

CONTRACT NO. 2778 D W&S
LEISHEAR KNOLLS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

ITEM	BID	QUANTITIES	
		AS-BUILT	MATERIAL/SUPPLIER
8" SEWER	2,864 L.F.	2,864	ACP
8" WATER	1,272 L.F.	1,272	DIP
9" WATER	408 L.F.		DIP
FIRE HYDRANTS	2		



LEISHEAR KNOLLS
 C. 2778-D-W&S

Robert S. Leishear
 PROFESSIONAL ENGINEER

LIGHT, ELLIOTT, & ASSOCIATES
 ENGINEERS PLANNERS SURVEYORS

8508 ADELPHI ROAD · ADELPHI MARYLAND 20783

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

R. E. Freudenberger 5/10/78
 DIRECTOR OF PUBLIC WORKS · DATE

W. O. Stort 5-10-78
 CHIEF, BUREAU OF ENGINEERING · DATE

CONTRACT NO. 2778-D-W&S

LOCATION MAP OF
 WATER AND SEWER MAIN EXTENSIONS

LEISHEAR KNOLLS

GUILFORD (6TH) ELECTION DISTRICT

DRAWING

NO. 1
 OF 3

SCALE

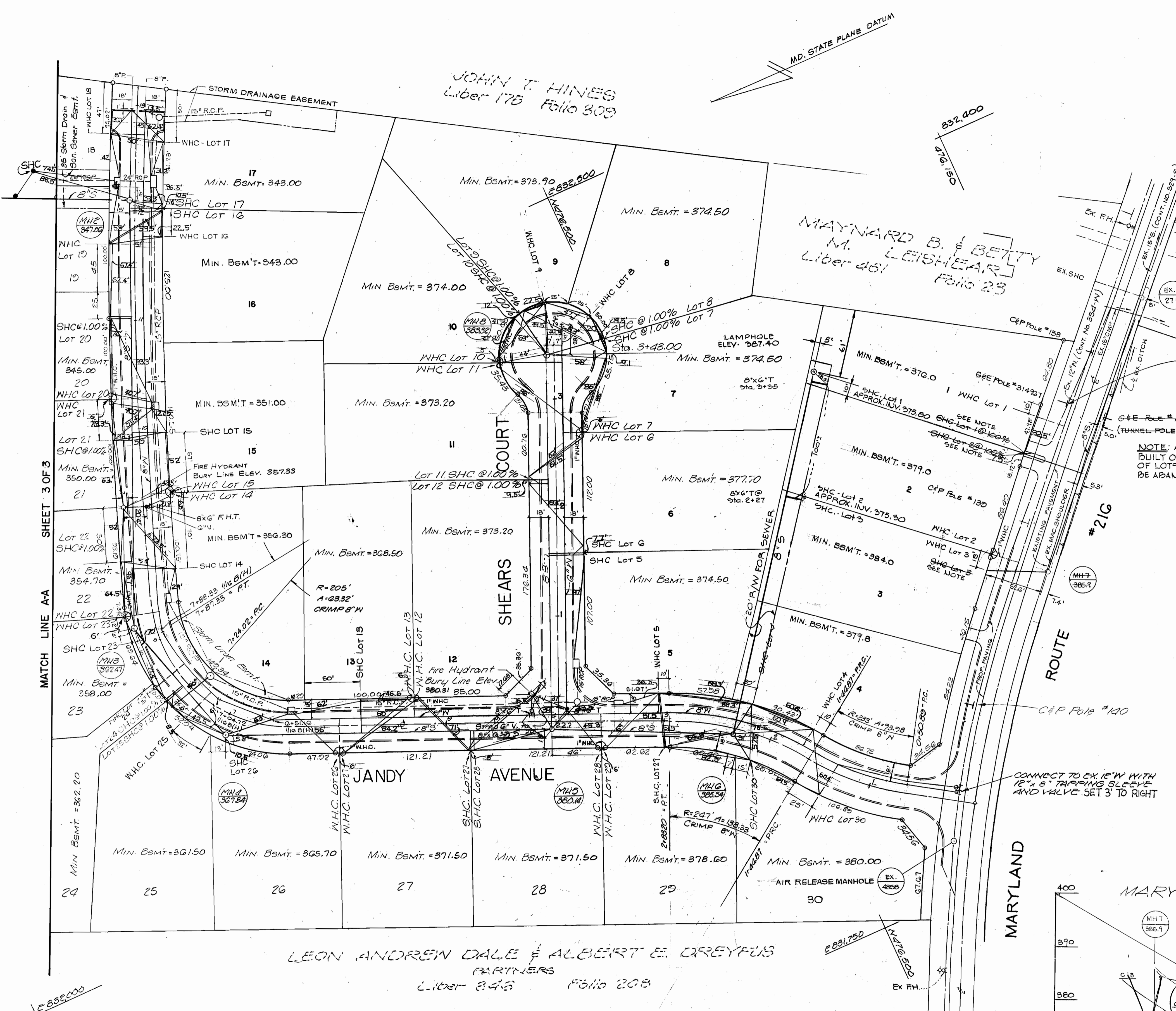
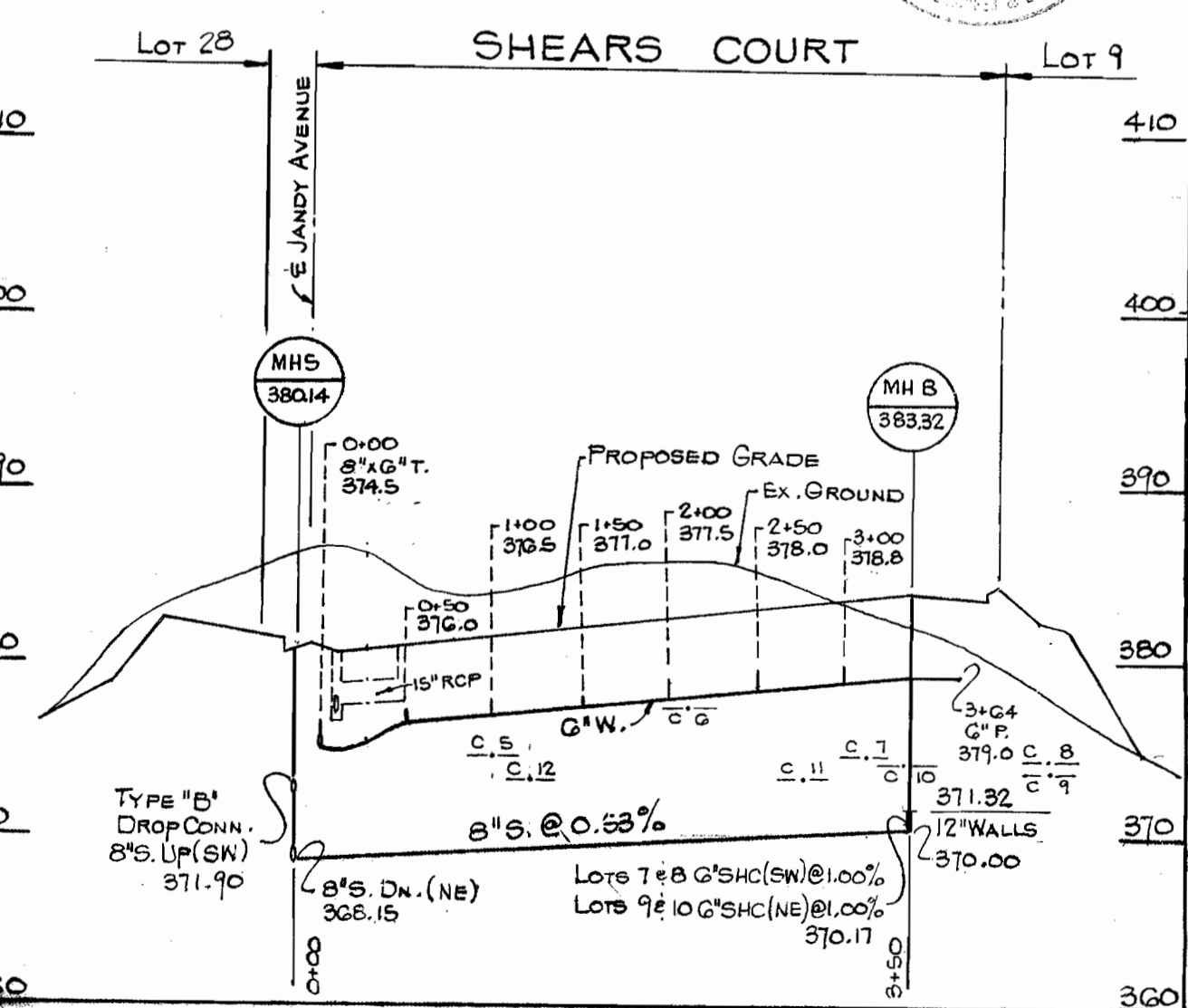
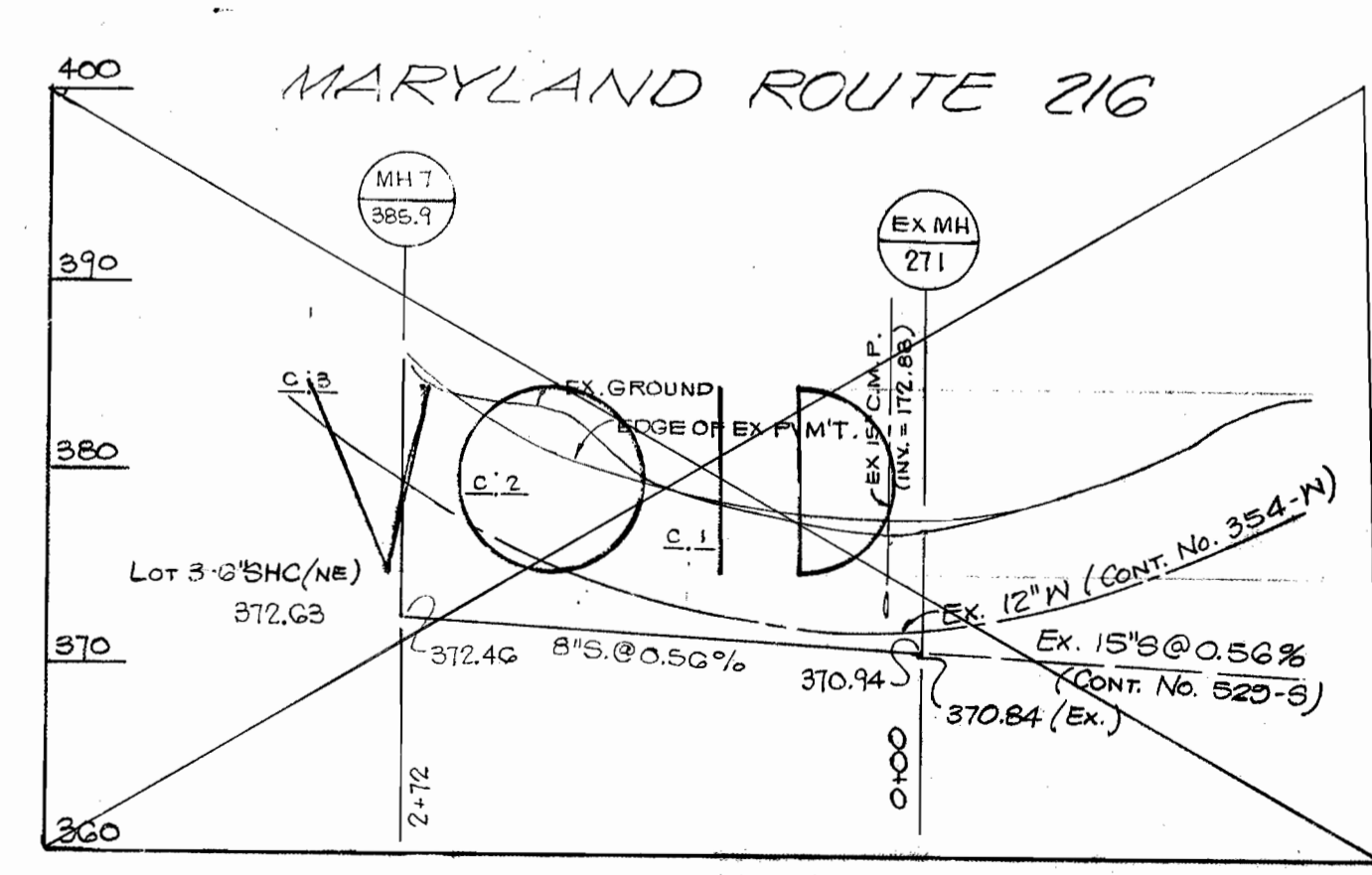
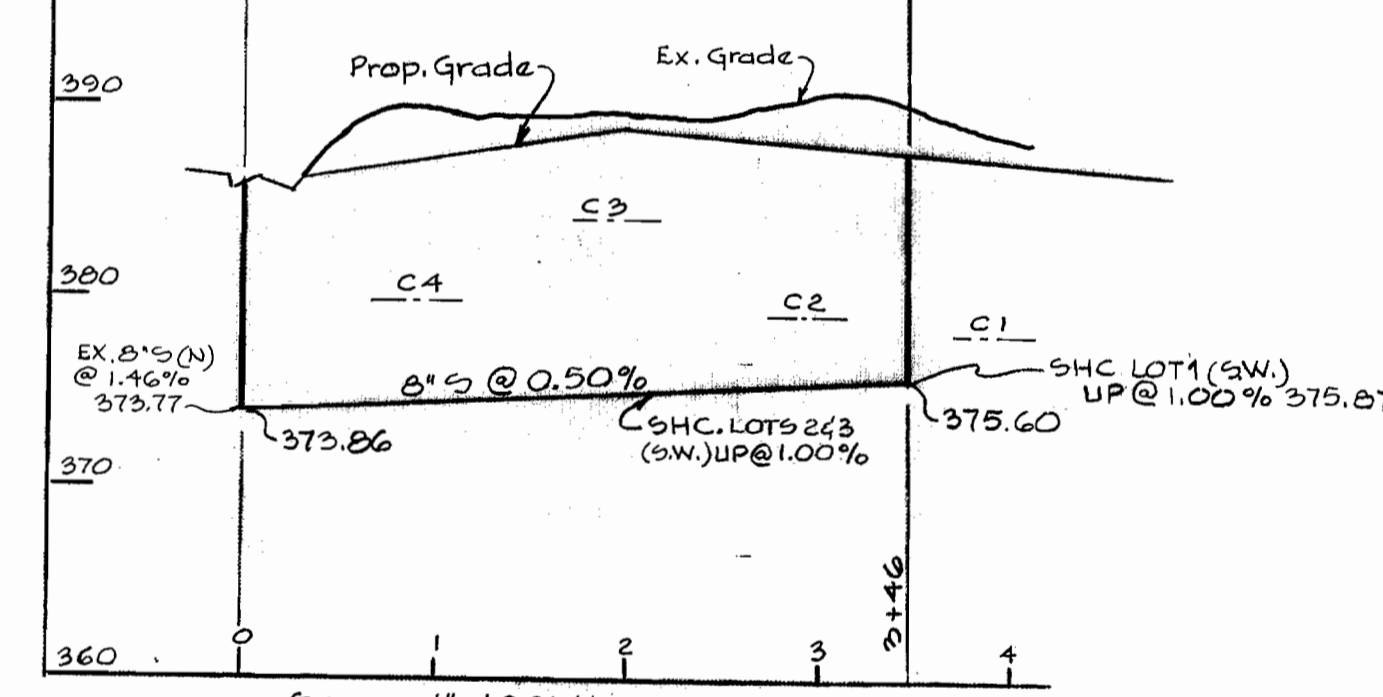
1" = 600'

