

SHEET INDEX	
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WATER AND SEWER EXTENSIONS

VILLAGE OF RIVER HILL

SECTION 2 AREA 6 PHASE 3

5th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

CONTRACT NO. 34-3576-D

GENERAL NOTES

- 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.
- All horizontal controls are based on Maryland State Coordinates.
- All vertical controls are based on U.S.G.S. data.
- All pipe elevations shown \circ are invert elevations.
- 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.
- 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.
- Where test pits have been made on existing utilities, they are noted by the symbol \circ 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.
- 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 787-9088
 Miss Utility 1-800-257-7777
 Colonial Pipeline Co. 795-1390
 Bureau of Utilities, Howard County Department of Public Works 313-4900
- 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.
- 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.
- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
- 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.
- The contractor shall not operate any water main valves on the existing water system.
- All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
- All sewer mains shall be D.I.P. and P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Force mains shall be D.I.P. only.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- 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.
- House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
- Manholes can be either brick or precast concrete structures.
- Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per standard detail W.1.11.
- Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
- The Howard County Department of Public Works has permission to access private lots shown on these plans to maintain public water and sewer house connections at curb stops and/or cleanouts.

QUANTITIES			
ITEMS	QUANTITIES ESTIMATED	AS-BUILT	
		QUANTITIES	TYPE MANUFACTURER / SUPPLIER
8" WATER	1678 LF	1678 LF	CL. 52 D.I.P. / Griffin Pipe Products
8"x8" TEE	1 EA	1 EA	" "
8"x6" TEE	3 EA	3 EA	" "
6"x4" TEE	1 EA	1 EA	" "
8"x6" REDUCER	1 EA	1 EA	" "
8" VALVE	3 EA	3 EA	Kennedy Awwa #C509 / M&C
8"-1/8 HB	2 EA	2 EA	CL. 52 D.I.P. / Griffin Pipe Products
6" WATER	110 LF	111 LF	CL. 52 D.I.P. / Griffin Pipe Products
FIRE HYDRANT	3 EA	3 EA	Kennedy / Municipal Contractors
6" VALVE	4 EA	4 EA	Kennedy / Municipal Contractors
6" PLUG & BUTTRESS	7 EA	1 EA	CL. 52 D.I.P. / Griffin Pipe Products
3/4" WHC	896 LF	960 LF	Cambridge Type K / M&C
1-1/2" DRAIN	2 EA	1 EA	Ford / Municipal Contractors
4" WATER	42 LF	0	
Curb Stops W.H.C.	29 EA	29 EA	Ametek / Bingham & Taylor
8" DIP SEWER	371 LF	371 LF	CL. 52 D.I.P. / Griffin Pipe Products
8" PVC SEWER	1389 LF	1379 LF	SDR 35 PVC / ET I
4" SHC	932 LF	1033 LF	SDR 35 PVC / ET I
4'-0" DIA. MANHOLES	12 EA	12 EA	Atlantic Concrete
4'-0" DIA. MANHOLES	133 VF		
TYPE 'B' DROP MANHOLES	3 EA	3 EA	Atlantic Concrete
8"x4" WHYE	13 EA	13 EA	HARCO / Municipal Contractors
Sewer House Connections	29 EA	29 EA	Ametek / Municipal Contractors

NAME OF UTILITY CONTRACTOR: Fallston Utilities
CHECKBOX
AS-BUILT DATE: 9-20-97
SURVEY AND DRAFTING DIVISION

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on F-97-125

Review for Howard Soil Conservation District and meets technical requirements.

