

QUANTITIES			
ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER
12" S (DIP) L.F.	520	520	U.S. Pipe
10" S (DIP) L.F.	820	804	" "
10" Sewer L.F.	2,850	2,807	Extrusion Tech. Inc.
8" S (DIP) L.F.	680	666	U.S. Pipe
8" Sewer L.F.	6,970	6,822	E.T.I.
Manholes Ea.	53	53	Atlantic Precast
16" Water L.F.	473	473	U.S. Pipe
12" Water L.F.	5,650	5,653	" "
8" Water L.F.	1,770	1,668	" "
6" Water L.F.	200	137	" "
12" Valves Ea.	8	8	Smith Metro
8" Valves Ea.	18	18	" "
6" (Excl. FHV)	1	1	" "
Fire Hydrants Ea.	12	12	" "
Air Release MH	2	2	Atlantic Precast
4" Water L.F.	20	20	U.S. Pipe
4" Valves Ea.	1	1	Smith Metro

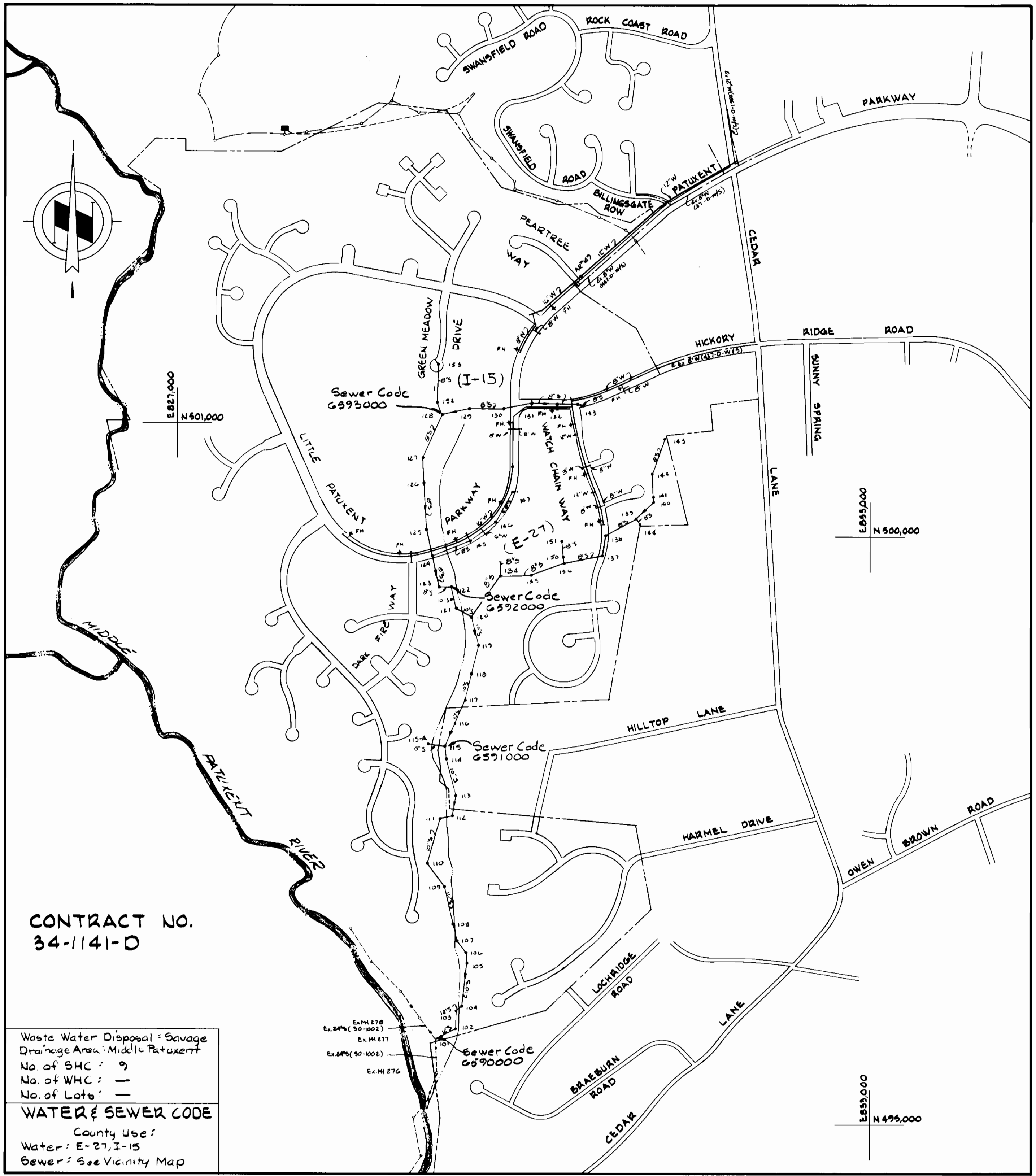
GENERAL NOTES

- 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.
 ENGINEERING - "DAMAGE CONTROL" - 234-5621.
 "MISS UTILITY" - 1 - 559-0100
 CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - 725-9976.
 AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 393-3553.
 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 37.01 AND 37.05 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., 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 S1.45.
- 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 AUGUST, 1981.

