

SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN OF WATER AND SEWER MAINS
3	PROFILES

WATER AND SEWER EXTENSIONS

MINI-U-STORAGE

MIDWAY BUSINESS CENTER

PARCEL A

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-3625-D

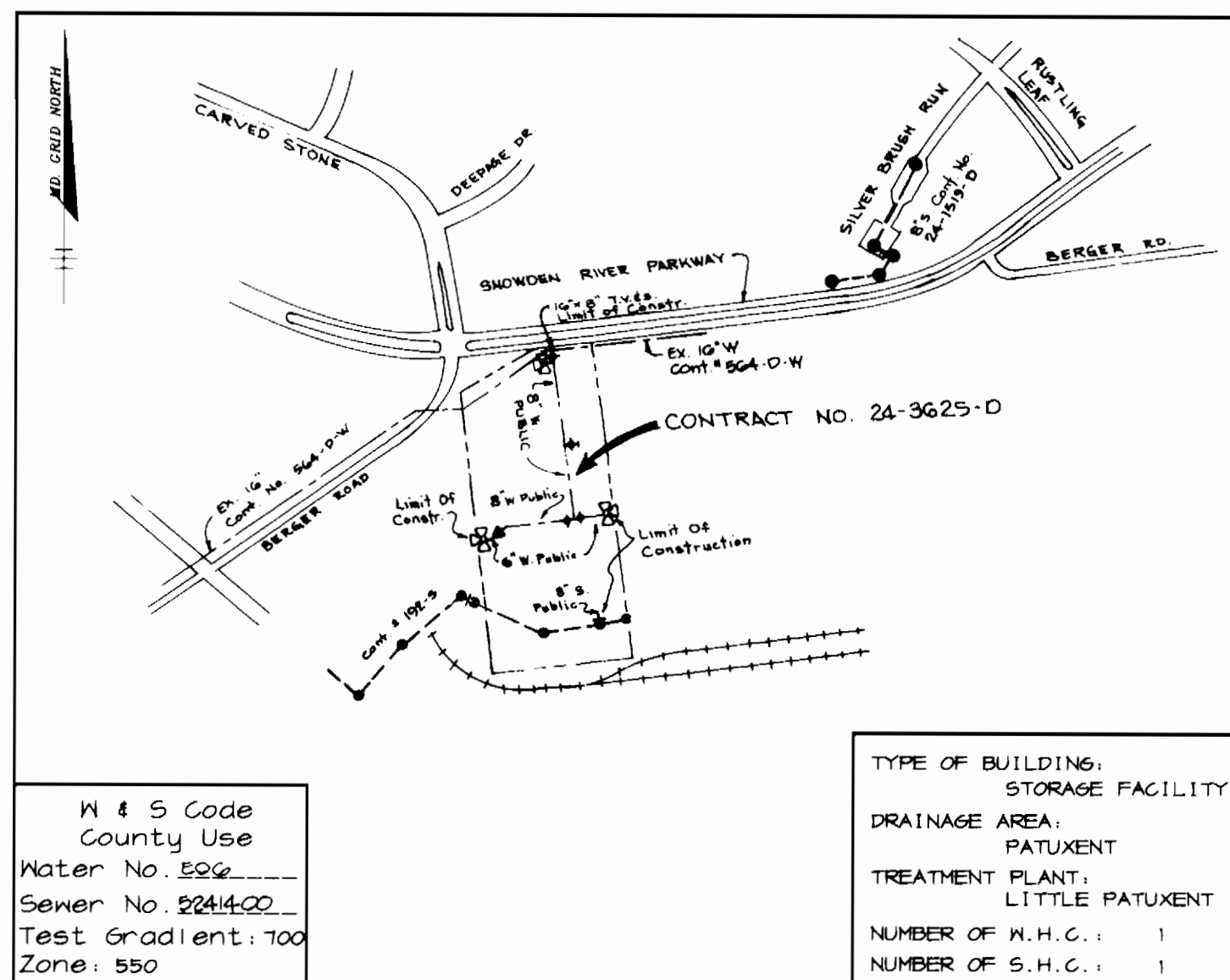
GENERAL NOTES

- 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 \curvearrowright are invert elevations.
- Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum of 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 \square 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	531-5535
Baltimore Gas & Electric Co. Contractor Services	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-4068
Misc Utility	1-800-257-7777
Colonial Pipeline Co.	735-1340
Bureau of Utilities, Howard County Department of Public Works	313-4400
- 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.
- 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 R.1.1.1.
- Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
- The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-7450 at least five (5) working days before any open cut of any County road or boring/jacking operation in County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DFN requirements per Section 18.114(d) of the Howard County Code.
