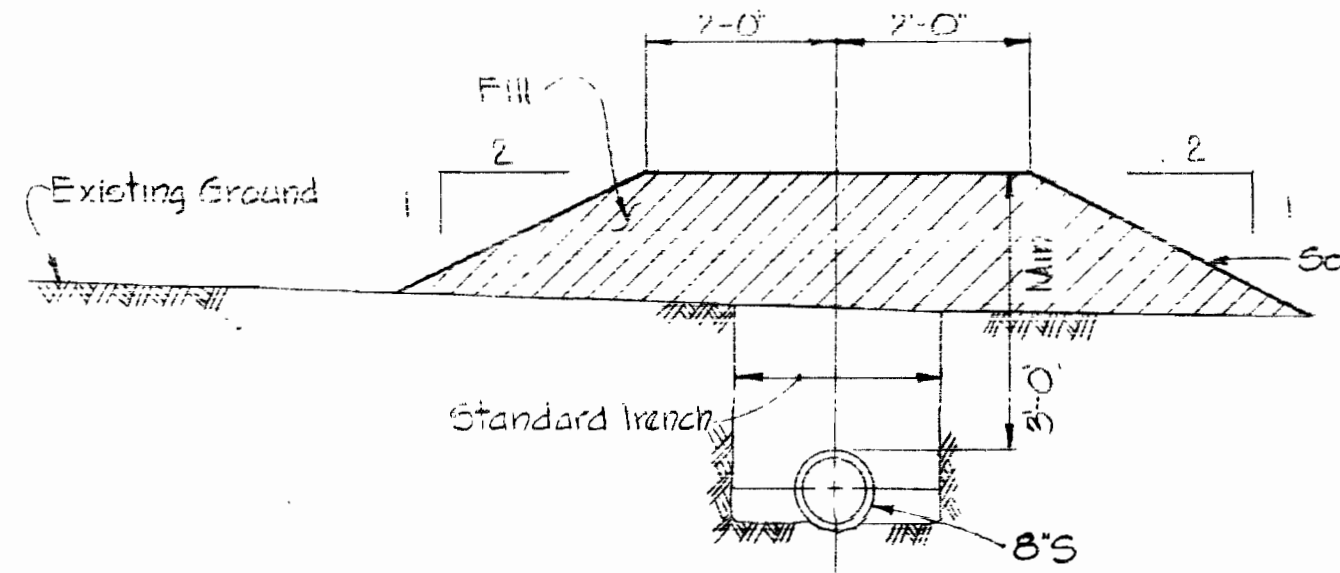


PLAN



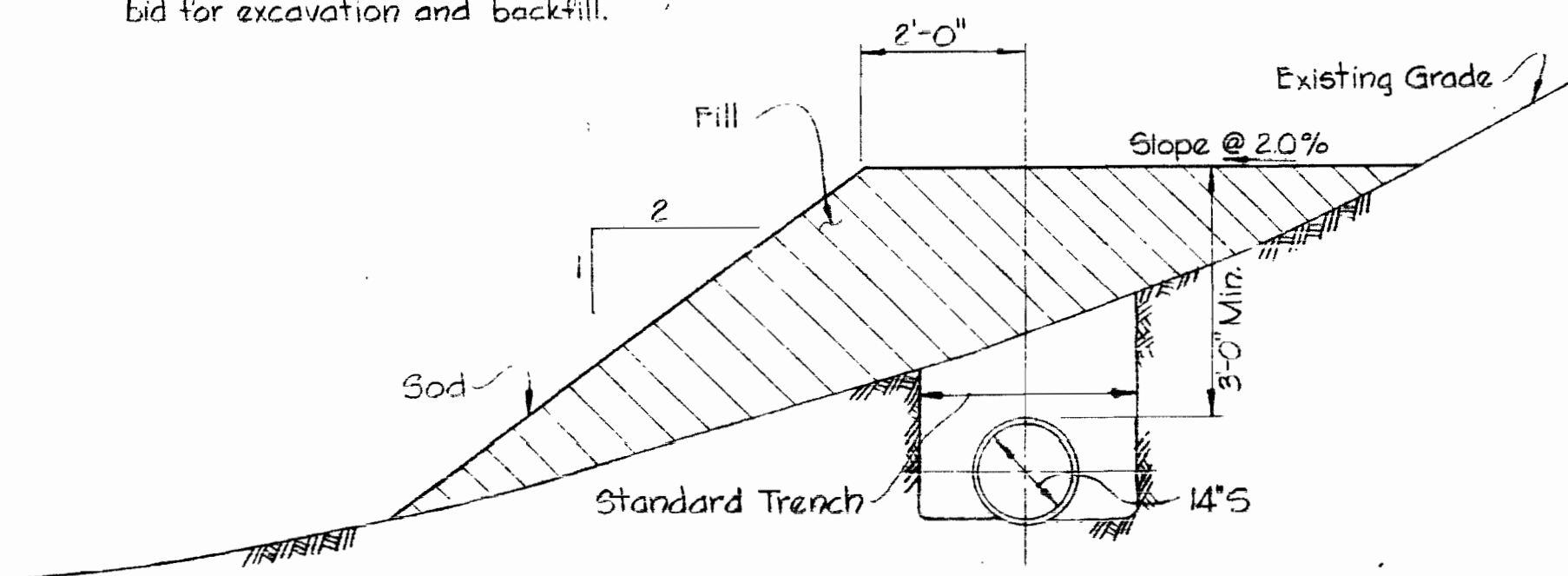
SECTION

DETAIL OF SEEP CONTROL BLOCK
Scale: 1/2" = 1'-0"
(For Plan See Drawing No. 3)



DETAIL OF FILL OVER PIPE BETWEEN MH'S 7603 AND 7604
Scale: 1/2" = 1'-0"

Note: All Slopes steeper than 4:1 shall be sodded. All other fill areas shall be seeded & mulched. Payment for placing fill, seeding and sodding will be included in the unit prices bid for excavation and backfill.