Cheryl Simmons 4/15/97
U.S. SOIL CONSERVATION SERVICE DATE

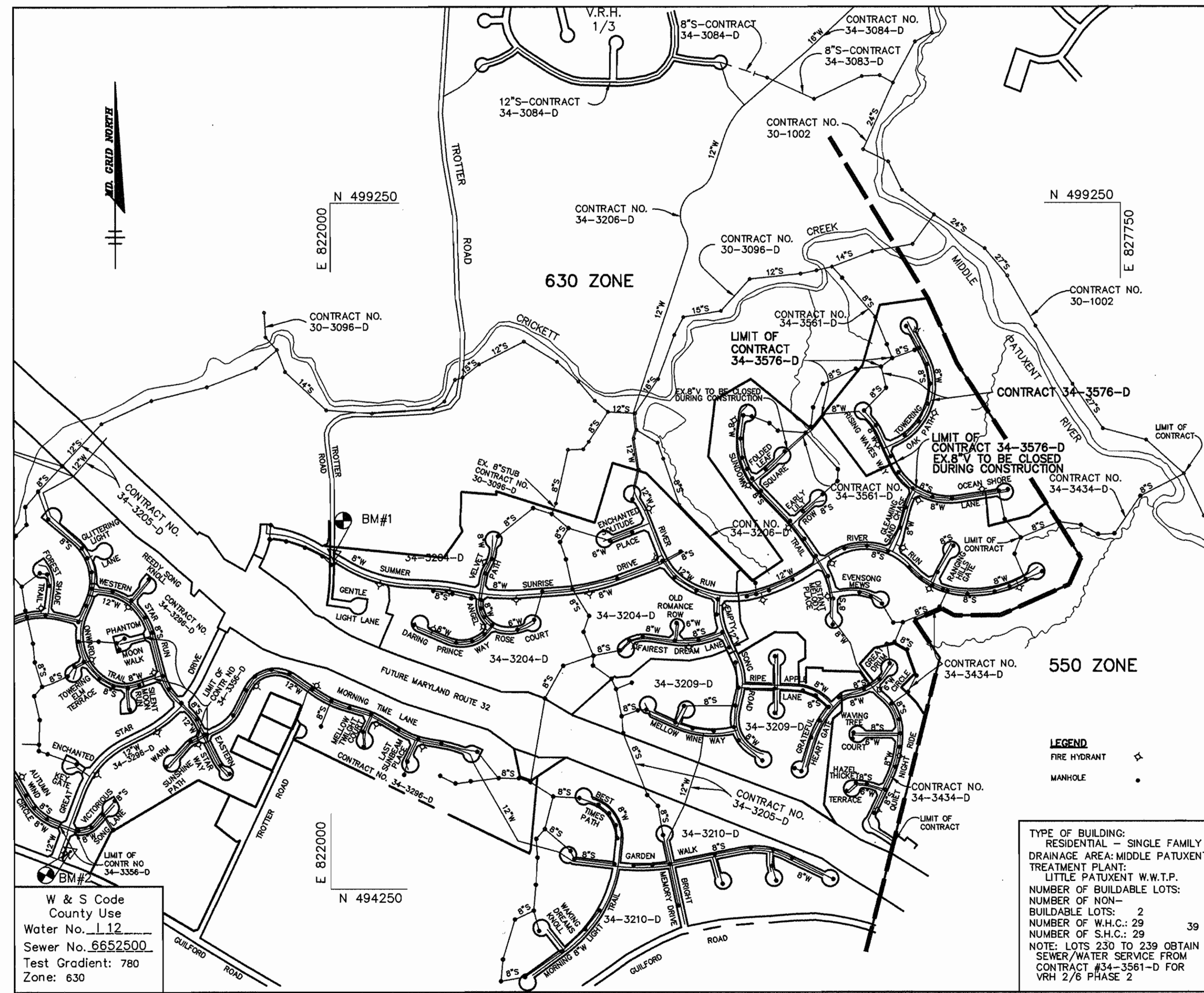
This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John K. Roberts 4/15/97
HOWARD SOIL CONSERVATION DISTRICT DATE

BENCHMARKS

BM#1 RAILROAD SPIKE IN POLE # 525680 (TROTTER ROAD) ELEV. 393.27
N 496697.02
E 822026.81

BM#2 HOWARD COUNTY MONUMENT NO. 2437003 ELEV. 472.12
CONCRETE MONUMENT



VICINITY MAP
SCALE: 1"=60'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John K. Roberts 4-14-97
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John K. Roberts 4/10/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
HCCO102800\PH351.DWG

