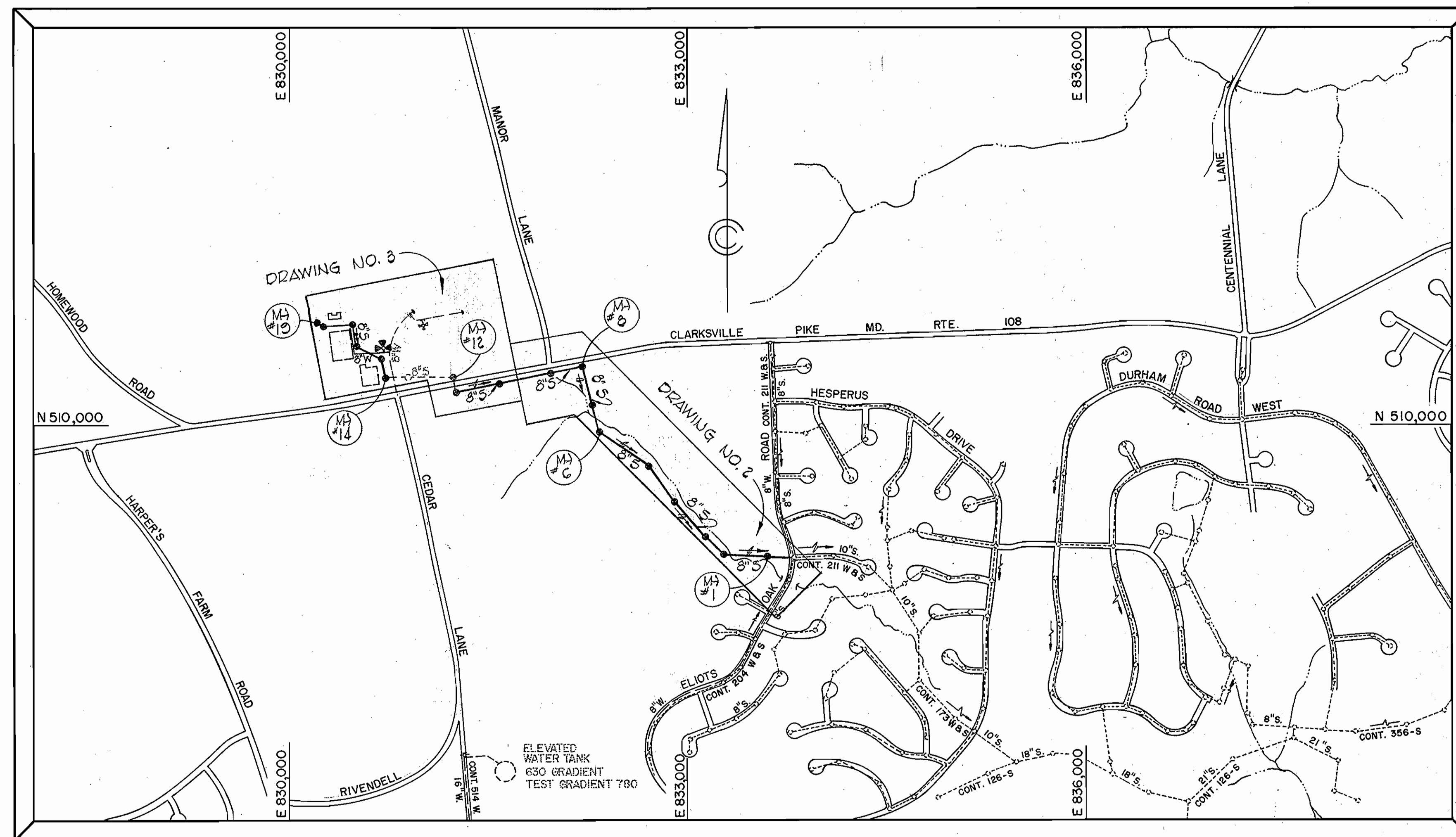


GENERAL NOTES

1. 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 due to the contractor's operations shall be repaired immediately at the contractor's expense.
2. All pipe elevations shown are invert elevations.
3. Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum or tunnel as required. Any costs incurred to the contractor for tunneling or bracing of poles shall be included in unit prices bid for excavation.
4. For all standard details see standards bound in the specifications.
5. The contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in the vicinity of proposed utilities.
6. The contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these plans:
 State Highway Administration - 531-5533
 Baltimore Gas & Electric Co. - Underground Electric Distribution Engineering - "Damage Control" - 234-5621
 Baltimore Gas & Electric Co. - Underground Gas Distribution Engineering - 559-0100
 C & P Telephone Co. - 725-2276
 A.T.&T. - Cable Location Division - 301-323-3553
 Colonial Pipeline Co. - 781-4641
 Miss Utility - 1-800-393-3648
7. Trees are to be protected from damage to 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.
9. All water mains to be C.I.P. or D.I.P. unless otherwise noted.
10. Top of all water mains to have a minimum of 3 1/2' of cover unless otherwise noted.
11. All valves shall be strapped to trees, where applicable, in accordance with standard details.
12. Buttress or anchor all water main fittings in concrete in accordance with details in specifications.
13. All sewer mains shall be C.S.P.X., V.C.P.X. or A.C.P. Class 2400 unless otherwise noted.
14. The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole walls.
15. All manholes to be 4'-0" inside dia. unless otherwise noted.
16. Horizontal controls are based on Maryland State Coordinates. Vertical controls are based on U.S.G.S. Datum.
17. Bury line elevations on fire hydrants shall be set to the elevations shown on the drawings.