**CONSTRUCTION SEQUENCE
SEDIMENT CONTROL PROCEDURES**

- OBTAIN SEDIMENT CONTROL PERMIT (ARTICLE 15.05-3).
- OBTAIN WATER RESOURCES ADMINISTRATION PERMIT (ARTICLE 40.25)
- CLEAR, GRUB AND STRIP AS REQUIRED FOR SEWER CONSTRUCTION -- PROTECT STREAMS FROM EROSION OF STORED TOPSOIL.
- CONSTRUCT DIKE AND SILT FENCE STRUCTURES IMMEDIATELY AFTER STRIPPING.
- CONSTRUCT SEWER PIPE LINES.
- RESTORE EROSION CONTROL STRUCTURES DISTURBED BY SEWER CONSTRUCTION.
- STABILIZE DISTURBED AREAS AS CONSTRUCTION PROGRESSES WITH TEMPORARY SEEDING AND MULCHING (OR PERMANENT RESTORATION)
- COMPLETE PERMANENT RESTORATION.
- REMOVE SEDIMENT STRUCTURES WHEN DIRECTED.

CONTRACT NO. 34-1141-D
VILLAGE OF HICKORY RIDGE
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS



CONTRACT NO.
34-1141-D

Waste Water Disposal: Savage
 Drainage Area: Middle Patuxent
 No. of SHC: 9
 No. of WHC: —
 No. of Lots: —
WATER & SEWER CODE
 County Use:
 Water: E-27, I-15
 Sewer: See Vicinity Map

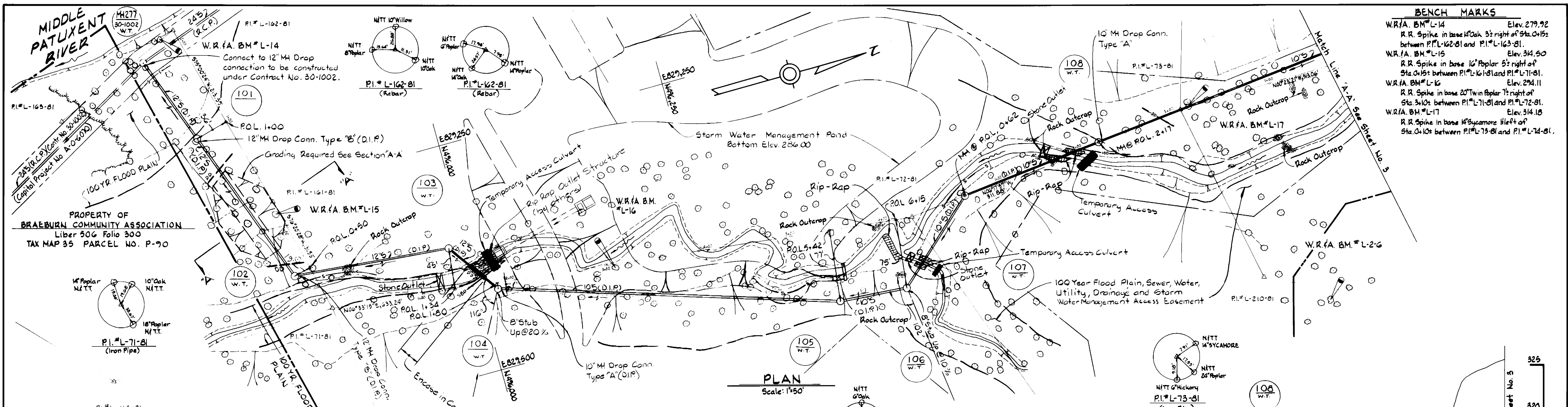
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
 Signature: James M. Helms, Jr. DATE: 8/5/83
 U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard County Conservation District.
 APPROVED: [Signature] DATE: 8-5-83
 HOWARD S.C.D.