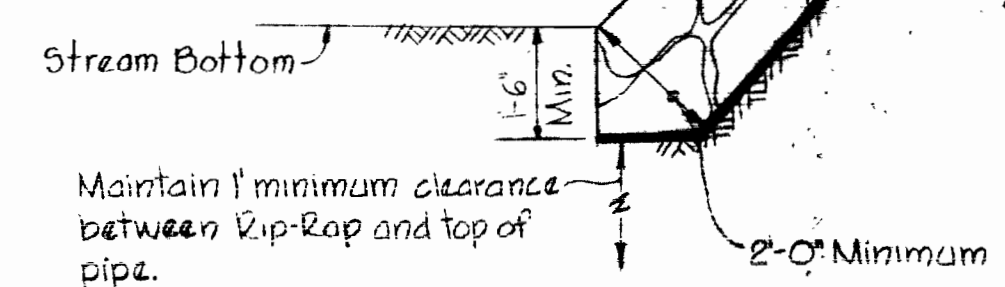


DETAIL OF FILL OVER PIPE BETWEEN MH'S 7593 AND 7595
Scale: 1/2" = 1'-0"

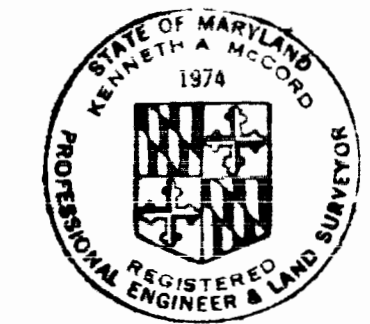
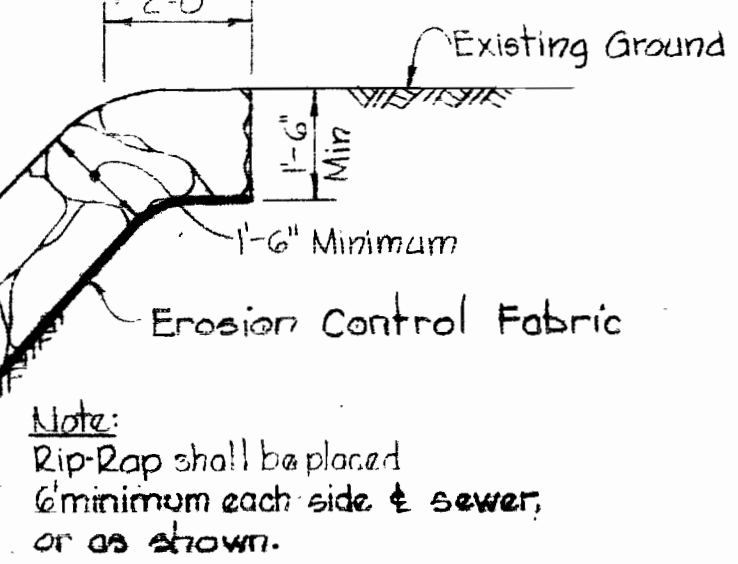
Note: Erosion Control Fabric shall be Poly Filter-X as manufactured by Carthage Mills Inc., Erosion Control Division, 124 W. 66th Street Cincinnati, Ohio; Laurel Erosion Control Cloth as manufactured by Laurel Plastics Inc., Madison, Wiscor or approved equal.