All fire hydrants shall be strapped and buttressed with concrete in accordance with standard details. Cost of strapping fire hydrants and valves to be included in unit prices bids for furnishing and installing fire hydrants.

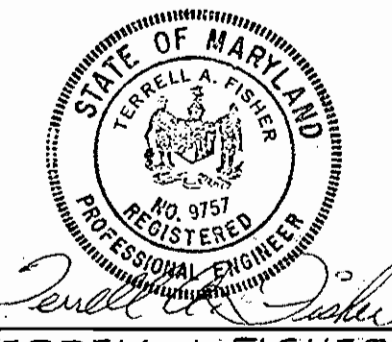
All grading for fire hydrants shall be in accordance with standard detail W-4B, unless otherwise noted. Cost for grading to be included in unit price bid for furnishing and installing fire hydrants. Soil around fire hydrants to be compacted in accordance with Section 5-15 of the Standard Specs.



WATER ZONE CODE: I - 02 EAST OF CEDAR LA.
 I - 03 WEST OF CEDAR LA.
 SEWER ZONE CODE: 5583000
 TOTAL LOTS TO BE SERVED: 10 SEWER
 1 WATER

QUANTITIES			
SIZE	ESTD.	AS BUILT	SUPPLIER
8" WATER	470 L.F.		
8" SEWER	4,120 L.F.		
MANHOLES	222 V.F.		
12 3/4" STEEL CASING PIPE	40 L.F.		
FIRE HYD.	1 EA.		

PHASE II-B
CONTRACT NO. 2831-W & S
HOWARD COUNTY BOARD OF EDUCATION
MARYLAND ROUTE 108 - CEDAR LANE
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS



TERRELL A. FISHER, NO. 9757

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 George F. Nierman 5-14-79
 DIRECTOR OF PUBLIC WORKS DATE
 W. O. Fisher 5-14-79
 CHIEF BUREAU OF ENGINEERING DATE

PHASE II-B
 CONTRACT NO. 2831-W & S

VICINITY MAP

HOWARD COUNTY BOARD OF EDUCATION
 ADMINISTRATION BUILDING AND
 VOCATIONAL TECHNICAL CENTER
 MARYLAND ROUTE 108 - CEDAR LANE

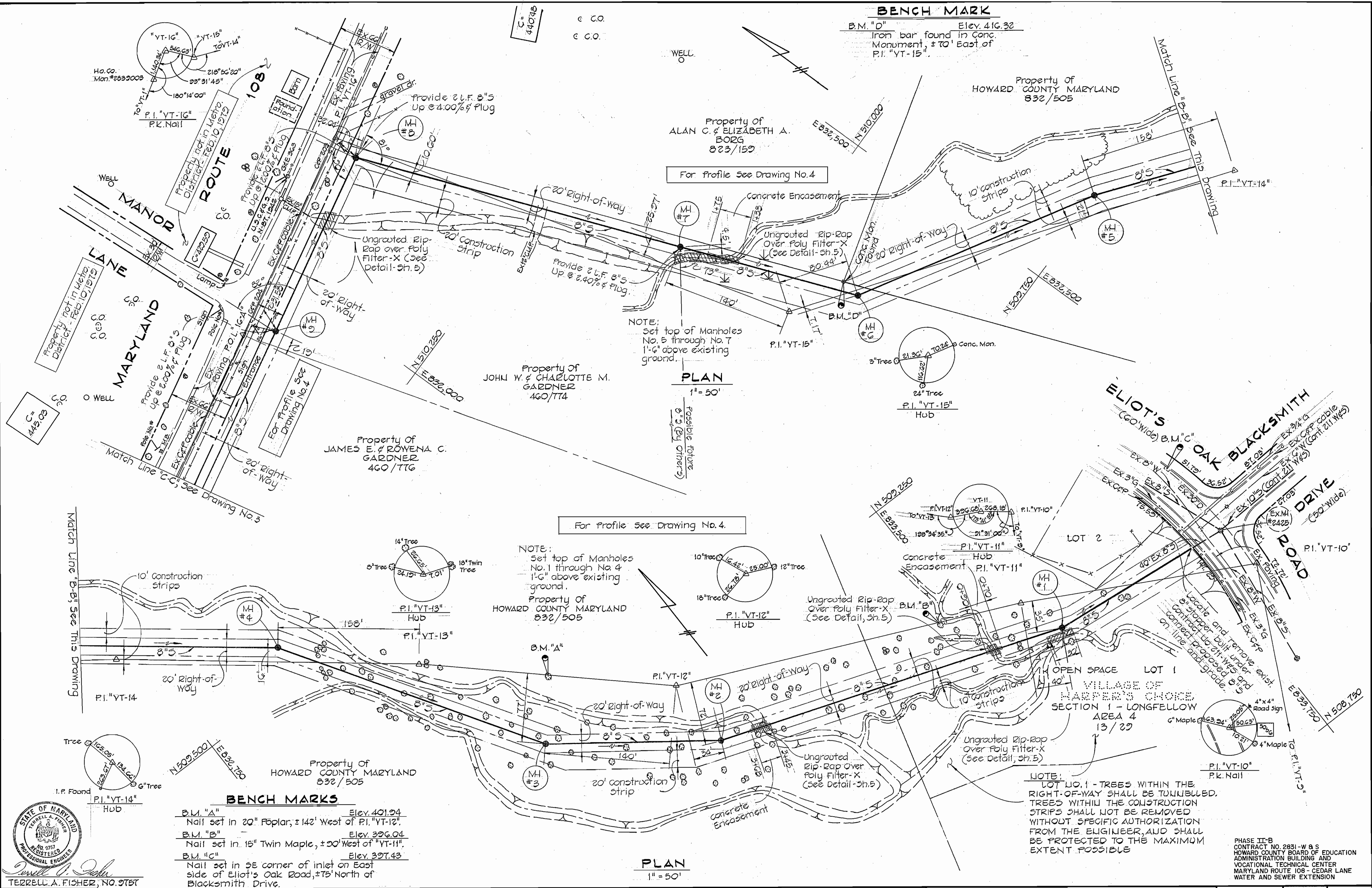
DRAWING NO. 1 OF 5	SCALE 1" = 600'	DESIGNED: R.D.B. DRAFTED: D.B.S. CHECKED: T.A.F.
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WS 831 -WS/1 (PHASE II B) 0241

