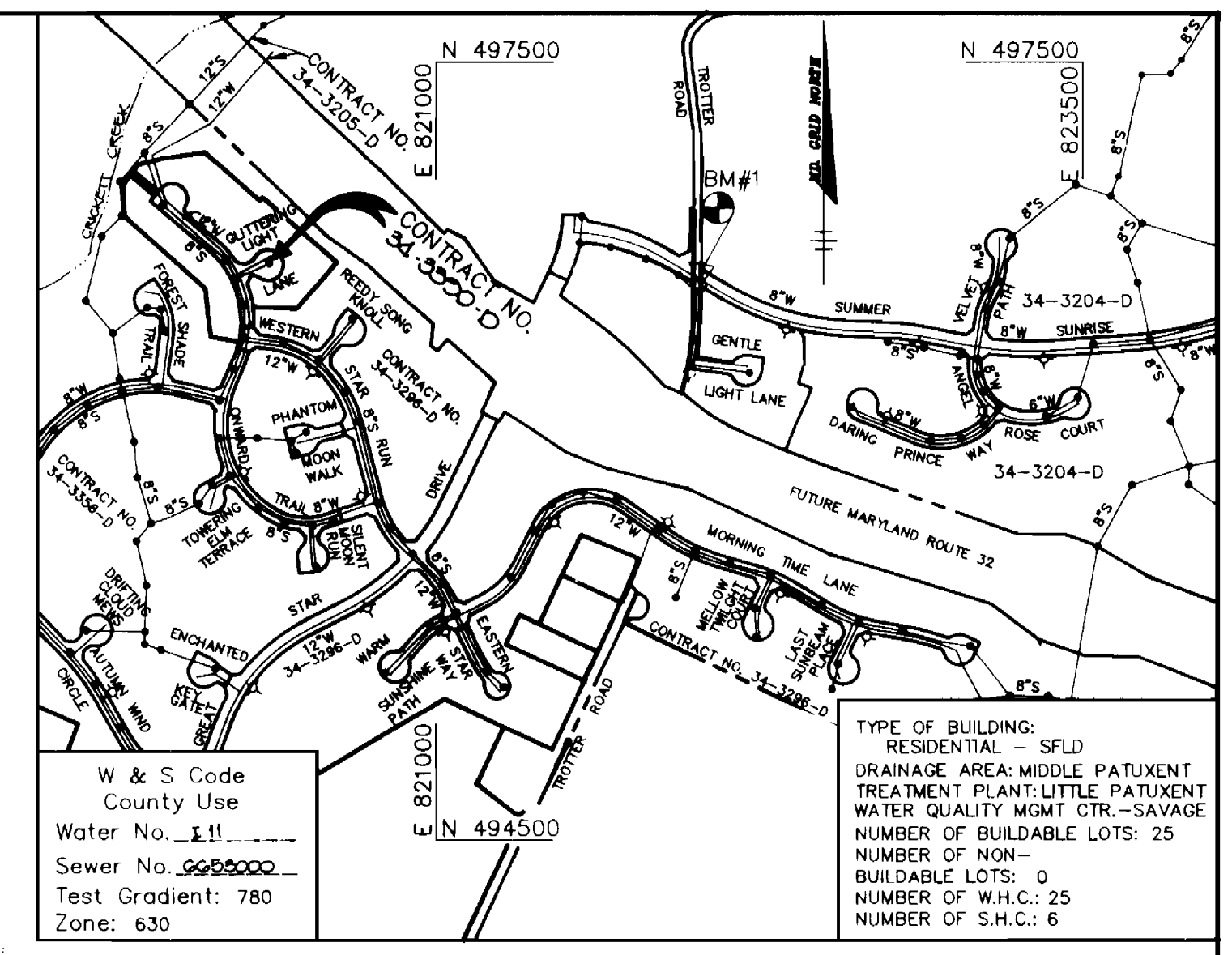
