

TYPE OF BUILDING	single family attached
NUMBER OF UNITS	50
NUMBER OF SHC's	1
NUMBER OF WHC's	4
DRAINAGE AREA	Rte. 100 pumping station

**GENERAL NOTES**

- PART I -**
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 a 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 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
BG&E Co. Contractor Services	850-4820
BG&E Co. Under Ground Damage Control	787-9068
Mis Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Howard County Dept. of Public Works, Bur. of Utilities	313-4900

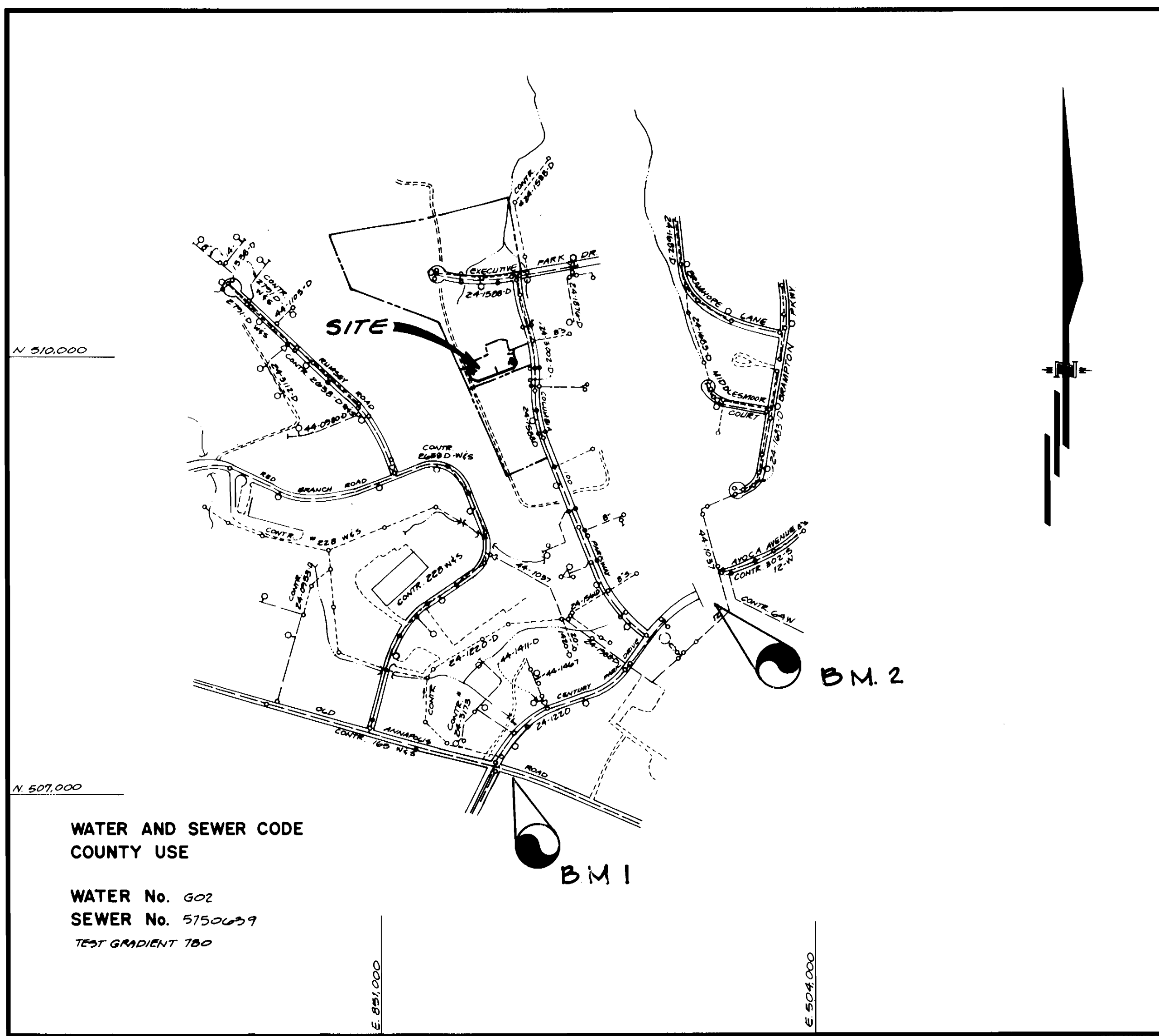
9. Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the contractor.
10. Contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.