WS 831 - WS/2 (PHASE II-B)
 O.A.B.2

BENCH MARK

B.M. "D" Eley. 416.32
 Iron bar found in Conc.
 Monument, ± 70' East of
 P.I. "YT-15".



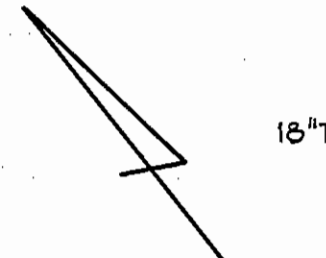
NOTE:
 Set top of Manholes
 No. 5 through No. 7
 1'-6" above existing
 ground.

PLAN

1" = 50'

NOTE:
 Set top of Manholes
 No. 1 through No. 4
 1'-6" above existing
 ground.

Property of
 HOWARD COUNTY MARYLAND
 832/505



P.I. "YT-12"
 HUB

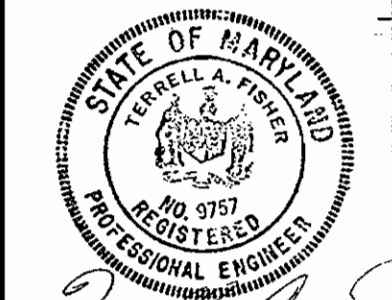
NOTE:
 LOT NO. 1 - TREES WITHIN THE
 RIGHT-OF-WAY SHALL BE TUNNELLED.
 TREES WITHIN THE CONSTRUCTION
 STRIPS SHALL NOT BE REMOVED
 WITHOUT SPECIFIC AUTHORIZATION
 FROM THE ENGINEER, AND SHALL
 BE PROTECTED TO THE MAXIMUM
 EXTENT POSSIBLE

PHASE II-B
 CONTRACT NO. 2831-W & S
 HOWARD COUNTY BOARD OF EDUCATION
 ADMINISTRATION BUILDING AND
 VOCATIONAL TECHNICAL CENTER
 MARYLAND ROUTE 108 - CEDAR LANE
 WATER AND SEWER EXTENSION

BENCH MARKS
 B.M. "A" Eley. 401.94
 Nail set in 20" Poplar, ± 142' West of P.I. "YT-12".
 B.M. "B" Eley. 326.04
 Nail set in 15" Twin Maple, ± 50' West of "YT-11".
 B.M. "C" Eley. 397.43
 Nail set in SE corner of inlet on East
 side of Eliot's Oak Road, ± 75' North of
 Blacksmith Drive.

