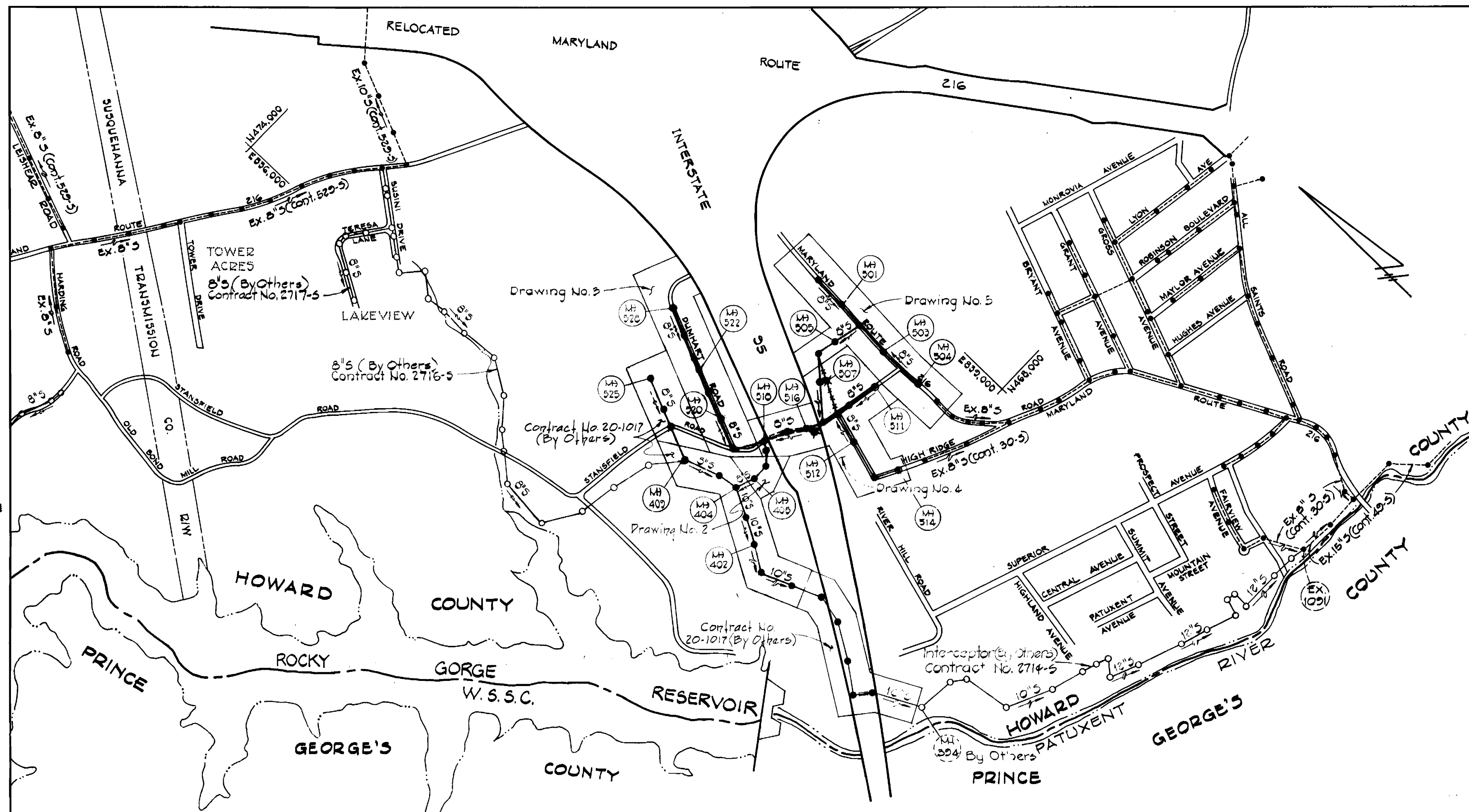


**GENERAL NOTES**

- Approximate location of existing utilities is shown. The Contractor shall take all necessary precautions to protect existing utilities and to maintain uninterrupted service. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer by the Contractor at the Contractor's expense.
- The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities. Cost shall be included in the unit price bid for excavation and backfill of sewer mains.
- Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these plans.  
 State Highway Administration - Mr. W.M. Vlach - 531-5533  
 Baltimore Gas & Electric Company - Underground Electric Distribution Engineering - "Damage Control" - 234-5891  
 Baltimore Gas & Electric Company - Underground Gas Distribution Engineering - 559-0100  
 Chesapeake and Potomac Telephone Company - 725-9976  
 Miss Utility - 1-800-441-8355
- Clear all utilities by a minimum of 6". Clear all poles 2'-0" minimum or tunnel as required. Cost for tunneling or bracing at poles shall be included in the unit prices bid for excavation and backfill of sewer mains.
- All pipe elevations shown are invert elevations.
- The Contractor shall provide a pipe joint in each sewer main within 2'-0" of the exterior manhole walls.
- For details not shown on the Contract Drawings see Standard Details bound in the specifications.
- Trees are to be protected from damage to the maximum extent. Trees located within the construction strip are not to be removed by the Contractor.
- Place regulation "Men Working" and warning signs as required to comply with Maryland State Highway Administration Manual of Traffic Control for Highway Construction & Maintenance Operations.
- All sewer mains shall be 8-8-P-X, V.C.P.X. or A.C.P. Class 2400 unless otherwise noted.
- All manholes shall be 4'-0" inside diameter, unless otherwise noted.
- 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 excavation and backfill for sewer mains.
- All vertical and horizontal control is based on the Maryland State Grid Coordinate System.



QUANTITIES			
ITEM	PROPOSED	AS-BUILT	SUPPLIER/MATERIAL
8" Sewer	6520	6468.2	CAPCO Pipe Co. Inc.-ACP
10" Sewer	1595	1,799.5	CAPCO Pipe Co. Inc.-ACP
Manholes	29	28	Atlantic Precast Conc. Inc.

Stakeout FB G771  
 Diary FB G772 & G772-A

# CAPITAL PROJECT S-4-6049

## CONTRACT NO. 20-1018

# HIGH RIDGE SANITARY SEWERS

# HOWARD COUNTY, MARYLAND

## DEPARTMENT OF PUBLIC WORKS



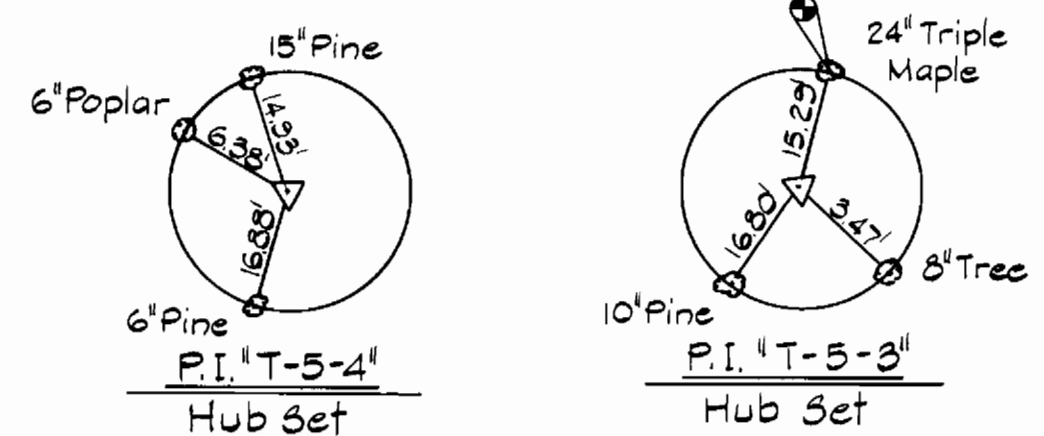
William G. Rosch II No. 4575

CONTRACT NO. 20-1018  
 HIGH RIDGE SANITARY SEWERS  
 DUMHART ROAD & MD. RTE. #216  
 HOWARD COUNTY CAPITAL PROJECT S-4-6049  
 SEWER MAIN EXTENSION