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 shall be repaired immediately.
2. All pipe elevations shown are invert elevations.
3. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
4. The Contractor shall notify the following utilities or agencies at least five days before starting work on these plans:
Baltimore Gas and Electric Company-
Underground Electric Distribution Engineering 'Damage Control' 234-5691.
Underground Gas Distribution Engineering 559-0100.
Chesapeake and Potomac Telephone Company 727-9976.
5. For all standard details see standards bound in Specifications.
6. All horizontal and vertical controls are based on Maryland State Datum.
7. Clear all utilities by a minimum of 6"; clear all poles by a minimum of 2'-0" or tunnel as required.
8. All water mains shall be C.I.P., D.I.P. or A.C.P. unless otherwise noted.
9. All water mains shall have a minimum 3/2' cover.
10. Block all fittings with concrete, see standards bound in Specifications.
11. All valves shall be strapped to tees where applicable in accordance with the Standard Details.
12. Payment for strapping fire hydrants and valves will be included in unit price bid for furnishing and laying water mains.
13. All fire hydrants shall be strapped and buttressed in accordance with standard details. Soil around the fire hydrants shall be compacted in accordance with Section 5-15 of the Standard Specifications.
14. Bury Line elevations on fire hydrants shall be set to elevations shown on drawings.
15. All W.H.C.'s shall be 3/4" diameter unless otherwise noted.
16. Water services shall be for inside meter setting.
17. All sewer mains shall be C.S.P.X., V.C.P.X. or A.C.P. Class 2400 unless otherwise noted.
18. All manholes shall be 4'-0" inside diameter.
19. The Contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole walls.

