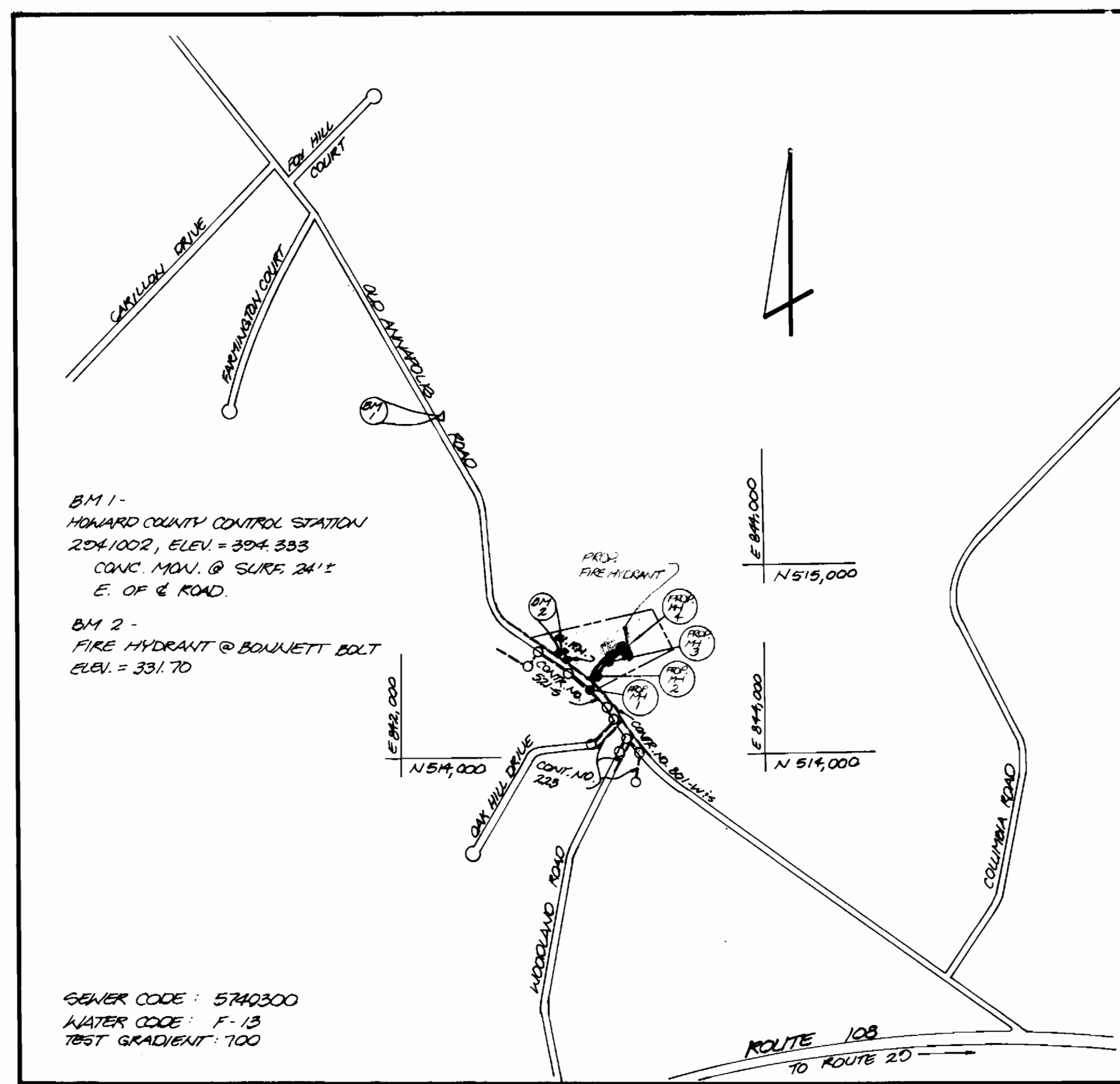


GENERAL NOTES

- PART I
- 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 of 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 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 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
    - BC&E Contractor Services 550-4820
    - BC&E Co. Under Ground Damage Control 787-9088
    - Miss Utility 1-800-257-7777
    - Colonial Pipeline Co. 795-1390
    - Howard County Department of Public Works 313-4990
    - Bureau of Utilities
  - 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.
  - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT 313-4990 AT LEAST FIVE WORKING DAYS BEFORE ANY WORK IS DONE ON ANY ROAD OR ROADWAY UNDER HIS CONTROL. ROAD WORK SHALL BE STOPPED IMMEDIATELY UPON THE ARRIVAL OF THE BUREAU'S FIELD SUPERVISOR.
- PART II
- All water mains to be D.I.P. Class 52 unless otherwise noted.
  - Taps 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 *restripped and* buttressed with concrete in accordance with Standard Detail W.11.1. 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.
- PART III - SEWER
- All sewer mains shall be DIP, RCP, VCPX, CSPX, RCCP, and P.V.C. unless otherwise noted.
  - The contractor shall provide a joint in all sewer mains within 2' - 0" of exterior manhole wall.
  - All manholes shall be 4' - 0" inside diameter unless otherwise noted.
  - Force mains shall be D.I.P. only.