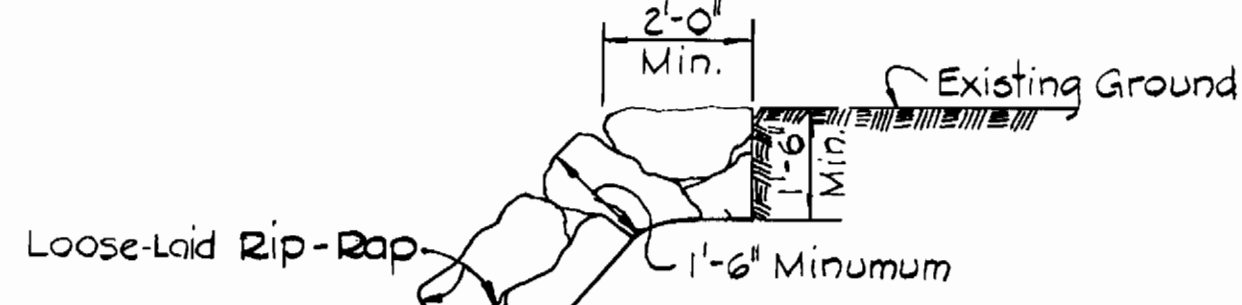
PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>W.G. Rosch II</i> DATE: 3-11-77 Chief-Bureau of Engineering: <i>W.D. Hart</i> DATE: 3-16-77	CONTRACT NO. 20-1018 CAPITAL PROJECT NO. S-4-6049	LOCATION MAP OF SANITARY SEWERS	HIGH RIDGE SANITARY SEWERS ELECTION DISTRICT NO. 8 HOWARD COUNTY, MARYLAND	DRAWING NO. 1 OF 8 SCALE 1" = 600' MAPS: 217-40, 218-40
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**BENCH MARKS**

- B.M. 'B-B' Elev. 254.45  
3 Cut nails in 15' poplar 31' northwest of P.O.L. 3+20 (between P.I.'s T-4 & T-5)
- B.M. 'O-1' Elev. 262.20  
2 Nails set in 10' poplar 11' northwest P.I. 'T-5-1'
- B.M. 'O-2' Elev. 279.68  
2 Nails in 8' pine 12.52' south of P.I. 'T-5-2'
- B.M. 'O-3' Elev. 268.67  
1 Nail set in root of 24' triple maple, 15.3' northwest of P.I. 'T-5-3'
- B.M. 'O-4' Elev. 253.15  
3 Cut nails set in 4' poplar 23.5' southeast of P.I. 'T-5-4'
- B.M. 'E-E' Elev. 237.07  
3 Cut nails 12' Oak 16 1/2' northwest of P.I. 'T-7'
- B.M. 'F-F' Elev. 233.54  
3 Cut nails 12' wild cherry 16 1/2' northwest of P.I. 'T-8'



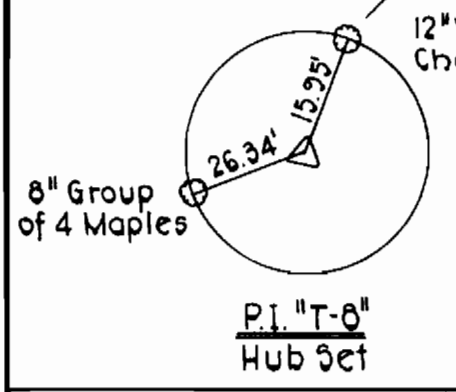
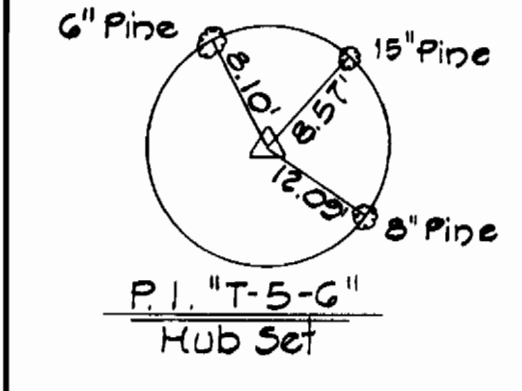
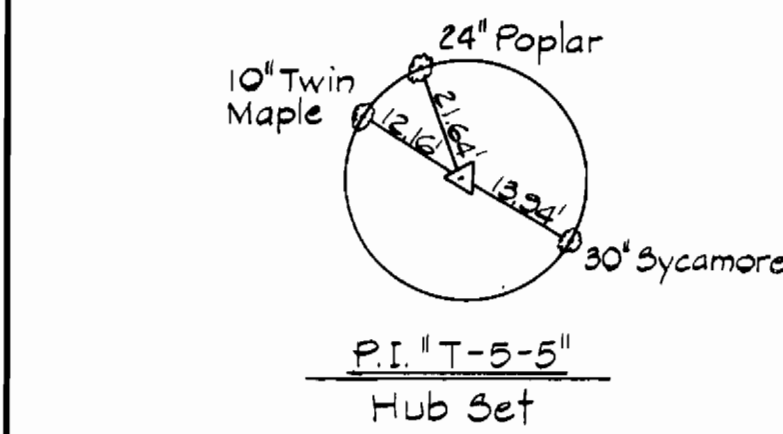
Rip-Rap to consist of dense rocks of random shapes and sizes, resistant to the action of air and water, and suitable for bank protection. All rocks shall weigh a minimum of 150 pounds.



NOTE: Erosion Control Fabric shall be Poly-Filter X as manufactured by Garthage Mills Inc., Permaliner M-1195 as manufactured by Staff Industries Inc., or equal.

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

Maintain 1'-0" minimum clearance between Rip-Rap and Top of Pipe



W.S.S.C. NO. 80 SO 4688 A

WASHINGTON SUBURBAN SANITARY COMMISSION

FOR SANITARY SEWERS LOCATED ON W.S.S.C. PROPERTY.

PROJECT DEVELOPMENT DIV. HEAD DATE

**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. 20-1018

CAPITAL PROJECT NO. S-4-8049

PLAN AND DETAILS OF SEWER MAINS

HIGH RIDGE SANITARY SEWERS  
ELECTION DISTRICT NO. 6  
HOWARD COUNTY, MARYLAND

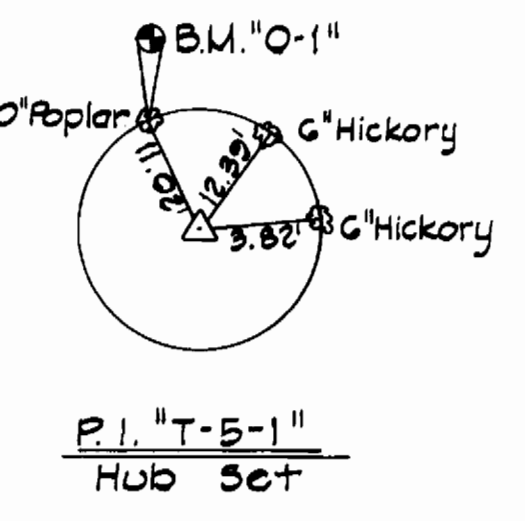
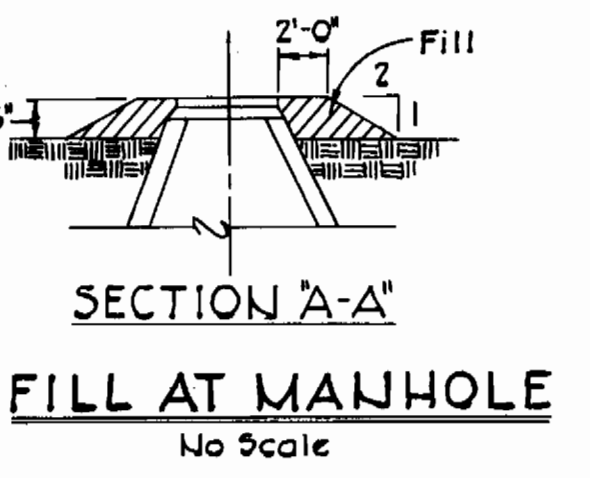
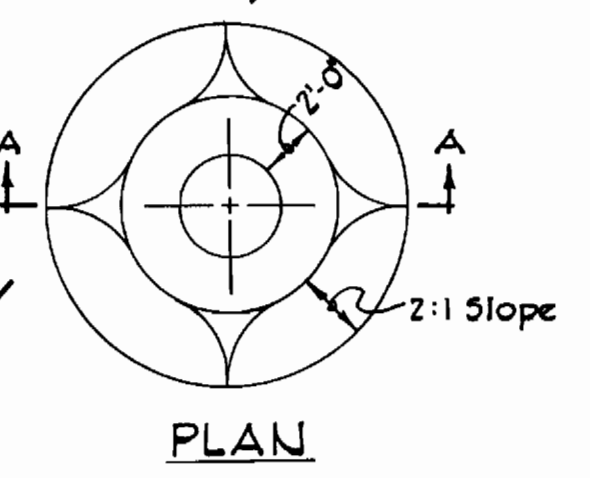
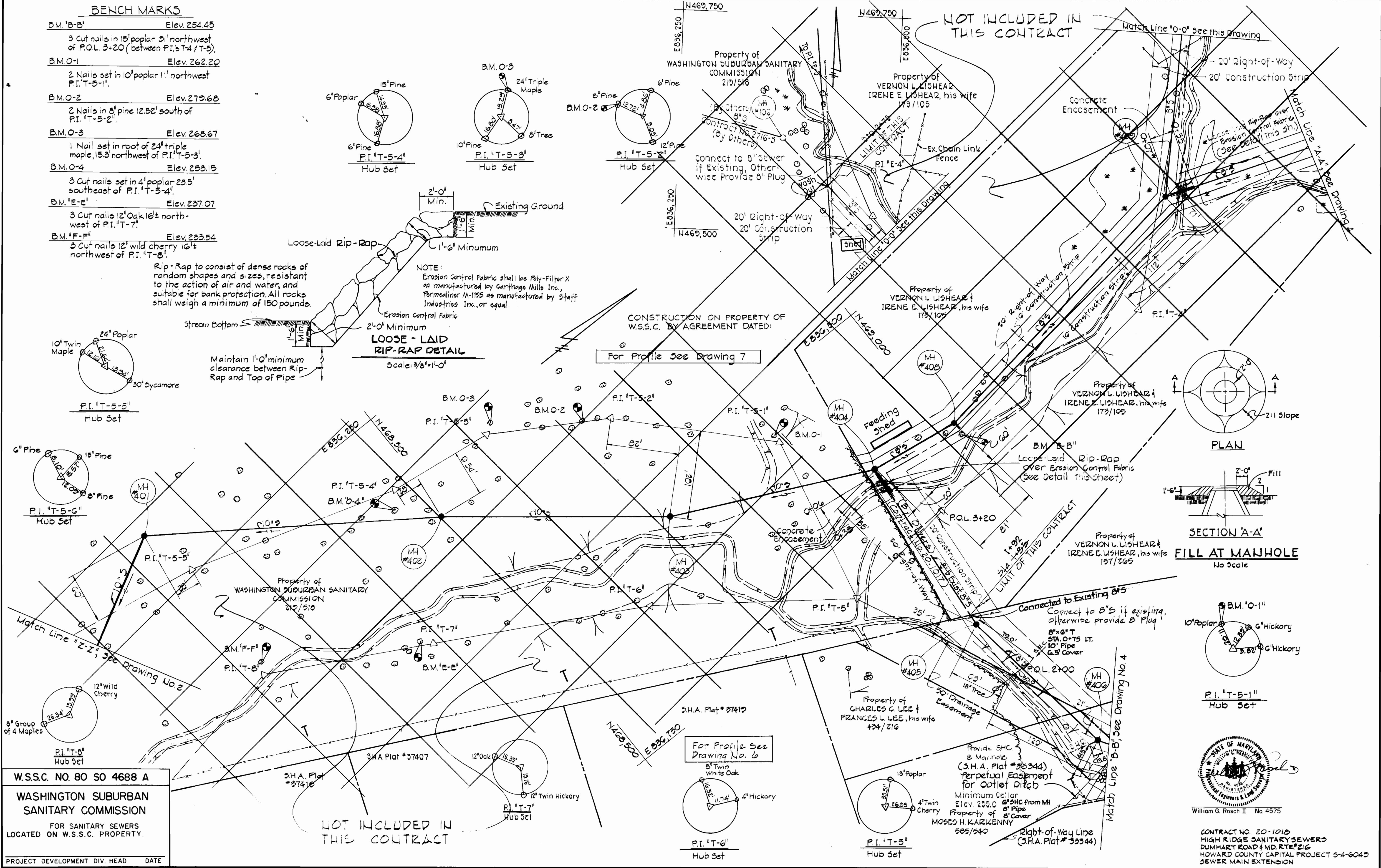
DRAWING NO. 2 OF 8  
SCALE AS SHOWN  
DESIGNED - JPB  
DRAFTED - YAM  
CHECKED - QSP