Rock excavated from trench may be used for Rip-Rap provided the rocks used conform to the following:

Rip-Rap shall 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 150 pounds.



RIP-RAP DETAIL
Scale: 3/8" = 1'-0"



Kenneth J. McLeod

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
11-30-73
DATE
W.D. Whitman
CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 542-S

DETAILS OF SEWER MAINS

ELECTION DISTRICT
ELLCOTT CITY NO. 2

DRAWING NO. 13 OF 13

SCALE AS SHOWN

October 11, 1977

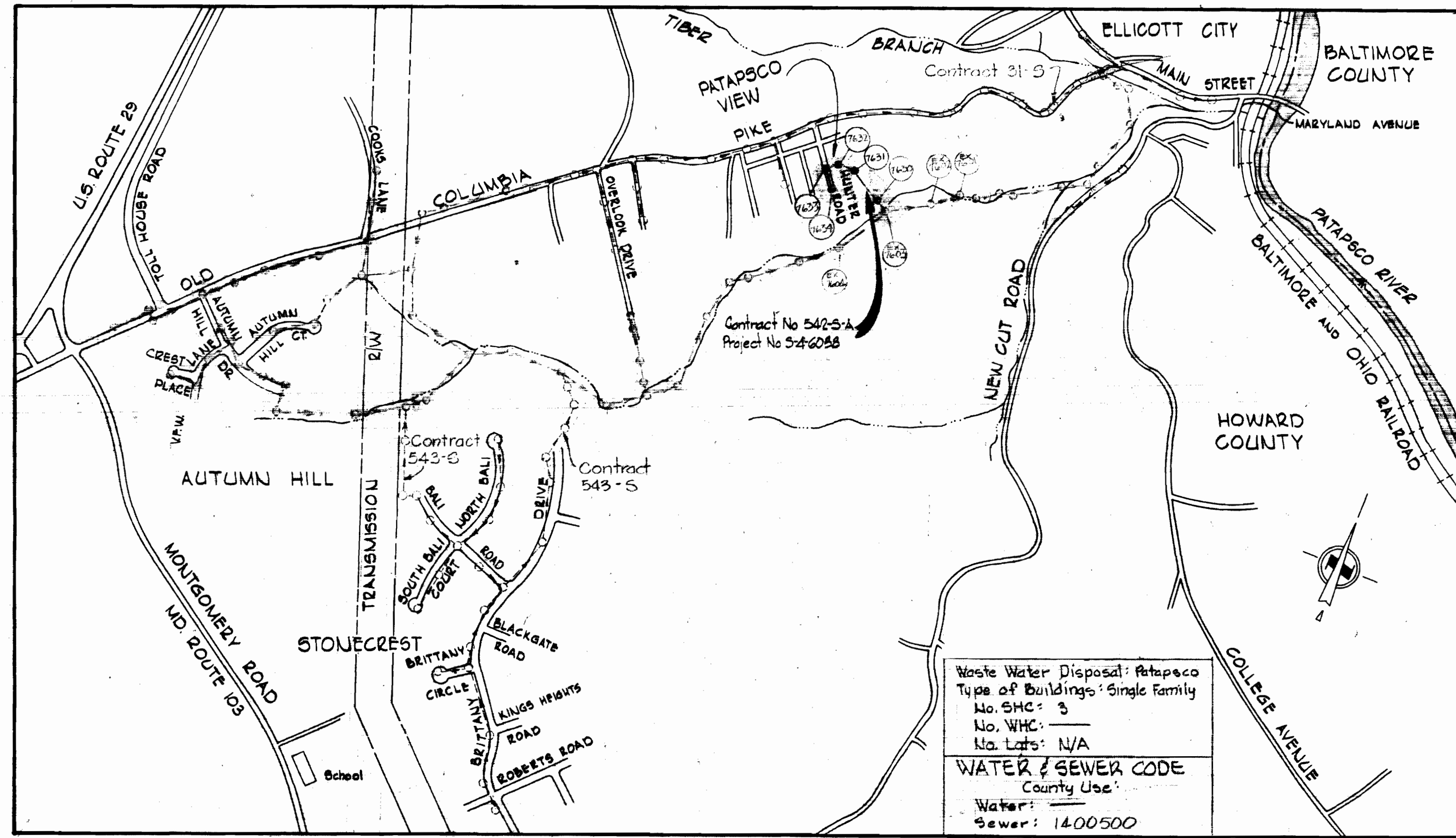
W. O. 6601-2

AS BUILT

WS 542-S/13

CRUNING 44-510 1899Z

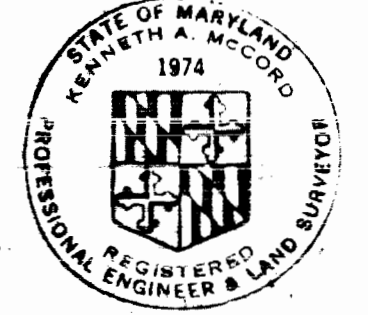
Autumn Hill
Project No. SP6056
Contract No. 542-S