  - Manholes shown with 12" and 18" 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' - 8" above finished grade unless otherwise noted on the drawings.
  - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.



BM 1 - HOWARD COUNTY CONTROL STATION 2041002, ELEV. = 304.335 CONC. MON. @ SURF 24" E. OF & ROAD.

BM 2 - FIRE HYDRANT @ BONNETT BOLT ELEV. = 331.70

SEWER CODE: 5740300  
WATER CODE: F-13  
TEST GRADIENT: 100

TYPE OF BLDG: RESIDENTIAL  
NO. LOTS: 12  
NO. B.H.C.: 8  
NO. W.H.C.: 8  
DRAINAGE AREA: LITTLE PATIENT  
TREATMENT PLANT: PATAPSCO VIA RT. 108 PUMPING STATION.

LOCATION PLAN  
SCALE: 1"=600'

SEDIMENT CONTROL MEASURES FROM THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 210 OF THE SPECIFICATIONS AND SHOWING S.D.P. 03-03.

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

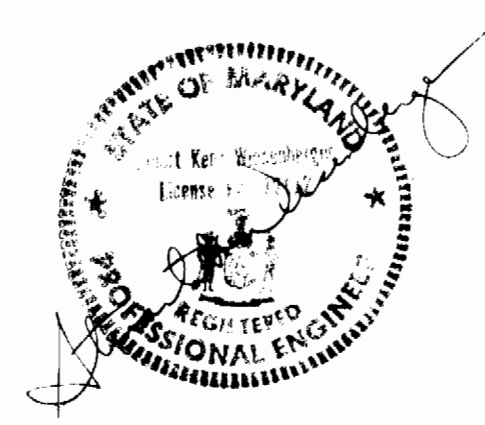
James M. Kelly, JMC 11/29/98  
S.O. SOIL CONSERVATION SERVICE DATE

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

John R. Johnston, JR. 11/29/92  
SOIL CONSERVATION DISTRICT DATE

ANNAPOLIS STATION LOT 1 THRU 7  
(F-91-160) OPEN SPACE LOTS 5, 6 AND 7  
WOODLAND STATION LOT 1 THRU 5  
(F-91-176) OPEN SPACE LOT 5

16" Ø T.S. & V	1			
4" DHC	21 V.F.			
4" SHC	144 L.F.			
1" WMC	103 L.F.			
Fire Hydrant	1			
Sewer MH	4			
8" W. Main	270 L.F.			
8" S. Main	298 L.F.			
Items	Quantities Estimated	Quantities	Type	Manufacturer/Supplier
As-Built				
QUANTITIES				
Name of Utility Contractor				
Survey And Drafting Division As-Built Date				