W.O. #3307

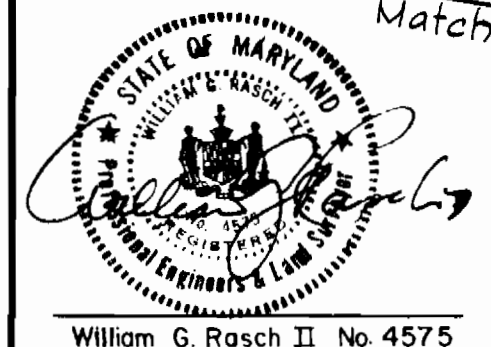
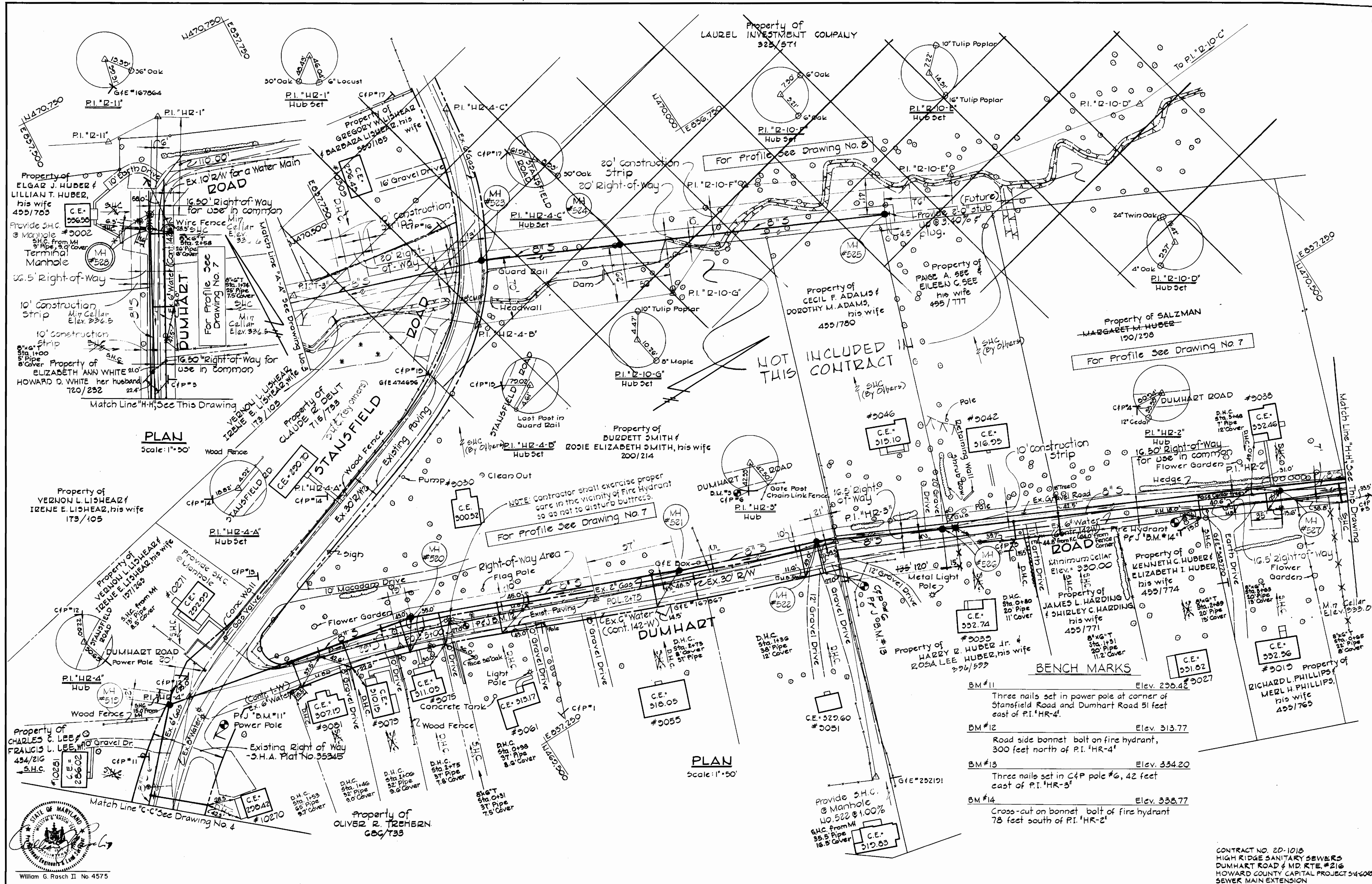
**AS-BUILT**

JUN 16 1983

K&E BALTIMORE 17 6483 PHOENIX MC 3349



CONTRACT NO. 20-1018  
HIGH RIDGE SANITARY SEWERS  
DUMHART ROAD & MD. RTE. 216  
HOWARD COUNTY CAPITAL PROJECT S-4-6049  
SEWER MAIN EXTENSION



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

**DEPARTMENT OF PUBLIC WORKS**  
 HOWARD COUNTY, MARYLAND  
 3-11-77  
 DIRECTOR OF PUBLIC WORKS DATE CHIEF-BUREAU OF ENGINEERING DATE

