

- GENERAL NOTES**
1. 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.
 2. 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.
 3. 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" - 234-5691
 - Baltimore Gas & Electric Company - Underground Gas Distribution Engineering - 559-0100
 - Chesapeake and Potomac Telephone Company - 725-9976
 - Miss Utility - 1-800-441-8355
 4. 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.
 5. All pipe elevations shown are invert \circ elevations.
 6. The Contractor shall provide a pipe joint in each sewer main within 2'-0" of the exterior manhole walls.
 7. Watertight manhole frame and cover to be used where indicated on drawings Standard Detail S-12 (RCR-63A). Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.
 8. For details not shown on the Contract Drawings see Standard Details bound in the specifications.
 9. 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.
 10. 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.
 11. All sewer mains shall be C.S.P.X., V.C.P.X. or A.C.P. Class 2400 unless otherwise noted.
 12. All manholes shall be 4'-0" inside diameter, unless otherwise noted.
 13. 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.
 14. All horizontal and vertical controls are based on the Maryland State Grid Coordinate System.

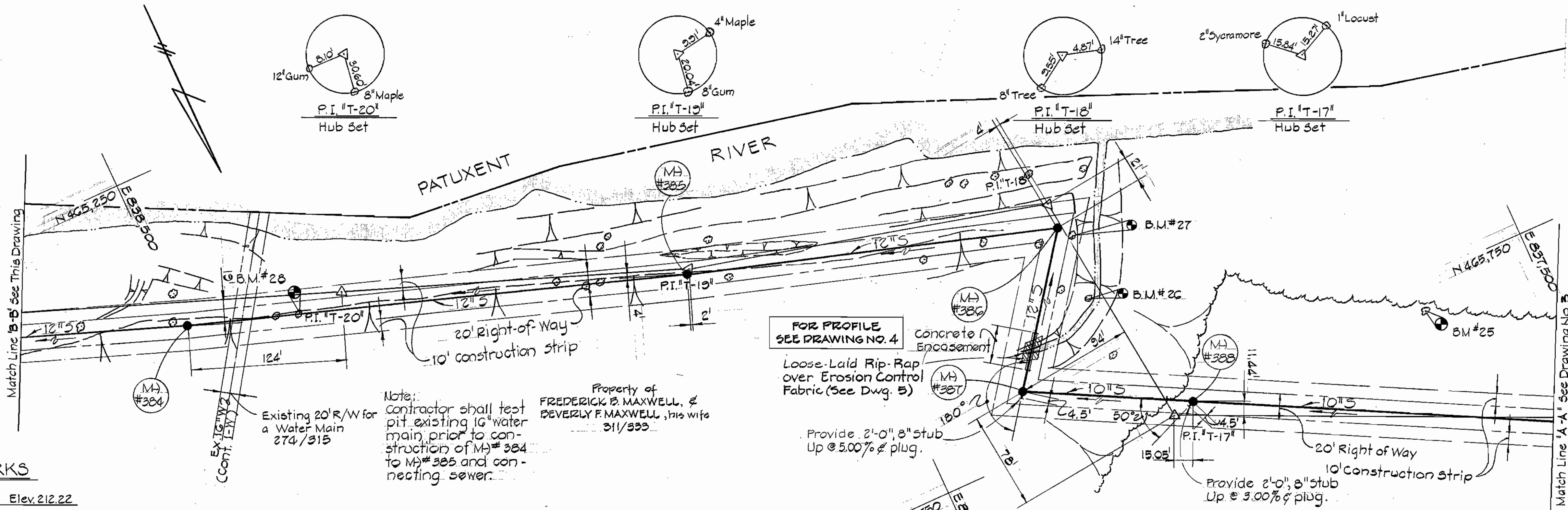
QUANTITIES			
	Proposed	As-Built	MAN/SUP.
12" Sewer	2,425 L.F.	2383	ACP
10" Sewer	2,050 L.F.	1717	
Manholes	187 V.F.		

CAPITAL PROJECT S-4-6049
CONTRACT NO. 2714-S
HIGH RIDGE INTERCEPTOR
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS



Contract No. 2714-S
 High Ridge Sanitary Sewers
 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 <i>A. D. Reagan</i> DIRECTOR OF PUBLIC WORKS	CONTRACT NO. X 714-S CAPITAL PROJECT NO. S-4-6049	LOCATION MAP OF SANITARY SEWERS	HIGH RIDGE SANITARY SEWERS ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND	DRAWING NO. 1 OF 5	SCALE 1" = 600'	MAPS: 217-40 218-40
					DATE 1-31-77	DATE 11-28-77	DATE