CONTRACT NO. 542-S-A
SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

QUANTITIES		
ITEM	QUANTITY	MATERIAL / SUPPLIER
8" Sewer	830 LF	86 LF
Manhole	5 Ea.	5

State-out and Diary F.B.# 6643



Kenneth A. McLeod
 Kenneth A. McLeod
 Professional Engineer
 Project No. 5-4-6038
 Contract No. 542-S-A

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

[Signature] 5-25-82
 SIGNATURE DATE
 U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Conservation District.

APPROVED:
[Signature] 5-25-82
 HOWARD SCD DATE

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

11-30-73
 DATE

[Signature]
 CHIEF BUREAU OF ENGINEERING

CONTRACT NO. 542-S-A

LOCATION MAP

ELECTION DISTRICT
 ELLICOTT CITY NO. 2

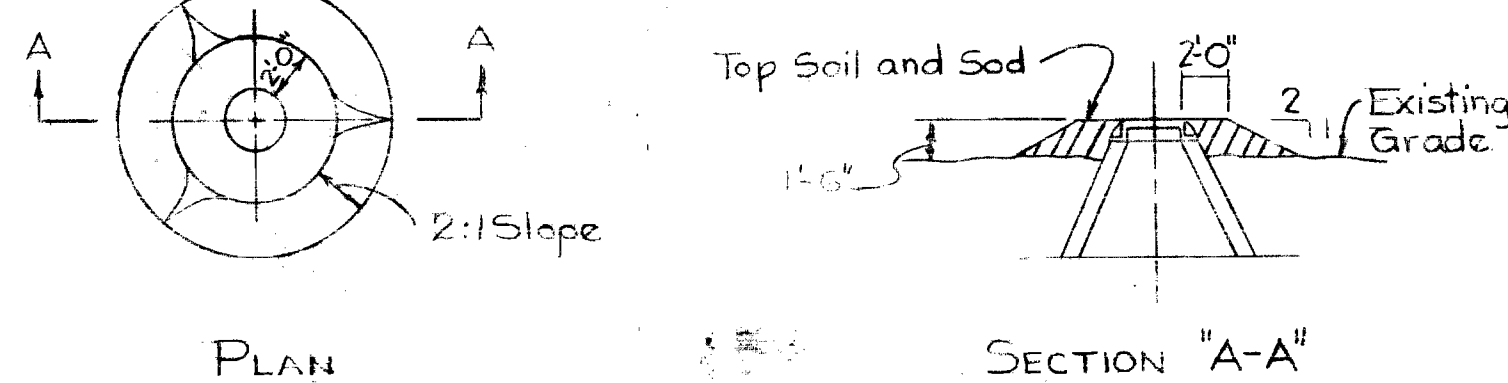
DRAWING NO. 1 OF 2

SCALE 1" = 600'