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

James M. Kelly, Director of Public Works, 12-1-92  
Richard Benning, Chief Bureau of Utilities, 11-17-92

**Boender Associates**  
ENGINEERS - ARCHITECTS - SURVEYORS  
3230 BETHANY LANE  
ELLICOTT CITY, MD. 21043  
(301) 465-7771

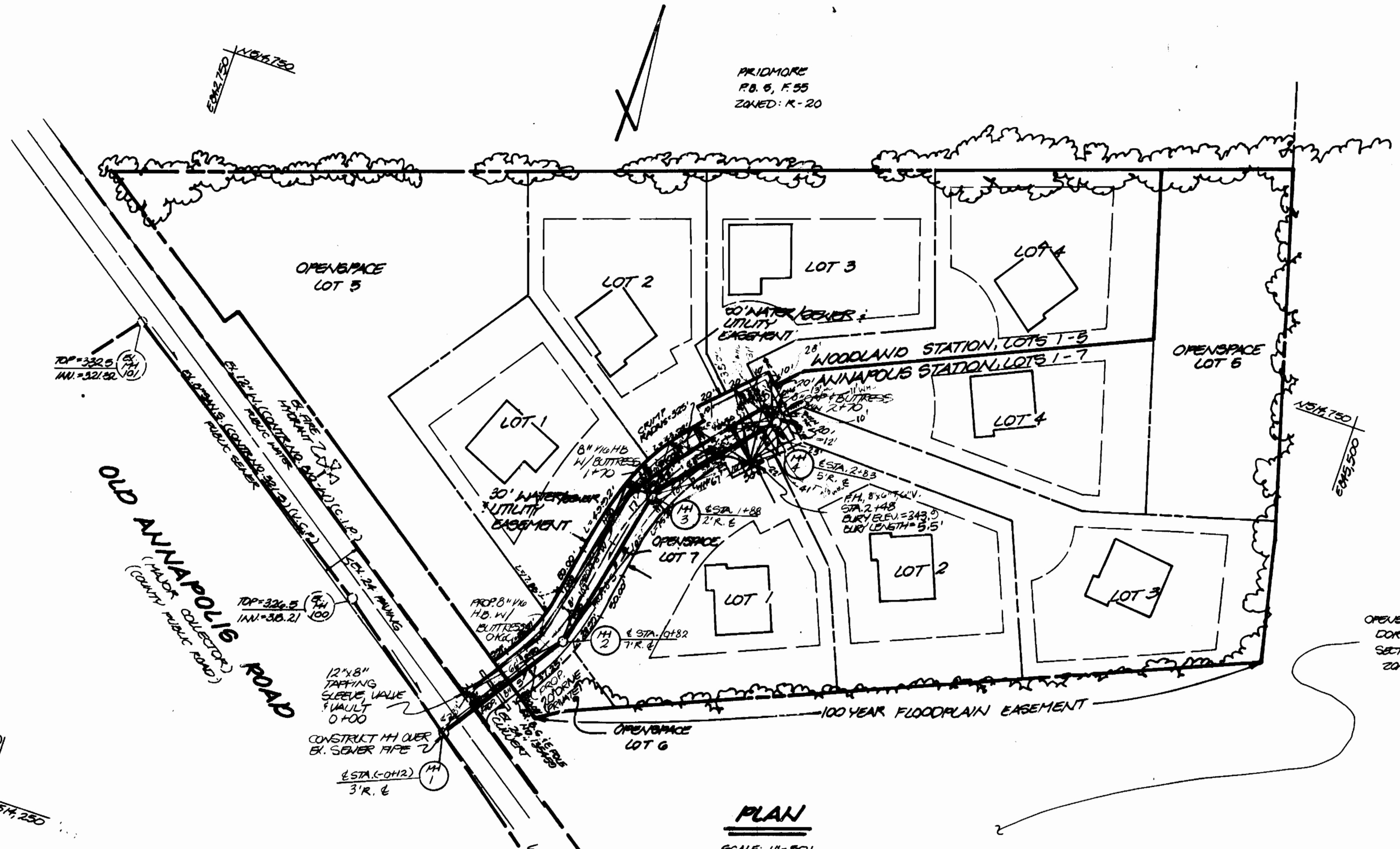
DATE: J.C.O.	J.C.O.	ADD TYPE OF DROP CONNECTION IN MH	2-11-92
DATE: J.C.O.	L.W.	ADD DROP CONNECTION NOTES	2-23-92
DATE: K/LST/DDL	BY NO.	REVISION	DATE