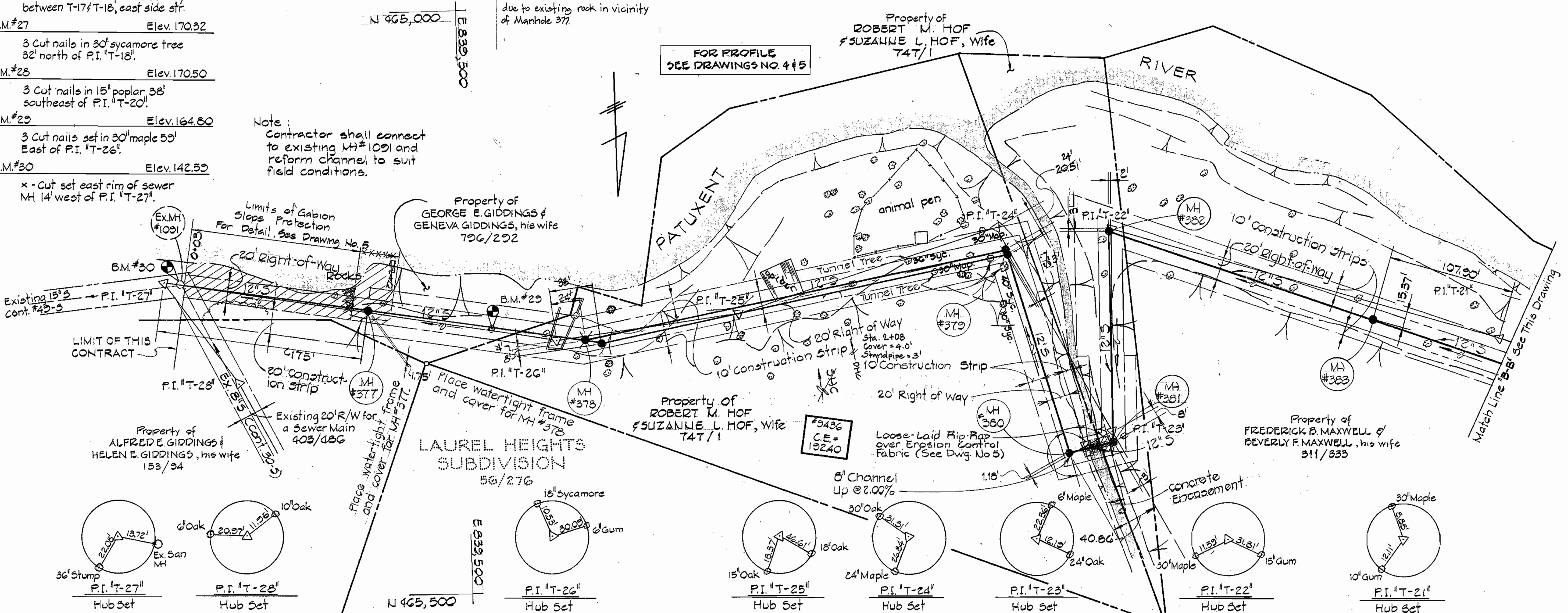


BENCH MARKS

B.M.#25	Elev. 212.22
3 Cut nails set in 12" dead oak on top slope 225 west of P.I. T-17"	
B.M.#26	Elev. 160.57
3 Cut nails 10" Poplar half-way between T-17/T-18, east side str.	
B.M.#27	Elev. 170.32
3 Cut nails in 30" sycamore tree 32' north of P.I. T-18"	
B.M.#28	Elev. 170.50
3 Cut nails in 15" poplar 38' southeast of P.I. T-20"	
B.M.#29	Elev. 164.80
3 Cut nails set in 30" maple 55' East of P.I. T-26"	
B.M.#30	Elev. 142.59
x - Cut set east rim of sewer MH 14' west of P.I. T-27"	

Note: Contractor shall connect to existing M#1091 and reform channel to suit field conditions.

NOTE: 1. Manholes 378 and 379 were relocated during construction to suit field conditions.
2. Limits of Gabions were reduced due to existing rock in vicinity of Manhole 377.



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

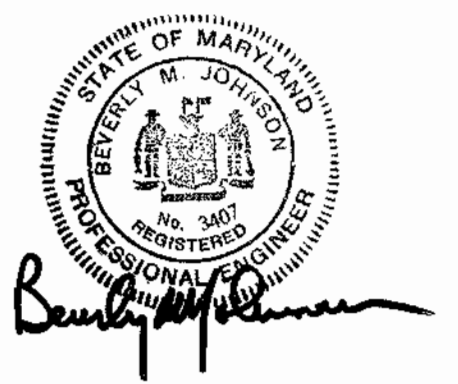
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
1-31-77
DATE