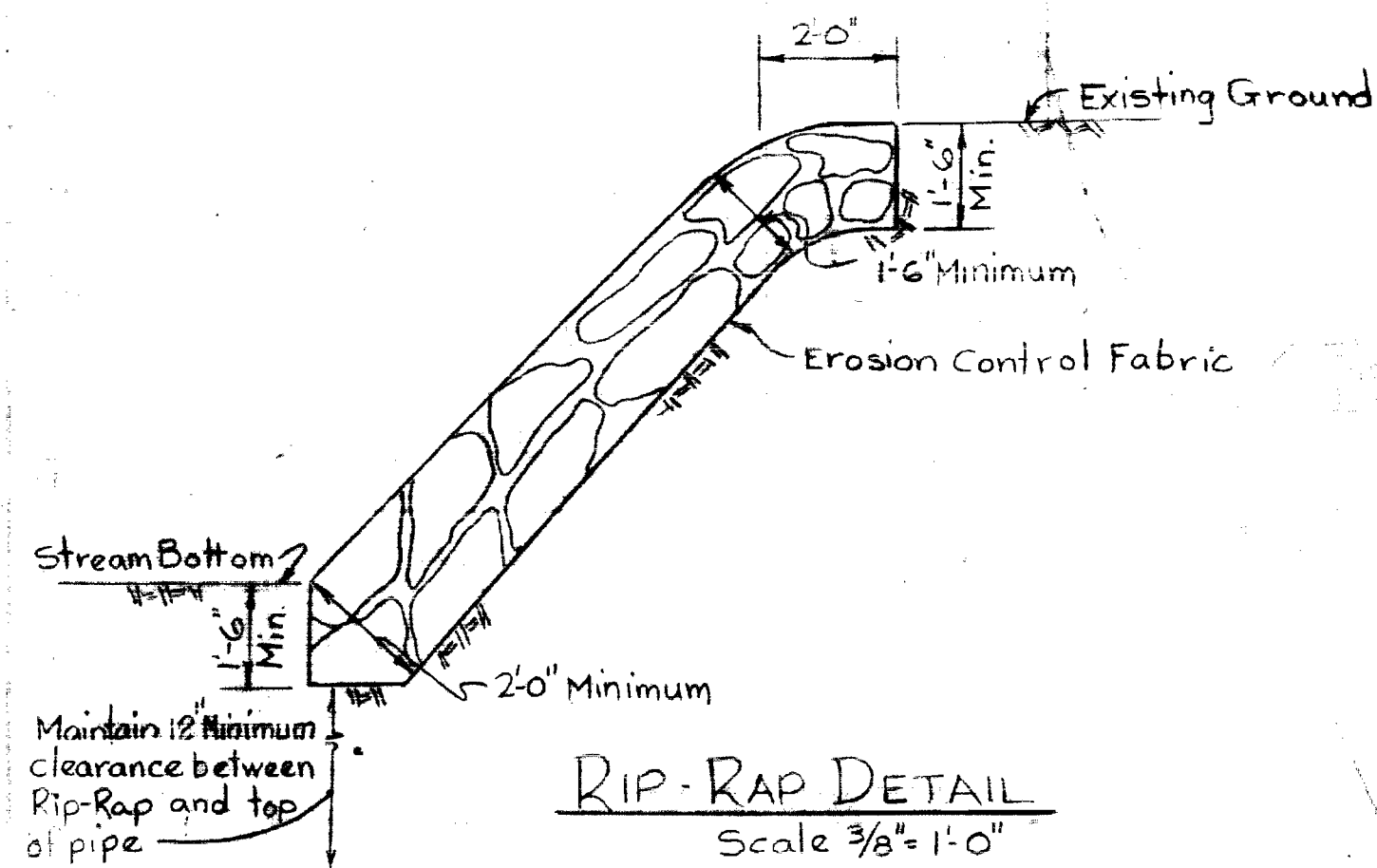
W.S. 542-S-A-1

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 PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION ENGINEERING DAMAGE CONTROL - 234-5621
 - UNDERGROUND GAS DISTRIBUTION ENGINEERING 685-0123
 - CHESAPEAKE AND POTOMAC TELEPHONE COMPANY 725-7976
 - MISC UTILITY - 1 - 668-0100 - BUREAU OF UTILITIES HOWARD COUNTY - 372-2360
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6", CLEAR ALL POLES BY 2'-0" OR TUNNEL AS REQUIRED. ANY COSTS INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES FOR CONSTRUCTION OF THE MAIN.
- BLOCK ALL FITTINGS WITH CONCRETE, SEE STANDARDS.
- ALL SEWER MAINS SHALL BE 6'-0" P.P., 4'-0" P.P., 4'-0" P.P., CLASS 2400, P.V.C. OR D.I.P. CLASS 52, UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION REQUIREMENTS, USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
- 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.