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER

J. Parekh
JAYKANT D. PAREKH # 19148

DES: DAM			
DRN: DAM			
CHK: CUR			
DATE: 4/7/97	RSC	ELIMINATED ONE DROP MANHOLE	9.29.97
BY NO.		REVISION	DATE

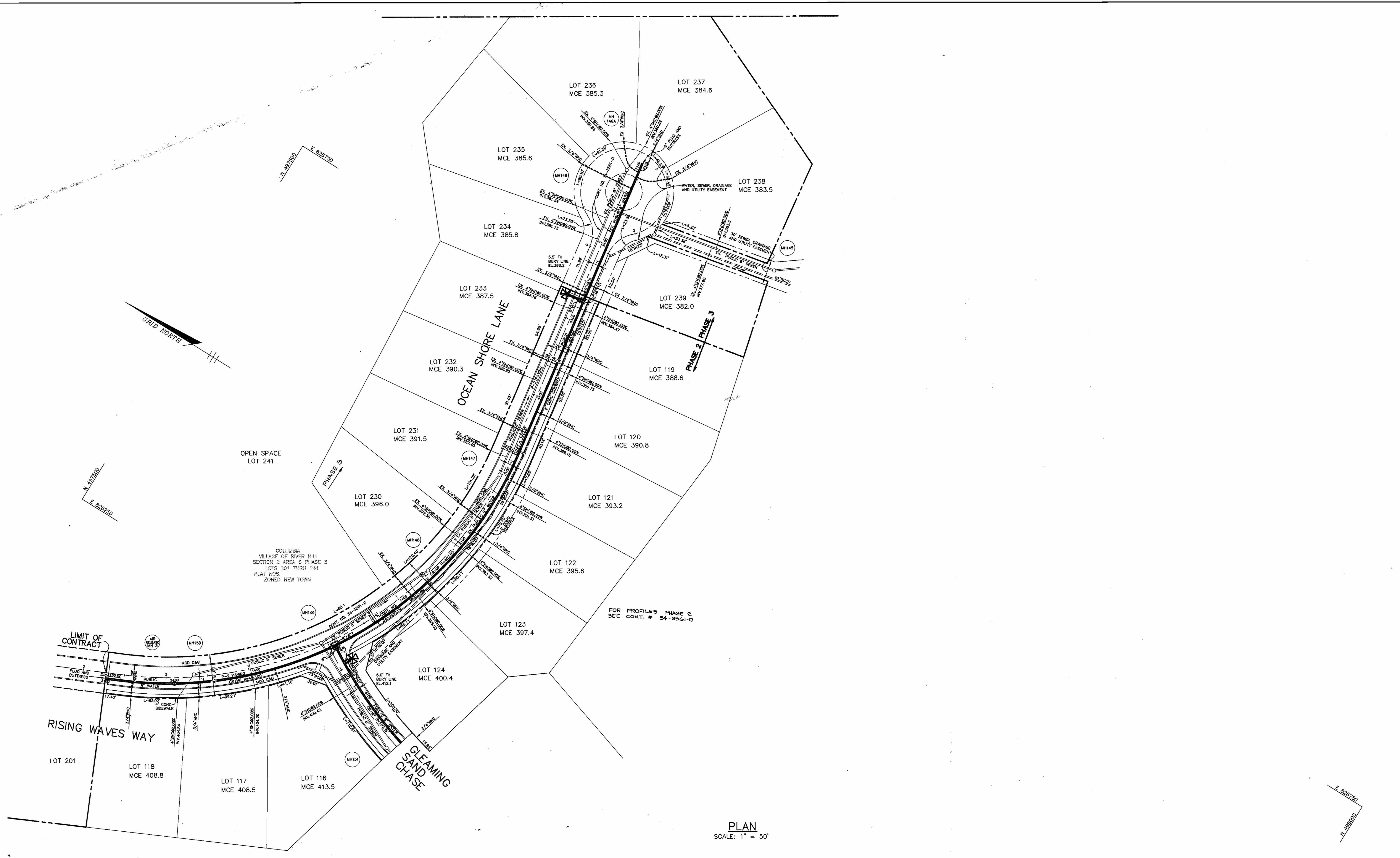
TITLE SHEET