CONTRACT NO. 714-S
CAPITAL PROJECT NO. S-4-8048

PLAN OF SEWER MAINS

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

DRAWING NO. 2
OF 5
SCALE 1" = 50'
DESIGNED: RDB
DRAFTED: RDB
CHECKED: EDC



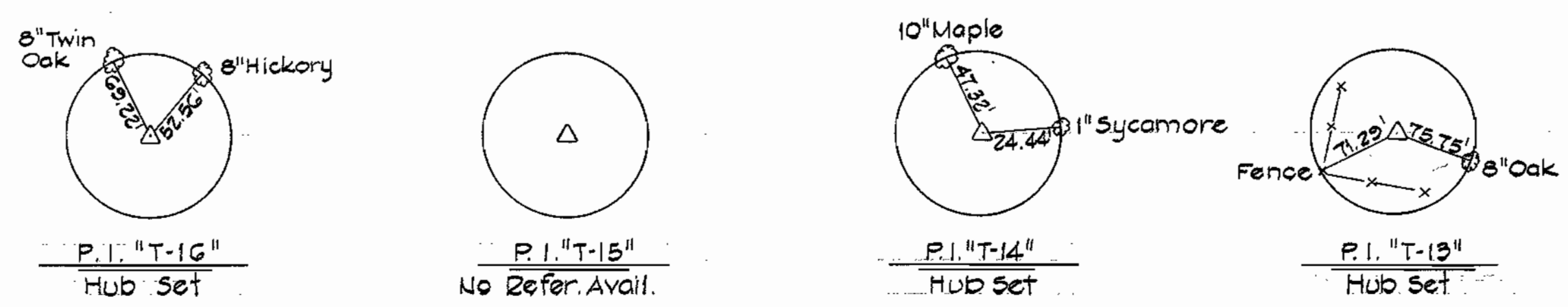
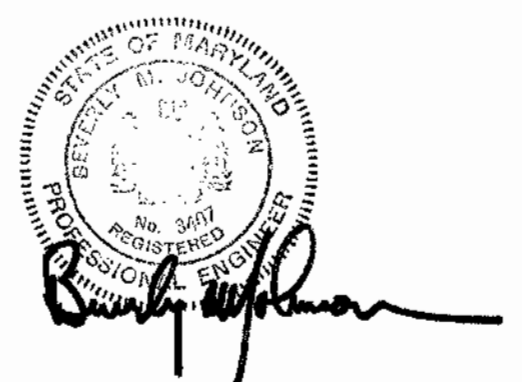
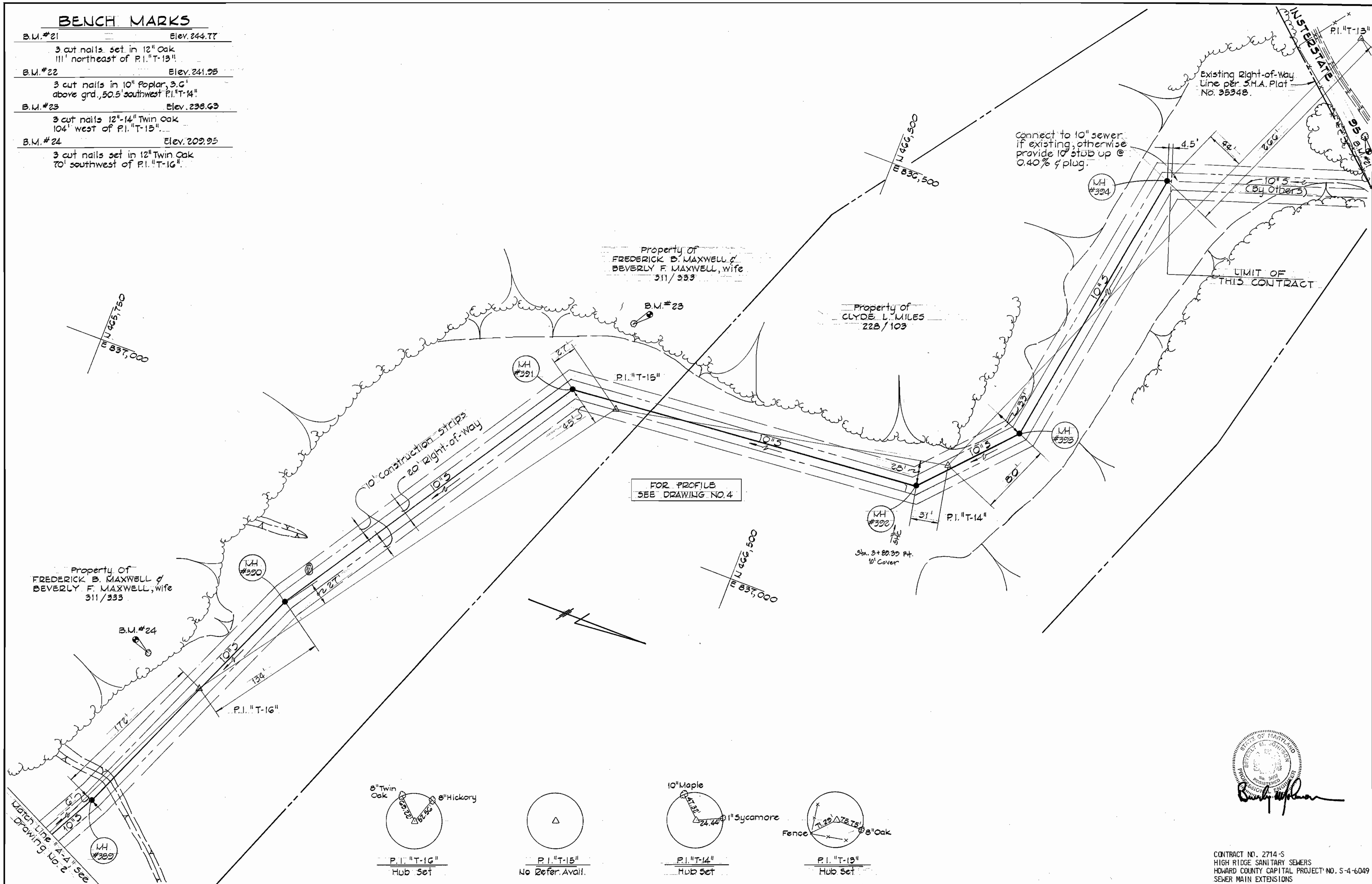
Contract No. 2714-S
High Ridge Sanitary Sewers
Howard County Capital Project S-4-8048
Sewer Main Extension

