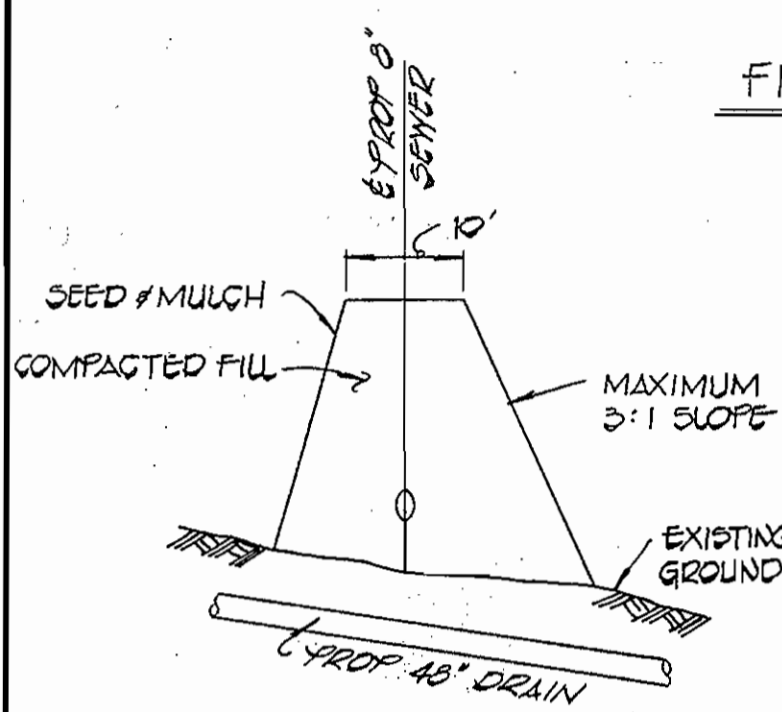
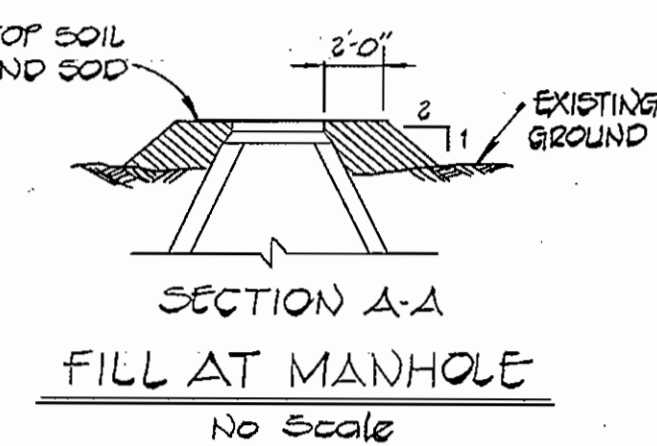
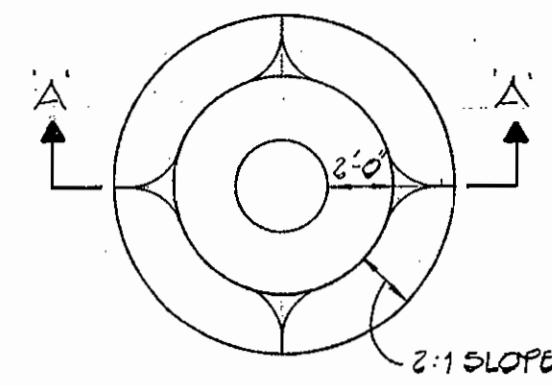