600' SCALE MAP NO. 35 BLOCK NO. 15 & 21

Water & Sewer
As-Built

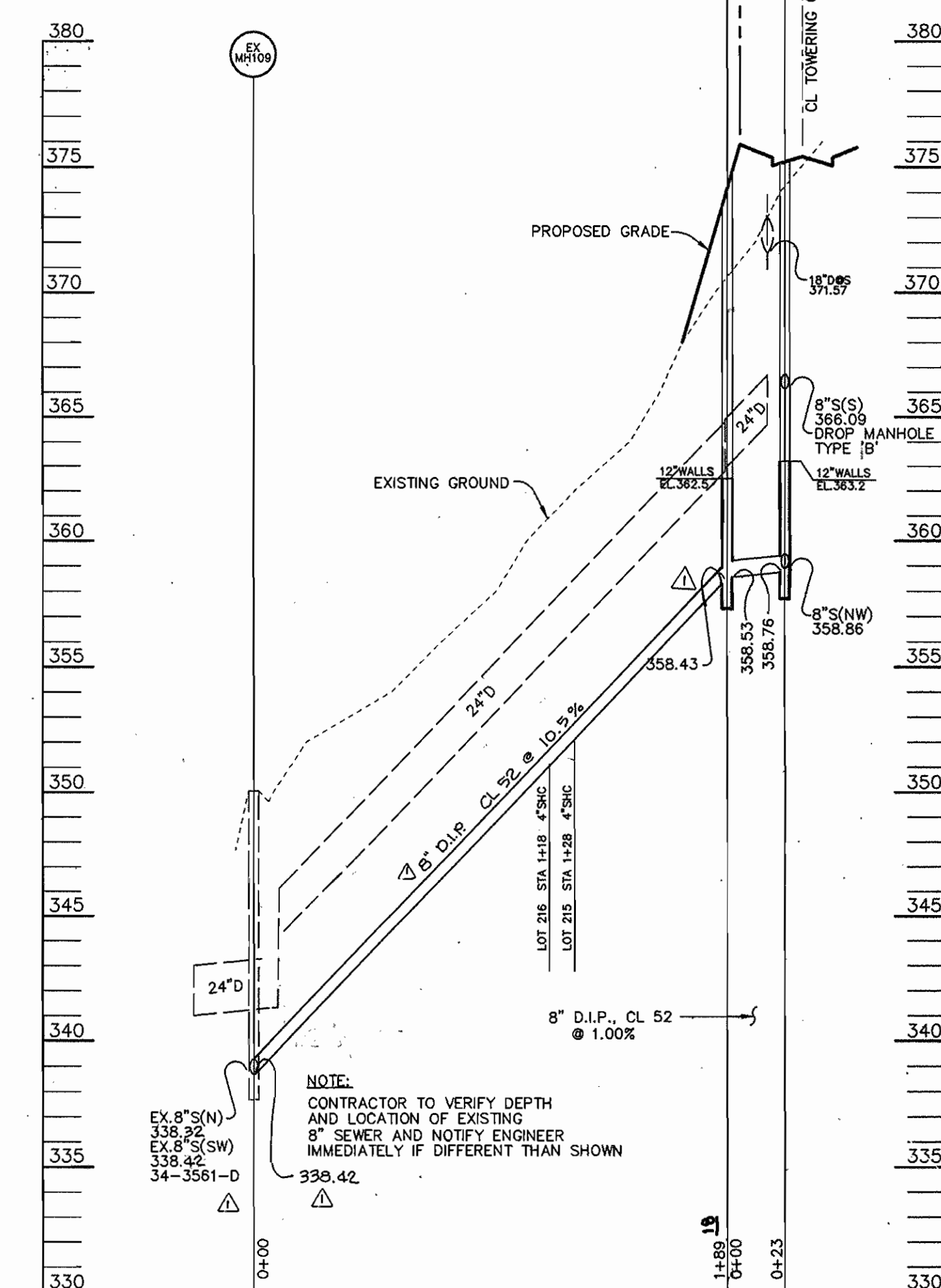
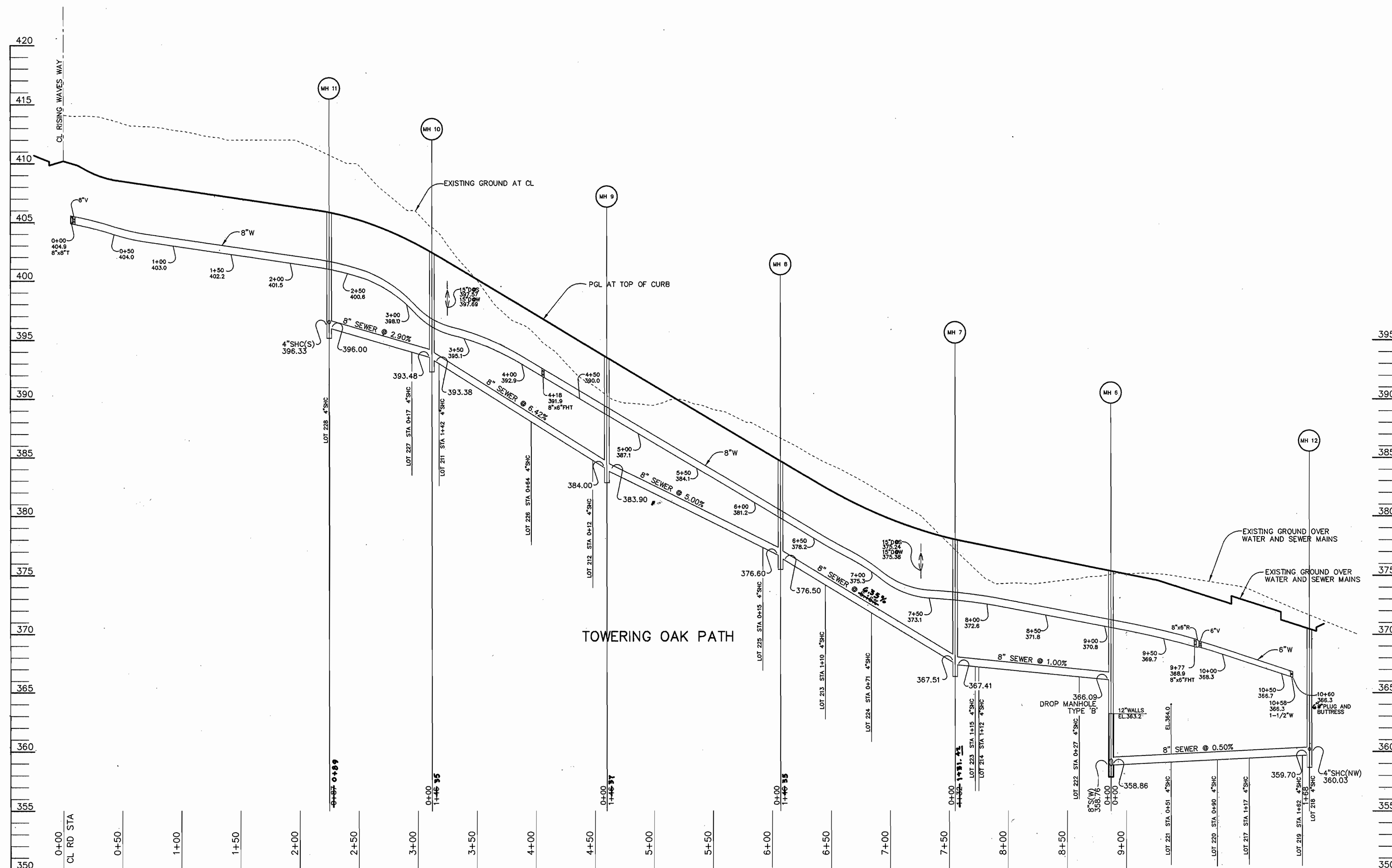
VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 3
LOTS 201 THRU 241
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3576-D