WS 14-S/2

AS BUILT 10-1-79

BENCH MARKS

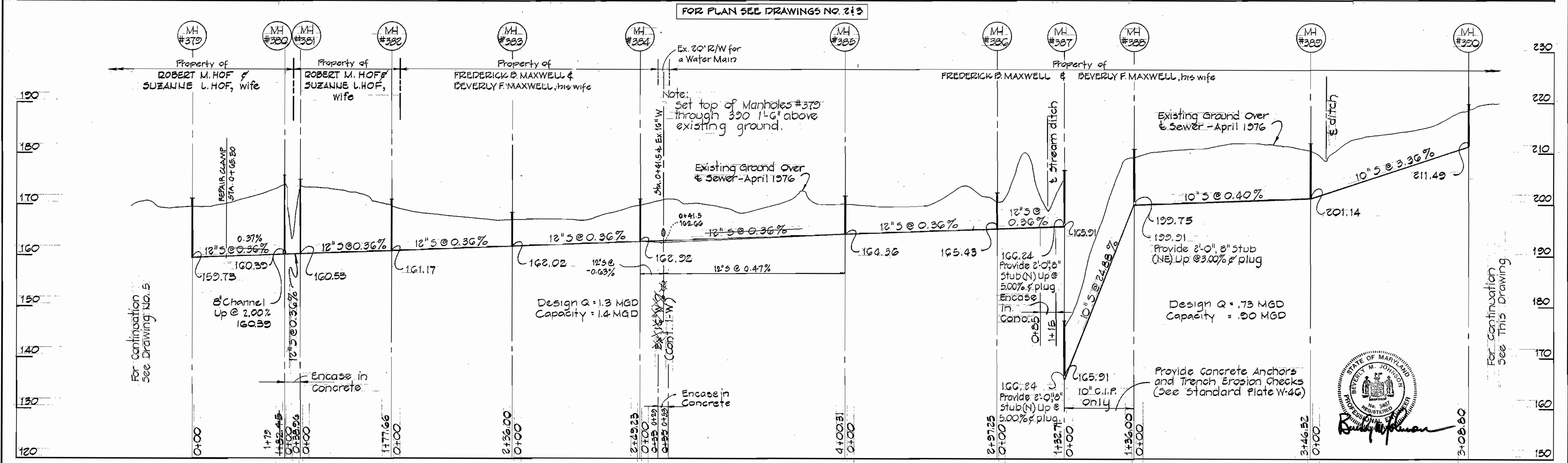
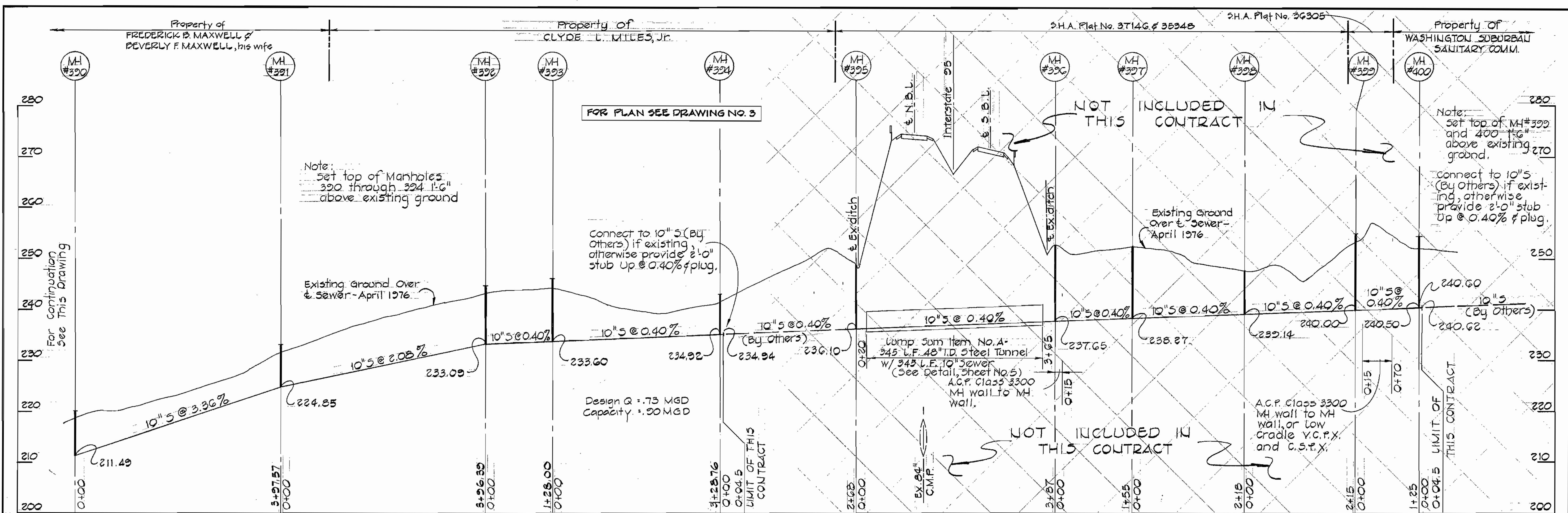
B.M.#21	Elev. 244.77
3 cut nails set in 12" Oak 111' northeast of P.I. "T-13"	
B.M.#22	Elev. 241.95
3 cut nails in 10" Poplar, 3.6' above grd., 50.5' southwest P.I. "T-14"	
B.M.#23	Elev. 238.63
3 cut nails 12"-14" Twin Oak 104' west of P.I. "T-15"	
B.M.#24	Elev. 209.95
3 cut nails set in 12" Twin Oak 70' southwest of P.I. "T-16"	



CONTRACT NO. 2714-S
 HIGH RIDGE SANITARY SEWERS
 HOWARD COUNTY CAPITAL PROJECT NO. S-4-6049
 SEWER MAIN EXTENSIONS

PURDUM & JESCHKE ENGINEERS 1023 N. CALVERT ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 1-31-77 DATE	CONTRACT NO. 2714-S CAPITAL PROJECT NO. S-4-6049	PLAN OF SEWER MAINS	HIGH RIDGE SANITARY SEWERS ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND	DRAWING NO. 3 OF 5	SCALE 1" = 50'	DESIGNED: RDB DRAFTED: RDB CHECKED: EDC
					DIRECTOR OF PUBLIC WORKS	CHIEF-BUREAU OF ENGINEERING	DATE

