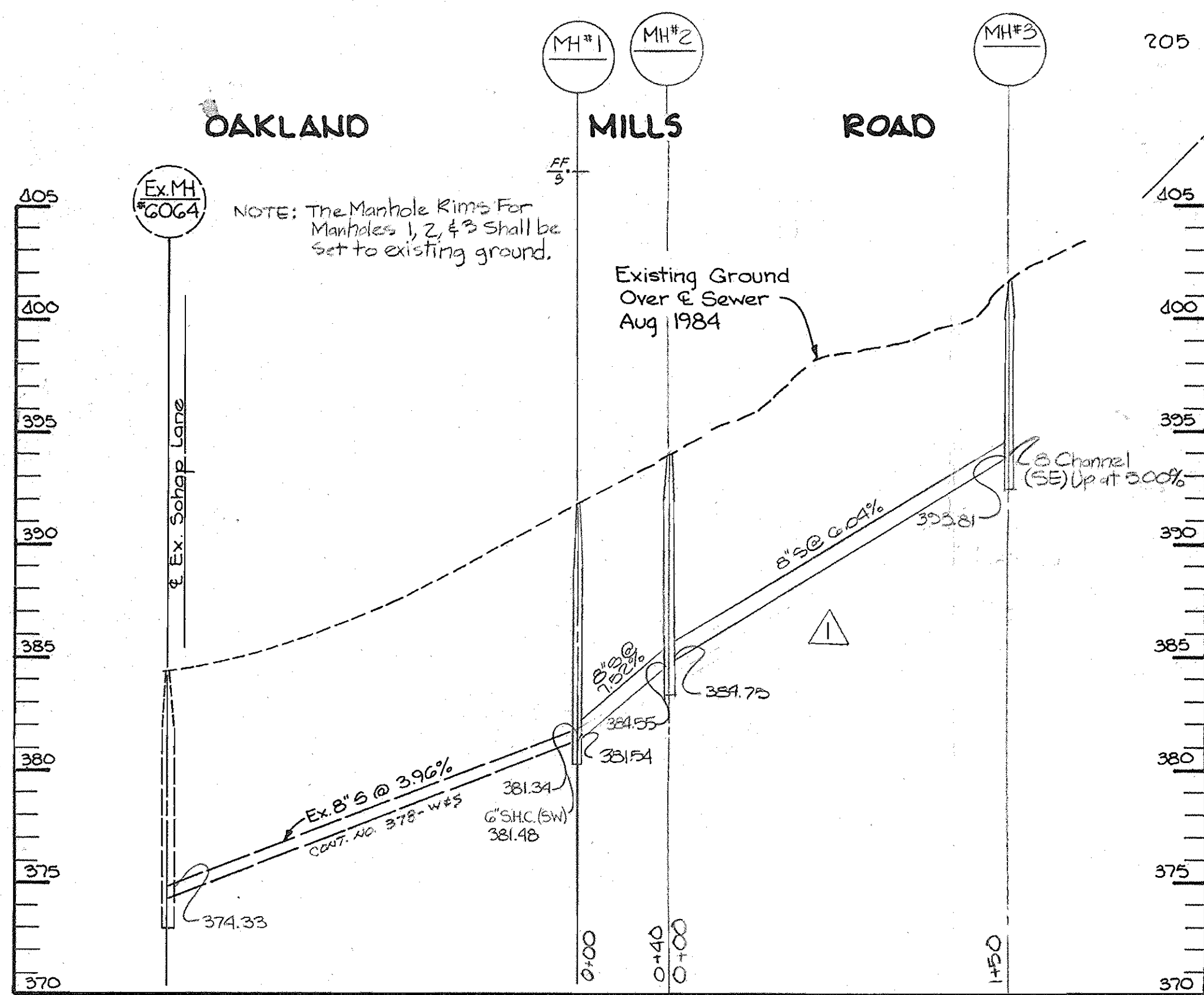


CONSTRUCTION NOTES:
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH WIRE TIES SPACED EVERY 24" AT TOP AND MID SECTION POST-STEEL EITHER T OR U TYPE OR 2" HARDWOOD.
FENCE: WOVEN WIRE, 1 1/2 GA. MAX. 6" MESH OPENING.
FILTER CLOTH: FILTER X, MIRIFI 100X LAUREL EROSION CONTROL CLOTH, BIDIM, POLYFILTER X OR EQUAL