BENCH MARKS

- B.M. - 1 R.K. NAIL IN C.P.P. POLE #140 93' E. OF INTERSECTION OF JANDY AVE. AND MD. ROUTE #216 E.L. 305.12
- R.F.U. B.M. #45'40' RR SPIKE IN DEAD 24" OAK 95' S.E. OF STONE MONUMENT E.L. 314.53

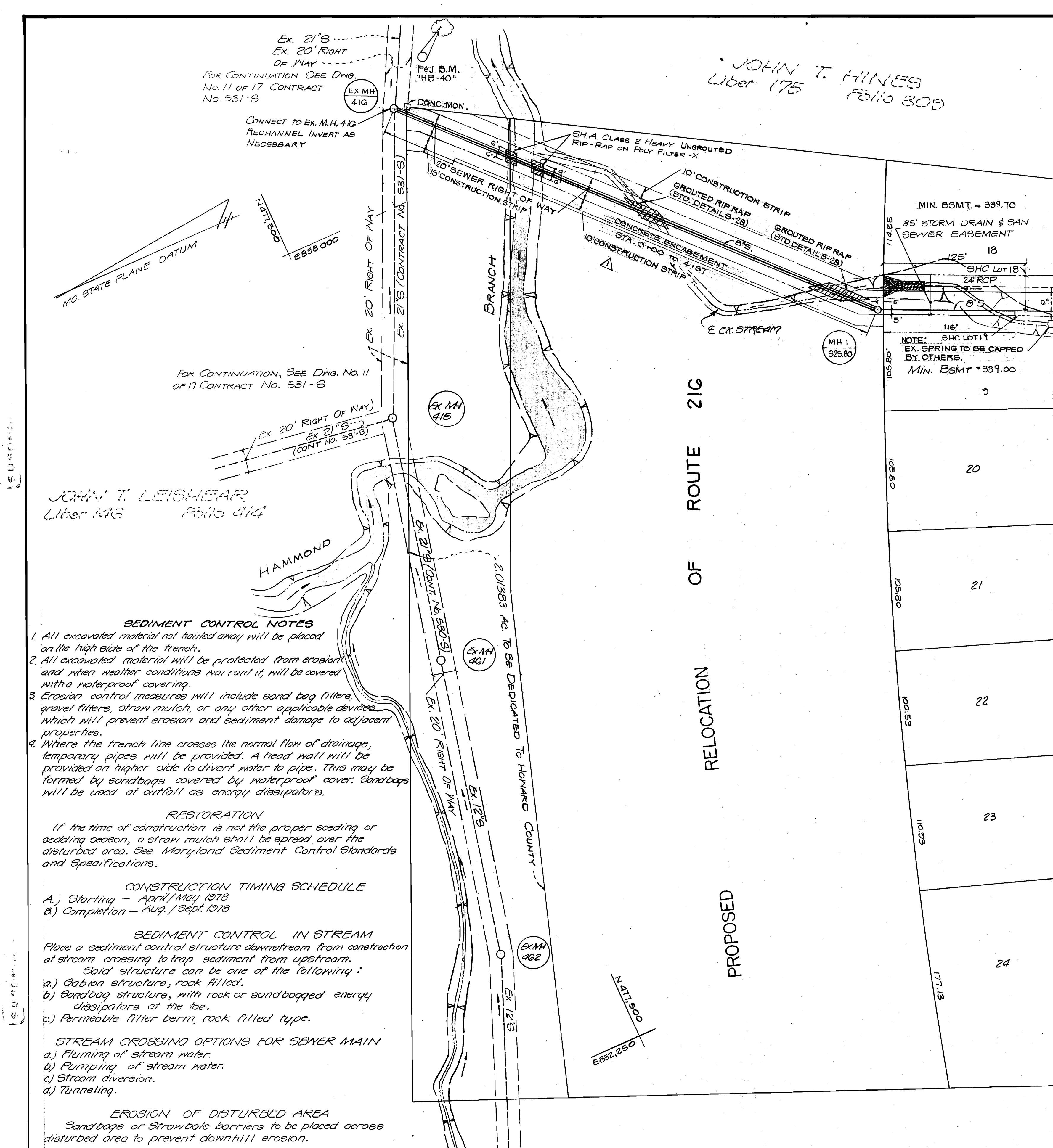


PLAN
SCALE: 1" = 50'

J.M.-A.P. SEWER & WATER AS-BUILT
GRIFFIN D.P.

REVISIONS MADE TO THIS DRAWING - 5-21-80 - AS SHOWN ON ENGINEER'S COPY - 5-20-79
SEWER MAIN WAS RELOCATED TO COME OUT OF MH 6 ALONG REAR PROPERTY LINES.

<p>LIGHT, ELLIOTT, & ASSOCIATES ENGINEERS PLANNERS SURVEYORS 8508 ADELPHI ROAD · ADELPHI MARYLAND 20783</p>	<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND R.E. Freudenberger 5/10/78 DIRECTOR OF PUBLIC WORKS - DATE</p>	<p>CONTRACT NO. 778-D-W&S</p>	<p>PLAN AND PROFILE WATER AND SEWER MAINS</p>	<p>LEISHEAR KNOLLS GUILFORD (6TH) ELECTION DISTRICT</p>	<p>DRAWING NO. 2 OF 3</p>	<p>SCALE AS SHOWN</p>
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JOHN T. LEISHEAR
Liber 175 Folio 308

FOR CONTINUATION SEE DWG. No. 11 OF 17 CONTRACT No. 531-S

FOR CONTINUATION, SEE DWG. No. 11 OF 17 CONTRACT No. 531-S

JOHN T. LEISHEAR
Liber 1416 Folio 414

- SEDIMENT CONTROL NOTES**
- All excavated material not hauled away will be placed on the high side of the trench.
 - All excavated material will be protected from erosion and when weather conditions warrant it, will be covered with a waterproof covering.
 - Erosion control measures will include sand bag filters, gravel filters, straw mulch, or any other applicable devices which will prevent erosion and sediment damage to adjacent properties.
 - Where the trench line crosses the normal flow of drainage, temporary pipes will be provided. A head wall will be provided on higher side to divert water to pipe. This may be formed by sandbags covered by waterproof cover. Sandbags will be used at outfall as energy dissipators.

RESTORATION
If the time of construction is not the proper seeding or sodding season, a straw mulch shall be spread over the disturbed area. See Maryland Sediment Control Standards and Specifications.

CONSTRUCTION TIMING SCHEDULE
A.) Starting - April/May 1978
B.) Completion - Aug./Sept. 1978

SEDIMENT CONTROL IN STREAM
Place a sediment control structure downstream from construction of stream crossing to trap sediment from upstream.
Said structure can be one of the following:
a.) Gabion structure, rock filled.
b.) Sandbag structure, with rock or sandbagged energy dissipators at the toe.
c.) Permeable filter berm, rock filled type.

STREAM CROSSING OPTIONS FOR SEWER MAIN
a.) Fluming of stream water.
b.) Pumping of stream water.
c.) Stream diversion.
d.) Tunneling.

