

CONTRACT NO. 34-1240-D

Wastewater Disposal: Sewage
 Drainage Area: Middle Patuxent
 Type of Buildings:
 No. of SHC: 57
 No. of WHC: 57
 No. of Lots: 55
WATER & SEWER CODE
 County Use:
 Water: E 27
 Sewer: 666000

ITEM	QUANTITIES		MATERIAL/SUPPLIER
	BID	AS-BUILT	
8" Sewer LF	1290	1271	JOHN MANVILLE & HARRINGTON
Manholes Ea.	7	7	ATLANTIC PRECAST
8" Water LF	1290	1294	GRIFFIN - AMSTED
6" Water LF	550	521	"
8" Valves Ea.	4	4	DRESSER
6" V (Excluding FHV)	3	3	"
Fire Hydrants Ea.	4	4	"
Blow-offs Ea.	1	1	CAMBRIDGE LEE & FORD
6" SH Connections LF	500	505	JOHN MANVILLE & HARRINGTON
2" WH Connections LF	30	27	CAMBRIDGE LEE & FORD
1" WH Connections LF	350	277	"
3/4" WH Connections LF	790	920	"

- 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 CONSTRUCTION OF THE MAIN.
 - 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:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - 685-0123.
 - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123.
 - "MISS UTILITY" - 1 - 559-0100
 - CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - 393-3648
 - AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 1-845-3803
 - COLONIAL PIPELINE COMPANY - 781-4641.
 - 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 CONSTRUCTION OF THE MAIN.
 - 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 SHALL BE D.I.P. UNLESS OTHERWISE NOTED.
 - TOP OF ALL WATER MAINS SHALL 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 SECTIONS 1003 AND 1008 OF THE STANDARD SPECIFICATIONS.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING, UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
 - ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR PVC 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 FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 05.32.
 - ALL MANHOLE FRAME AND COVERS SHALL BE SET 0.5' ABOVE EXISTING GRADE WHERE SHOWN IN PROFILE. SEE DETAIL G 5.41.
 - ORIGINAL GROUND OVER WATER AND SEWER WAS TAKEN FROM AERIAL PHOTOGRAPHY PREPARED BY MAPS AND INC., AND VERIFIED BY FIELD SURVEY IN SEPTEMBER 1985.
 - ALL COPPER WATER HOUSE CONNECTIONS SHALL UTILIZE FLARED FITTINGS.
 - ALL WATER HOUSE CONNECTIONS SHALL BE 1" UNLESS OTHERWISE NOTED.

CONTRACT NO. 34-1240-D
 VILLAGE OF HICKORY RIDGE
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS

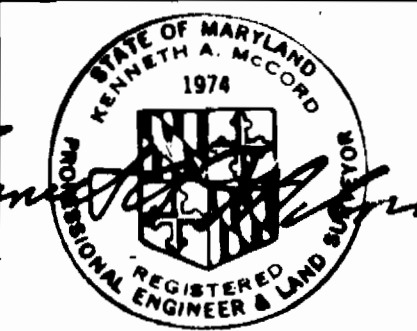
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
M.H.K. Silby
 SIGNATURE DATE 6-11-84
 U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard County Conservation District.
 APPROVED:
Robert W. Zichau
 HOWARD S.C.D. DATE 6-11-84

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications, and Road Construction Plans F-84-140

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works - DATE 6-24-84
 Robert W. Zichau
 Chief - Bureau of Utilities - DATE 6/14/84

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND



DES: S.J.
 DRN: J.R.K.
 CHK: R.B.N.
 DATE: 6/4/84

VICINITY MAP AND GENERAL NOTES

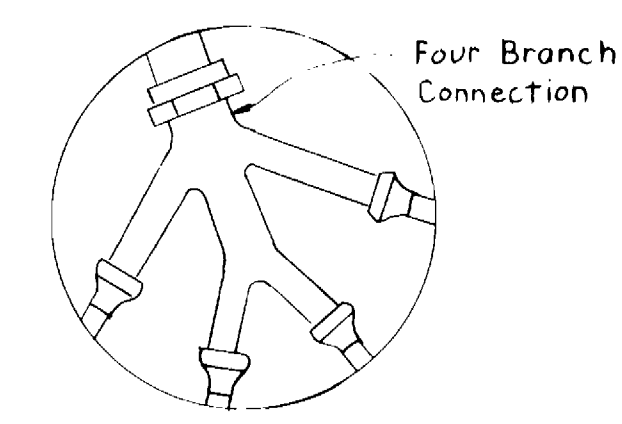
COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 6
 ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-1240-D
 SCALE 1"=600'
 SHEET 1 OF 4

BENCH MARKS

W.R.I.A. B.M. "S" Elev. 343.496
 R.R. Spike in base 20' Poplar 10's left of
 Sta. 8+15 on Winterlong Way (Road "S")
 W.R.I.A. B.M. "E-E" Elev. 380.485
 R.R. Spike in base 18' Oak 10's right of
 Sta. 6+70 on Blue February Way (Road "E").