SILT FENCE

NO SCALE
SYMBOL: — S — S — S — S —



PROFILE

SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

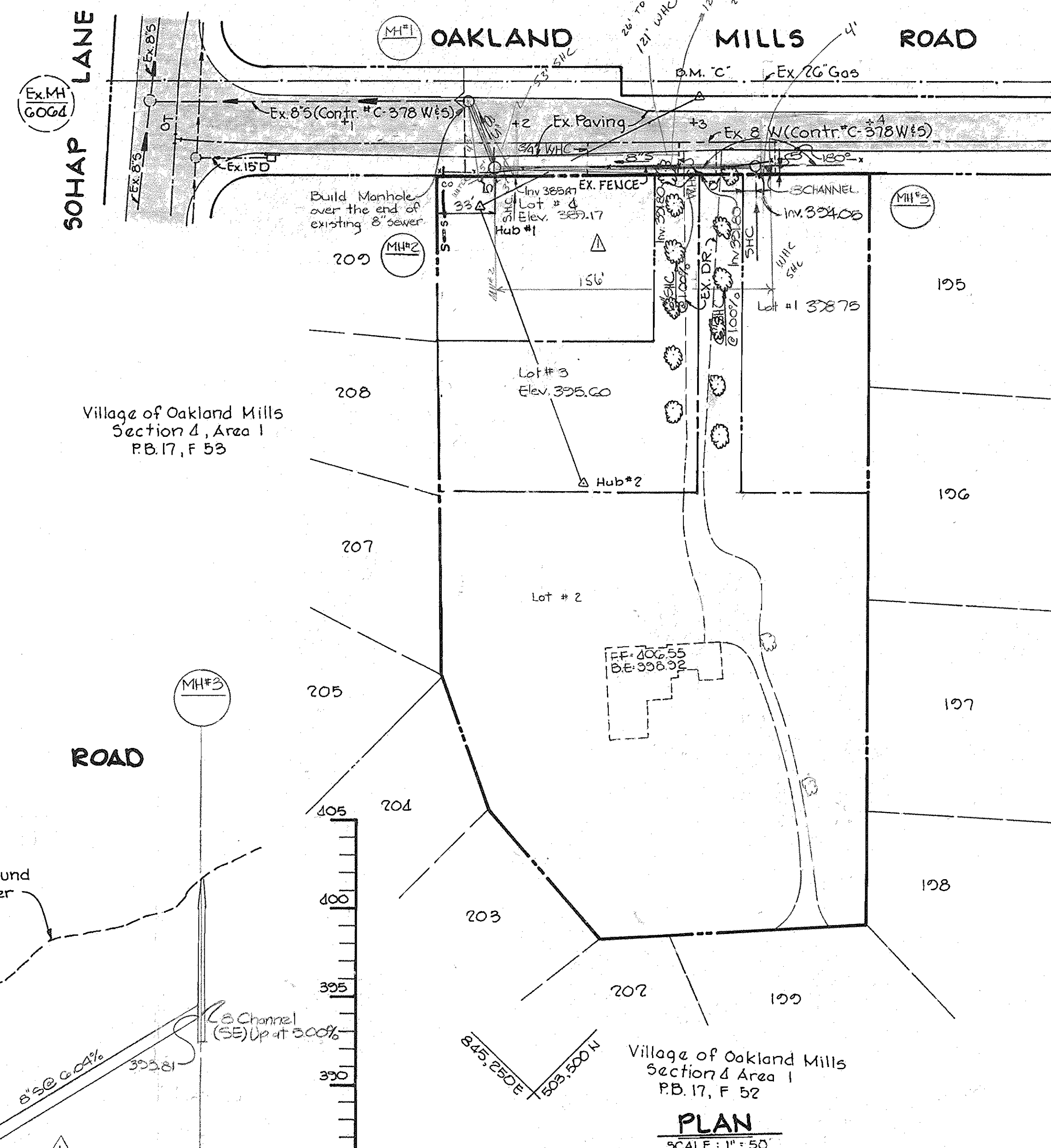
Sediment control measures for this contract will be implemented in accordance with Article 15 of the specifications and as shown on this plan.

Howard Soil Conservation District:
Reviewed for Howard Soil Conservation District and meets technical requirements.