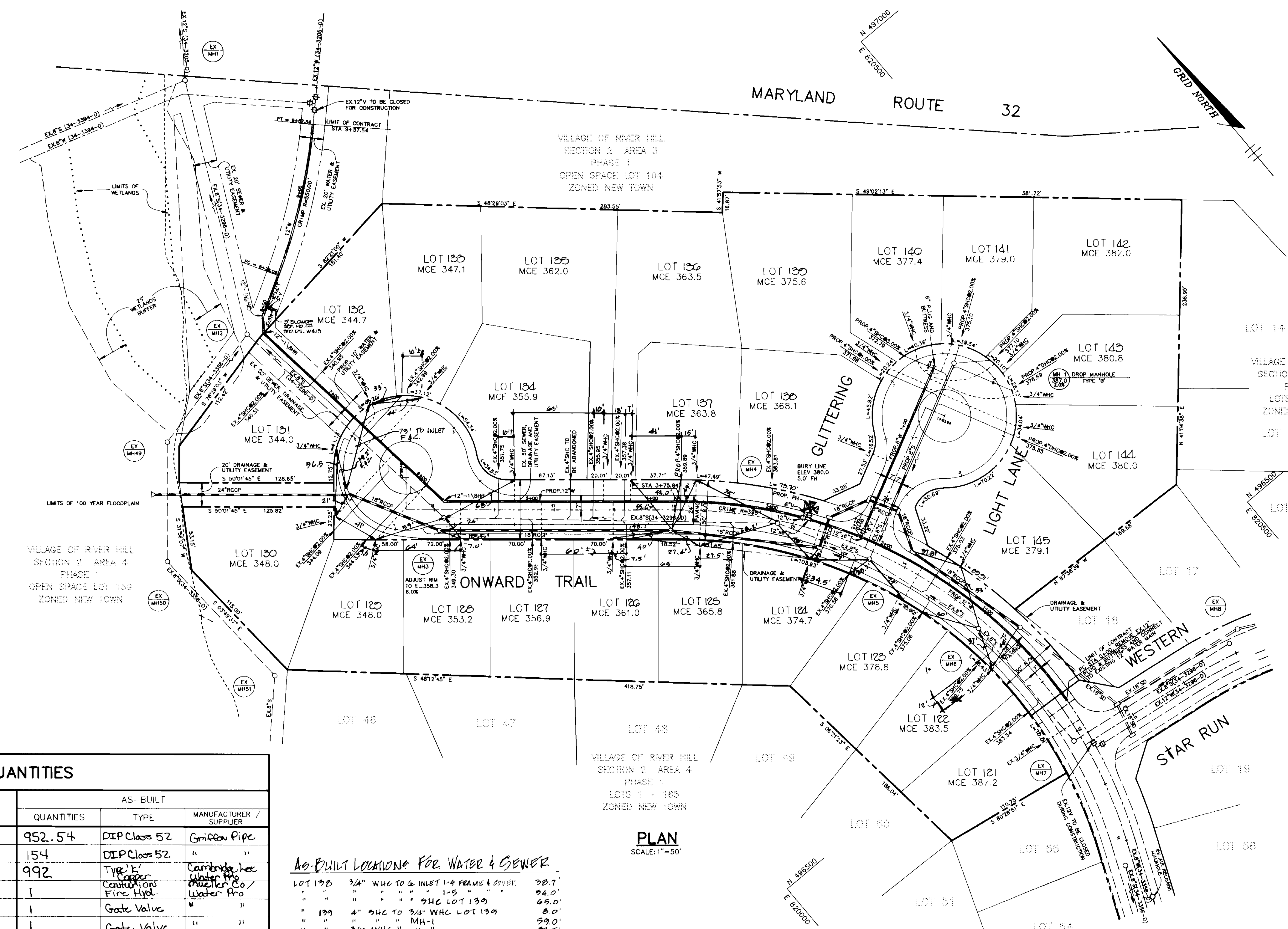