**CONTRACT NO.** 20-1018  
**CAPITAL PROJECT NO.** S-4-8049

**PLAN OF SEWER MAINS**

**HIGH RIDGE SANITARY SEWERS**  
 ELECTION DISTRICT NO. 6  
 HOWARD COUNTY, MARYLAND

**DRAWING SCALE**  
 NO. 3 OF 8  
 1" = 50'

W.O. #3357

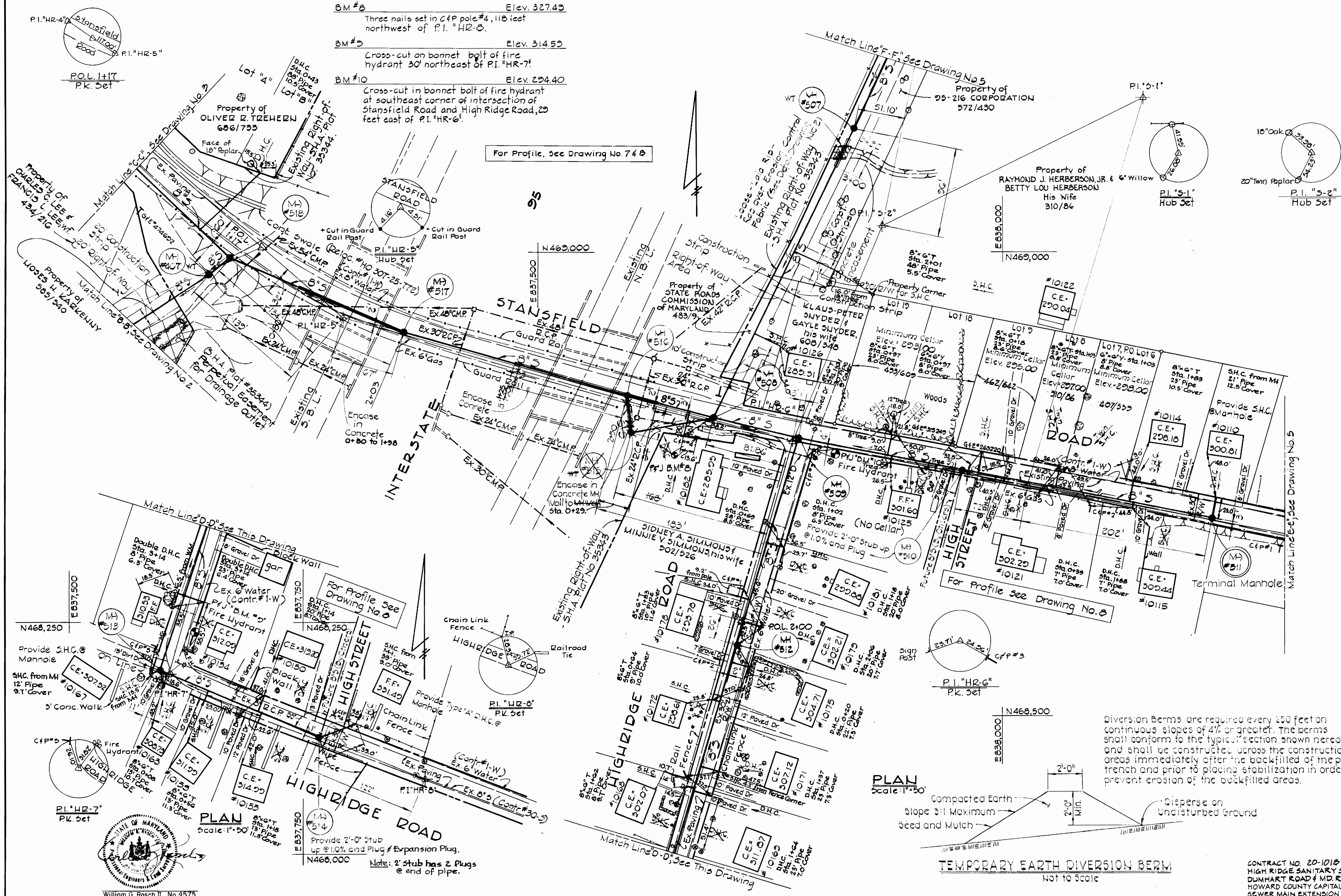
**AS-BUILT** JUN 16 1983

CONTRACT NO. 20-1018  
 HIGH RIDGE SANITARY SEWERS  
 DUMHART ROAD & MD. RTE. #216  
 HOWARD COUNTY CAPITAL PROJECT S-4-8049  
 SEWER MAIN EXTENSION

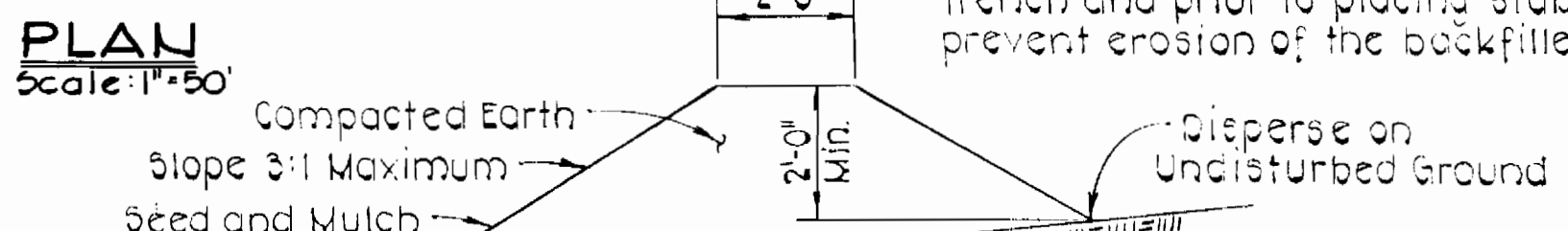
**BENCH MARKS**

- BM #8 Elev. 327.49  
Three nails set in C&P pole #4, 118 feet northwest of P.I. "HR-5".
- BM #9 Elev. 314.59  
Cross-cut on bonnet bolt of fire hydrant 30' northeast of P.I. "HR-7".
- BM #10 Elev. 294.40  
Cross-cut in bonnet bolt of fire hydrant at southeast corner of intersection of Stansfield Road and High Ridge Road, 25 feet east of P.I. "HR-6".

For Profile, See Drawing No. 7 & 8



Diversion Berms are required every 250 feet on continuous slopes of 4% or greater. The berms shall conform to the typical section shown hereon and shall be constructed across the construction areas immediately after the backfill of the pipe trench and prior to placing stabilization in order to prevent erosion of the backfilled areas.



**TEMPORARY EARTH DIVERSION BERM**  
Not to Scale

CONTRACT NO. 20-1018  
HIGH RIDGE SANITARY SEWERS  
DUMHART ROAD & MD. RT. 216  
HOWARD COUNTY CAPITAL PROJECT 5-4-6049  
SEWER MAIN EXTENSION



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

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND  
3-10-77  
DIRECTOR OF PUBLIC WORKS DATE CHIEF-BUREAU OF ENGINEERING DATE

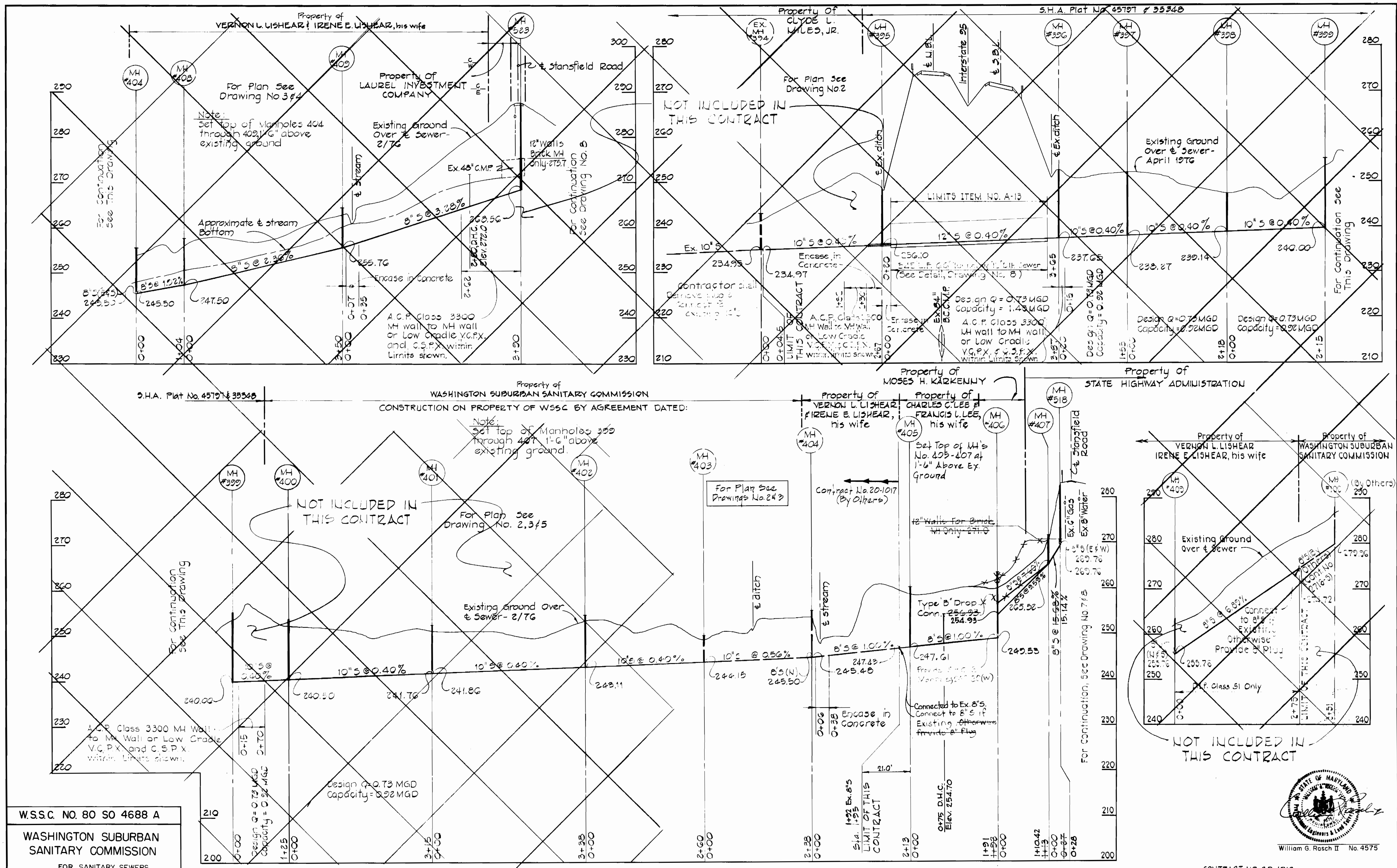
CONTRACT NO. 20-1018  
CAPITAL PROJECT NO. 5-4-6049