PLAN

1" = 50'



FISHER, COLLINS AND CARTER, INC.
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 ELLICOTT CITY, MARYLAND 21043

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works
 DATE 5-14-79

CONTRACT NO. **2831-W & S**
 PHASE II-B

PLAN
 SEWER MAIN

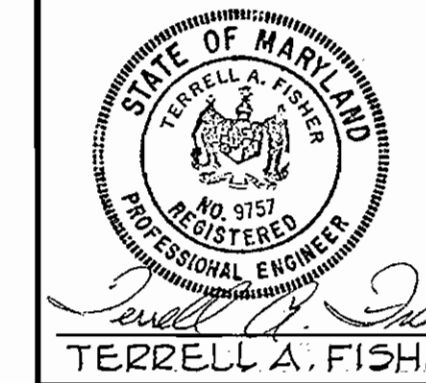
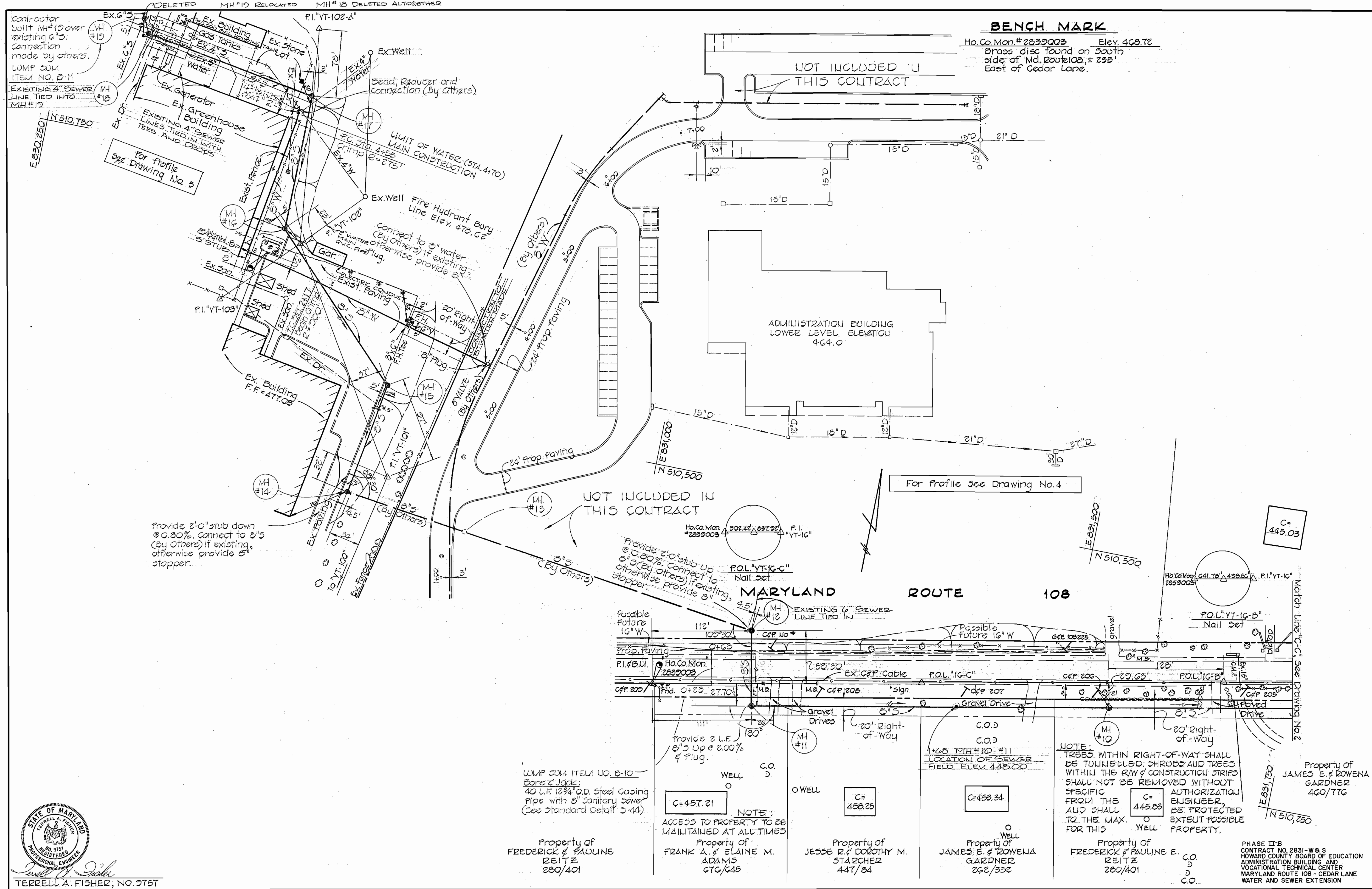
HOWARD COUNTY BOARD OF EDUCATION
 ADMINISTRATION BUILDING AND
 VOCATIONAL TECHNICAL CENTER
 MARYLAND ROUTE 108 - CEDAR LANE

DRAWING NO. **2**
 OF **5**

SCALE
 1" = 50'

DESIGNED: R.D.B.
 DRAFTED: D.B.S.
 CHECKED: T.A.F.