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications and Road Construction Plans F-83-120.

Phase I Part I
 Outfall Sewer System and
 Major Water Service

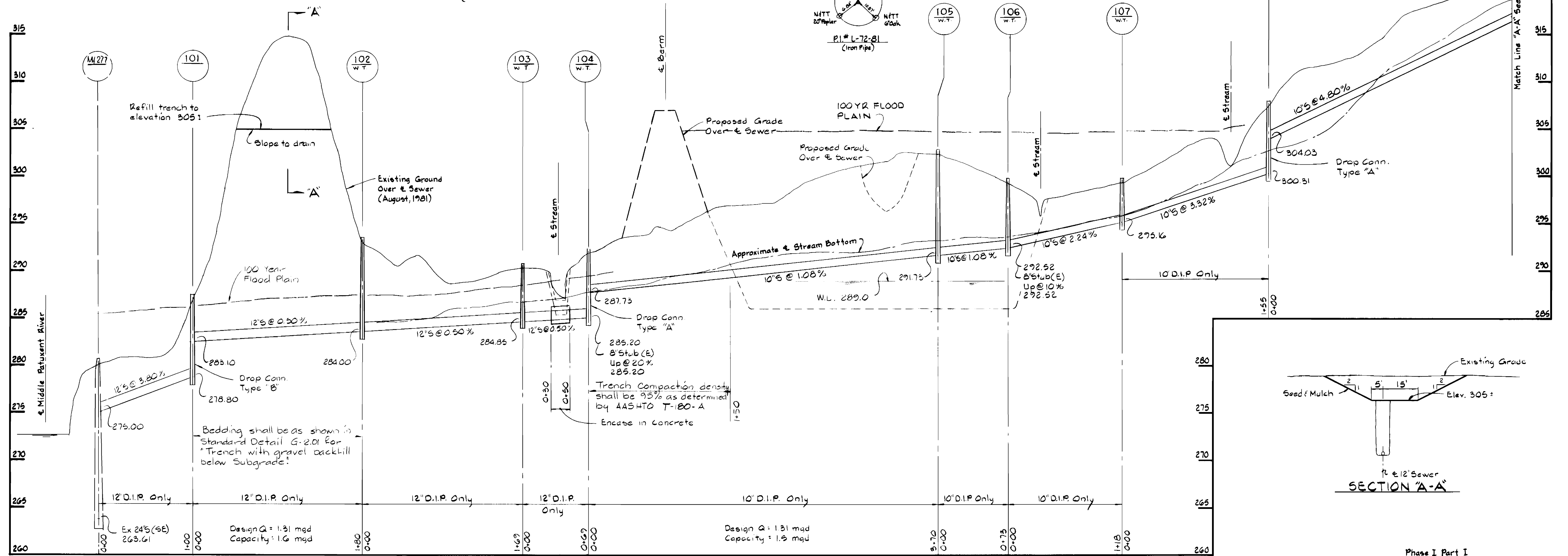
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] 8-10-83 DIRECTOR OF PUBLIC WORKS - DATE	WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS 2315 ST. PAUL ST. BALTIMORE, MARYLAND [Signature] 8-10-83 CHIEF - BUREAU OF ENGINEERING - DATE		DES. S.J. DRN. J.R.K. CHK. A.B.N. DATE: 8/5/83	VICINITY MAP AND GENERAL NOTES 600 SCALE MAP NO. 35 BLOCK NO.	COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 1 ELECTION DISTRICT NO. 5 CONTRACT NO. 34-1141-D	SCALE 1"=600' SHEET 1 OF 15
---	---	--	---	--	---	--------------------------------------