- 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.
- Manholes can be either brick or precast concrete structures.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	935 LF	935 L.F.		ATLANTIC / U.S. STATES / FILTER UNION FOUNDRY, U.S.
8" 1/8 HB	2 EA.	2 EA.		
8" VALVES	2 EA.	1 EA.		MUELLER / U.S. FILTER
8" X6" T	1 EA.	2 EA.		UNION FOUNDRY / U.S. FILTER
8" X8" T	1 EA.	1 EA.		UNION FOUNDRY / U.S. FILTER
6" WATER	190 LF	190 L.F.		ATLANTIC / U.S. STATES / FILTER
6" VALVES	4 EA.	4 EA.		MUELLER / U.S. CO. / FILTER
FIRE HYDRANTS	3 EA.	3 EA.		MUELLER / U.S. CO. / FILTER
8" X6" R	2 EA.	2 EA.		UNION FOUNDRY / U.S. FILTER
16" X8" T, 5' V	1 EA.	1 EA.		SMITH BLAIR / U.S. FILTER
METER VALVE T	1 EA.	1 EA.		FREDERIC PRECAST
8" 1/16 VB	2 EA.			
8" 1/16 HB	2 EA.	2 EA.		UNION FOUNDRY / U.S. FILTER
4" DIA. SEWER MANHOLE	3 EA.	3 EA.		FREDERIC PRECAST
8" SEWER	520 LF.	529 L.F.		J.M. MANUFACTURING
1" WATER	10 LF.	10 L.F.		READING / U.S. TUBE / FILTER
1 1/2" WATER	10 LF.	10 L.F.		READING / U.S. TUBE / FILTER



VICINITY MAP
SCALE: 1"=600'

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 SDP-97-79

CHECKBOX
AS-BUILT DATE: 08-09-97
SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