WS 831-WS/3 (PHASE II-B)



FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 5-14-79
 DIRECTOR OF PUBLIC WORKS: [Signature]
 CHIEF BUREAU OF ENGINEERING: [Signature]

CONTRACT NO. **PHASE II-B**
831-W & S

PLAN
SEWER MAIN

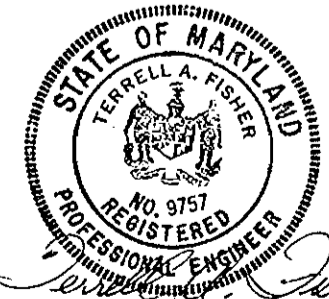
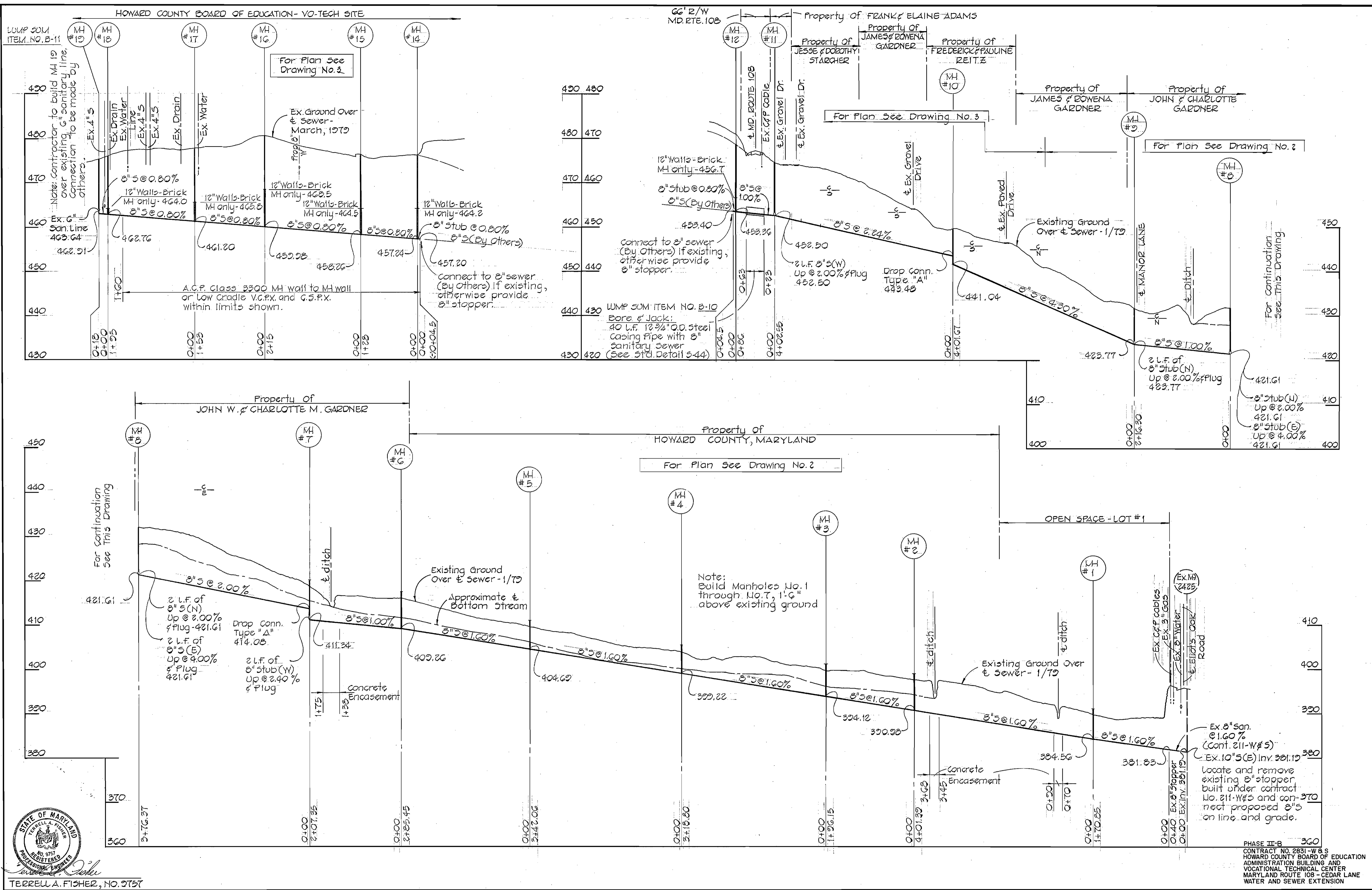
HOWARD COUNTY BOARD OF EDUCATION
ADMINISTRATION BUILDING AND
VOCATIONAL TECHNICAL CENTER
MARYLAND ROUTE 108 - CEDAR LANE

DESIGNED: R.D.B.
 DRAFTED: D.B.S.
 CHECKED: T.A.F.