3390 WS/1 , VRRH, 2/3, Ph. 3, LOTS 121-145



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 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 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 Detail for Construction. (Latest Edition). 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 utility companies 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 850-4620
 - Baltimore Gas & Electric Co. Underground Damage Control 787-9068
 - Miss Utility 1-800-257-7777
 - Colonial Pipeline Co. 795-1390
 - Bureau of Utilities, Howard County Department of Public Works 313-4900
9. Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs 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. Payment for such removal shall be included in the unit price bid for construction of the main.
11. All water mains to be D.I.P. Class 52 unless otherwise noted.
12. Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
13. Valves adjacent to tees shall be strapped to tees.
14. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
15. Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
16. The contractor shall not operate any water main valves on the existing water system.
17. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
18. All sewer mains shall be DIF and PVC unless otherwise noted.
19. All manholes shall be 4'-0" inside diameter unless otherwise noted.
20. Force mains shall be D.I.P. only.
21. Manholes shown with 12" and 16" walls are for brick manholes only.
22. Manholes designated W.T. in plan and profile shall have watertight frame and covers Standard Detail GS-52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
23. House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
24. Manholes can be either brick or precast concrete structures.
25. Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
26. Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.

QUANTITIES

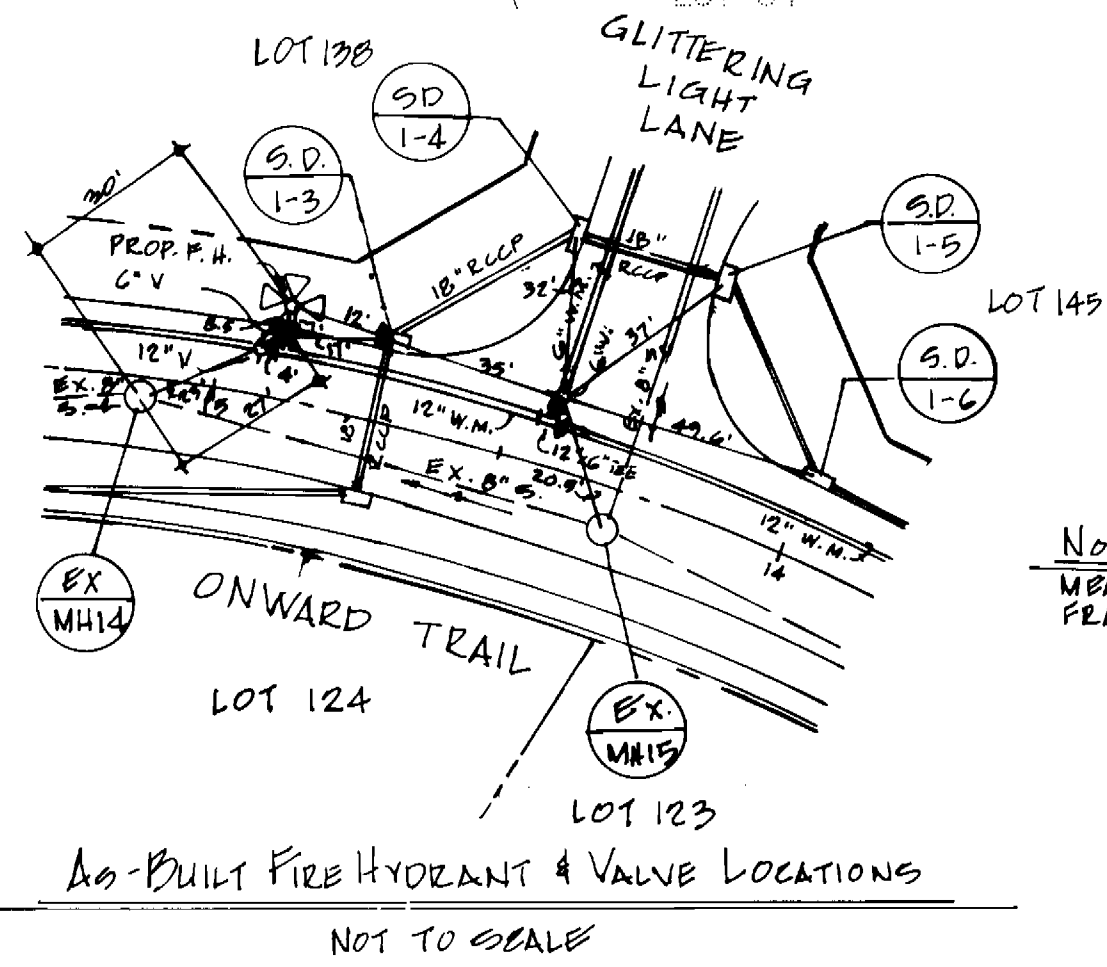
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
12" WATER	957 LF	952.54	DIP Class 52	Gifford Pipe
6" WATER	163 LF	154	DIP Class 52	" "
3/4" WHC	860 LF	992	Typ. E' concrete	Cambridge Ice Water Pro
FIRE HYDRANTS	1 EA.	1	Typ. E' concrete	Water Pro
12" VALVES	1 EA.	1	Gate Valve	" "
6" VALVES	1 EA.	1	Gate Valve	" "
8" SEWER	147 LF	145.53	PVC	J.M. Mansur Water Pro
SEWER MANHOLFS	1 EA. 16 VF.	1	Precast Concrete	Atlantic Concrete Co.
4" SHC	292 LF	355.99	PVC	J.M. Mansur Water Pro
5' BLONOFF	1 EA.	1	Kupferle Foundry	" "