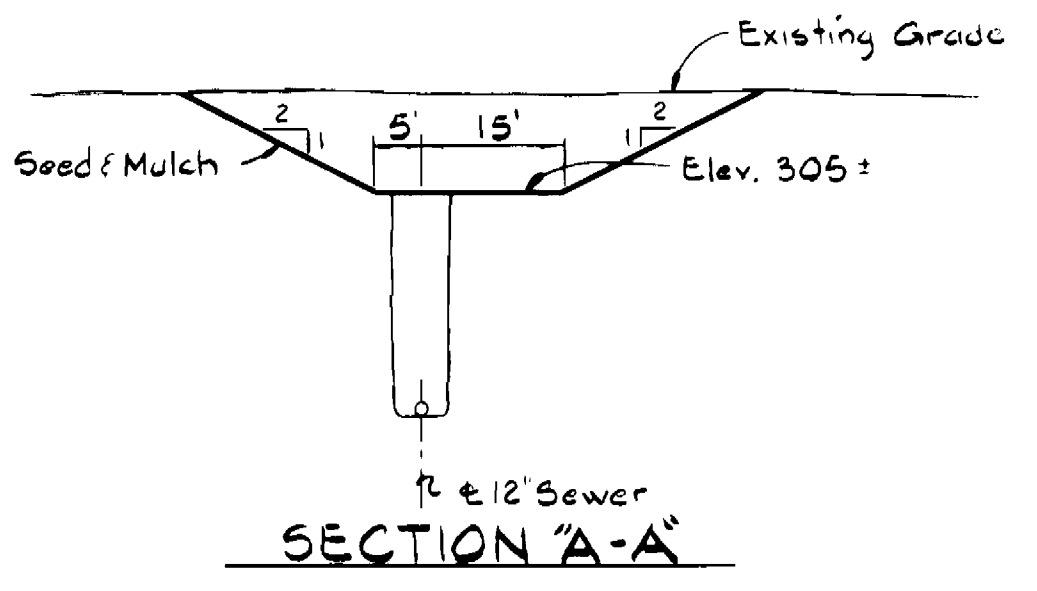
BENCH MARKS

W.R.F.A. BM#L-14	Elev. 279.92
R.R. Spike in base of Oak 3' right of Sta. 0+15 between P.I.#L-162-81 and P.I.#L-163-81	
W.R.F.A. BM#L-15	Elev. 314.50
R.R. Spike in base of Poplar 5' right of Sta. 0+15 between P.I.#L-161-81 and P.I.#L-171-81	
W.R.F.A. BM#L-16	Elev. 294.11
R.R. Spike in base of Twin Poplar 7' right of Sta. 3+10 between P.I.#L-171-81 and P.I.#L-172-81	
W.R.F.A. BM#L-17	Elev. 314.18
R.R. Spike in base of Sycamore 11' left of Sta. 0+10 between P.I.#L-173-81 and P.I.#L-174-81	

PLAN
Scale: 1"=50'



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



Phase I Part I
Outfall Sewer System
and Major Water Service

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Sam M. Shuler 8/10/83
DIRECTOR OF PUBLIC WORKS - DATE

Robert M. Bevinger 8-10-83
CHIEF - BUREAU OF UTILITIES - DATE

W. C. ... 8-10-83
CHIEF - LAND DEVELOPMENT DIVISION - DATE

WHITMAN, REQUARDT
AND ASSOCIATES
ENGINEERS

2315 ST. PAUL ST.
BALTIMORE, MARYLAND

DES: S.J.			
DRN: J.R.K.			
CHK: A.B.N.			
DATE: 8/5/83			
REVISION	1	General Revisions	8/20/83