[Signature] 5/29/97
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

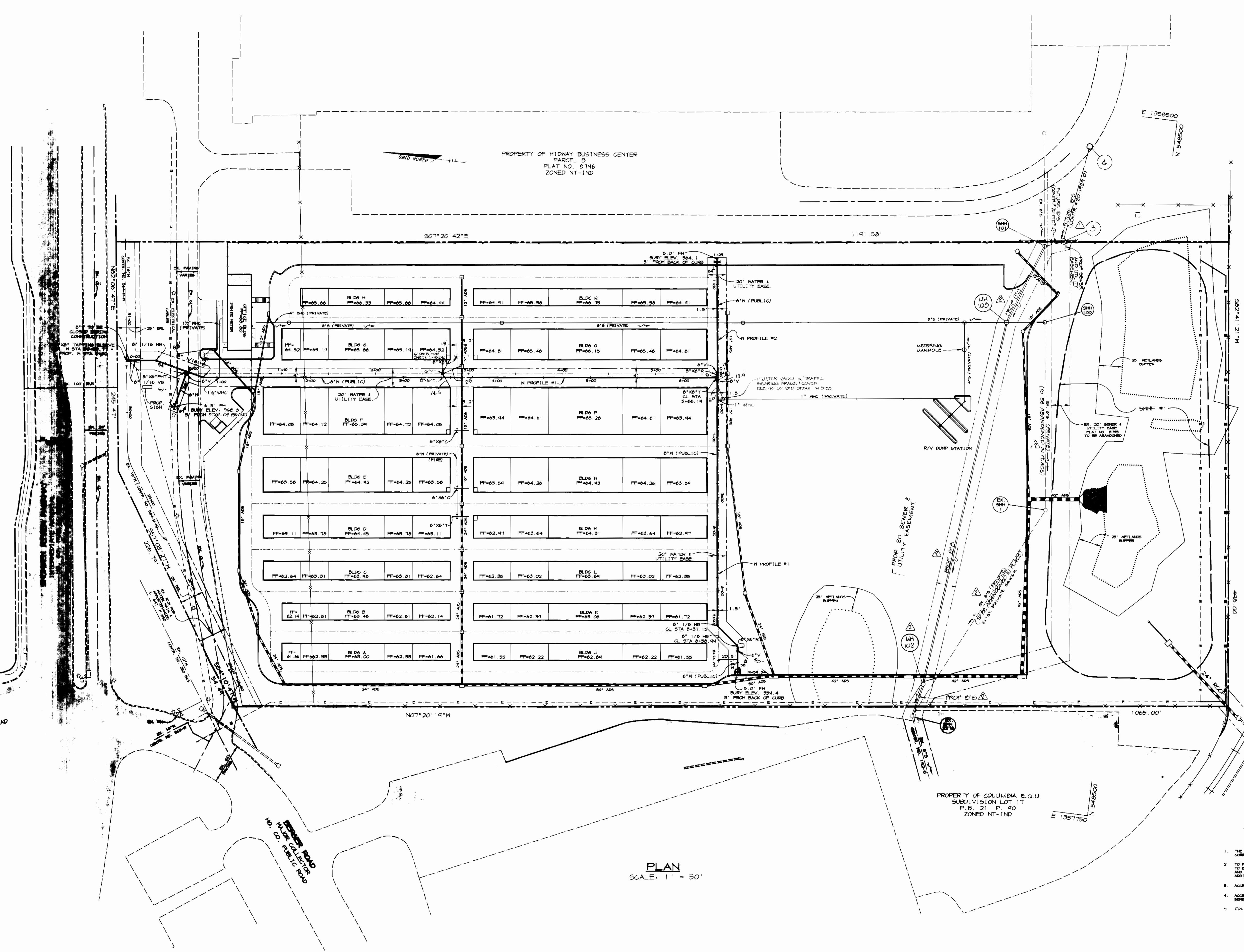
[Signature] 5/29/97
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>[Signature]</i> 5-29-97 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>[Signature]</i> 5/30/97 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 Tel 410.997.8900 Fax 410.997.9282 86089 931.DWG	DES: BLK DRN: BLK CHK: GJR DATE: 5-29-97 WAD \triangle REVISIONS BY NO. DATE	TITLE SHEET	SCALE AS SHOWN SHEET 1 OF 3
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WATER & SEWER AS-BUILT

600' SCALE MAP NO. 42 BLOCK NO. 10

NOTE:
CONTRACTOR TO VERIFY
DEPTH AND LOCATION
OF 16" WATER LINE AND
NOTIFY ENGINEER IF
DIFFERENT THAN SHOWN.



PLAN
SCALE: 1" = 50'

ACCEPTANCE OF PRIVATE 8" SEWER
INTO PUBLIC SYSTEM.

1. THE SEWER LINE WILL BE FIELD AND VIDEO INSPECTED. THE DEVELOPER WILL CORRECT ALL DEFECTS IDENTIFIED DURING INSPECTION.
2. TO FACILITATE INSPECTION, 30" DIA. SHALL BE CONSTRUCTED TO ALLOW ACCESS TO EACH END OF SEWER LINE. EX. 30" DIA. SHALL REQUIRE A BREAK CHANNEL, BENCH AND INTERMEDIATE LANDING. LOWER SECTIONS WILL NEED TO BE EVALUATED FOR ADDITIONAL LOADS.
3. ACCESS FOR VIDEO TRUCK AND INSPECTION VEHICLE WILL BE PROVIDED.
4. ACCESS SHALL BE MAINTAINED FOR FUTURE ACCESS TO MAINTAIN AND INSPECT SEWER IS REQUIRED 24 HOURS A DAY.
5. CONTRACTOR TO SUPPLY ALL MATERIALS, PERMITS, AND INSURE CONTRACTOR.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert D. Berman
CHIEF, BUREAU OF UTILITIES
5-29-97
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Michael D. Berman
CHIEF, DEVELOPMENT ENGINEERING DIVISION
5/30/97
DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