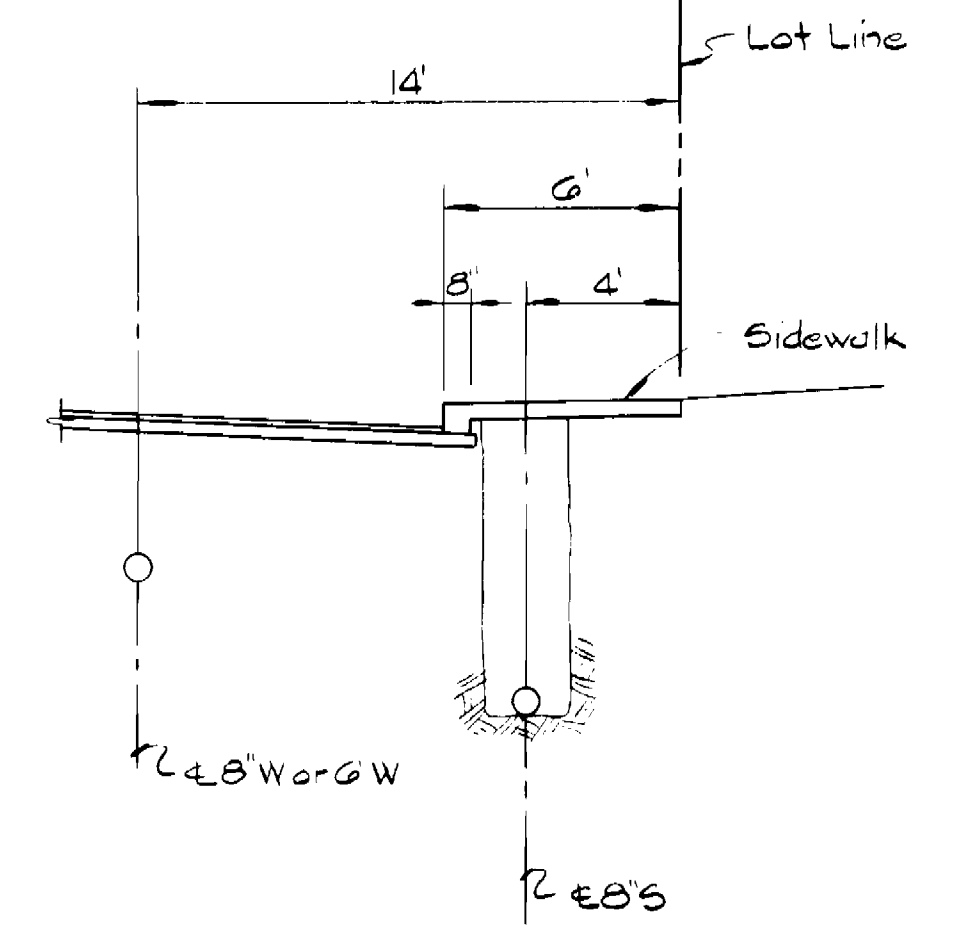
**SEWER HOUSE CONNECTION
 INVERT ELEVATIONS
 AT PROPERTY LINE**

STATION	LOT	INVERT
MH 237 TO MH 240		
0+28 L I-154		353.14
0+47 L I-153		353.04
0+28 L I-152		354.12
0+47 L I-151		354.91
0+67 L I-150		355.74
MH 240 TO MH 241		
0+32 R I-20		360.27
0+56 R I-21		361.29
0+75 R I-22		362.08
MH 241 TO MH 242		
0+16 R I-23		363.30
0+36 R I-24		363.27
0+61 R I-25		363.38
0+76 R I-26		363.51
0+96 R I-27		363.59
0+96 R I-28		363.69
MH 242 TO MH 243		
0+15 R I-29		364.33
0+35 R I-30		363.93
0+55 R I-31		363.97
0+75 R I-32		364.02
0+95 R I-33		364.13
1+15 R I-34		364.23
1+35 R I-35		364.33
1+55 R I-36		364.44
1+75 R I-37		364.54
1+95 R I-38		364.78
2+15 R I-39		364.88
2+35 R I-40		364.98
2+55 R I-41		365.09
2+75 R I-42		365.19
MH 243 TO MH 244		
0+35 R I-43		365.44
0+55 R I-44		365.41
0+75 R I-45		365.52
0+95 R I-46		365.62
1+15 R I-47		365.72
1+35 R I-48		365.83
1+55 R I-49		365.93
1+75 R I-50		366.04
1+95 R I-51		366.16
MH 244 TO Stopper		
0+13 R I-52		366.88
0+33 R I-53		367.45
0+53 L I-11		369.81
0+73 R I-10		369.81
0+93 R I-88		369.60
0+93 L I-9		371.34
1+09 R I-8		371.34
1+29 R I-89		370.37
1+49 R I-90		371.13
1+69 L I-7		372.88
1+89 L I-6		372.88
MH 241 TO MH 241a		
0+25 L I-19		363.80
0+45 L I-18		364.29
0+65 L I-17		364.78
0+85 L I-16		365.26
1+05 L I-15		365.75
1+25 L I-14		366.24
1+45 L I-13		366.73
0+MH241a L I-12		367.22
MH 218 TO B' Stopper		
1+38 R I-60		366.82