714-S/3



PROFILES
 Horiz. 1"=100'
 Vert. 1"=10'



Contract No. 2714-S
 High Ridge Sanitary Sewers
 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
 DATE 1-31-77
 CHIEF BUREAU OF ENGINEERING

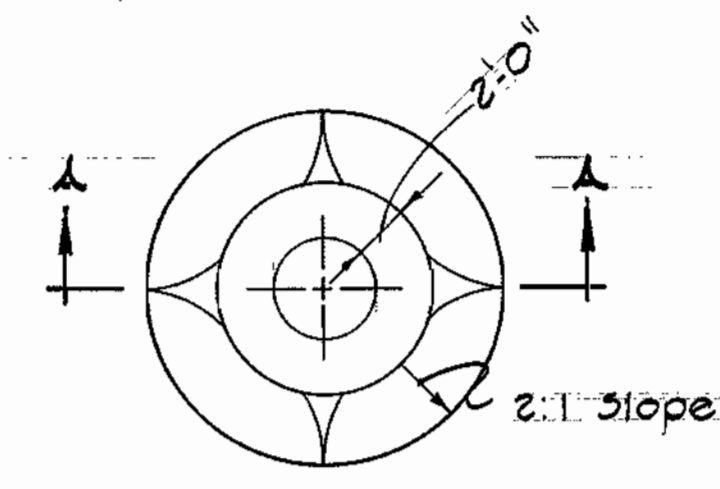
CONTRACT NO. 2714-S
 CAPITAL PROJECT NO. S-4-6049

PROFILES OF
 SEWER MAINS

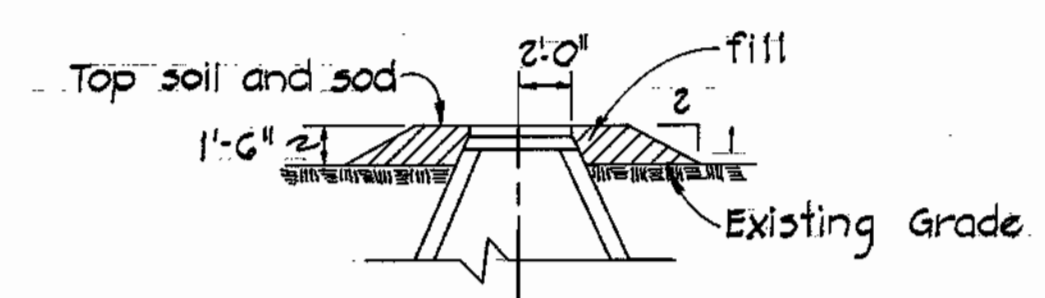
HIGH RIDGE SANITARY SEWERS
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY, MARYLAND