**PART II - WATER**

1. All water mains to be D.I.P. Class 52 unless otherwise noted.
2. Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
3. Valves adjacent to tees shall be strapped to tees.
4. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
5. Fire hydrants shall be set to the bury line 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 shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
6. The contractor shall not operate any water main valves on the existing water system.
7. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.

**PART III - SEWER**

1. All sewer mains shall be DIP, RCP, VCPX, CSPX, RCCP and P.V.C. unless otherwise noted.
2. All manholes shall be 4'-0" inside diameter unless otherwise noted.
3. Force mains shall be D.I.P. only.
4. Manholes shown with 12" and 16" walls are for brick manholes only.
5. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
6. House(s) with the symbol "C.N.S." indicates that the cellar cannot be served.



**WATER AND SEWER CODE COUNTY USE**

WATER No. 602  
SEWER No. 5750629  
TEST GRADIENT 780

**VICINITY MAP**  
SCALE: 1" = 600'

**Benchmarks**

**BM 1**  
H.C. Co 274+010 R  
3/4" Rebar 24" below surface, 34.7' south of curb on Md. Rte 100, 175' east of Phillips Luck Drive

**BM 2**  
Nail in stone at property corner Columbia 100 office research park

**CONTRACT NO. 24-3335-D**

**COLUMBIA 100 OFFICE RESEARCH PARK SECTION 1 AREA 2, PARCEL Z**

**HOWARD COUNTY, MARYLAND**

**DEPARTMENT OF PUBLIC WORKS**

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
6"W	50 L.F.	48'	PIP CL 52	ATLANTIC STATES
8"W	100 L.F.	755'	DIP EL 52	" "
2"WHC	144 L.F.	148'	TY 16	CAMBRIDGE IND
Fire Hydrants	5 EA	3	A 473	MUELLER
8" S	50 L.F.	48	PVC STD 35	A I PIPE
1/8 bend	5 EA.	5	MJ	TYLER PIPE
1/2 bend	1 EA	1	"	" "
6" x 12"	1 EA	4	"	" "
6" V	1 EA	4	MJRS	MUELLER
MH	1	1	PRECAST	ATLANTIC CONCRETE

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications B with Site Development Plan SOP 94-52; Drawings Sediment & Erosion Control.

**REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.**

Signature: Patricia E. ... DATE: 4/2/94

**U.S. SOIL CONSERVATION SERVICE**

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

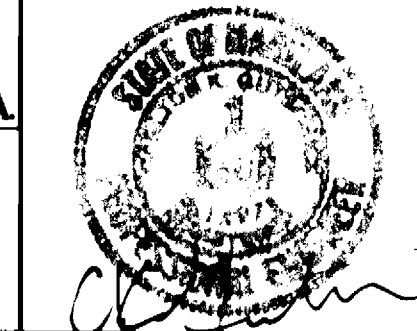
APPROVED: Signature: ... DATE: 4/2/94

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND

James P. ... 4/8/94  
Robert M. ... 3-30-94

**GUTSCHICK LITTLE & WEBER, P.A.**  
ENGINEERS, PLANNERS, SURVEYORS

3909 NATIONAL DRIVE SUITE 250 BURTOWNSVILLE OFFICE PARK  
BURTOWNSVILLE, MD 20886  
(301) 421-4024



DES: HK					
DRN: HK					
CHK: D.E.V.					
DATE: 3/04					
BY: MCF	NO: 1	REVISION: revise meter setting from outside to inside in plan notes of plan new	DATE: 4/10/94		