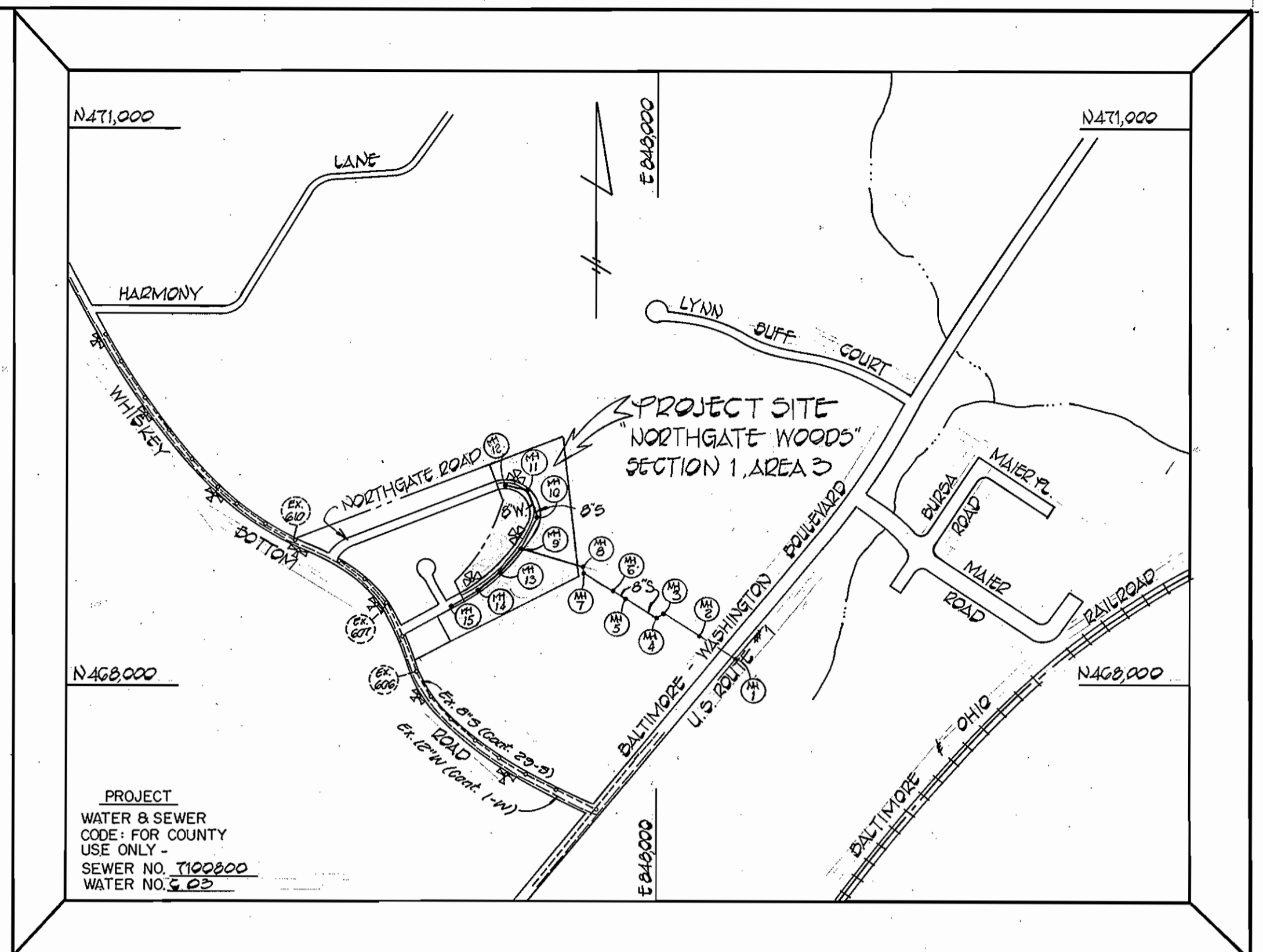