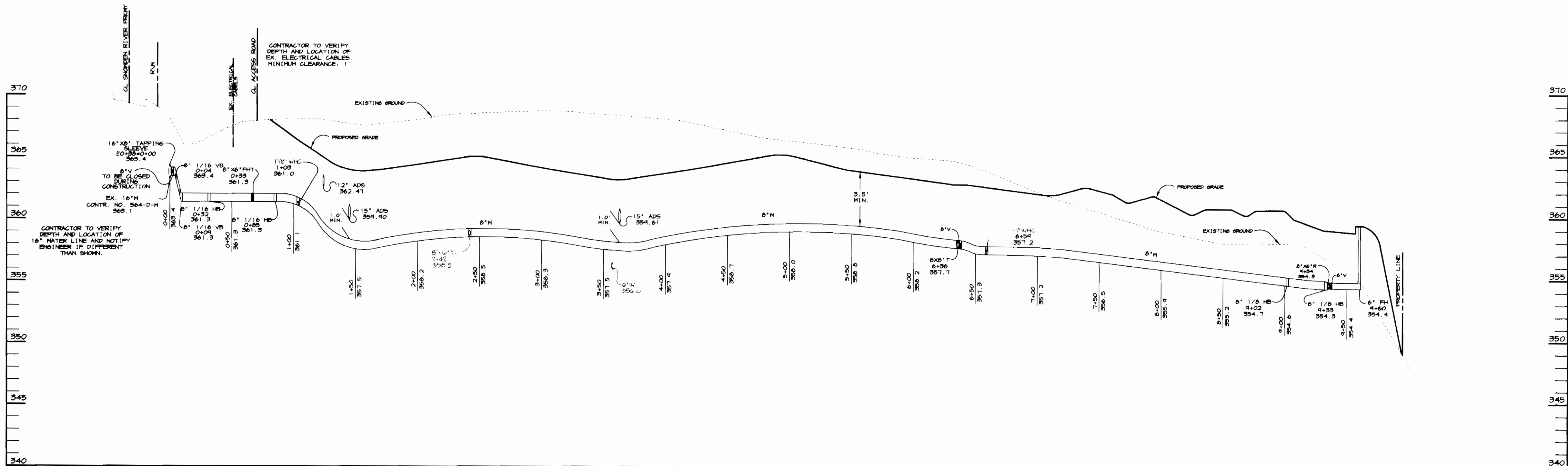
J. Saebel
JAYKANT D. PAREKH # 19148

DES: BLW
DRN: BLW
CHK: GJR
DATE: 5-28-97

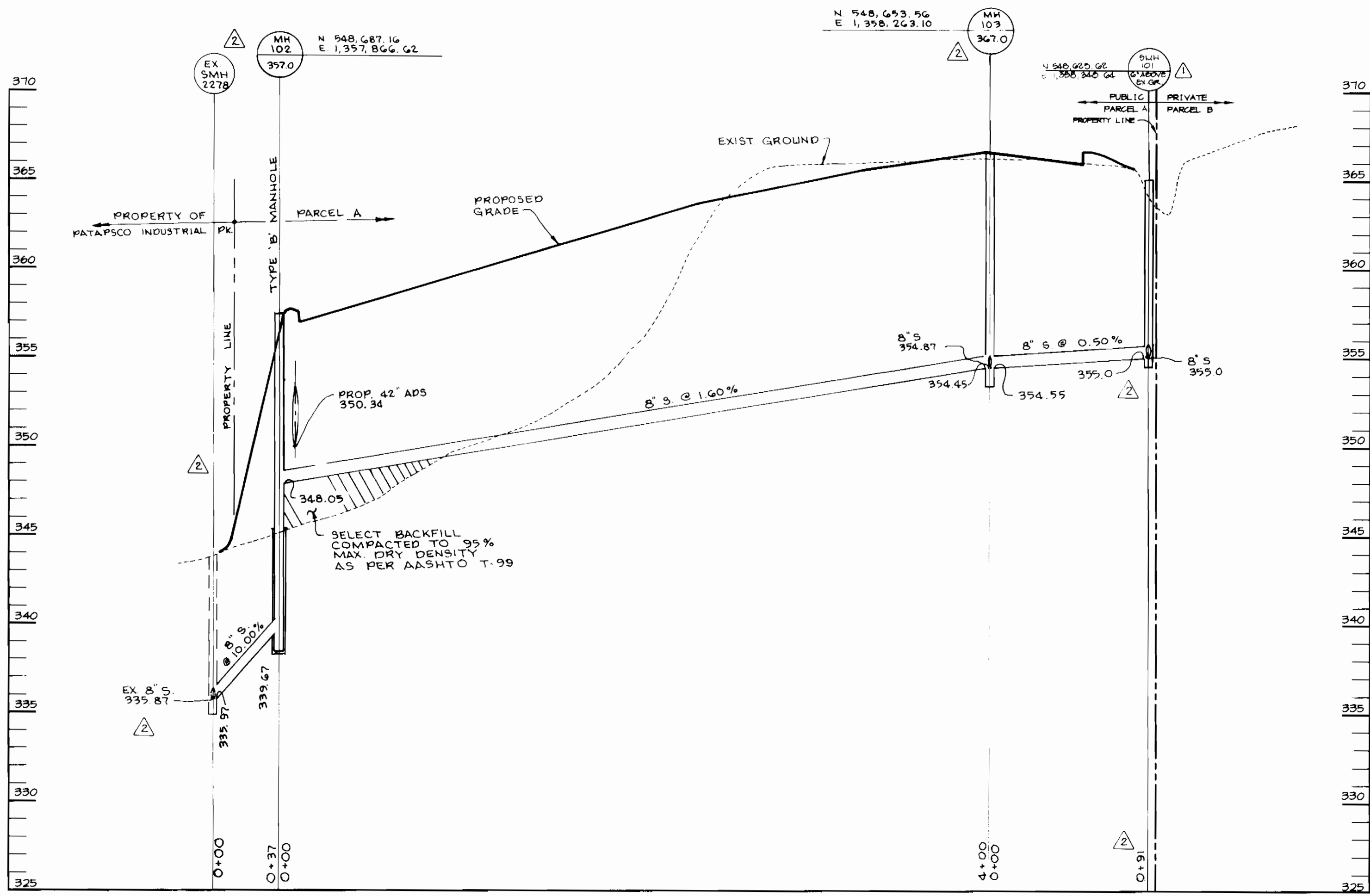
BY	NO.	REVISION	DATE
WAD	1	ADDED SEWER FROM EX 30" DIA 22" TO SLAB 101 & ABANDONED EX PRIVATE 8" IN PLACE	11-5-97
WAD	2	ADDED FUTURE SEWER CONNECTION TO PARCEL D	8-15-97