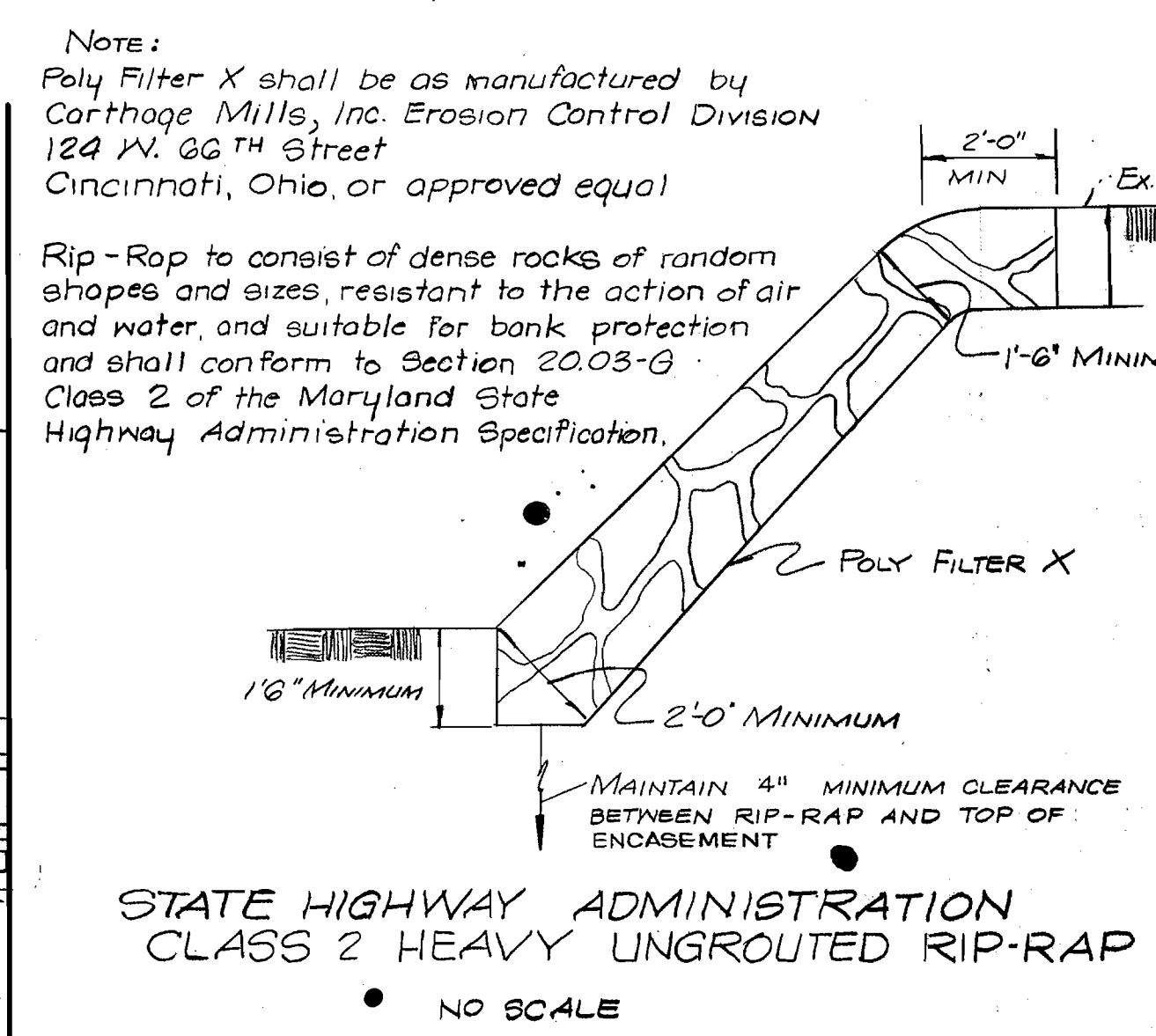
EROSION OF DISTURBED AREA
Sandbags or strawbale barriers to be placed across disturbed area to prevent downhill erosion.

RIP RAP
Immediately following the completion of construction at stream crossings, the contractor will construct the ungrouted rip rap as indicated on plan.