AS-BUILT LOCATIONS FOR WATER & SEWER

LOT 122	3/4" WHC TO 6" INLET 1/4" FRAME & COVER	38.7'
"	" " " " " 1-5 "	34.0'
"	" " " " " 9HC LOT 139	65.0'
LOT 139	4" SHC TO 3/4" WHC LOT 139	8.0'
"	" " " " MH-1	59.0'
"	3/4" WHC " " " 4" SHC LOT 140	27.4'
"	" " " " " 4" SHC LOT 140	14.8'
LOT 140	4" SHC TO 3/4" WHC LOT 140	10.5'
"	" " " " " MH-1	41.8'
"	3/4" WHC " " " " " MH-1	39.0'
"	" " " " " " " " " MH-1	17.0'
LOT 141	" " " " " " " " " MH-1	17.0'
"	4" SHC " " " " " " " " " MH-1	19.0'
"	" " " " " " " " " MH-1	29.0'
LOT 142	" " " " " " " " " MH-1	31.0'
"	3/4" WHC " " " " " " " " " MH-1	26.0'
"	4" SHC TO 3/4" WHC LOT 143	59.0'
LOT 143	" " " " " " " " " MH-1	6.5'
"	4" SHC TO 3/4" WHC LOT 144	52.0'
"	" " " " " " " " " MH-1	57.0'
LOT 144	" " " " " " " " " MH-1	73.0'
"	4" SHC " " " " " " " " " MH-1	78.0'

MANHOLE LOCATION SCHEDULE

SEWER MANHOLE	LOCATION
1	7.4' RT OF UP STA 1+60.5 GLITTERING LIGHT LANE



NAME OF UTILITY CONTRACTOR: UTILITIES UNLIMITED INC.

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on F-95-141

Review for Howard Soil Conservation District and meets technical requirements.

Patricia Long 8/28/95
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Robertson 8/30/95
HOWARD SOIL CONSERVATION DISTRICT DATE

BENCHMARKS
BM#1 RAILROAD SPIKE IN POLE #525680 TROTTER ROAD ELEV. 393.27
N 498697.02 E 822026.81
BM#2 RAILROAD SPIKE IN POPLAR ELEV. 438.92
N 495551.90 E 820727.80

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

RIEMER MUEGGEL & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282

Robert A. Mueggel 8-28-95
CHIEF, BUREAU OF UTILITIES DATE

John W. Mueggel 8/28/95
CHIEF OF PLANNING ENGINEERING DIVISION DATE

DES: C.J.R.

DRN: DAM

CHK:

DATE: 8-28-95

BY NO. REVISION DATE

600' SCALE MAP NO. 35 BLOCK NO. 14

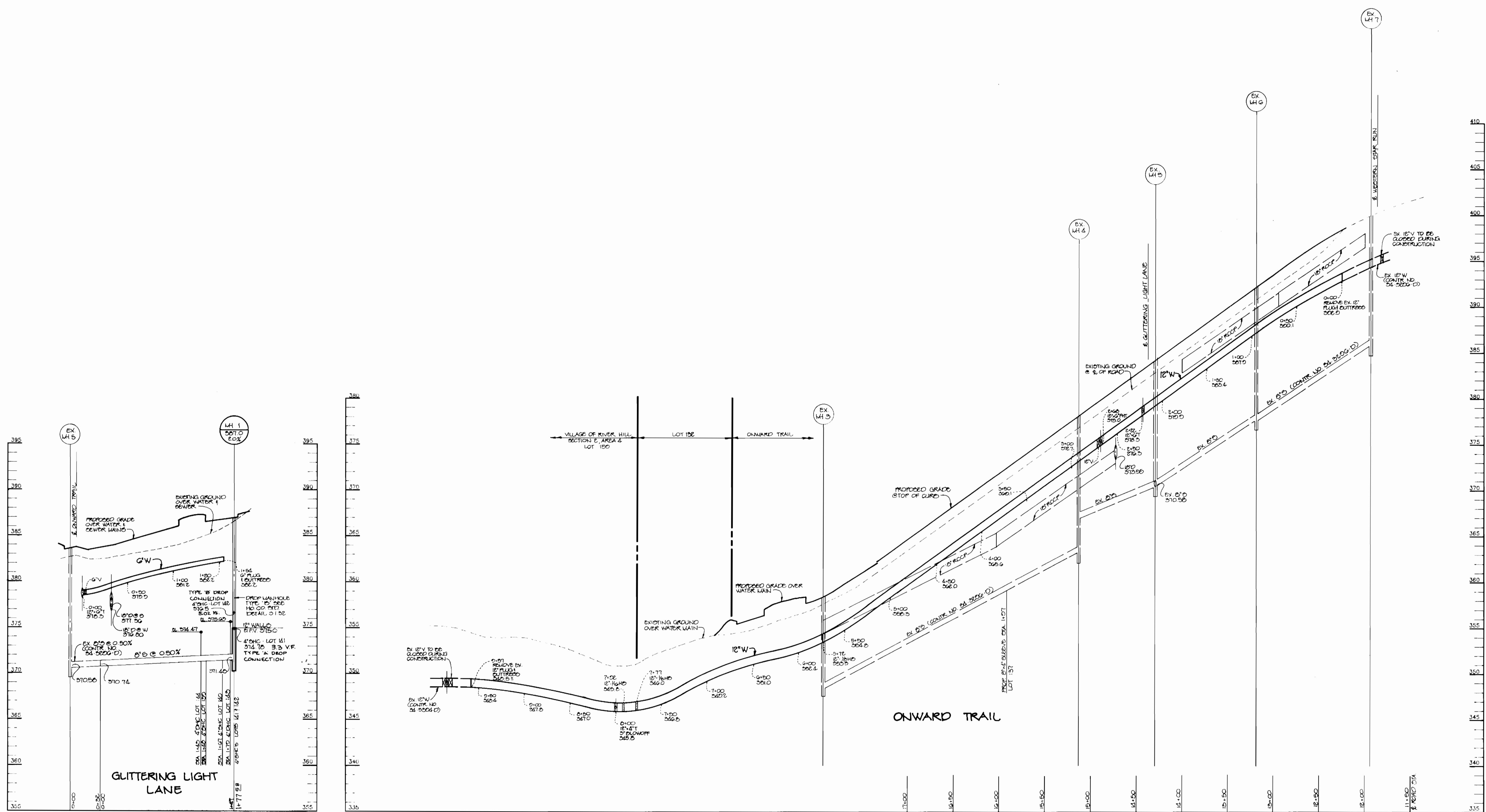
PLAN OF WATER AND SEWER MAINS

VILLAGE OF RIVER HILL
SECTION 2 AREA 3 PHASE 3
LOTS 121-145
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3300-D

SCALE AS SHOWN

SHEET 1 OF 2

3390 ws/2, YRH, 2/3, Ph. 3



PROFILE
SCALE:
HOR.-1"=50'
VERT.-1"=5'

PROFILE
SCALE:
HOR.-1"=50'
VERT.-1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert W. Benner
CHIEF, BUREAU OF PUBLIC WORKS

8-28-95
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Arthur E. Muegge
CHIEF, DEPARTMENT OF PLANNING & ZONING

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www.rma.com

Arthur E. Muegge
ARTHUR E. MUEGGE 6707



DFS: C.J.R.	
DRN: DAM	
CHK:	
DATE: 8-20-05	
CJR	ADD TYPE OF HOUSE CONNECTION AT M4-1
BY: NC	REVISION
DATE: 10/1/05	

PROFILE OF WATER AND SEWER MAINS

DATE: 600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 2 AREA 3 PHASE 3
LOTS 121-145
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3000-D

SCALE AS SHOWN

SHEET 2 OF 2