DRAWING NO. 4 OF 5
 SCALE: Horiz. 1"=100', Vert. 1"=10'
 DESIGNED: RDB
 DRAFTED: RDB
 CHECKED: EDC

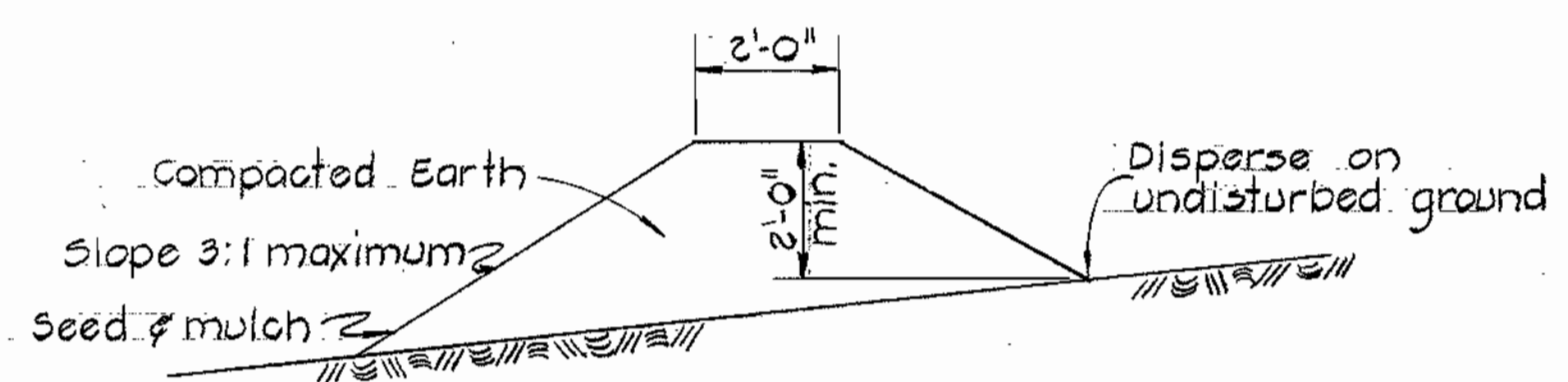
714-S/4



PLAN

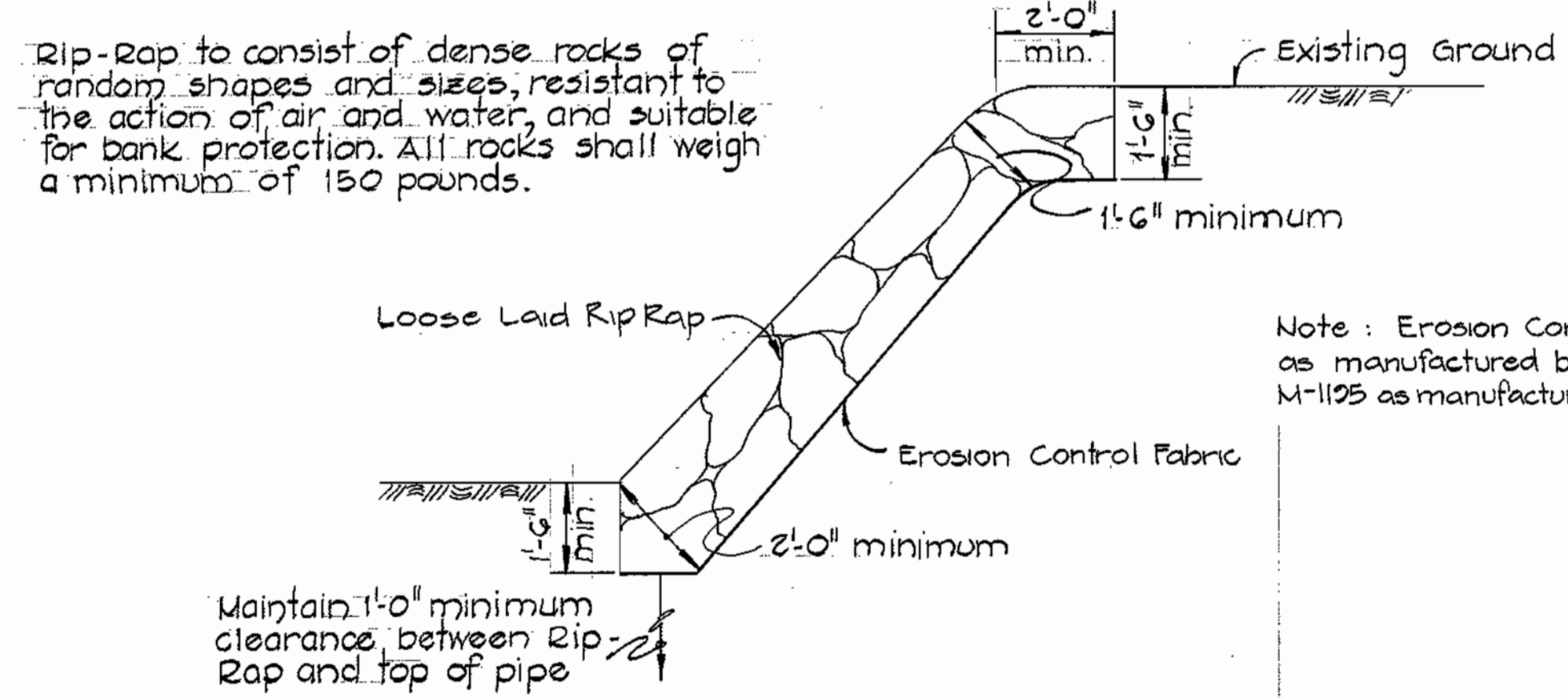


SECTION "A-A"
FILL AT MANHOLE
No Scale



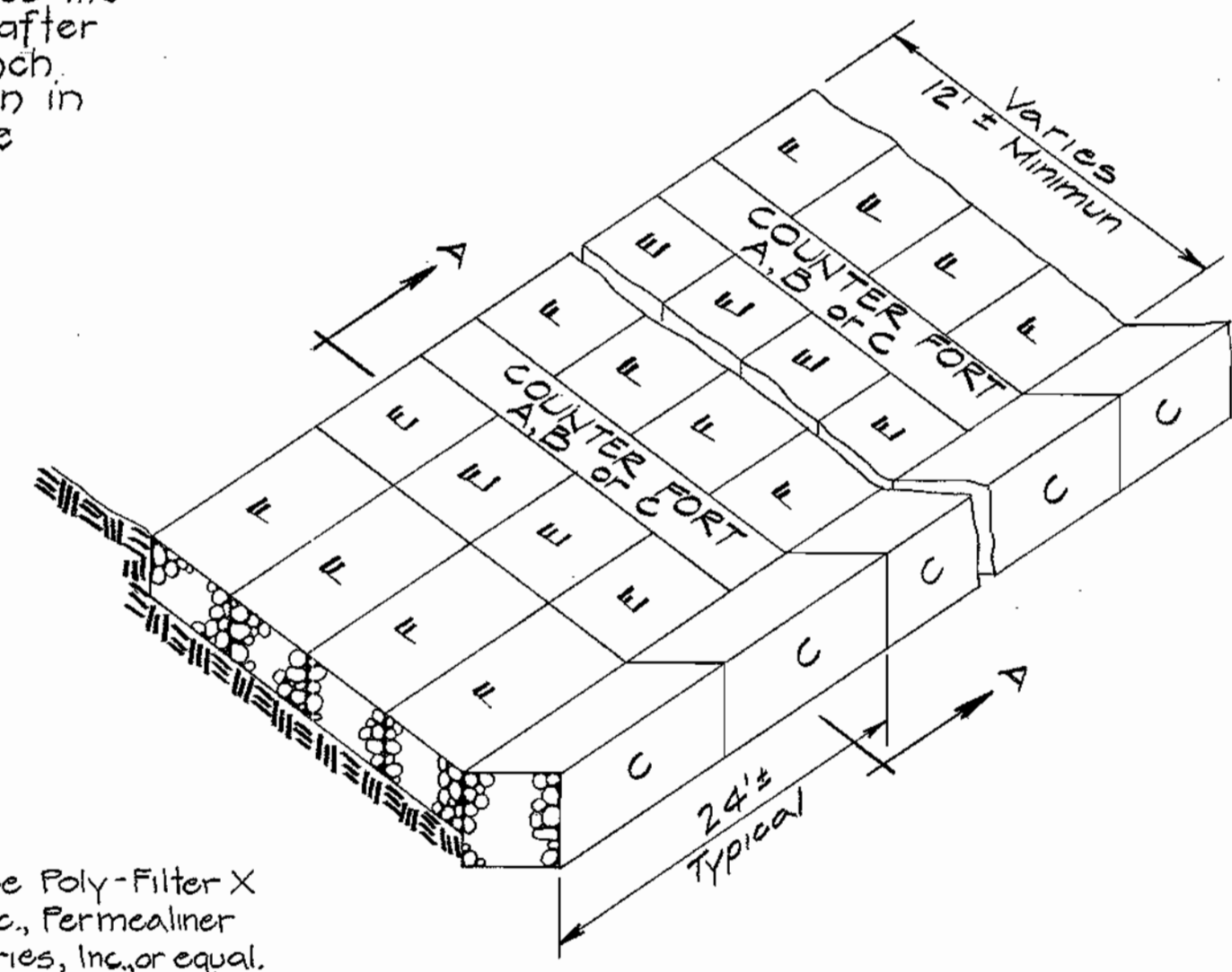
TEMPORARY EARTH DIVERSION BERM
No Scale