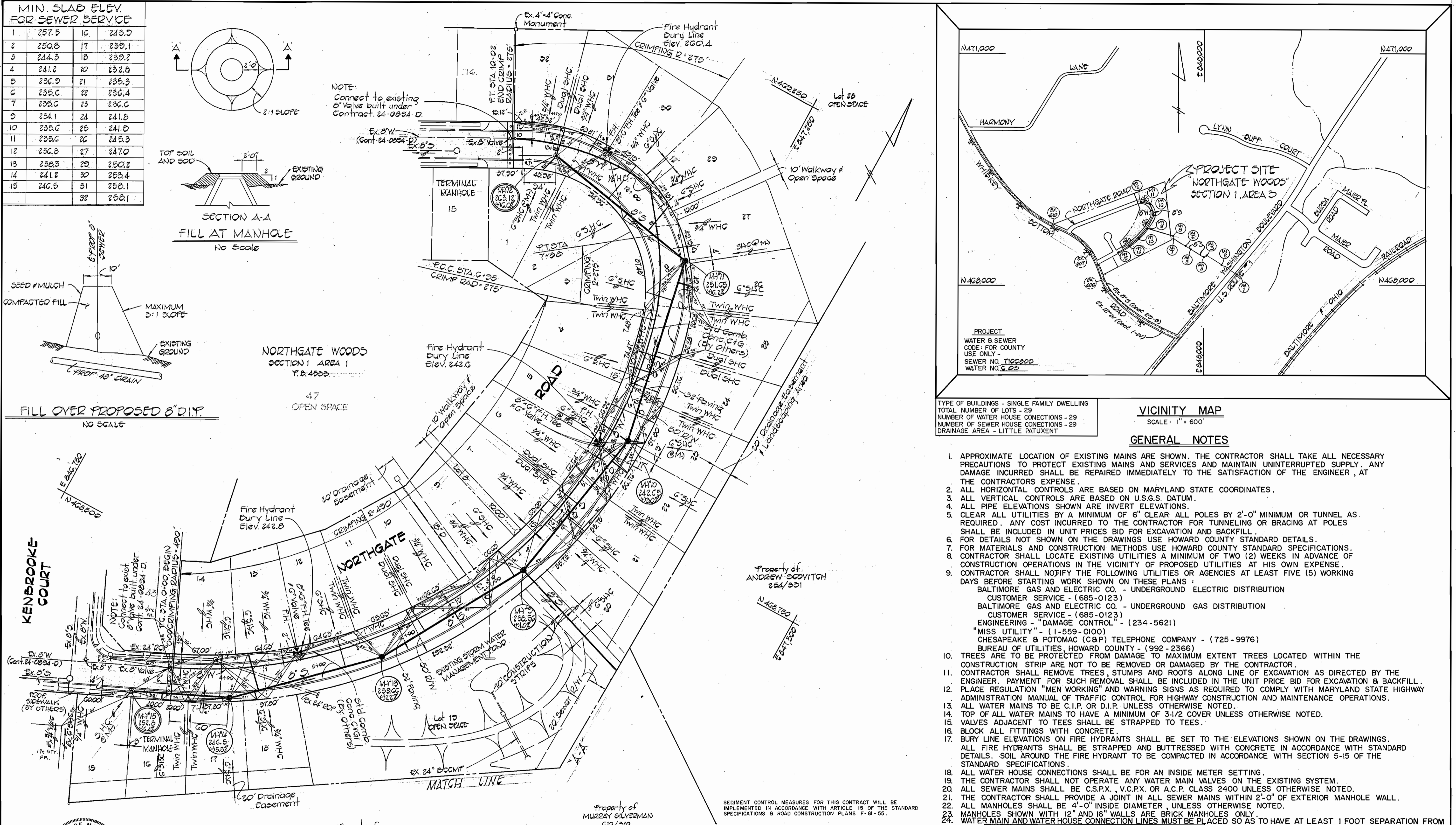
MIN. SLAB ELEV. FOR SEWER SERVICE