PLAN OF WATER
AND SEWER MAINS
600' SCALE MAP NO. 42 BLOCK NO. 10

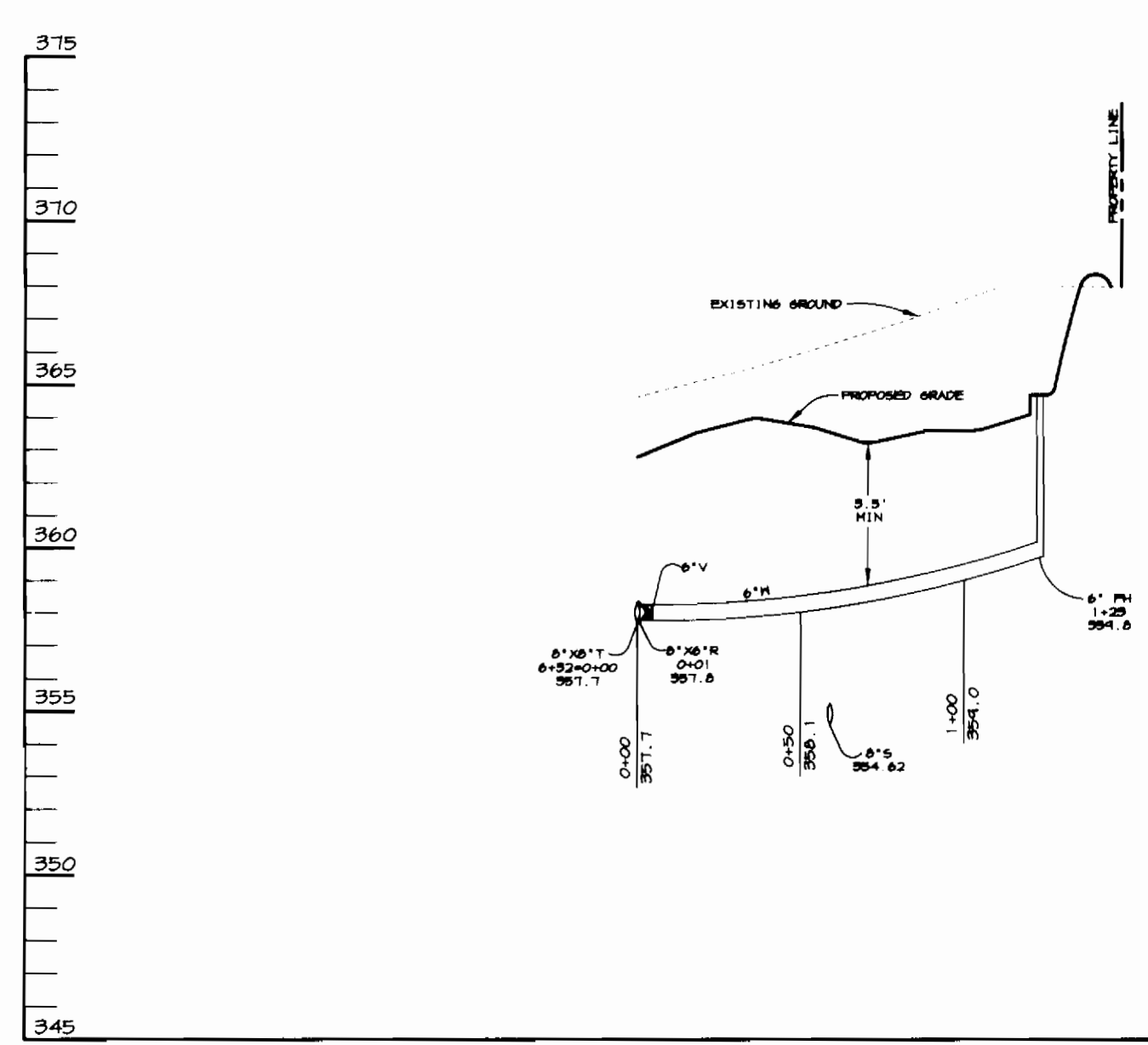
MINI-U-STORAGE
MIDWAY BUSINESS CENTER
PARCEL A
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3625-D
SCALE AS SHOWN
SHEET 2 OF 3