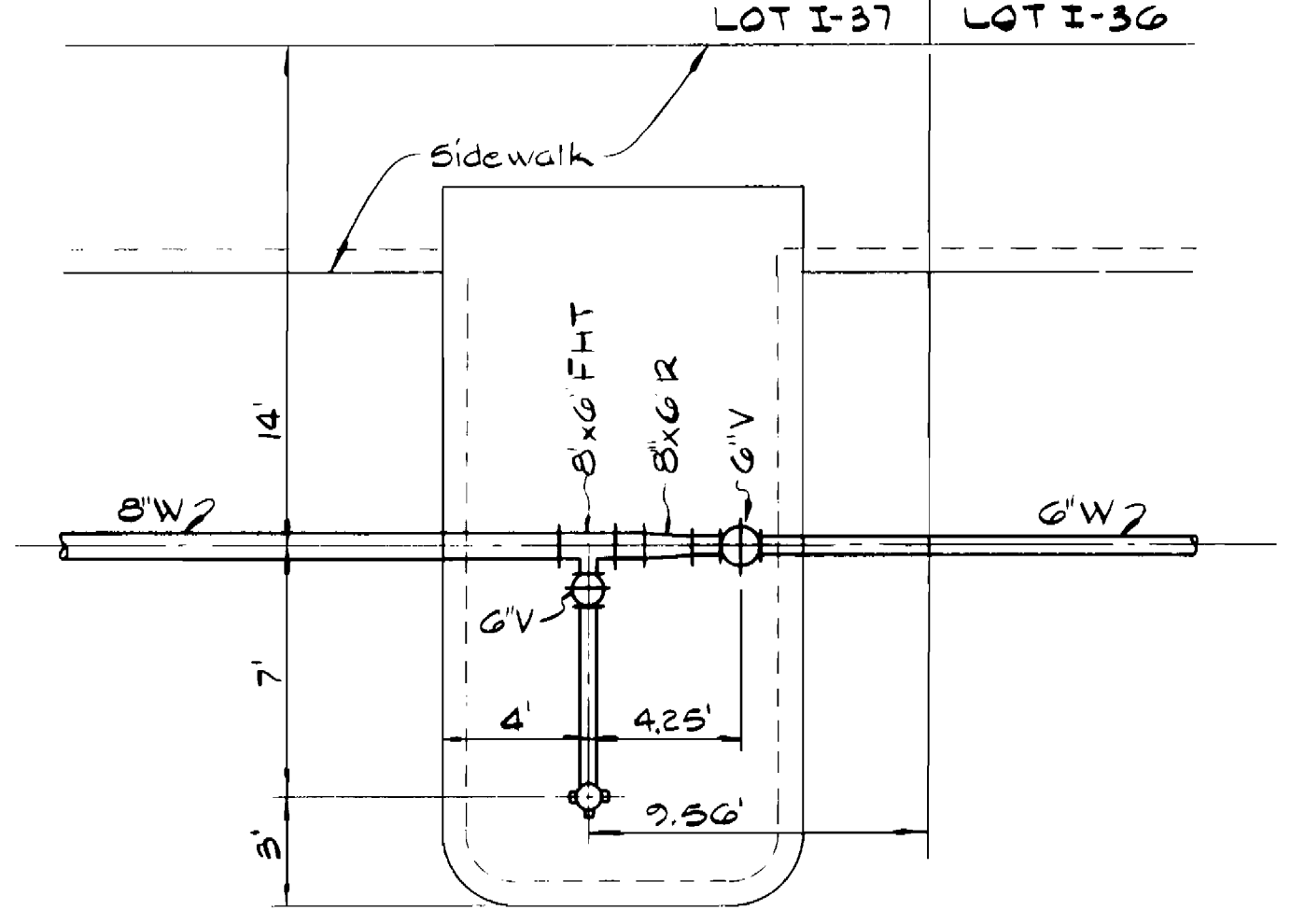
4-WAY WHC DETAIL

Lots I-20 thru I-23
 No Scale



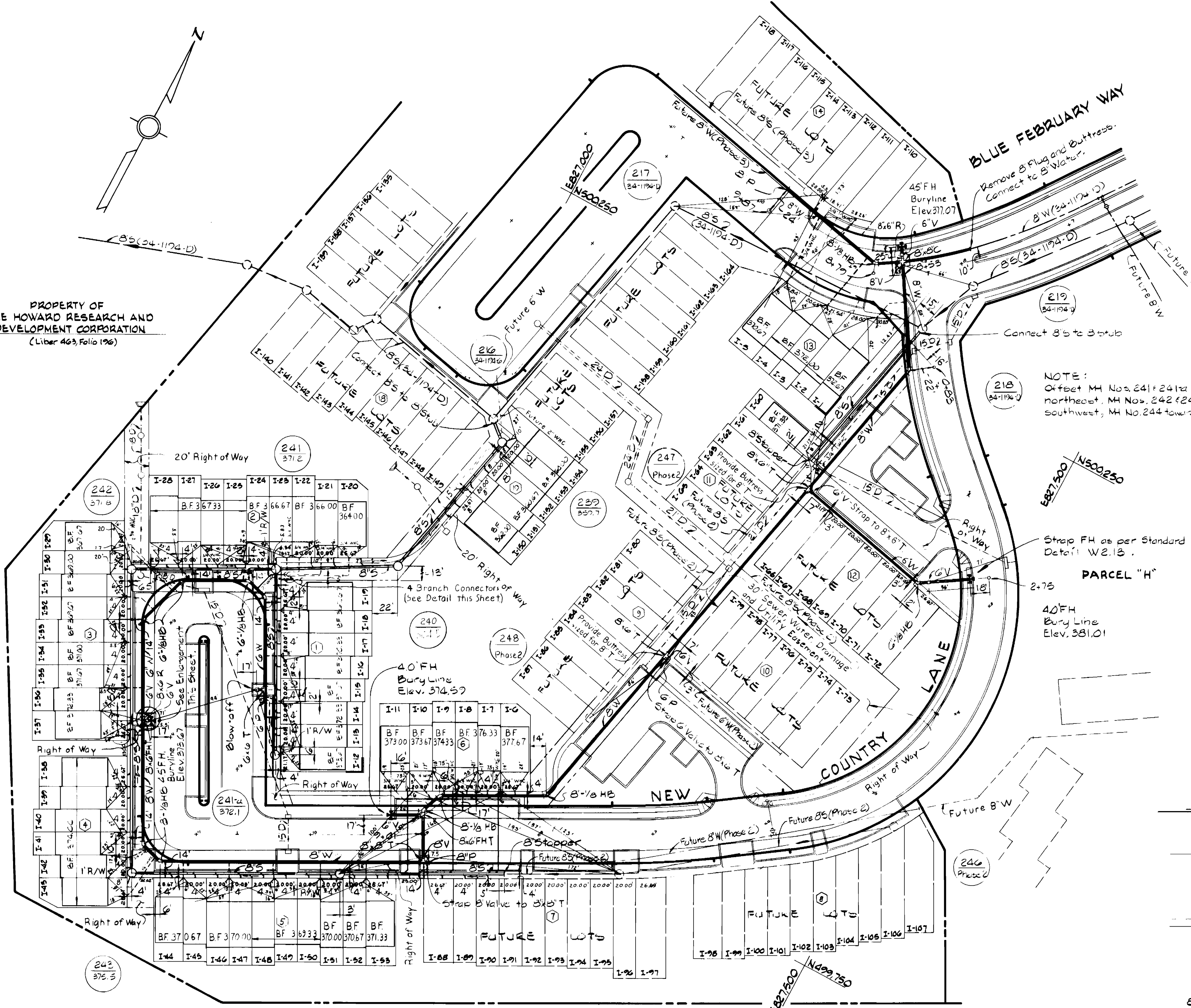
TYPICAL SECTION

Scale: 1"=3'



FH LOCATION ENLARGEMENT

Scale: 1"=3'



PLAN

Scale 1"=50'

NOTE: Unless otherwise noted refer to table @ right for base line station and offset for AS-BUILT referencing. Length of lateral S.H.C.'S noted @ each lot.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS - DATE
Robert W. ...