PLAN OF SEWER MAINS

**HIGH RIDGE SANITARY SEWERS**  
ELECTION DISTRICT NO. 8  
HOWARD COUNTY, MARYLAND

<b>DRAWING</b>	<b>SCALE</b>	<b>DESIGNED - PWK</b>
NO. 4	1" = 50'	DRAFTED - TMB
OF 8		CHECKED - REP





W.S.S.C. NO. 80 SO 4688 A  
 WASHINGTON SUBURBAN  
 SANITARY COMMISSION  
 FOR SANITARY SEWERS  
 LOCATED ON W.S.S.C. PROPERTY.  
 PROJECT DEVELOPMENT DIV. HEAD DATE

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

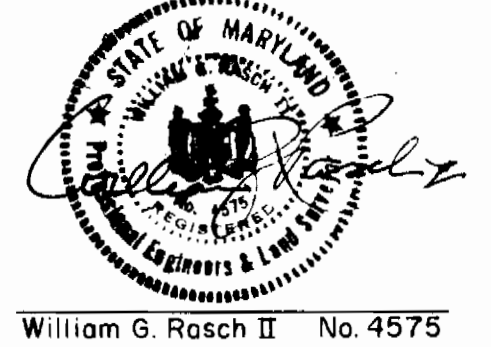
DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 3-177  
 DATE 3-10-77  
 CHIEF BUREAU OF ENGINEERING DATE

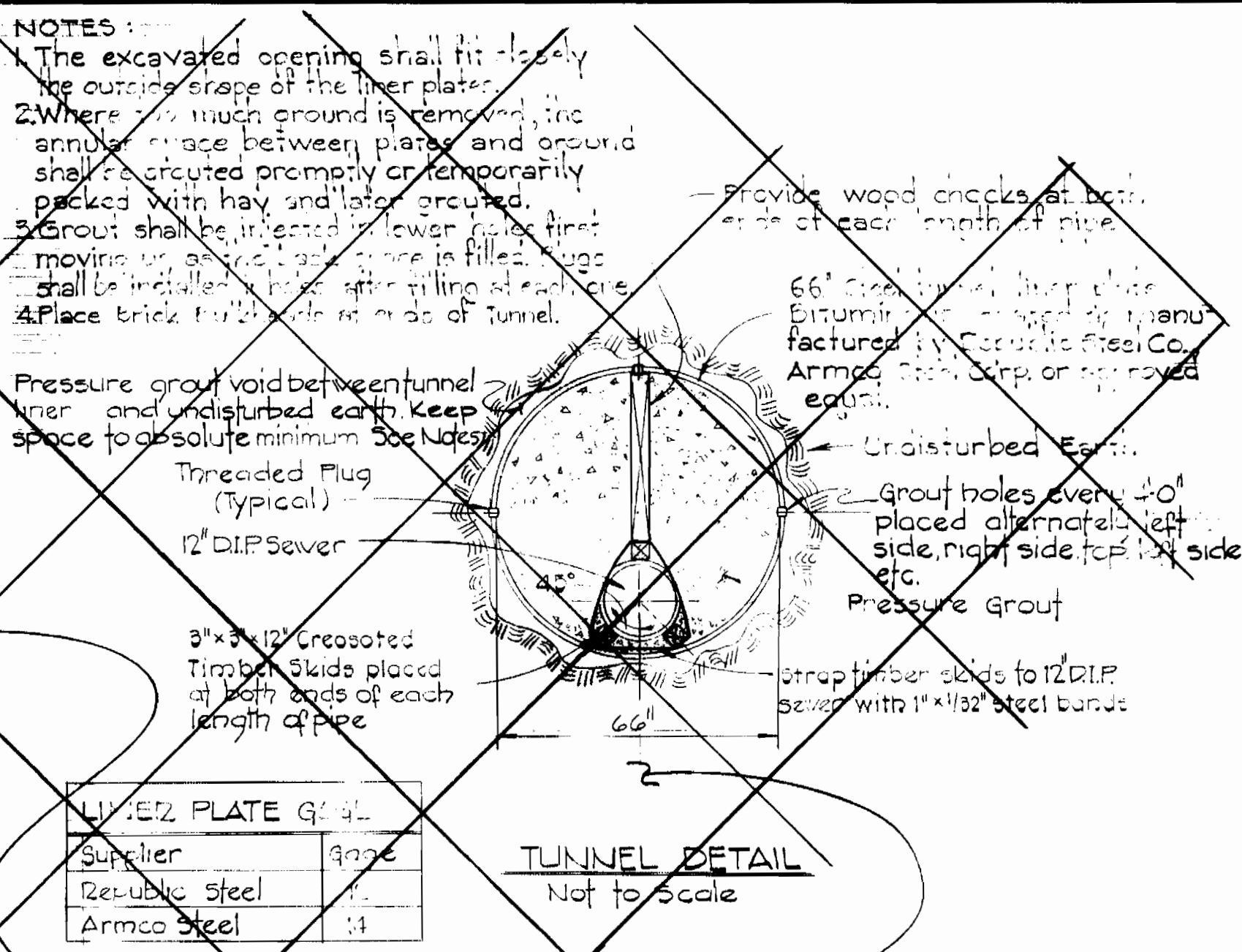
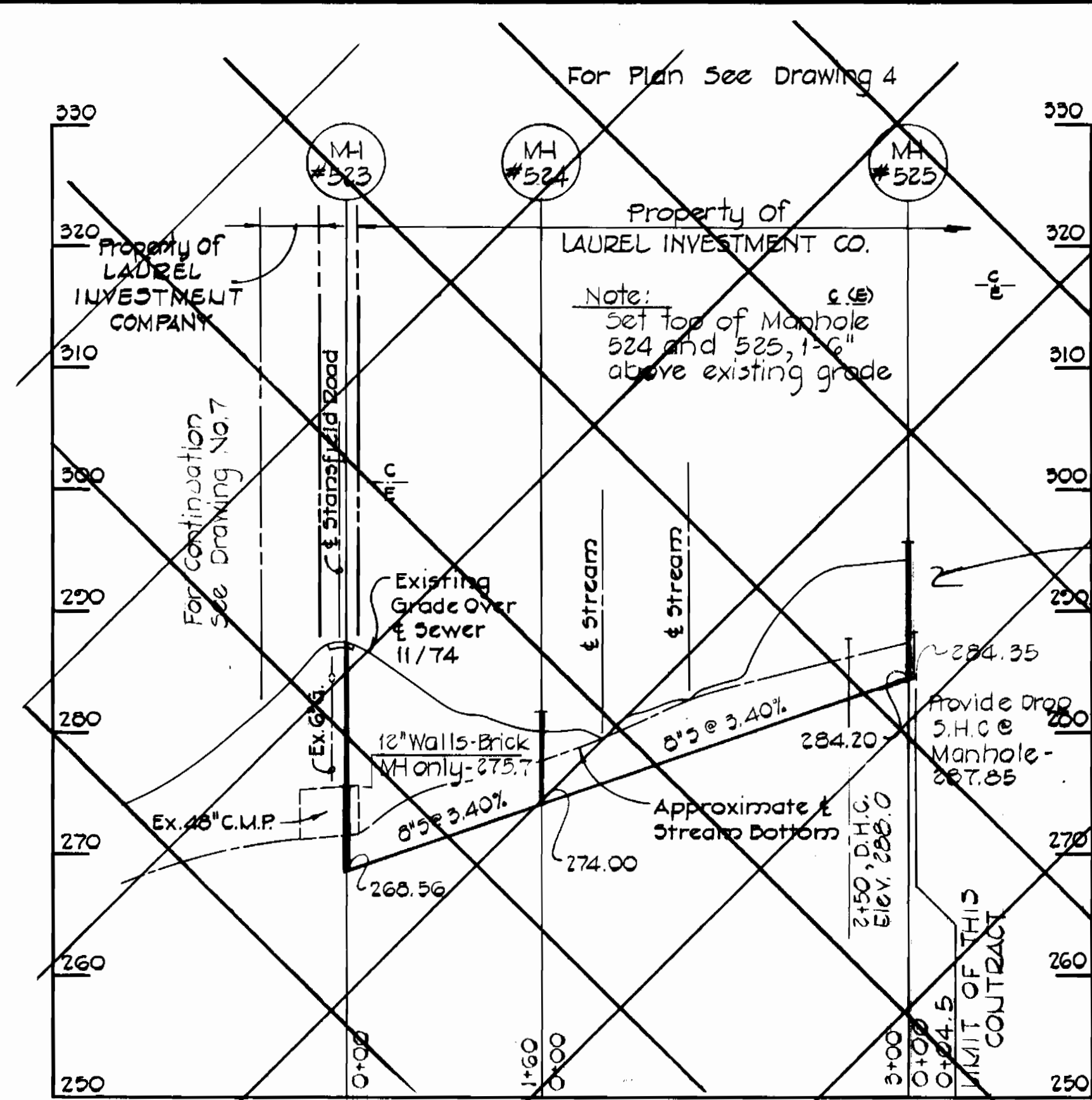
CONTRACT NO. 20-1018  
 CAPITAL PROJECT NO. S-4-8049