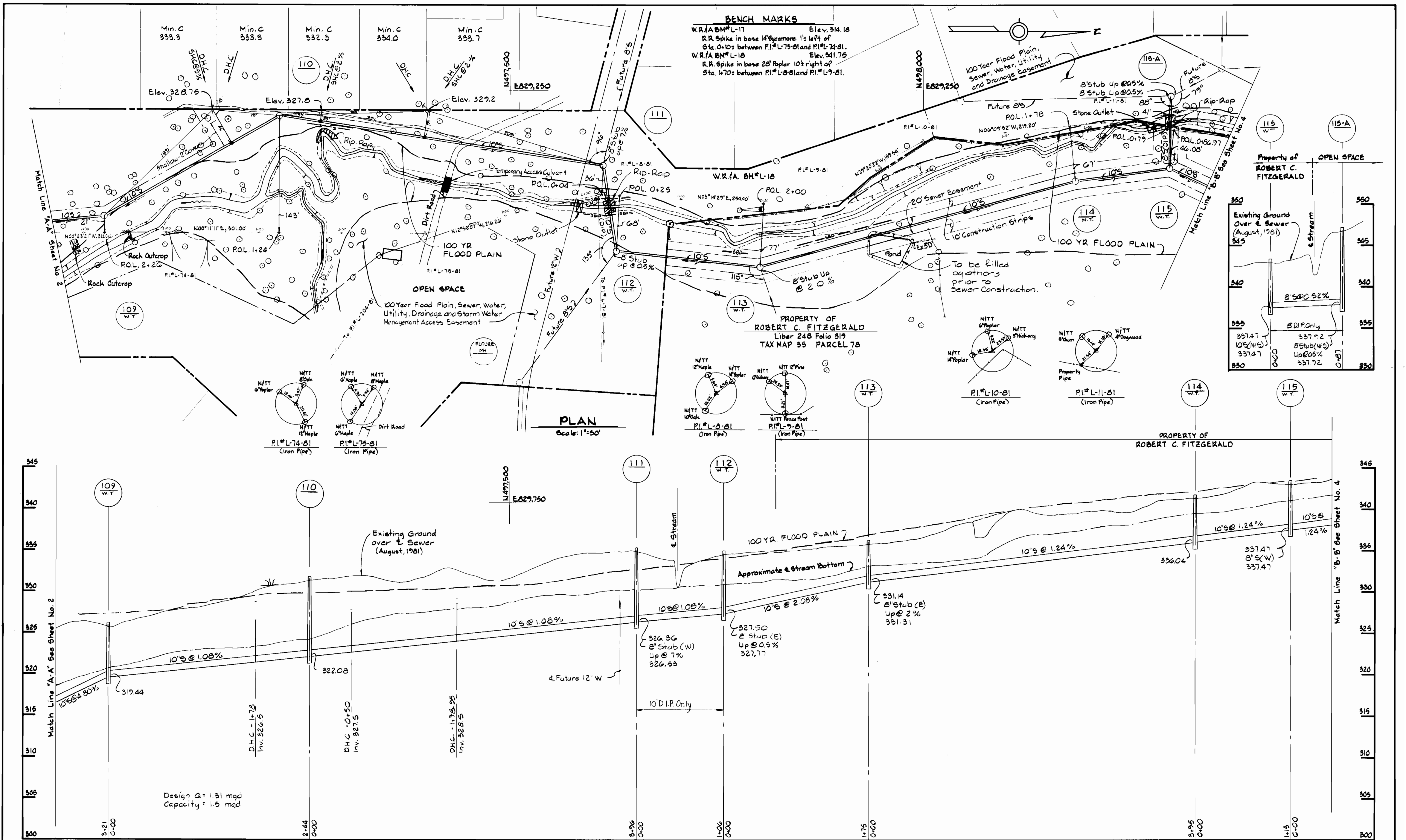
PLAN & PROFILE OF
SEWER MAIN

600' SCALE MAP NO. 35 BLOCK NO.

COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 3 AREA 1
ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1141-D

SCALE
AS
SHOWN

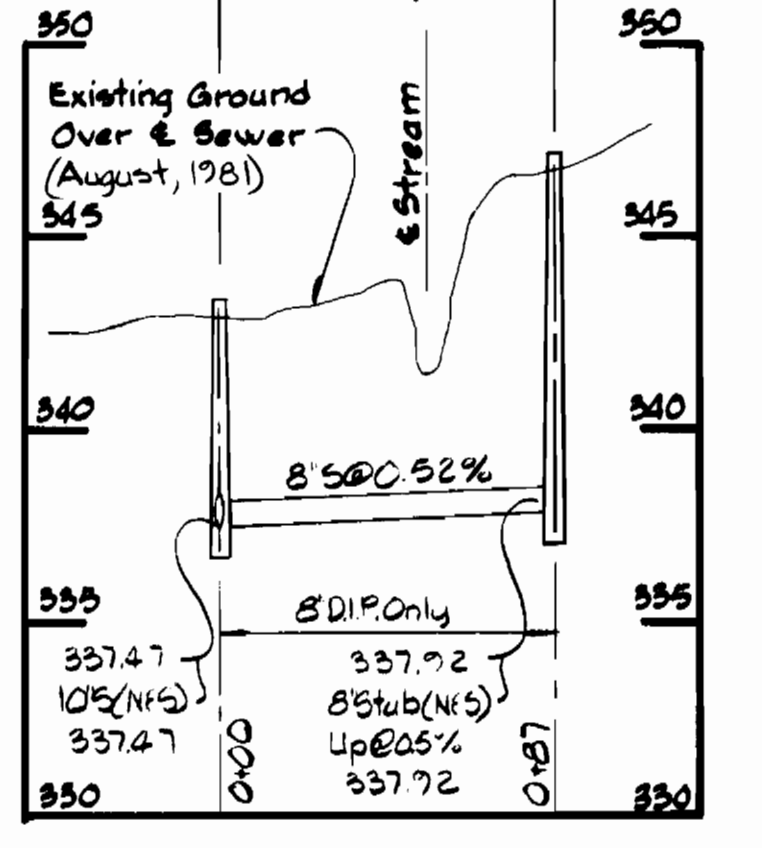
SHEET
2 OF 15



BENCH MARKS
 W.R./A.B.M. L-17 Elev. 314.16
 R.R. Spike in base 14' by corner 1' left of Sta. 0+10s between P.I. L-75-81 and P.I. L-74-81.
 W.R./A.B.M. L-18 Elev. 341.75
 R.R. Spike in base 28' by corner 10' right of Sta. 1+70s between P.I. L-8-81 and P.I. L-9-81.