TITLE SHEET

ANNAPOLIS STATION - LOTS 1 THRU 7  
WOODLAND STATION - LOTS 1 THRU 5  
2ND ELECTION DISTRICT  
CONTRACT NO. 24-5214-D

SCALE: AS SHOWN  
SHEET: 1 OF 2

AS-BUILT



WATER LINE  
CHAMP RADIUS DATA  
R = 305'  
L = 23'  
PC STA. = 2+03  
PT STA. = 2+26

**PLAN**  
SCALE: 1" = 50'

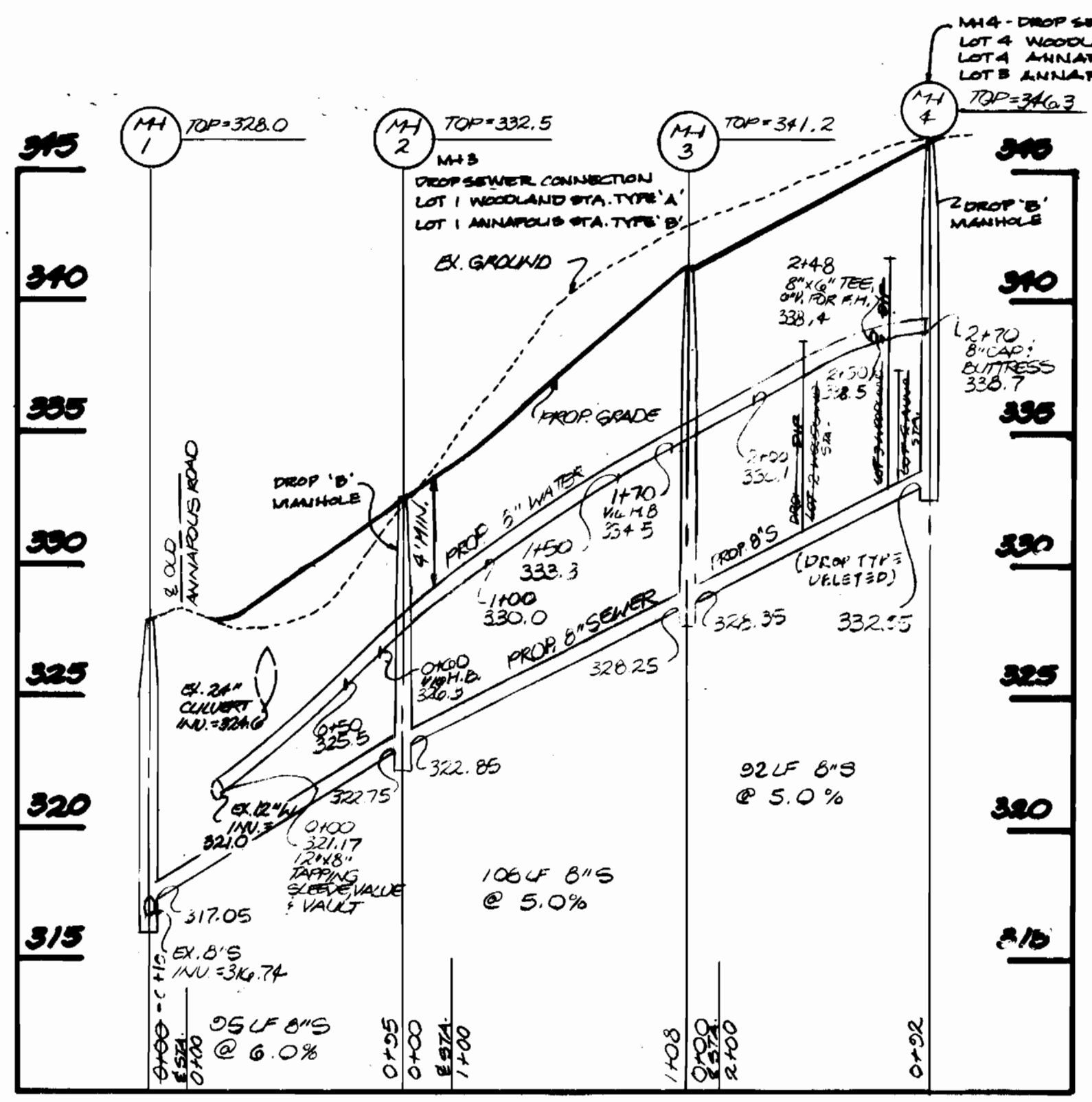
**SEWER INVERT CHART**

LOT NO.	IN. @ MAIN	IN. @ EASEMENT	MIN. GELAR ELEVATION	SUBDIVISION NAME	TYPE OF CONNECTION
1	881.97	381.95	338.78	WOODLAND STATION	SEWER HOUSE
2	388.77	388.89	341.78	WOODLAND STATION	DROP HOUSE
3	387.48	340.14	344.18	WOODLAND STATION	DROP HOUSE
4	387.72	388.22	348.08	WOODLAND STATION	SEWER HOUSE
1	383.67	383.98	347.88	ANNAPOLIS STATION	SEWER HOUSE
2	357.22	357.68	341.18	ANNAPOLIS STATION	DROP HOUSE
3	386.44	357.10	341.60	ANNAPOLIS STATION	SEWER HOUSE
4	387.88	357.78	348.60	ANNAPOLIS STATION	SEWER HOUSE

NOTE: OPEN CUT FOR SEWER CONSTRUCTION, MAINTAIN 1 LANE FOR TRAFFIC DURING CONSTRUCTION.