CHIEF - BUREAU OF ENGINEERS - DATE
 CHIEF - BUREAU OF UTILITIES - DATE

**WHITMAN, REQUARDT
 AND ASSOCIATES
 ENGINEERS**

2315 ST. PAUL ST.
 BALTIMORE, MARYLAND

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 CHK: R.B.N.
 DATE: 6/4/84

C.R.H. I. *Canera Revision*

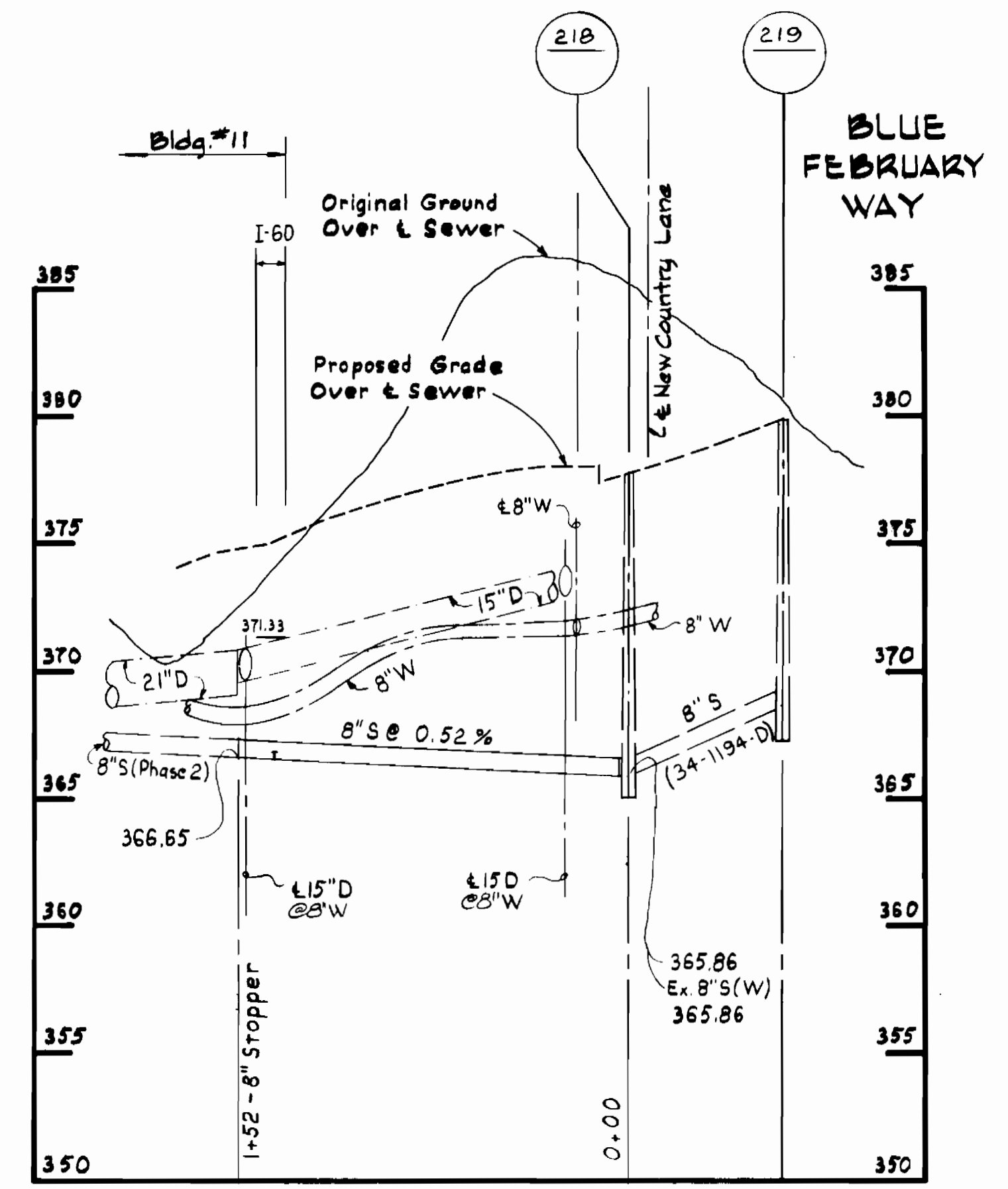
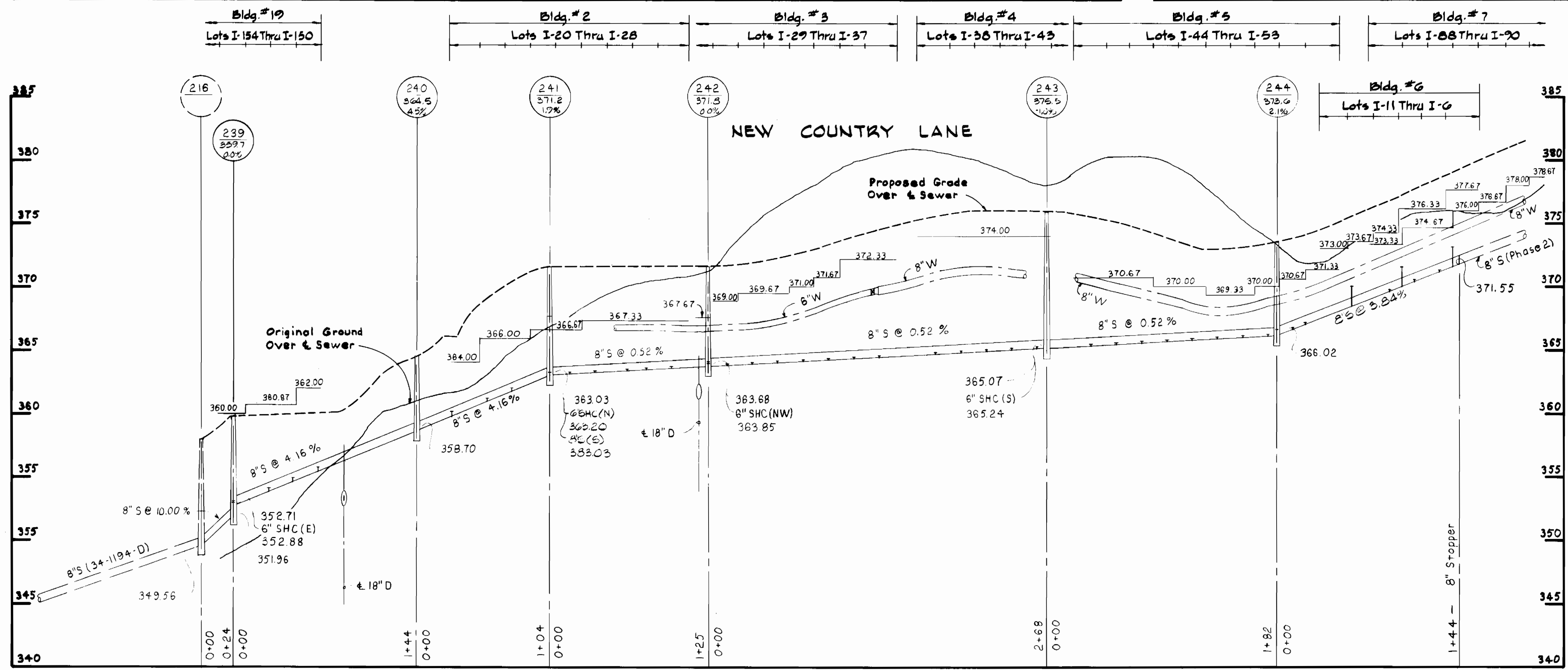
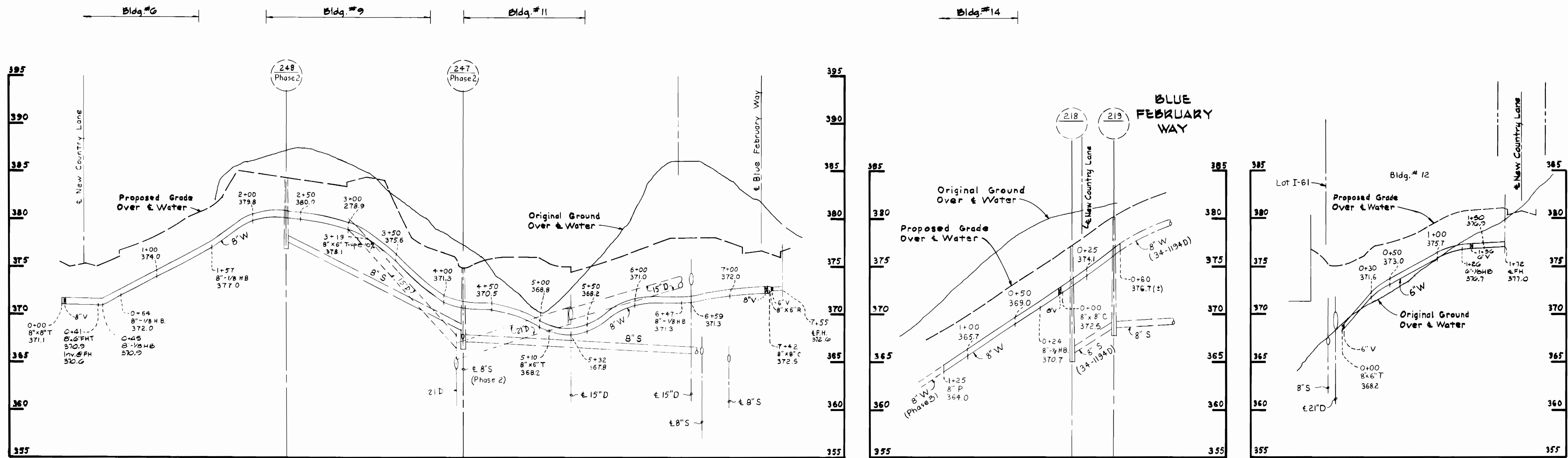
**PLAN & DETAILS OF
 WATER & SEWER MAINS**