**PUBLIC WATER CONSTRUCTION PLANS**  
**TITLE SHEET**

600 SCALE MAP NO. 30 BLOCK NO. 12 & 13

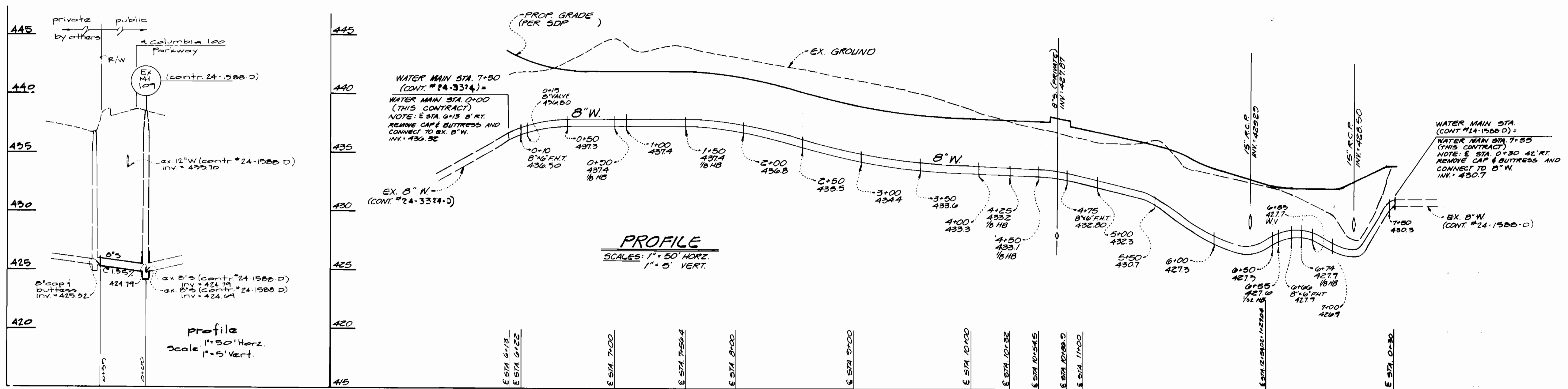
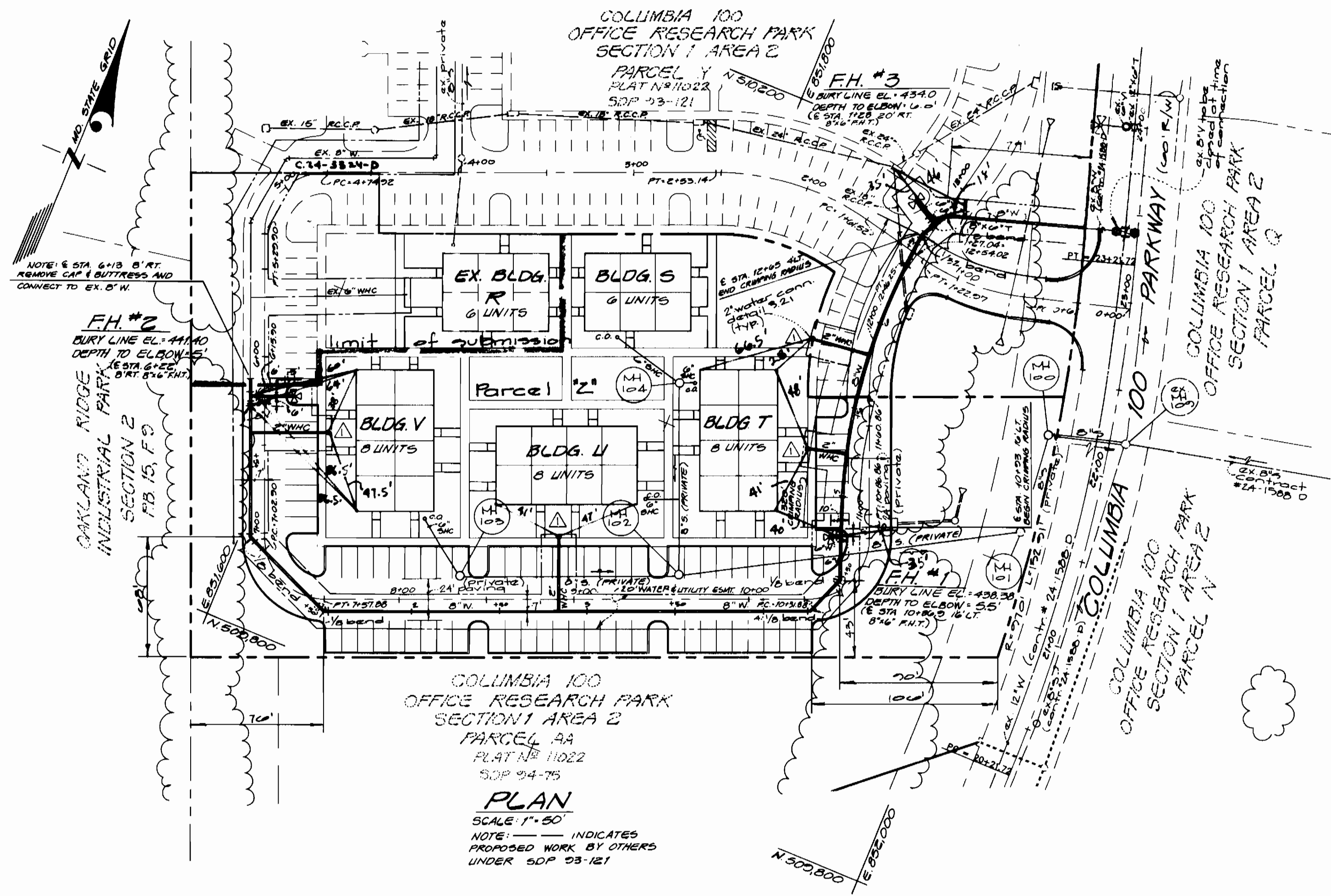
**ORCHARD CROSSING**  
COLUMBIA 100 OFFICE RESEARCH PARK  
SECTION 1 AREA 2 PARCEL Z  
CONT. # 24-3335 D  
2<sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 1 OF 2