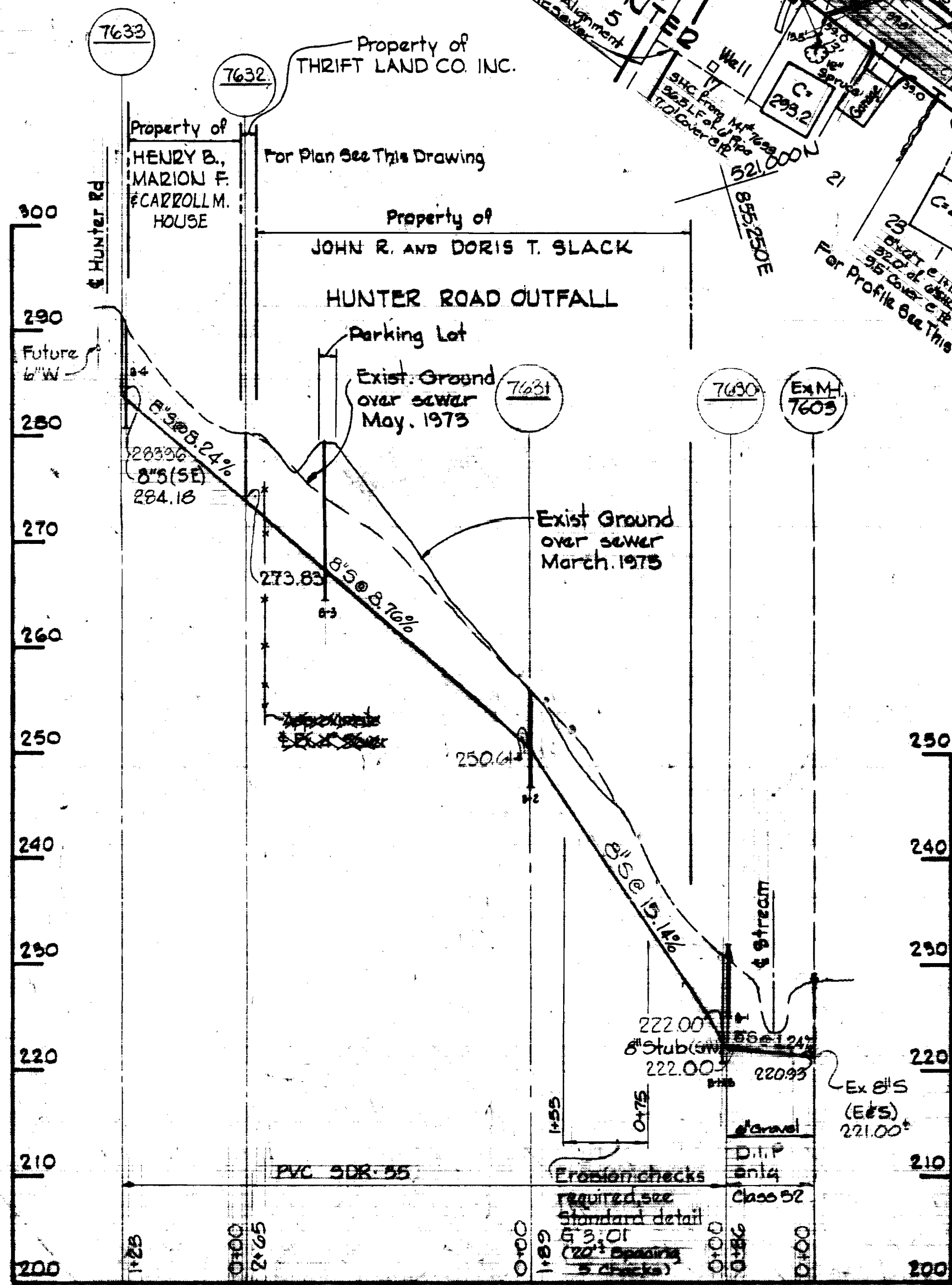
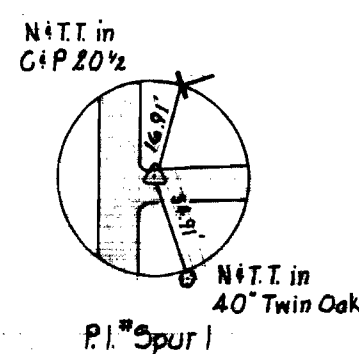
FILL AT MANHOLE NO 7630
Scale: 1/8" = 1'-0"



RIP-RAP DETAIL
Scale 3/8" = 1'-0"