W.O. #100

ASBUILT FEBRUARY 22, 1980

WS 831 - WS/4 (PHASE II-B) 02/14/79

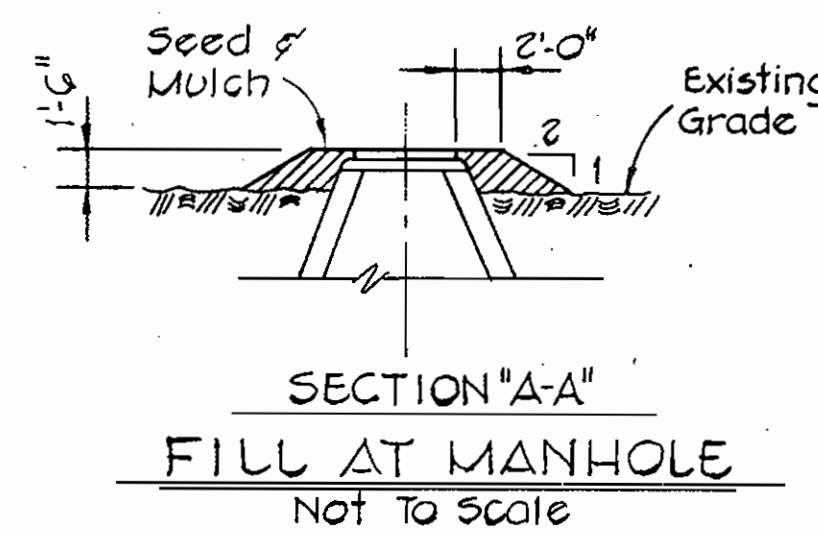
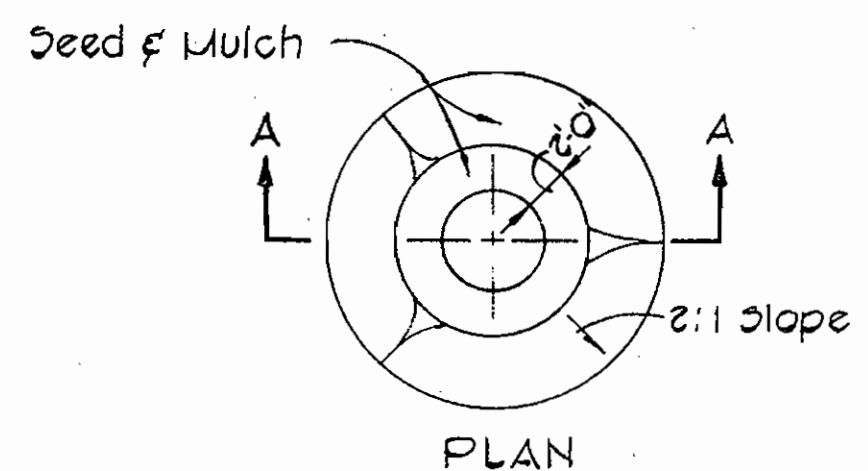


FISHER, COLLINS AND CARTER, INC. CIVIL ENGINEERING CONSULTANTS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>W. F. N...</i> DATE: 5-14-79 Chief Bureau of Engineering: <i>W. O. Albert</i> DATE: 2-14-79	PHASE II-B CONTRACT NO. 831-W & S	PROFILE WATER & SEWER MAINS	HOWARD COUNTY BOARD OF EDUCATION ADMINISTRATION BUILDING AND VOCATIONAL TECHNICAL CENTER MARYLAND ROUTE 108 - CEDAR LANE	DRAWING NO. 4 OF 5	SCALE HOR: 1"=100' VERT: 1"=10' DESIGNED: R.D.B. DRAFTED: D.B.S. CHECKED: T.A.F.
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W.O.100