3335 WS/1 - ORCHARD CROSSING (Col. 100 O.R.P.)

WS/2 - ORCHARD CROSSING  
(Columbia 100 O.R.P.)

3335



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

James J. ... 4/6/94  
DIRECTOR OF PUBLIC WORKS DATE

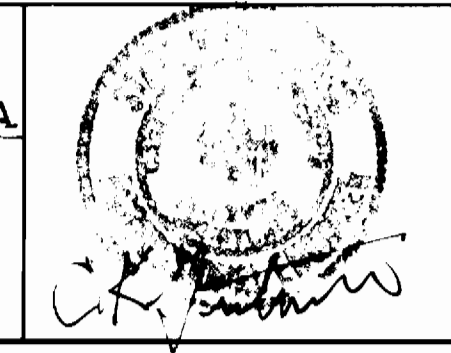
Robert ... 4/8/94  
CHIEF BUREAU OF ENGINEERING DATE

Robert ... 3-30-94  
CHIEF, BUREAU OF UTILITIES DATE

... 4/6/94  
CHIEF, LAND DEVELOPMENT DIV DATE

**GW** GUTSCHICK LITTLE & WEBER, P.A.  
ENGINEERS, PLANNERS, SURVEYORS

3909 NATIONAL DRIVE SUITE 200 BURTOWNSVILLE OFFICE PARK  
BURTOWNSVILLE, MD 21038  
(301) 421-4024



DES: HK  
DRN: HK  
CHK: D.E.V.  
DATE: 3/04

M.C.P. 1 rev. meter settings from outside to inside 11/16/94  
BY NO. REVISION DATE

PUBLIC WATER  
CONSTRUCTION PLANS  
PLAN AND PROFILE SHEET

600' SCALE MAP NO. 30 BLOCK NO. 12218

ORCHARD CROSSING  
COLUMBIA 100 OFFICE RESEARCH PARK  
SECTION 1 AREA 2 PARCEL Z  
CONT. #24-3335-D  
2<sup>ND</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 2 OF 2