1	257.5	16	243.0
2	250.8	17	239.1
3	244.3	18	239.7
4	241.2	20	238.8
5	236.9	21	235.3
6	235.6	22	236.4
7	235.6	23	236.6
9	234.1	24	241.8
10	235.6	25	241.0
11	235.6	26	245.3
12	236.6	27	247.0
13	238.3	29	250.7
14	241.2	30	253.4
15	246.5	31	258.1
		32	258.1



FILL OVER PROPOSED 8" D.I.P. NO SCALE

NOTE: Connect to existing 8" Valve built under Contract 24-0924-D.



PROJECT
WATER & SEWER
CODE: FOR COUNTY
USE ONLY
SEWER NO. 1102200
WATER NO. 622

VICINITY MAP
SCALE: 1" = 600'

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. DATUM.
- 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. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR EXCAVATION AND BACKFILL.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - BALTIMORE GAS AND ELECTRIC CO. - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - (685-0123)
 - BALTIMORE GAS AND ELECTRIC CO. - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - (685-0123)
 - ENGINEERING - "DAMAGE CONTROL" - (234-5621)
 - "MISS UTILITY" - (1-559-0100)
 - CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - (725-9976)
 - BUREAU OF UTILITIES, HOWARD COUNTY - (992-2366)
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT TREES 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 AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXCAVATION & BACKFILL.
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- ALL WATER MAINS TO BE C.I.P. OR D.I.P. UNLESS OTHERWISE NOTED.
- TOP 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.
- BLOCK ALL FITTINGS WITH CONCRETE.
- BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE 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 TO BE COMPACTED IN ACCORDANCE WITH SECTION 5-15 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL SEWER MAINS SHALL BE C.S.P.X., V.C.P.X. OR A.C.P. CLASS 2400 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.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
- WATER MAIN AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST 1 FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.

STATE OF MARYLAND
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Dr. William W. McLaughlin 5/22/81
DIRECTOR OF PUBLIC WORKS DATE

John H. Brainerd 7-6-81
CHIEF, BUREAU OF UTILITIES DATE

William W. McLaughlin 7-11-81
CHIEF, BUREAU OF ENGINEERING DATE

William W. McLaughlin 7-11-81
CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

CONTRACT NO. 24-0992-D

PLAN & DETAILS
WATER & SEWER MAINS

NORTHGATE WOODS
SECTION 1, AREA 3
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

DRAWING NO. 1 OF 3

SCALE AS SHOWN

DES: T.A.F.
ORN: D.S.
CHK: T.A.F.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Samuel J. Reber 6-30-81
U.S. SOIL CONSERVATION SERVICE DATE

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

William W. McLaughlin 6-30-81
HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

QUANTITIES

ITEM	EST'D	AS-BUILT	SUPPLIER
8" WATER	1,003 L.F.	771.0 L.F.	Atlantic States
6" WATER	25 L.F.	25.0 L.F.	Atlantic States
FIRE HYDRANT	3 EA.	3 EA.	American Darling
3/4" W.H.C.	370 L.F.	434.5 L.F.	Revere Copper
1" W.H.C.	105 L.F.	101.0 L.F.	Revere Copper
8" SEWER	2,411 L.F.	2,067.1 L.F.	Atlantic States
6" SEWER	625 L.F.	626 L.F.	Atlantic States
MANHOLES	140 V.F.	140 V.F.	Logan Clay Products
20" CASING	1274 L.F.	66 L.F.	Atlantic States