PROFILES OF  
 SEWER MAINS

HIGH RIDGE SANITARY SEWERS  
 ELECTION DISTRICT NO. 6  
 HOWARD COUNTY, MARYLAND

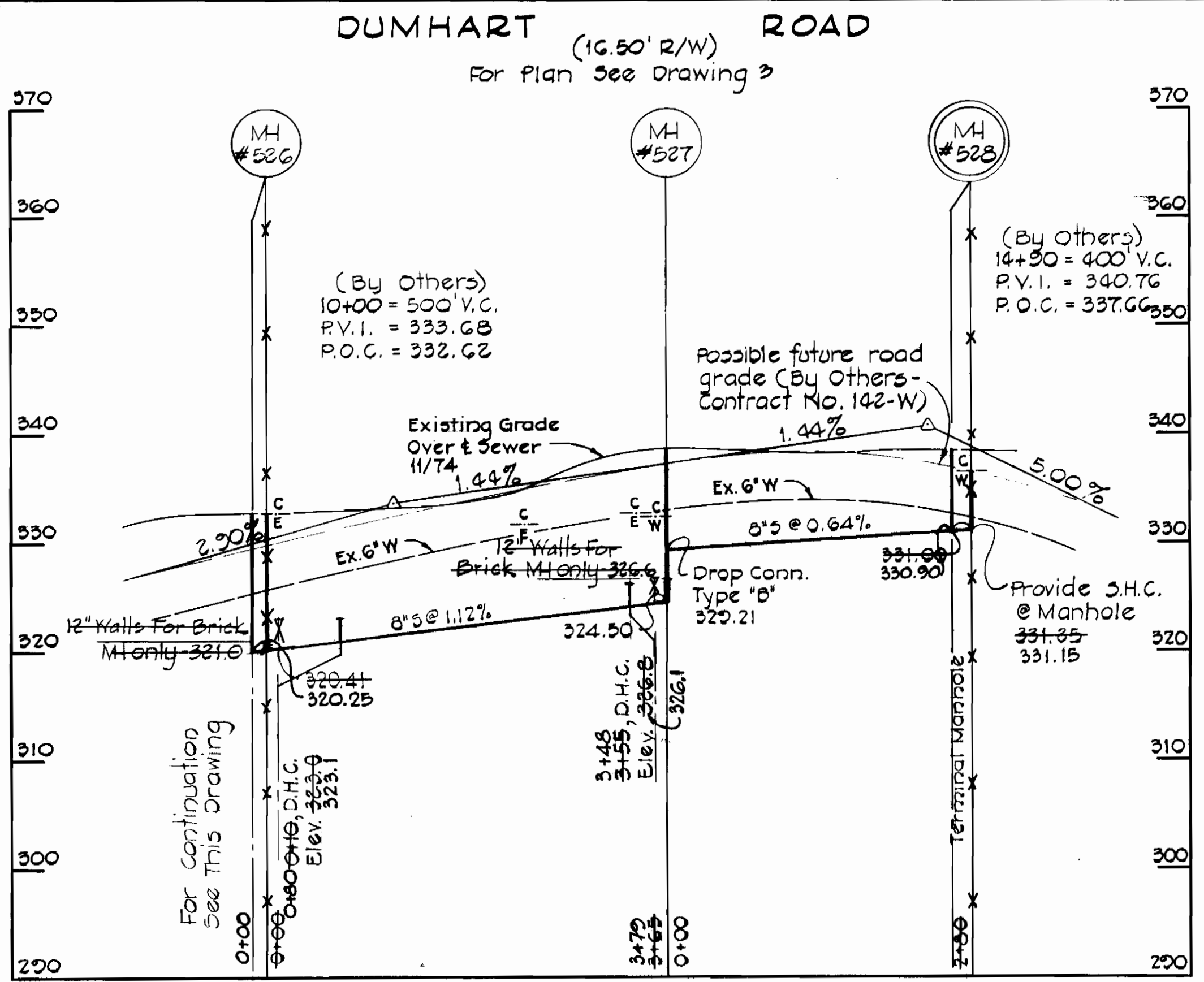
CONTRACT NO. 20-1018  
 HIGH RIDGE SANITARY SEWERS  
 DUNHART ROAD & MD RT 216  
 HOWARD COUNTY CAPITAL PROJECT S-4-8049  
 SEWER MAIN EXTENSION  
 DRAWING NO. 6 OF 8  
 SCALE Horz 1" = 100' Vert 1" = 10'  
 DESIGNED - P.W.K.  
 DRAFTED - M.M.  
 CHECKED - R.E.P.