SCALE AS SHOWN
SHEET 1 OF 5



PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] 4/18/97 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND [Signature] 4/18/97 CHIEF, DEVELOPMENT ENGINEERING DIVISION	RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 FAX: 410-997-9282 HOC0\102800\PH3\SWSS.DWG	STATE OF MARYLAND PROFESSIONAL ENGINEER J. Kaeble JAYKANT D. PAREKH # 19148	DES: DAM DRN: DAM CHK: CJR DATE: 4/22/97 BY NO. REVISION DATE	PLAN OF WATER AND SEWER MAINS 600' SCALE MAP NO. 35 BLOCK NO. 15 & 21	VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 3 LOTS 201 THRU 241 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 34-3576-D	SCALE AS SHOWN SHEET 3 OF 5
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PROFILE

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

PROFILE

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
John Beaman 4-14-97
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
John Beaman 4/15/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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410-997-8900 FAX: 410-997-9282
HOCO\102800\PH3WS4.DWG

STATE OF MARYLAND
JAYKANT D. PAREKH # 19148

DES: DAM			
DRN: DAM			
CHK: CJR			
DATE: 4/7/97	RJC	ELIM. CONVERSION OF EX MH 109 TO DROP MANHOLE ADJ. INV. IN @ 109 @ PIPE SLOPE	9-29-97
BY: NO.		REVISION	DATE

PROFILES OF WATER AND SEWER MAINS
600' SCALE MAP NO. 35 BLOCK NO. 15 & 21

VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 3
LOTS 201 THRU 241
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 34-3576-D

SCALE AS SHOWN
SHEET 5 OF 5