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 backfilling of the pipe trench, and prior to placing stabilization in order to prevent erosion of the backfilled areas.



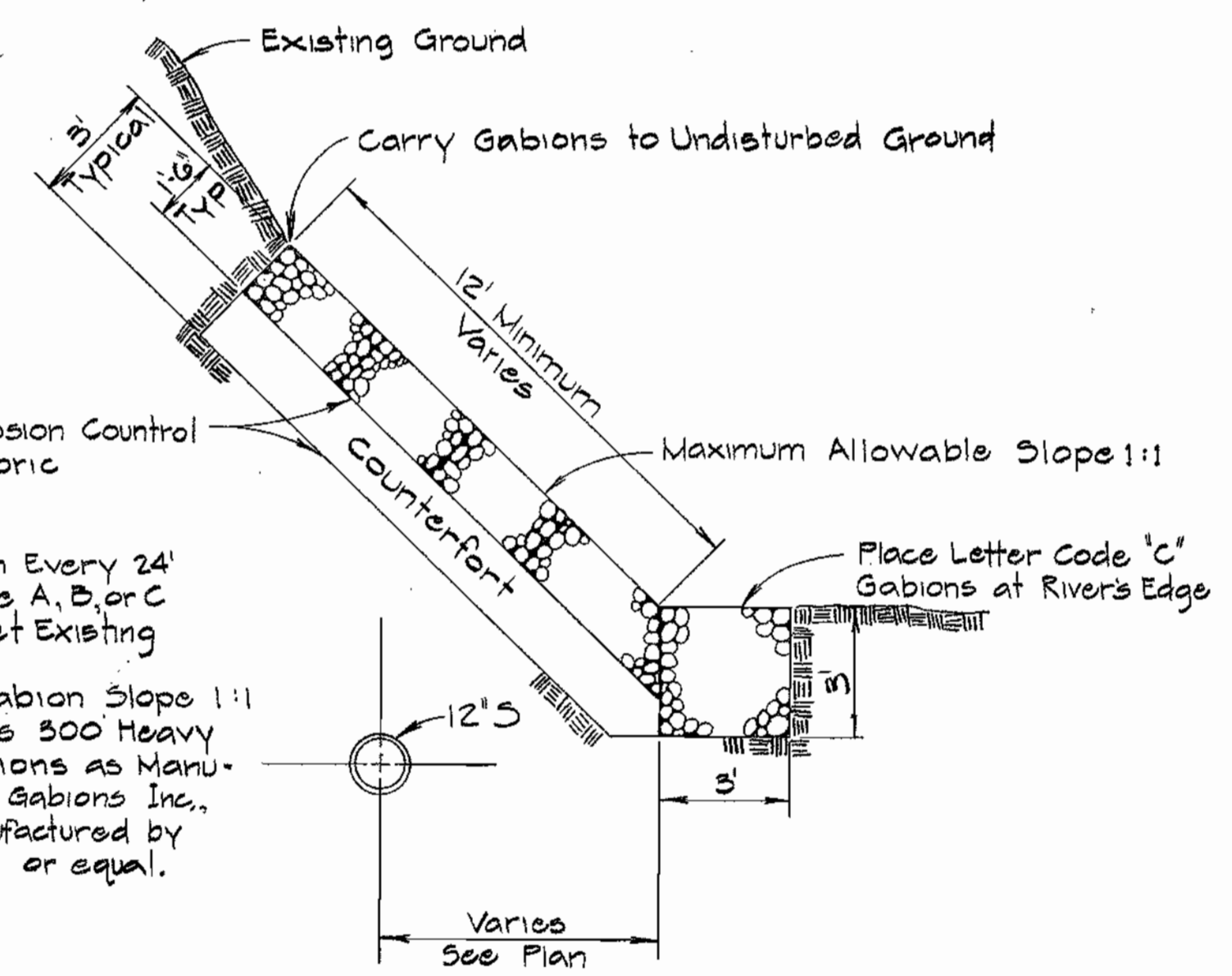
UNGRADED RIP-RAP DETAIL
No Scale

Note: Erosion Control Fabric shall be Poly-Filter X as manufactured by Carthage Mills, Inc., Permealiner M-1125 as manufactured by Staff Industries, Inc., or equal.