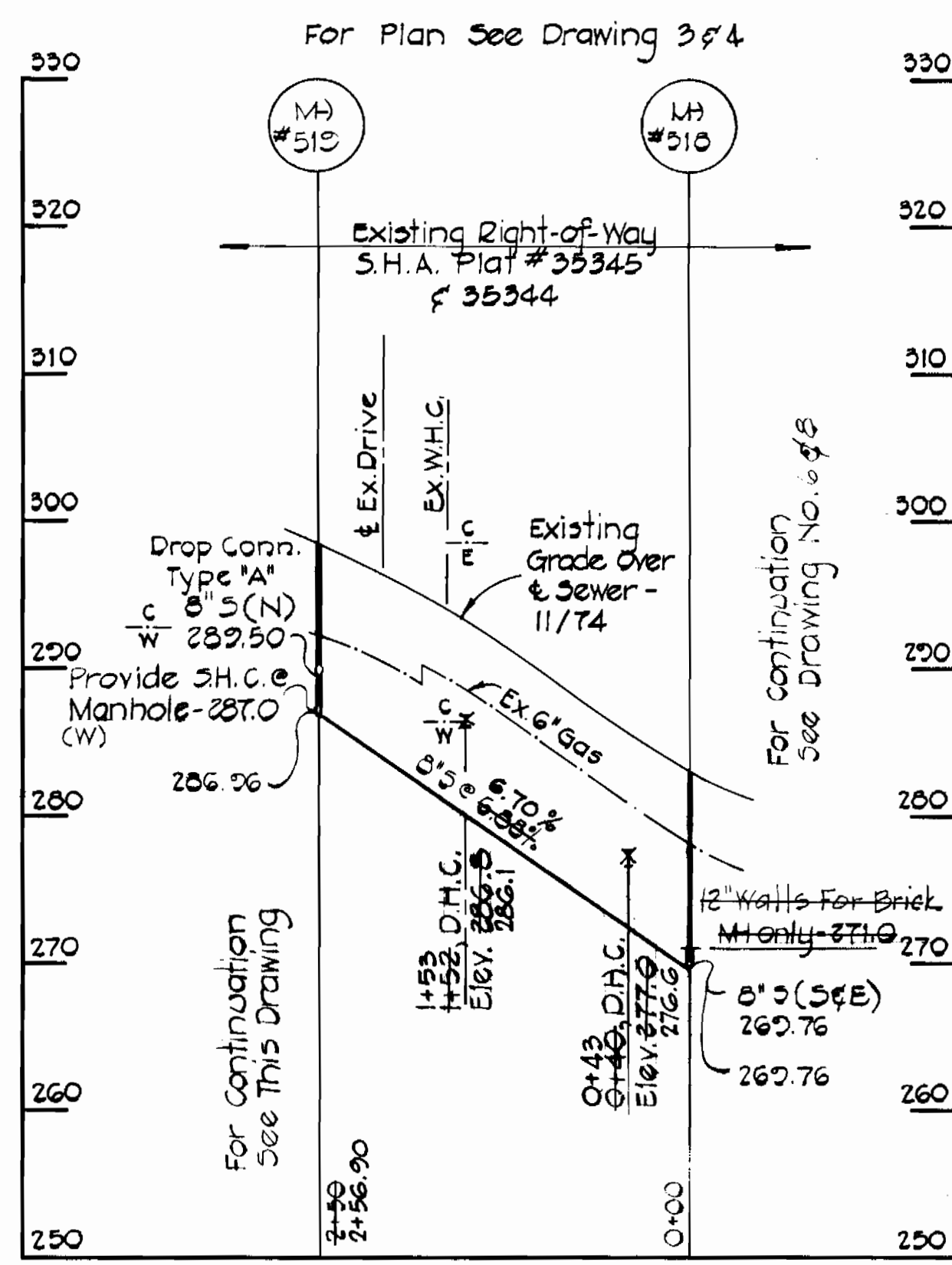


Supplier	Grade
Re-usable steel	1:1
Armco Steel	1:1

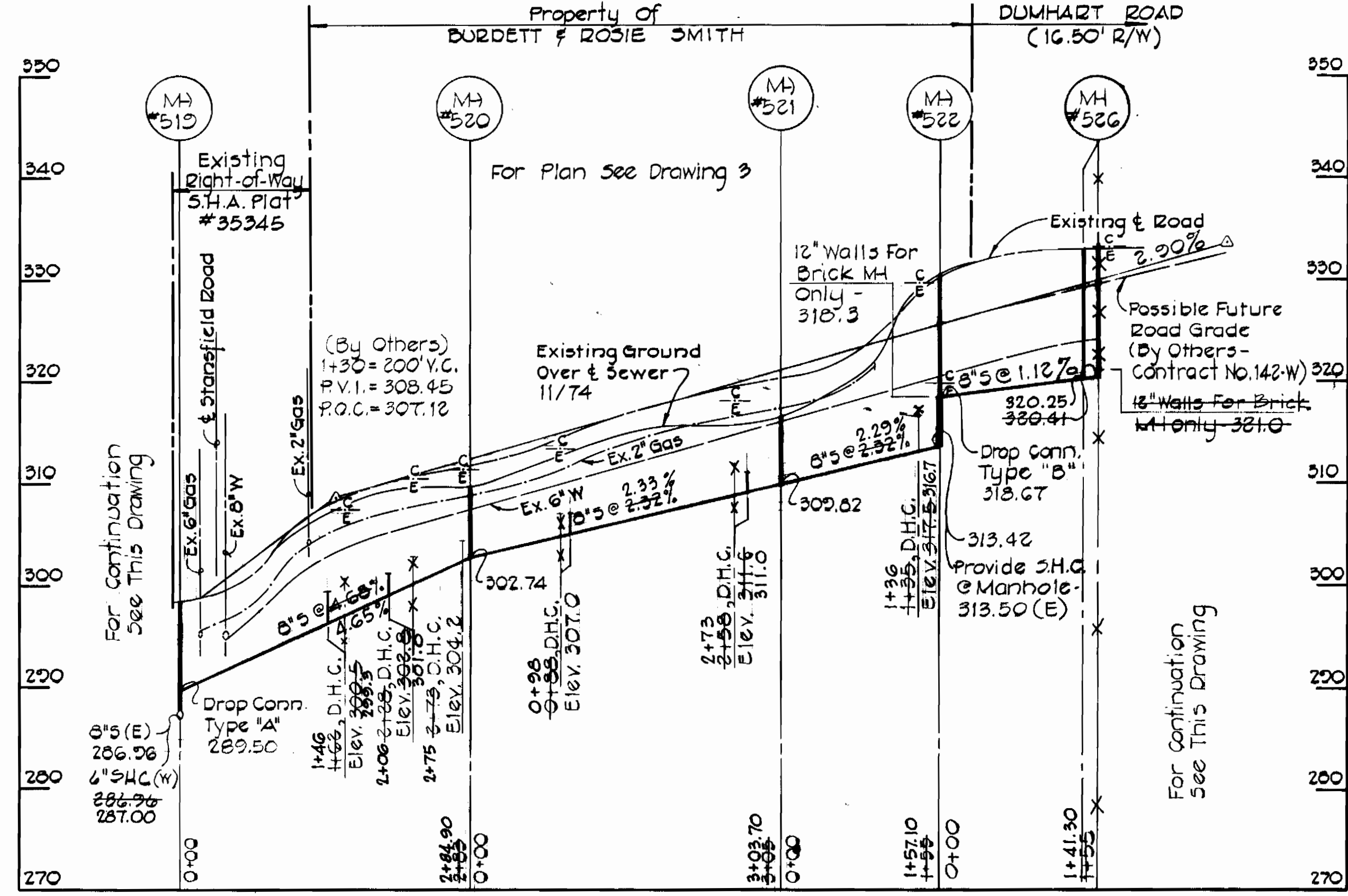
NOT INCLUDED IN THIS CONTRACT



STANSFIELD ROAD



DUMHART ROAD



CONTRACT NO. 20-1018  
HIGH RIDGE SANITARY SEWERS  
DUMHART ROAD / MD. RTE. #216  
HOWARD COUNTY CAPITAL PROJECT 5-4-6049  
SEWER MAIN EXTENSION

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

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
3417 W.O.# 3357  
DIRECTOR OF PUBLIC WORKS DATE CHIEF BUREAU OF ENGINEERING DATE