John W. ... 10-2-89
U.S. Soil Conservation Service Date

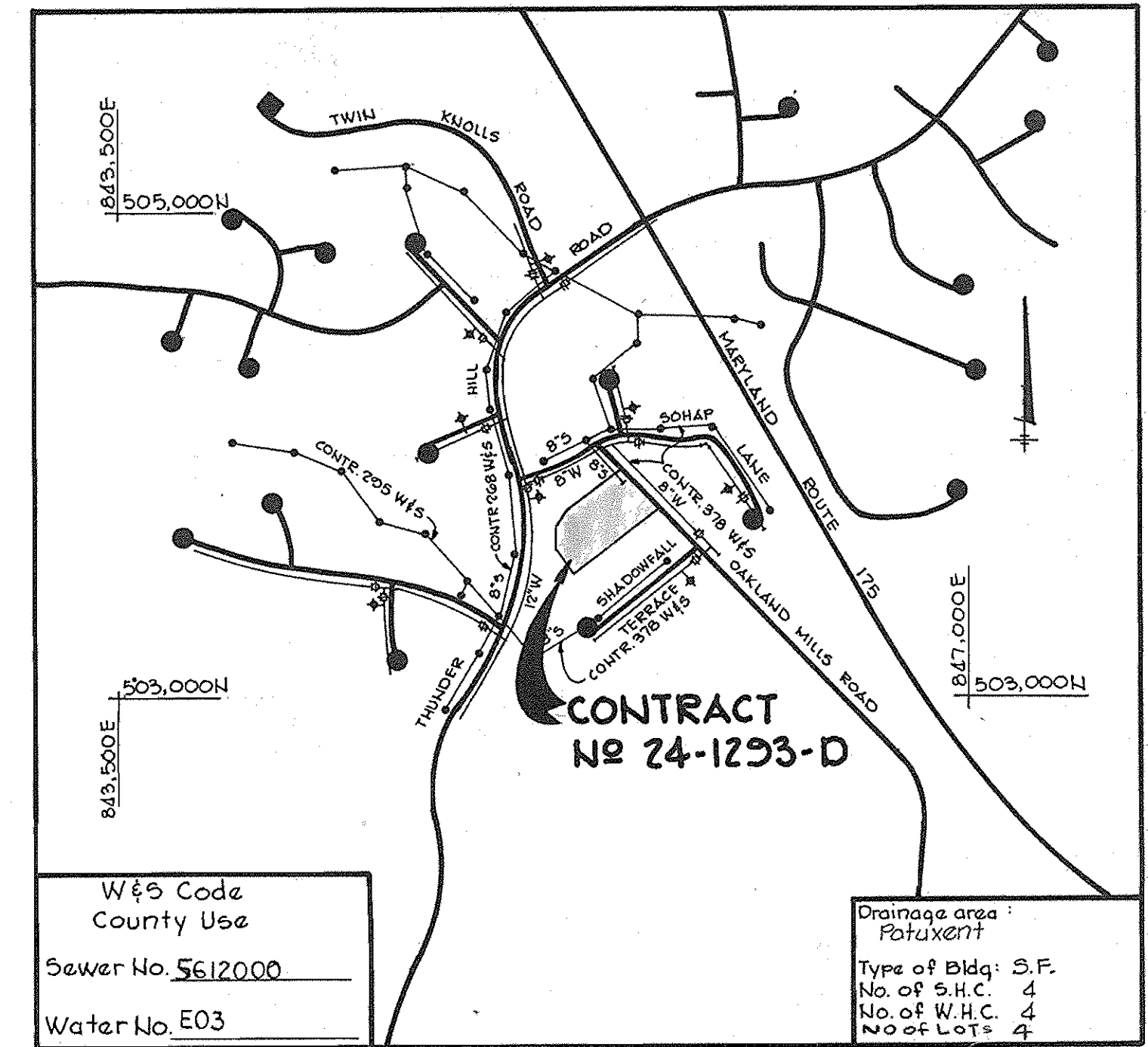
This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Arthur E. Muegge 10-2-89
Howard Soil Conservation District Date



BENCH MARKS

- 1) BM #C ELEV. 398.16
P.K. NAIL SET IN N.E. EDGE OF OAKLAND MILLS ROAD OPPOSITE PRIVATE DRIVEWAY.
- 2) HUB #1 ELEV. 395.89
HUB SET IN LOT # 4
- 3) HUB #2 ELEV. 398.35
HUB SET BETWEEN LOTS 4 & 5