PLAN
 Scale: 1"=50'

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



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: James H. Law 8/10/83
 Chief - Bureau of Engineering: William B. Ray 8-10-83
 Chief - Bureau of Utilities: Robert M. Bevington 8-10-83
 Chief - Land Development Division: [Signature] 8-10-83

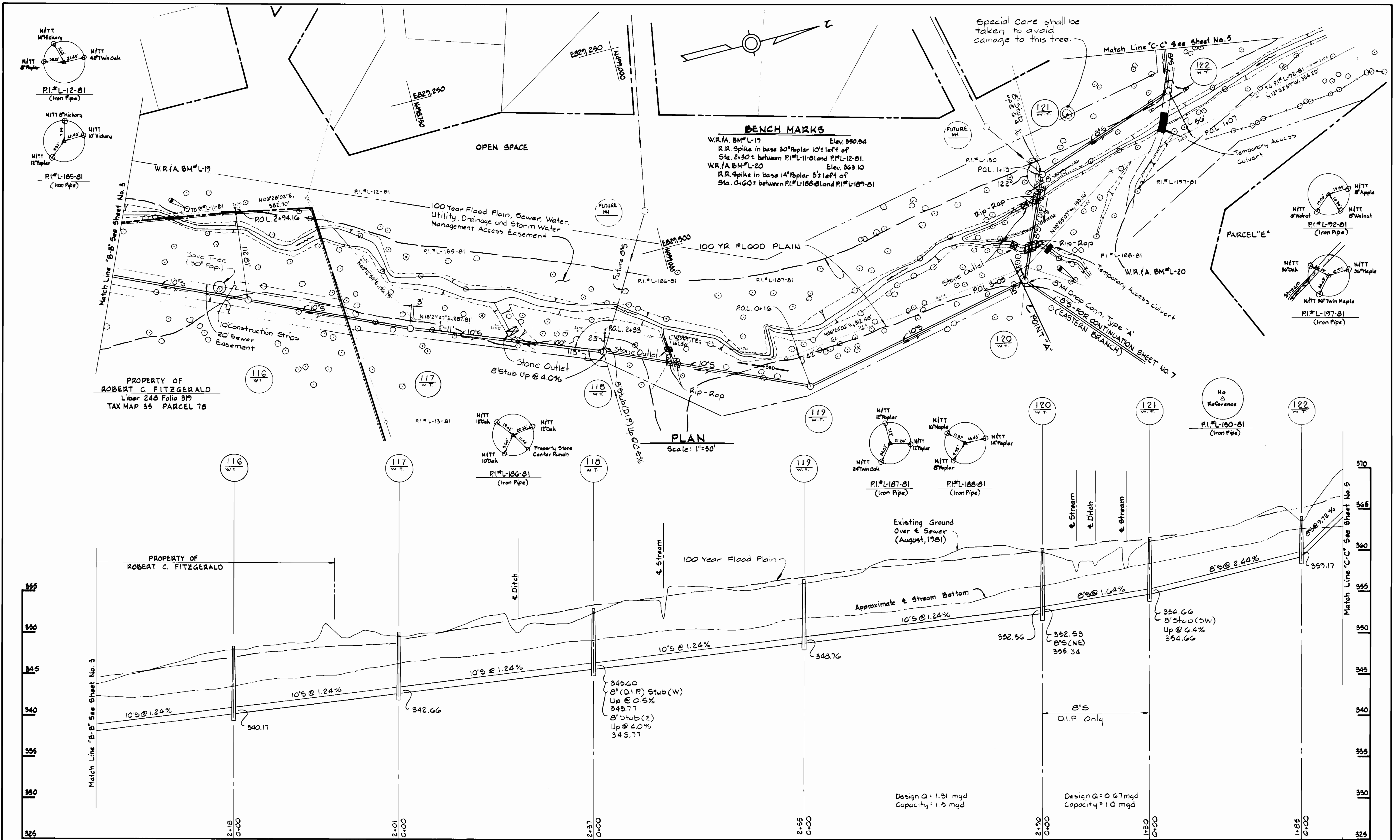
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 2315 ST. PAUL ST. BALTIMORE, MARYLAND
 DES: S.J.
 DRN: J.R.K.
 CHK: A.B.N.
 DATE: 8/5/83