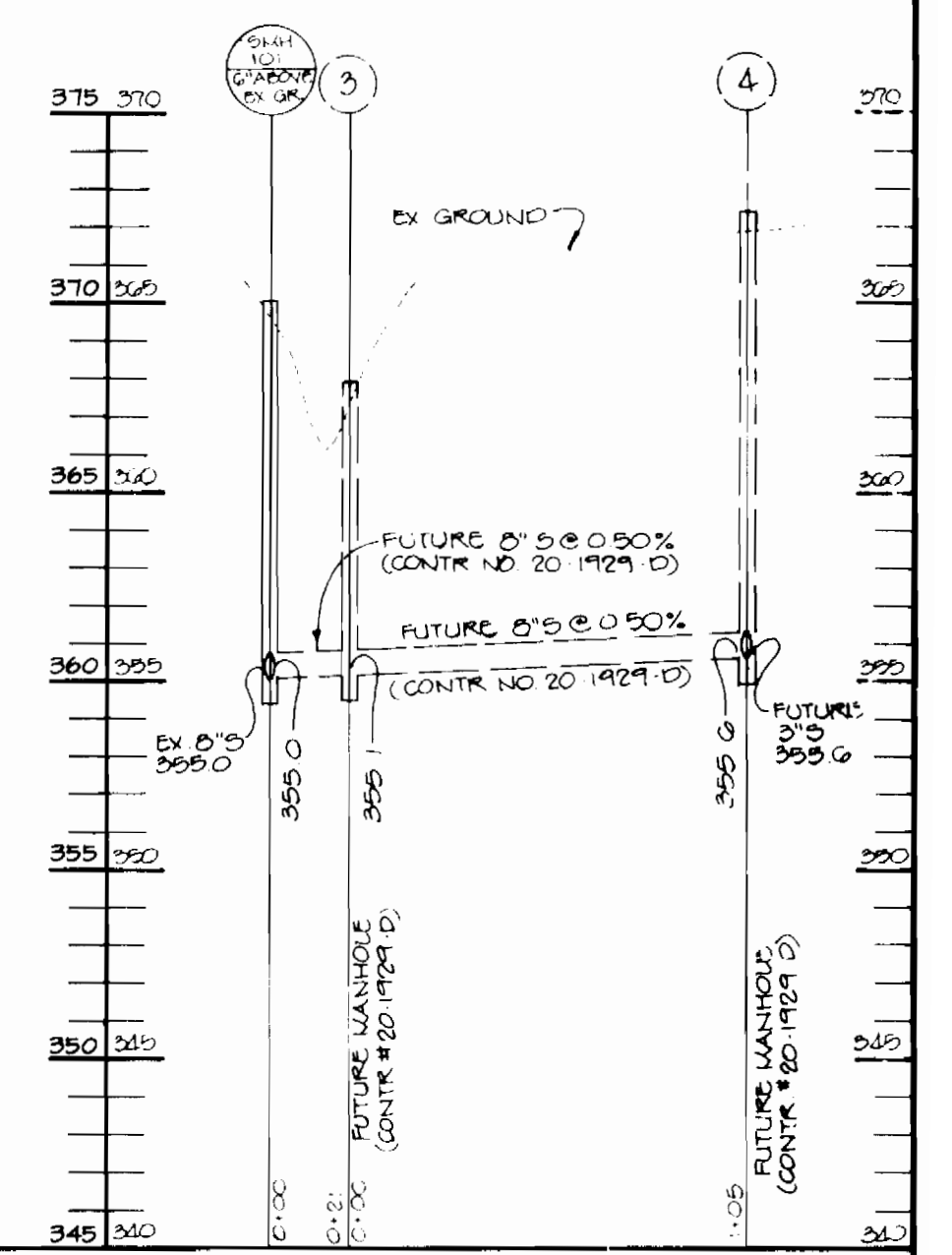
WATER PROFILE 1
 SCALE
 HOR. - 1"=50'
 VERT. - 1"=5'



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



WATER PROFILE 2
 SCALE
 HOR. - 1"=50'
 VERT. - 1"=5'



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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 5-29-97 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND 5/30/97 CHIEF, DEVELOPMENT ENGINEERING DIVISION	RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	DES: BLN DRN: BLN CHK: GJR DATE: 5-28-97	RJC WAD BY NO.	REV SWR PROFILE FR SMH 101 TO EX SMH 2278, BY RELOCATING PROP 8" S. ADDED SEWER PROFILE & REVISED LOCATION OF SMH 101 & 207. 11/4/97 6/21/97	PROFILES 600' SCALE MAP NO. 42 BLOCK NO. 10	MINI-U-STORAGE MIDWAY BUSINESS CENTER PARCEL A 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-3625-D	SCALE AS SHOWN SHEET 3 OF 3
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