60' SCALE MAP NO. 35 BLOCK NO. 9, 10

**COLUMBIA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 6**

ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-1240-D

SCALE AS SHOWN
 SHEET 2 OF 4



PROFILES
H: 1" = 50'
V: 1" = 5'

Parcel "I"
Phase 1

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works - DATE
Chief - Bureau of Engineering - DATE
Chief - Bureau of Utilities - DATE
Chief - Land Development Division - DATE

WHITMAN, REQUARDT
AND ASSOCIATES
ENGINEERS
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BALTIMORE, MARYLAND

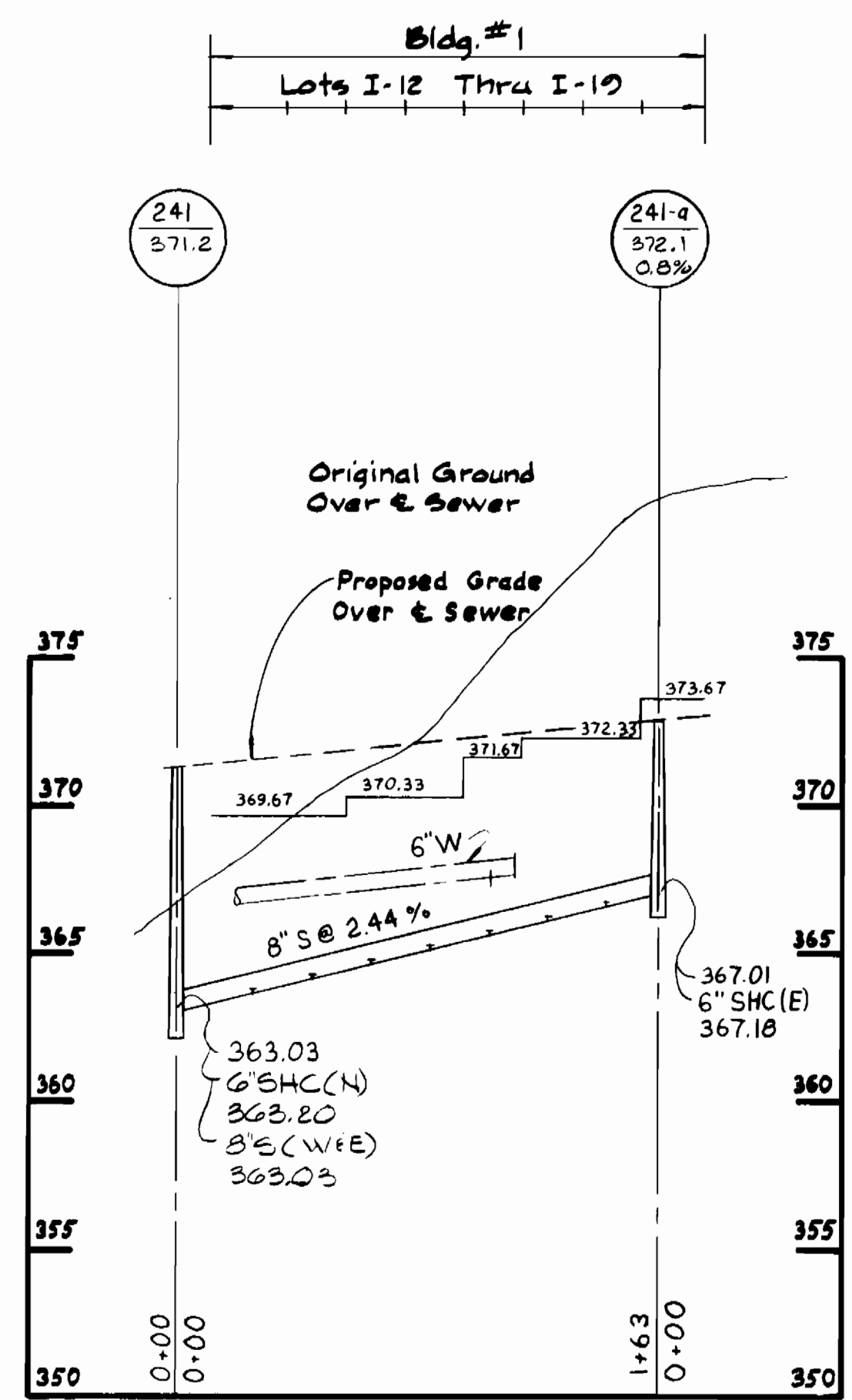
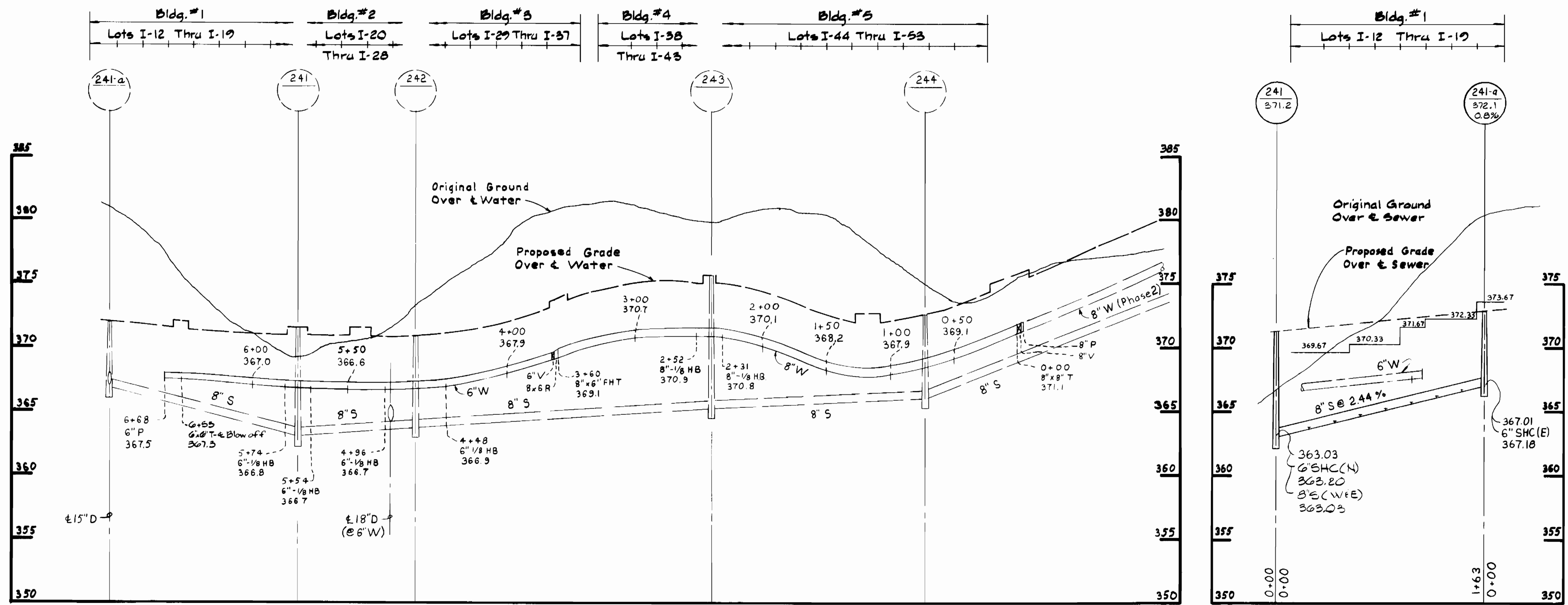


DES: S.J.			
DRN: R.P.G.			
CHK: R.B.N.			
DATE: 6/4/84	BY: NO.	REVISION	DATE

PROFILES OF
WATER & SEWER MAINS

COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 3 AREA 6
ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1240-D

SCALE
AS
SHOWN
SHEET
3 OF 4



PROFILES
H: 1" = 50'
Scale: V: 1" = 5'

Parcel "I"
Phase 1

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS - DATE
CHIEF - BUREAU OF UTILITIES - DATE

WHITMAN, REQUARDT
AND ASSOCIATES
ENGINEERS
2315 ST PAUL ST
BALTIMORE, MARYLAND



DES: S.J.	BY: NO.	REVISION	DATE
DRN: R.P.G.			
CHK: R.B.N.			
DATE: 6/4/84			

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

COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 3 AREA 6
ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1240-D

SCALE
AS
SHOWN
SHEET
4 OF 4