DES.	S.J.		
DRN.	J.R.K.		
CHK.	A.B.N.		
DATE	8/5/83		
BY	CEH	1	General Revisions
NO.			
REVISION			
DATE			

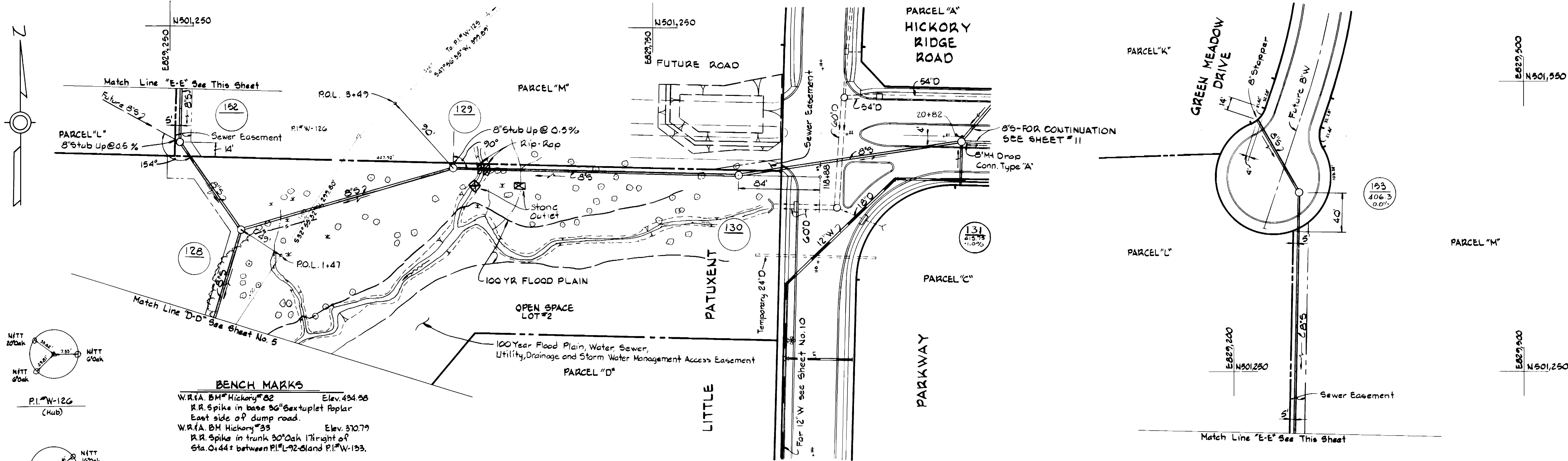
PLAN & PROFILE OF SEWER MAIN
 600' SCALE MAP NO. 35 BLOCK NO.

COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 1
 ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-1141-D
 Phase I Part I
 Outfall Sewer System and Major Water Service