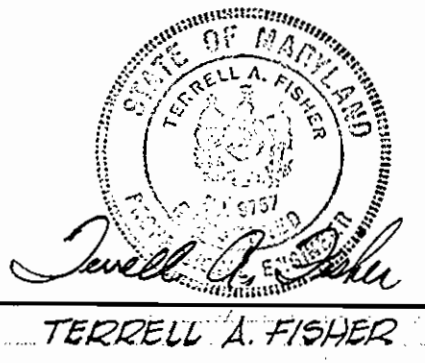
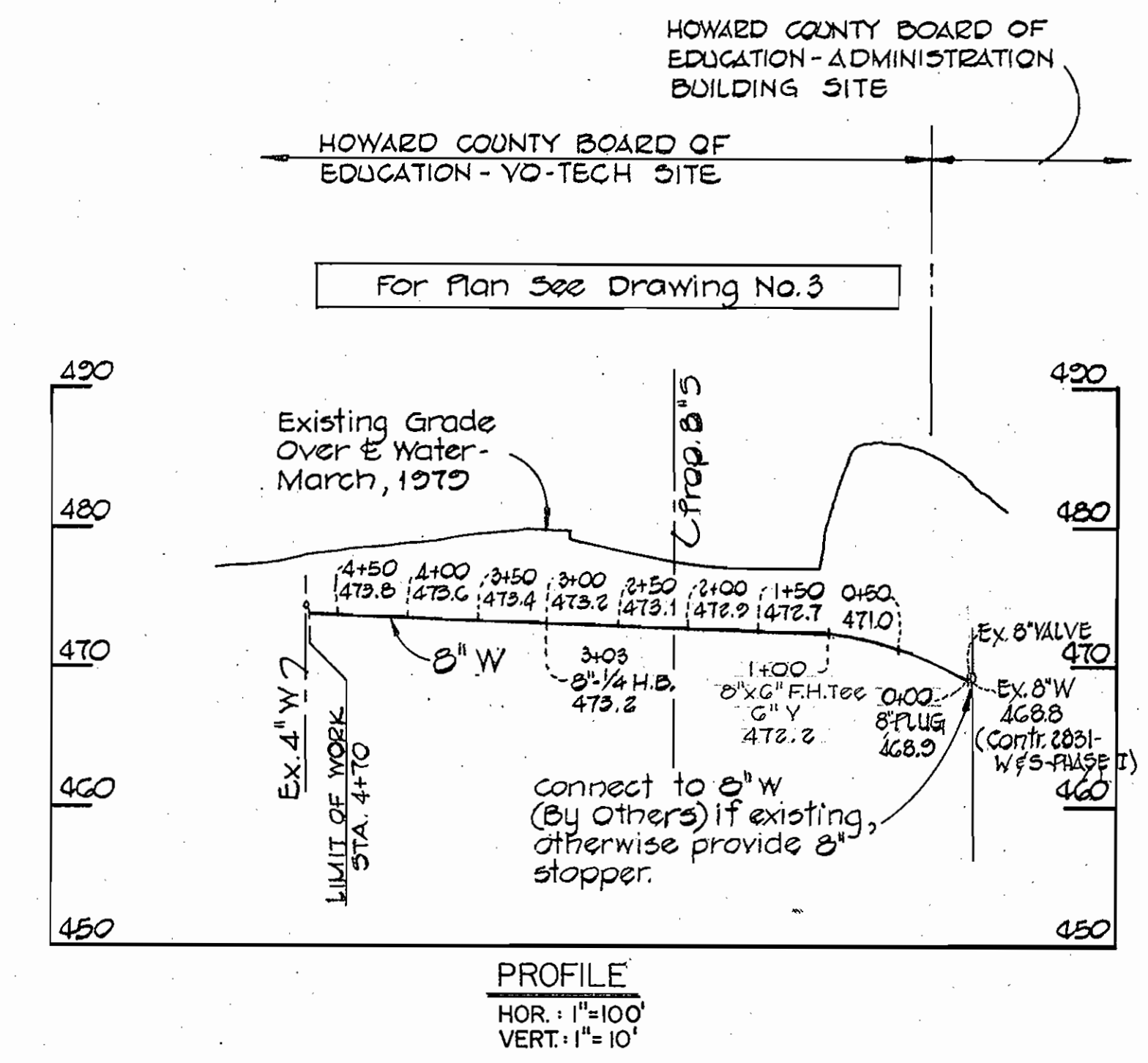
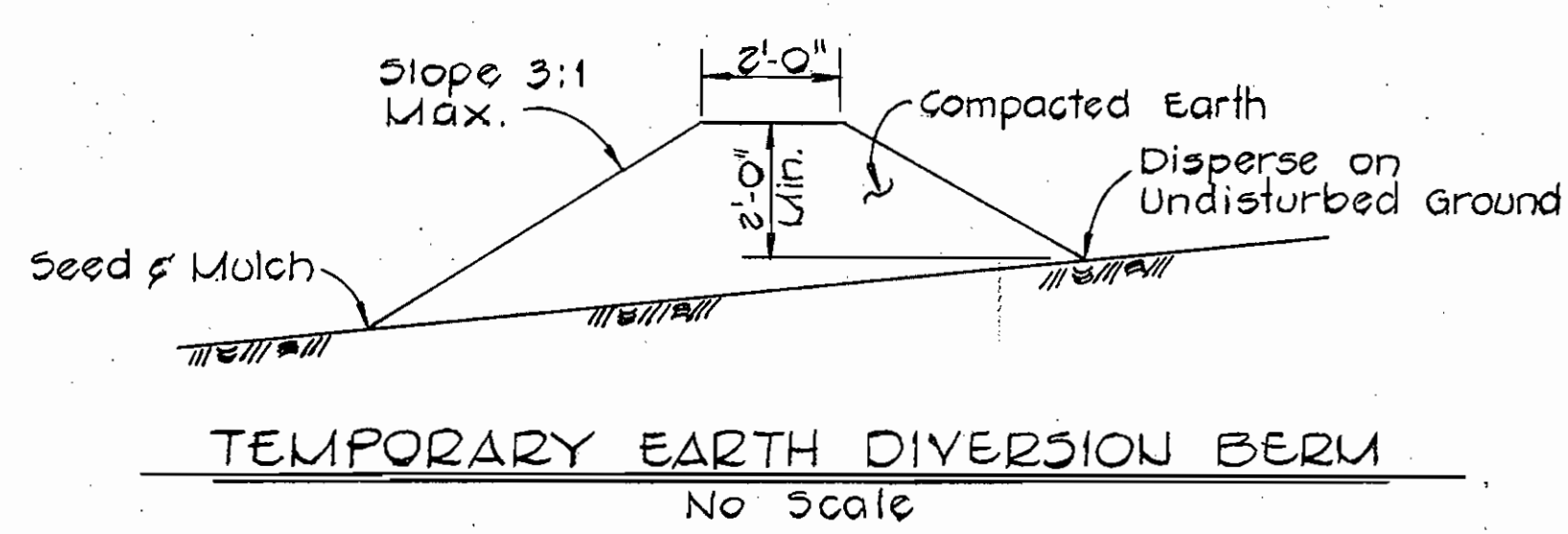
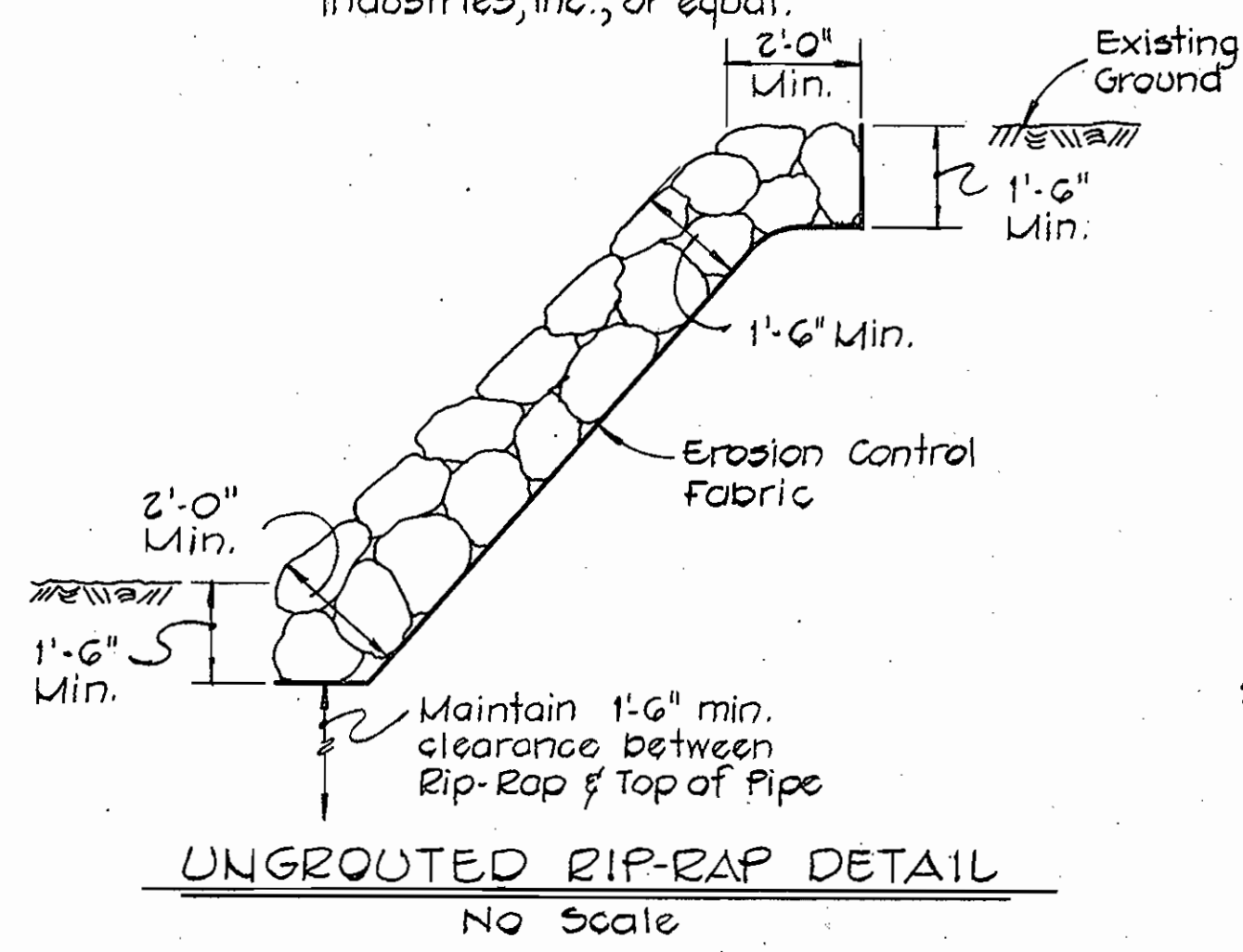
AS-BUILT FEBRUARY 22, 1980

WS 831 -WS/5 (PHASE II-B)



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

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



FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERING CONSULTANTS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

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

PHASE II-B
CONTRACT NO. 831-W & S

PROFILES AND DETAILS
WATER & SEWER MAINS

HOWARD COUNTY BOARD OF EDUCATION
ADMINISTRATION BUILDING AND
VOCATIONAL TECHNICAL CENTER
MARYLAND ROUTE 108 - CEDAR LANE
WATER AND SEWER EXTENSION

DRAWING NO. 5 OF 5
SCALE AS SHOWN
DESIGNED: R.D.B.
DRAFTED: D.B.S.
CHECKED: T.A.F.

W.O. 100

AS BUILT FEBRUARY 22, 1980