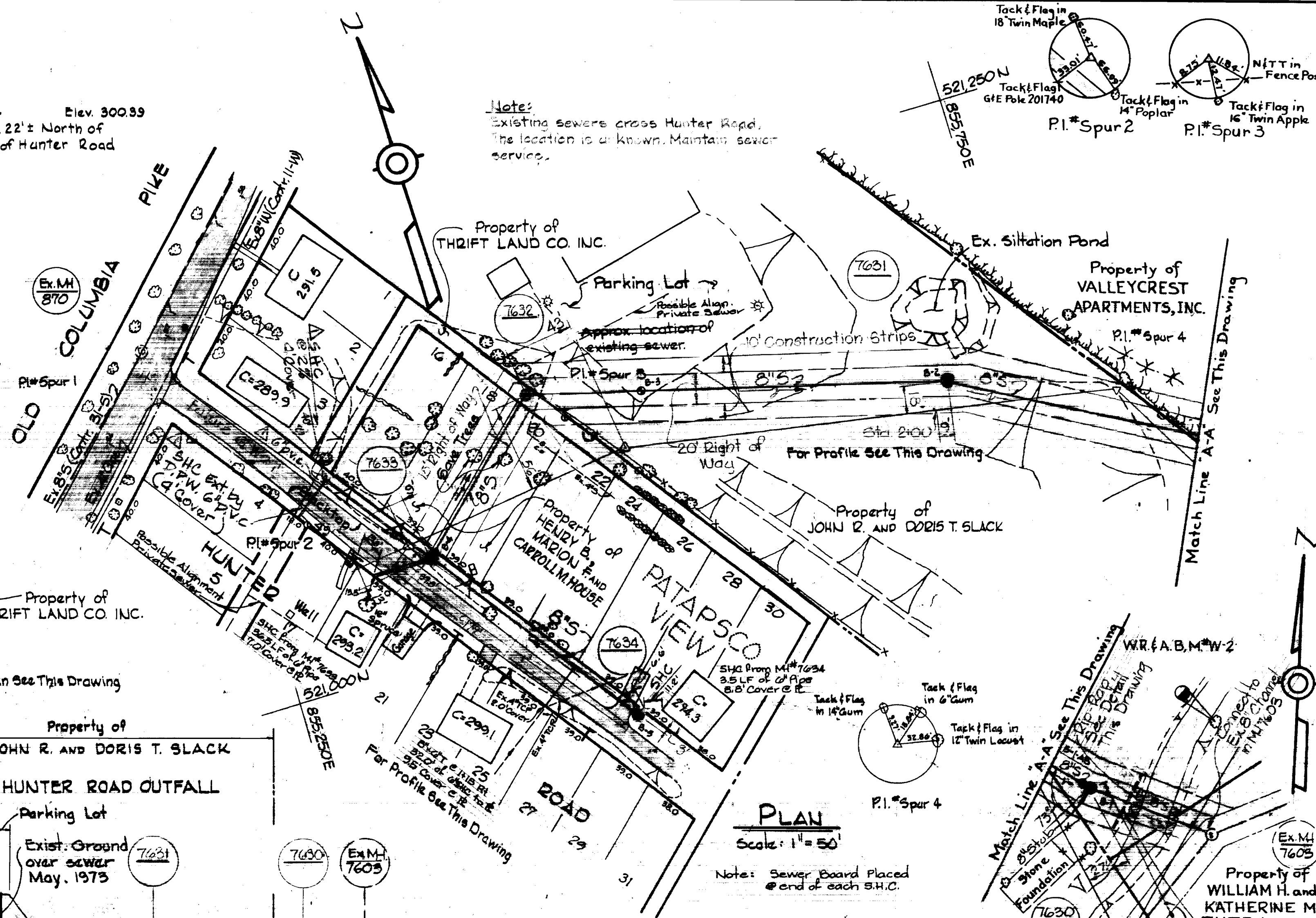
- Notes
- Cost of Rip-Rap shall be included in unit price bid for constructing sewer mains.
 - Rip-Rap shall be placed 6' minimum each side to sewer or as shown.
 - Erosion Control Fabric shall be Poly Filter X as manufacture by Carthage Mills, Inc., Erosion Control Division 124 W 66th Street, Cincinnati, Ohio; Laurel Erosion Control Cloth as manufacture by Laurel Plastic, Inc., Madison, Maine, or approved equal.
 - Rip-Rap shall 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 150 pounds.
 - Rip-Rap shall be placed on any disturbed stream bank. If more than the minimum is required because of the Contractor's operations, it shall be placed at his expense.

Howard County Sta. # 3143004 Elev. 300.93
3/4" rebar 0.2' below surface, 22' North of
& Columbia Pike, 250' N.E. of Hunter Road