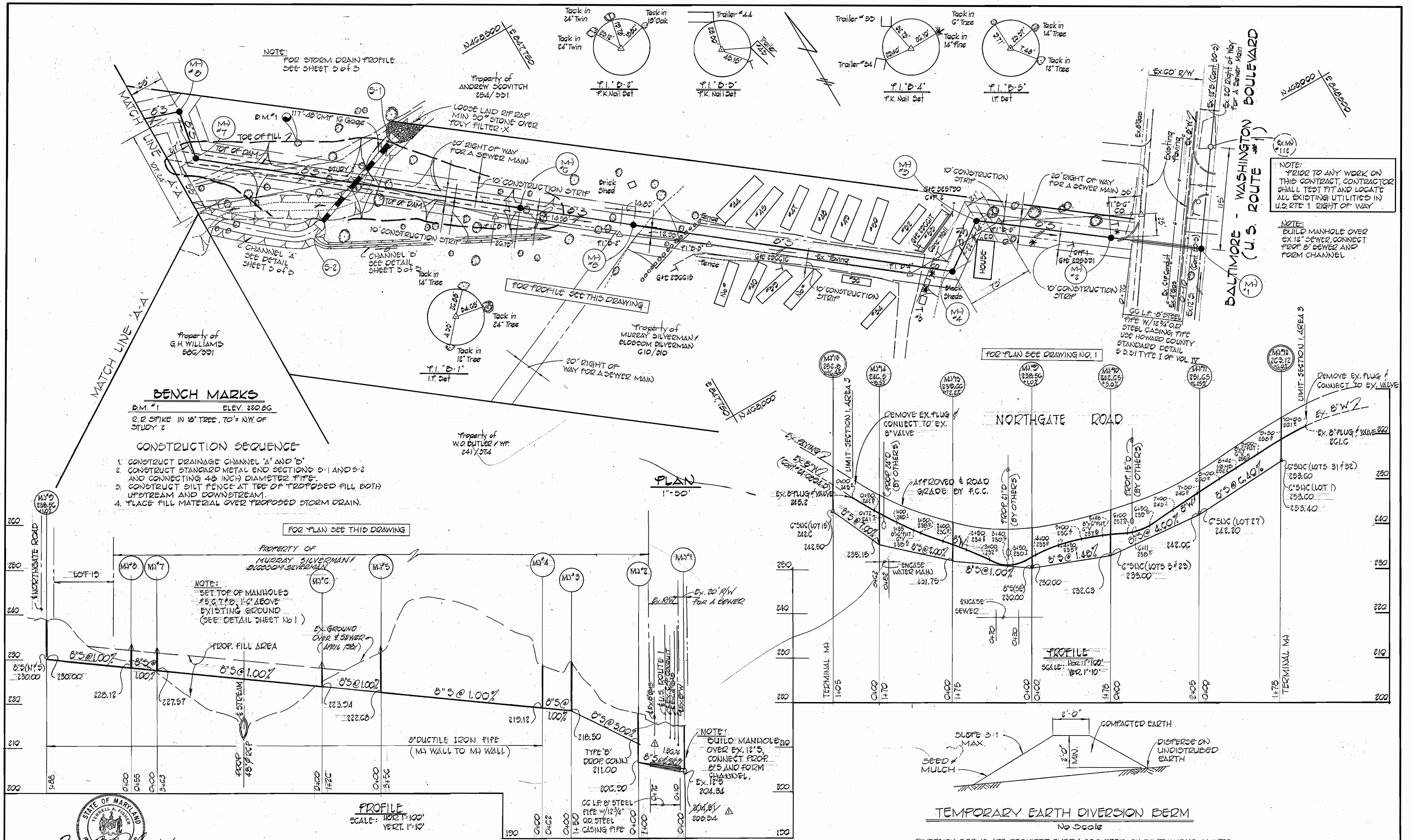
CONTRACT NO. 24-0992-D
NORTHGATE WOODS
SECTION 1, AREA 3
WATER & SEWER EXTENSION

As Built - June 1982

JUNE 24, 1981

992/1 WS

992/12 WS



STATE OF MARYLAND
 DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James W. McDaniel 5/22/81
 DIRECTOR OF PUBLIC WORKS

Robert R. Bunn 7-1-81
 CHIEF, BUREAU OF UTILITIES

James W. McDaniel 8/23/81
 CHIEF, BUREAU OF ENGINEERING

William F. Finn 7-1-81
 CHIEF, LAND DEVELOPMENT DIVISION

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043

REVISION	
NO.	DATE
1	11-2-81

DESCRIPTION
 REVISE PROP. 8" INVERT @ M#1 AND PIPE SLOPE

CONTRACT NO. 24-0992-D

PLAN, PROFILES & DETAILS
 SEWER MAINS

NORTHGATE WOODS
 SECTION I, AREA 3
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY, MARYLAND

DRAWING NO. 2	SCALE AS SHOWN	DES. T.A.P.
OF 3		DRN. D.B.S.
		CHK. T.A.P.