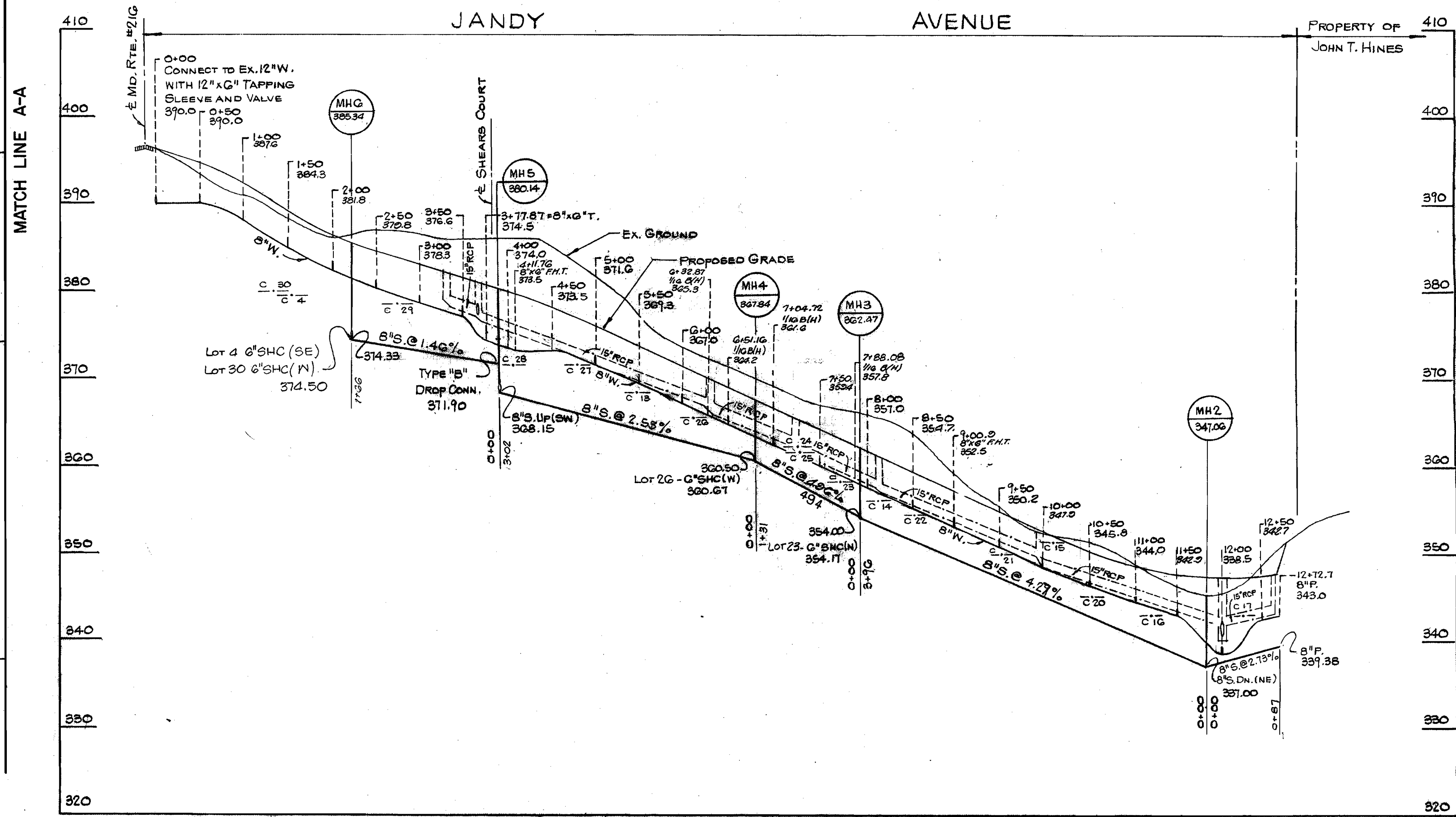
SEDIMENT REMOVAL
All trapped sediment is to be removed and disposed of at authorized landfills prior to removal of sediment control structures.

FOR CONTINUATION, SEE DWG. 4 OF 10 CONTRACT No. 530-S

PLAN
SCALE: 1"=50' HORIZ.



STATE HIGHWAY ADMINISTRATION
CLASS 2 HEAVY UNGROOVED RIP-RAP
NO SCALE



PROFILES
SCALE: 1"=100' HORIZ.
1"=10' VERT.

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CONTRACT NO. 2778-D-W9S

PLAN AND PROFILE
WATER AND SEWER MAINS

LEISHEAR KNOLLS
GUILFORD (6TH) ELECTION DISTRICT

DRAWING NO. 3 OF 3
SCALES AS SHOWN