NOTE: LOTS 2 & 5 WOODLAND STATION DROP HOUSE CONNECTIONS TO BE D.I.P. AND JOINTS ENCASED.

NOTE: CONTRACTOR TO NOTIFY THE BUREAU OF UTILITIES TO ARRANGE FOR CLOSURE OF CLOSEST VALVE, IF REQUIRED.



**PROFILE**  
SCALE: HOR. 1" = 50'  
VERT. 1" = 10'



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

James M. Shum 12-1-92  
DIRECTOR OF PUBLIC WORKS DATE

Richard Berman 11-17-92  
CHIEF BUREAU OF UTILITIES DATE

Richard Berman 12-1-92  
CHIEF LAND DEVELOPMENT DIVISION DATE

**Boender Associates**  
ENGINEERS - PLANNERS - SURVEYORS  
3230 BETHANY LANE  
ELLCOTT CITY, MD. 21043  
(301) 465-7777

DATE	BY	NO.	REVISION	DATE
JUL 27, 1992	JCO	1	ADD TYPE OF DROP CONNECTION IN IAH	2-11-92
	LW		ADD DROP CONNECTION NOTES	2-12-92
	JCO			

**WATER & SEWER  
PLAN & PROFILE**

**ANNAPOLIS STATION - LOTS 1 THRU 7  
WOODLAND STATION - LOTS 1 THRU 5  
2 ND. ELECTION DISTRICT**  
CONTRACT NO. 26-3214-D

SCALE: AS SHOWN  
SHEET: 2 OF 2

AS-BUILT