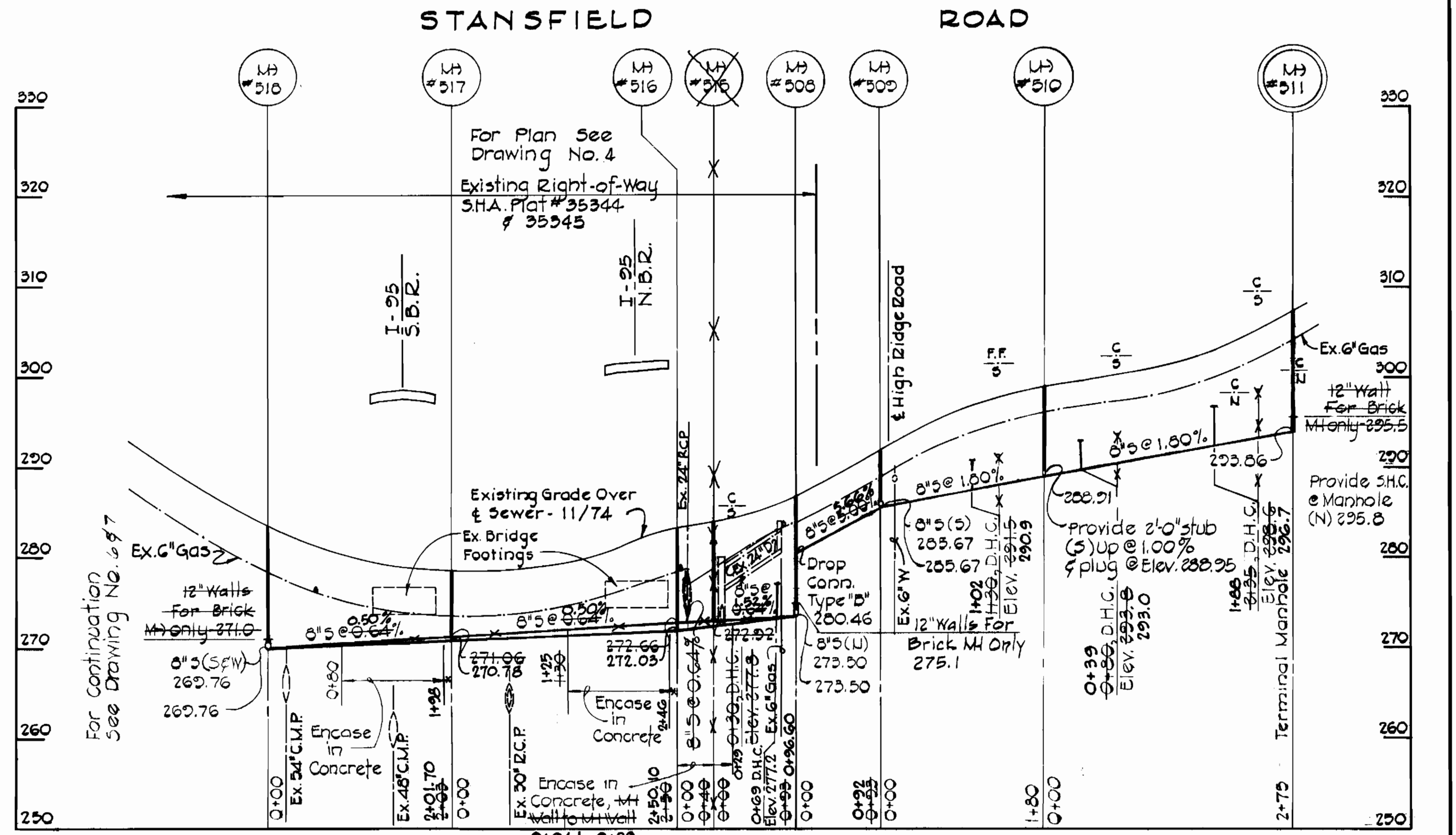
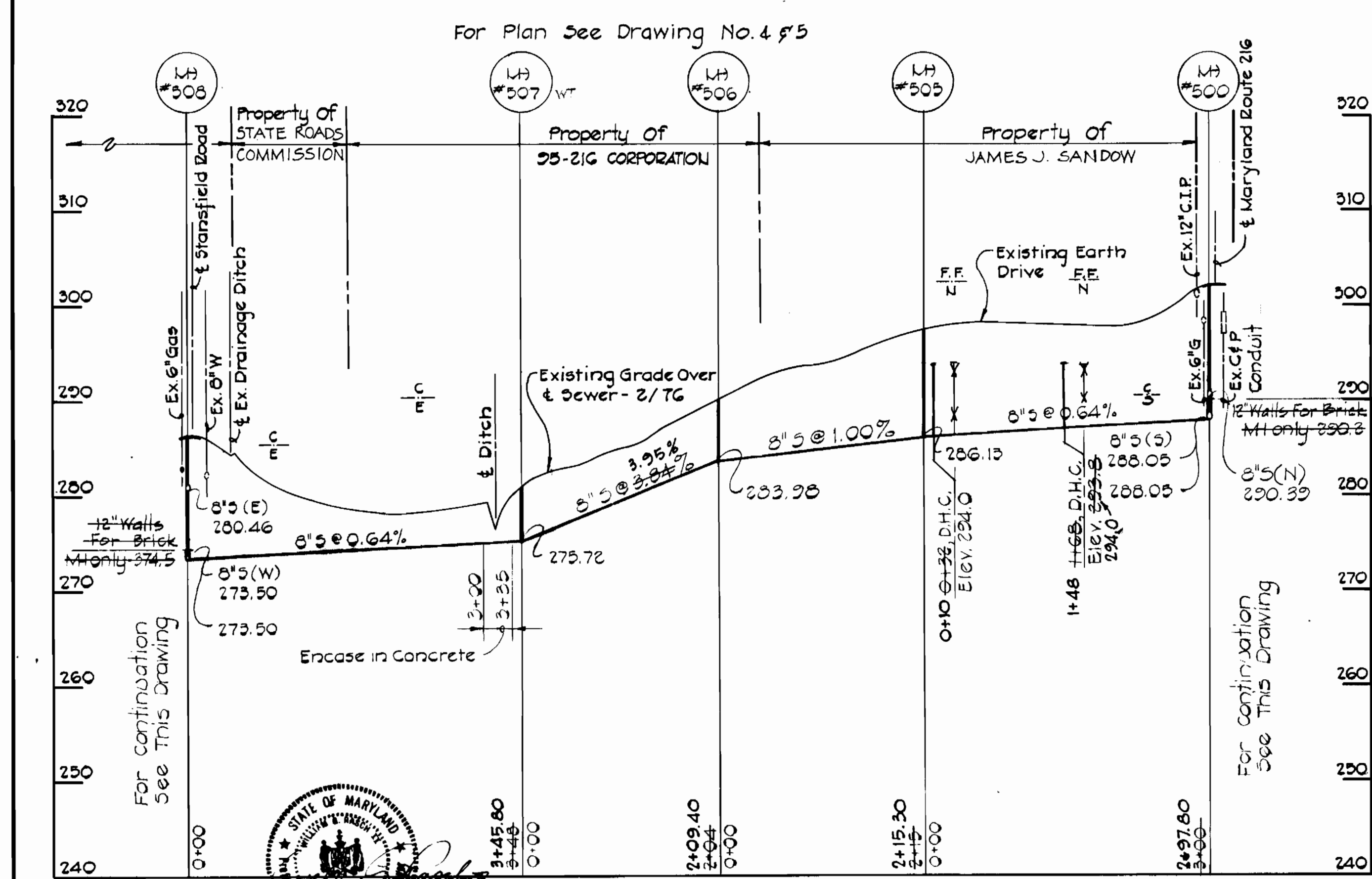
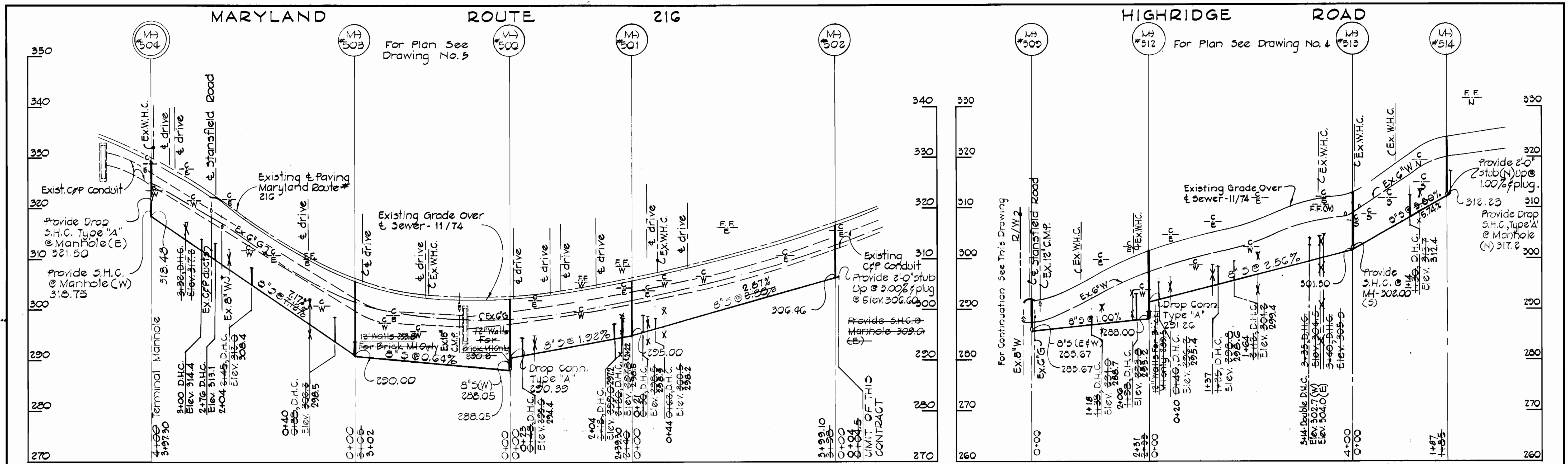
CONTRACT NO. 20-1018  
CAPITAL PROJECT NO. S-4-8048

PROFILES OF SEWER MAINS

HIGH RIDGE SANITARY SEWER  
ELECTION DISTRICT NO. 8  
HOWARD COUNTY, MARYLAND

DRAWING NO. 7 OF 8  
SCALE: Horiz 1" = 100' Vert 1" = 10'

AS-BUILT JUN 16 1983



CONTRACT NO. 20-1018  
 HIGH RIDGE SANITARY SEWER  
 DUNHART ROAD / MD RTE #216  
 HOWARD COUNTY CAPITAL PROJECT 5-4-6045  
 SEWER MAIN EXTENSION

<b>PURDUM &amp; JESCHKE</b> ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	<b>DEPARTMENT OF PUBLIC WORKS</b> HOWARD COUNTY, MARYLAND DATE: 3-1-77 CHIEF BUREAU OF ENGINEERING	CONTRACT NO. 20-1018 CAPITAL PROJECT NO. 5-4-6045	PROFILES OF SEWER MAINS	<b>HIGH RIDGE SANITARY SEWER</b> ELECTION DISTRICT NO. 8 HOWARD COUNTY, MARYLAND	<b>DRAWING</b> NO. 8 OF 8 <b>SCALE</b> Horz 1" = 100' Vert 1" = 10' REVISIONS: P.V.V., P.F.T.B., R.P.P.
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