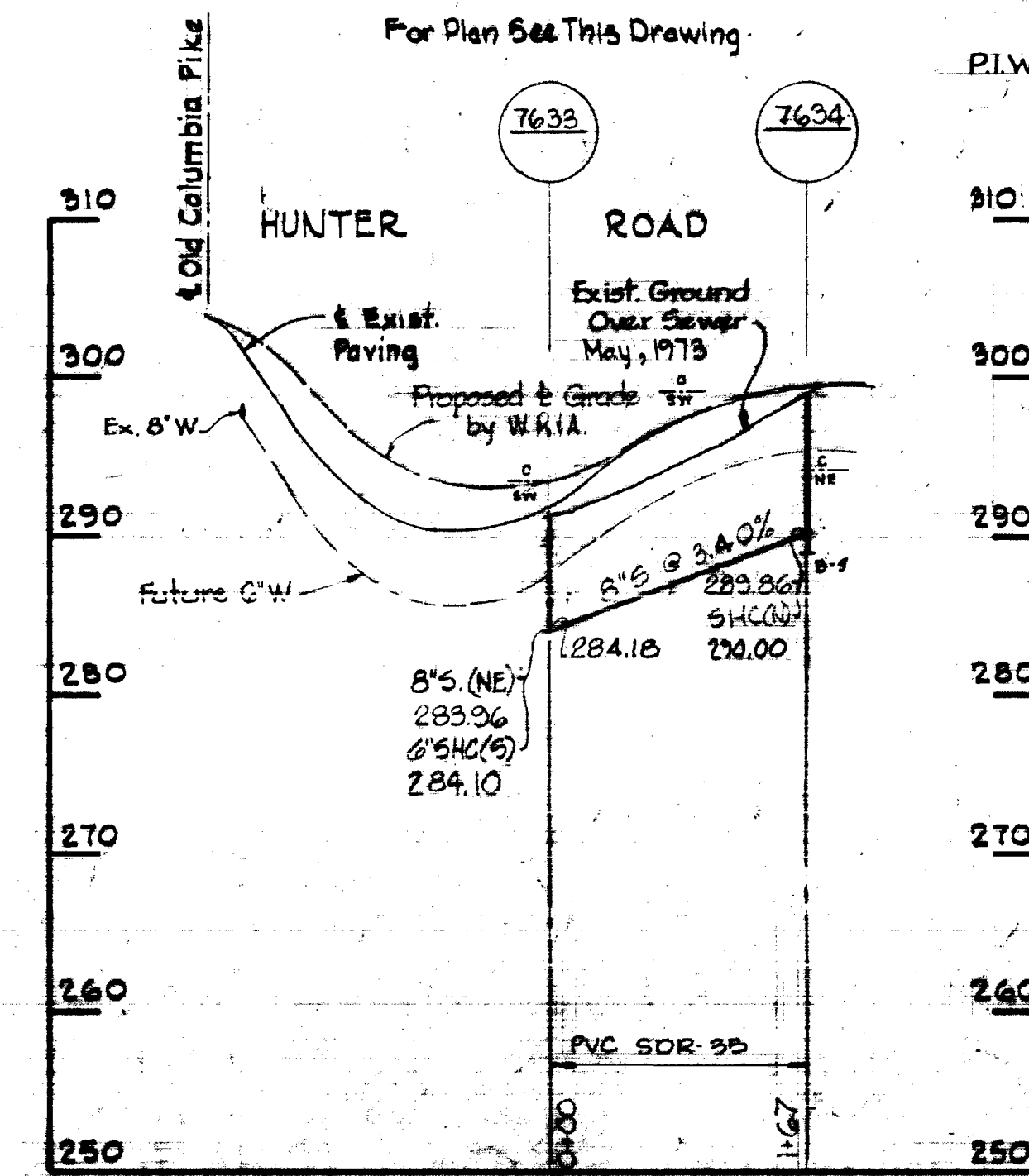


PROFILE Scale: 1/4" = 100'
1/16" = 10'

Note:
Existing sewers cross Hunter Road.
The location is unknown. Maintain sewer service.

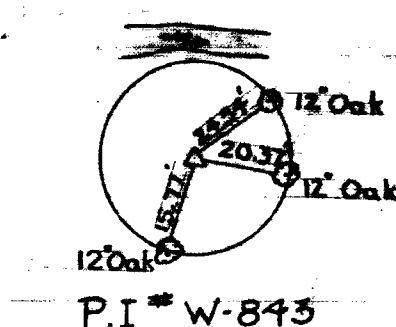


PLAN
Scale: 1" = 50'

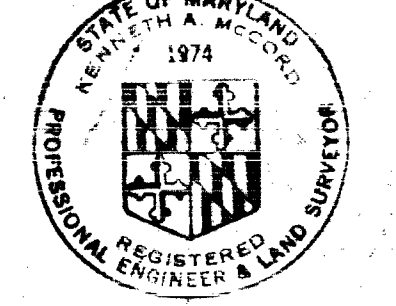


HUNTER ROAD

W.R.A.B.M.#W-2 Elev. 225.90
Railroad Spike in root of 20"
Chestnut, 23' E. of P.I.W-842



P.I. # W-845



Autumn Hill (Hunter Road)
Project No. 5-4-6038
Contract No. 542-S-A

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
2315 ST. PAUL ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
11-30-73
DATE

CONTRACT NO. 542-S-A

PLAN AND PROFILES
OF SEWER MAINS

ELECTION DISTRICT
ELICOTT CITY NO. 2

DRAWING NO. 2
OF 2

SCALE AS SHOWN