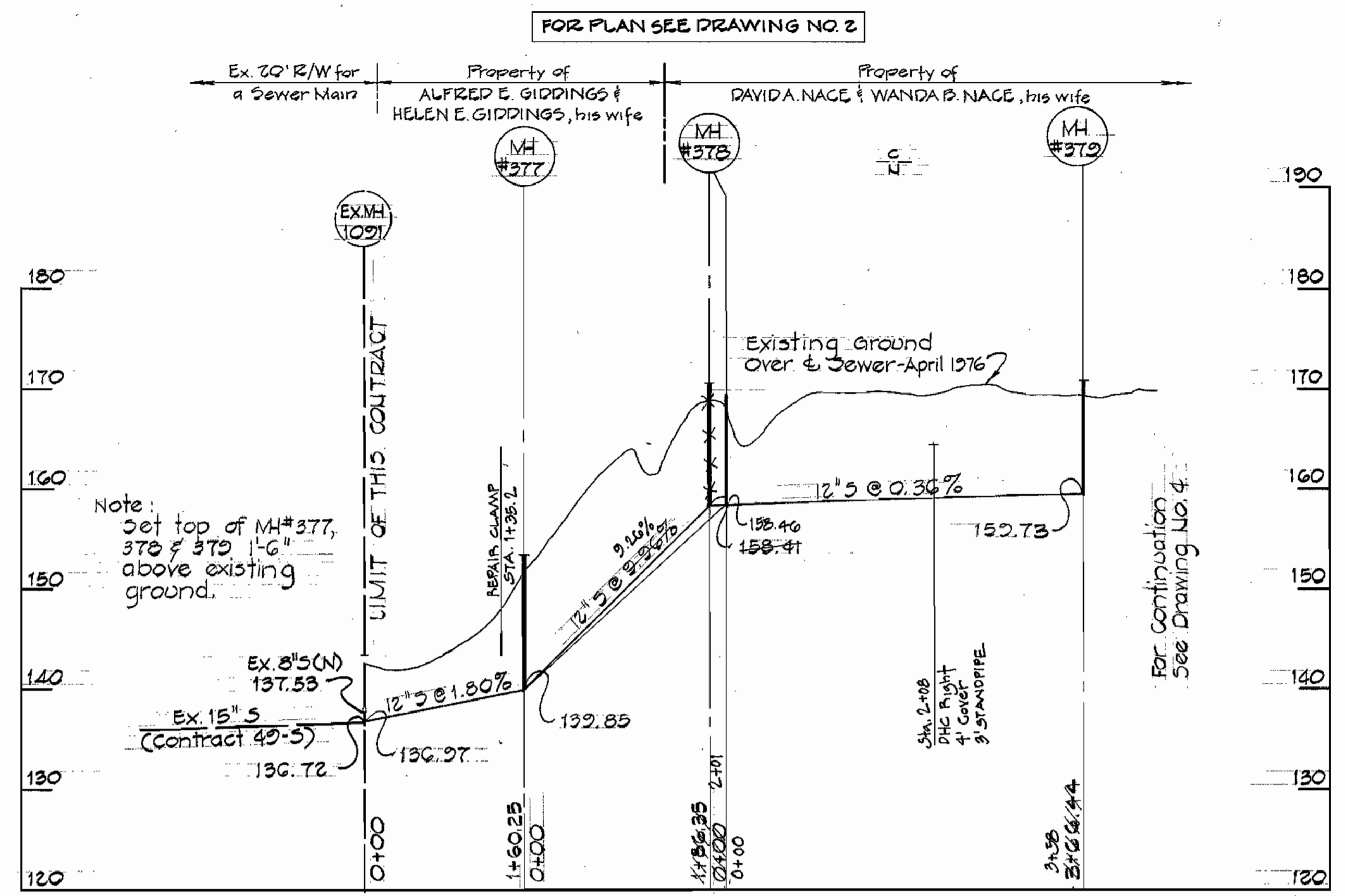
ISOMETRIC VIEW
No Scale

Letter Code of size	Approximate Length Width and Depth in feet
A	6' x 3' x 3'
B	9' x 3' x 3'
C	12' x 3' x 3'
E	9' x 3' x 1'-6"
F	12' x 3' x 1'-6"



- Notes
- Place Counterfort Section Every 24' With Combinations of Type A, B, or C Units As Required to Meet Existing Slope.
 - Maximum Allowable Gabion Slope 1:1
 - Gabions shall be Series 300 Heavy Duty Galvanized Gabions as Manufactured by Maccaferri Gabions Inc., Bekaert Gabions as manufactured by Terra Aqua Conservation or equal.

GABION SLOPE PROTECTION
Details



PROFILE
Horiz. 1"=100'
Vert. 1"=10'

For Continuation See Drawing No. 4



Contract No. 2714-S
High Ridge Sanitary Sewers
Howard County Capital Project S-4-0049
Sewer Main Extensions

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
1-31-97
DIRECTOR OF PUBLIC WORKS DATE

CONTRACT NO. 2714-S
CAPITAL PROJECT NO. S-4-0049

PROFILES AND DETAILS
OF SEWER MAINS

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

DRAWING NO. 5 OF 5
SCALE As Shown
DESIGNED: RDB
DRAFTED: RDB
CHECKED: EDC