VICINITY MAP

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 to the satisfaction of the Engineer at the Contractor's expense.
- 2) All horizontal controls are based on Maryland State Coordinates.
- 3) All vertical controls are based on U.S.G.S. data.
- 4) All pipe elevations shown are invert (I) elevations.
- 5) Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum or tunnel as required. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event the contractor's work requires the bracing of additional poles, any cost incurred by the owner for the bracing of additional poles or damages shall be deducted from money owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
- 6) For details not shown on the drawings, and for materials and construction methods, use Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction. The contractor shall have a copy of Volume IV on the job.
- 7) Where test pits have been made on existing utilities, they are noted by the symbol [] at the location of the test pit. A note or notes containing the results of the test pit or pits is included on the drawings. Existing utilities in the vicinity of the proposed work for which test pits have not been dug shall be located by the contractor two weeks in advance of construction operations at his own expense.
- 8) Contractor shall notify the following utilities or agencies at least five working days before starting work shown on these plans:
State Highway Administration - 531-5533
Baltimore Gas & Electric Co. - Contractor Services 561-2585
Baltimore Gas & Electric Co. Underground Damage Control - 234-5621
Baltimore Gas & Electric Co. Trouble Shooting - 298-9013
Miss Utility - 1-559-0100
Colonial Pipeline Co. - 795-1390
Bureau of Utilities, Howard County Department of Public Works - 992-2366
- 9) 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.
- 10) 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.
- 11) 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.
- 12) All water mains to be D.I.P. unless otherwise noted.
- 13) Top of all water mains to have a minimum of 3 1/2' cover unless otherwise noted.
- 14) Valves adjacent to trees shall be strapped to trees.
- 15) Block all fittings with concrete.
- 16) 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. Soil around the fire hydrant to be compacted in accordance with Section 1003 & 1008 of the General Requirements for water and sewer.
- 17) All water house connections shall be for an inside meter setting.
- 18) The contractor shall not operate any water main valves on existing system.
- 19) For all copper water house connections utilize flared type fittings only.
- 20) All sewer mains shall be C.S.P.X., V.C.P.X., P.V.C. or A.C.P. Class 2400 unless otherwise noted.
- 21) The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
- 22) All manholes shall be 4'-0" inside diameter, unless otherwise noted.
- 23) Manholes shown with 12" and 16" walls are brick manholes only.
- 24) Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G 5-52 Volume IV. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.
- 25) House (s) with the symbol "C.N.S" indicates cellar can not be served.
- 26) All water house connections shall have a minimum vertical clearance of 12" above all sanitary sewer crossings.
- 27) All sanitary sewer house connections shall have a minimum vertical clearance of 12" below all water main crossings.
- 28) Profile stations shall be adjusted as necessary to conform to plan dimensions.
- 29) No pipe shall be laid until lines of excavation have been brought to subgrade.

QUANTITIES

ITEM	ESTIMATED	AS BUILT	MATERIAL/SUPPLIER
8" Sewer	150 LF	184'	PVC WATER WORKS
6" Sewer	20 LF	28'	PVC
Manhole's	30 V.F.	3.0	FRAMER COVER WATER WORKS ATLANTIC CONCRETE PRODUCTS
3/4" W.H.C.	72 LF	84'	BRASS COPPER WATER WORKS BRASS AND CUPR PRODUCTS

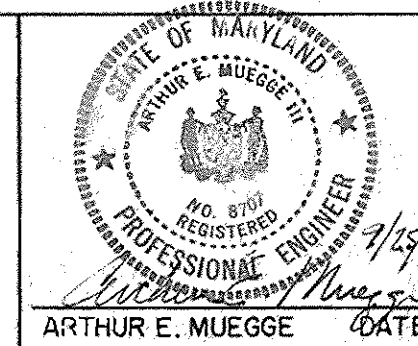
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John F. ... 10-8-89
DIRECTOR OF PUBLIC WORKS DATE

Arthur E. Muegge 10-8-89
CHIEF BUREAU OF UTILITIES DATE

THE RIEMER GROUP, INC.
3105 HEALTH PARK DRIVE
ELLCOTT CITY, MARYLAND 21043

Arthur E. Muegge 10-8-89
CHIEF LAND DEVELOPMENT DIVISION DATE



DES: L.J.D.	LD	REVISED SAN. SEWER ALIGNMENT BET. MH #1 & 3
DRN: D.A.M.		
CHK:		
DATE:		
BY NO.		REVISION
DATE		DATE

PLAN AND PROFILE
OF WATER AND SEWER MAINS

600' SCALE MAP NO. 30836 BLOCK NO.

MILL HAVEN
ELECTION DISTRICT NO. 2
CONTRACT NO. 24-1293-D

SCALE AS SHOWN

SHEET 1 OF 1