SCALE AS SHOWN
 SHEET 3 OF 15



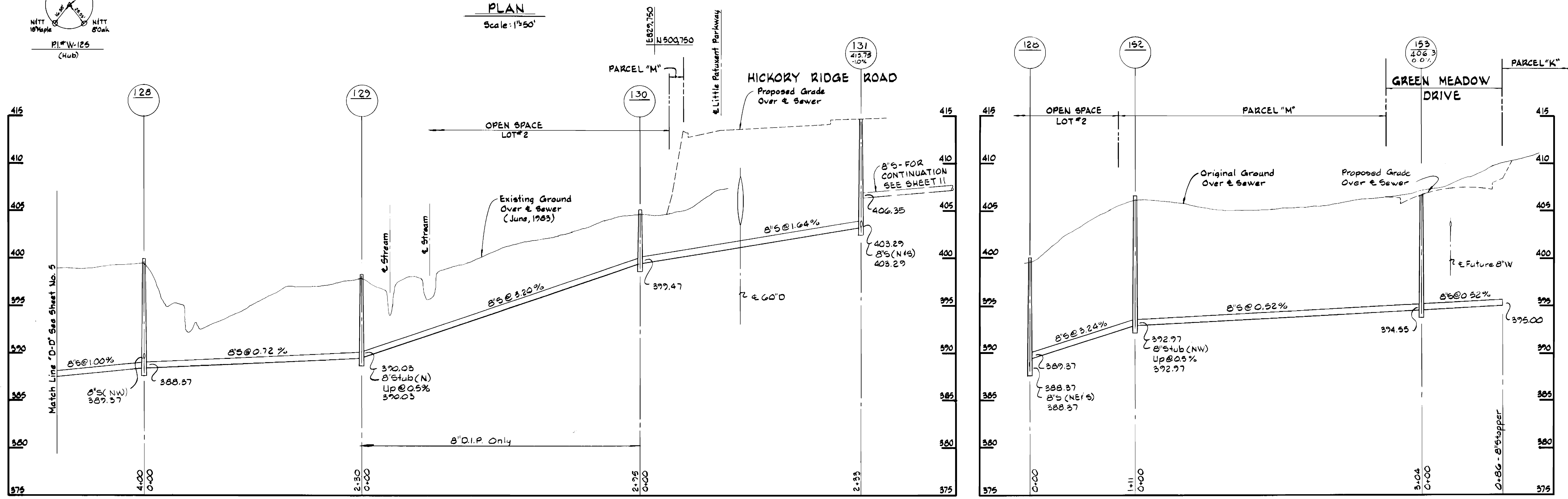
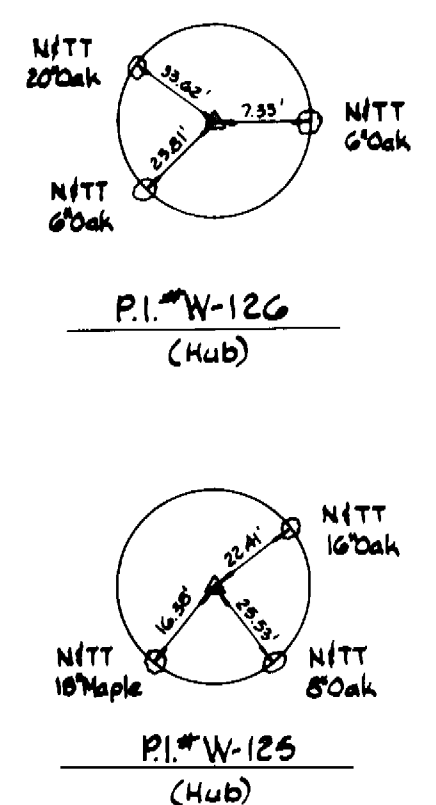
<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>James M. Lewis</i> DIRECTOR OF PUBLIC WORKS - DATE 8-10-83</p> <p><i>Robert M. Beninger</i> CHIEF - BUREAU OF UTILITIES - DATE 8-10-83</p>	<p>WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS</p> <p>2315 ST. PAUL ST. BALTIMORE, MARYLAND</p> <p><i>Thomas J. Requardt</i> PERSONAL ENGINEER</p>	<p>DES. S.J.</p> <p>DRN. J.R.K.</p> <p>CHK. R.B.N.</p> <p>DATE 8/9/83</p>	<p>PLAN & PROFILE OF SEWER MAIN</p> <p>600' SCALE MAP NO. 35 BLOCK NO.</p>	<p>COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA I ELECTION DISTRICT NO. 5 CONTRACT NO. 34-1141-D</p>	<p>SCALE AS SHOWN</p> <p>SHEET 4 OF 15</p>
--	---	---	--	--	--



BENCH MARKS

W.R.A. BM Hickory #82 Elev. 434.58
R.R. Spike in base 56" hexuplet Poplar East side of dump road.

W.R.A. BM Hickory #33 Elev. 370.79
R.R. Spike in trunk 30" Oak 17' right of Sta. 0+44.2 between P.I. L-72 and P.I. W-125.

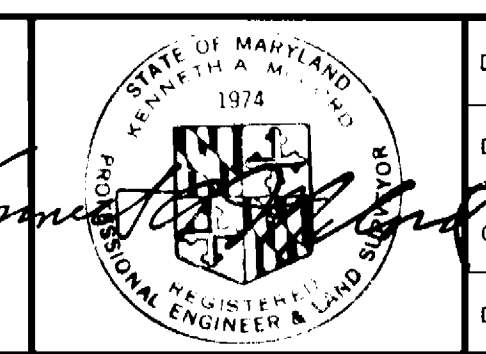


DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Bunker
DIRECTOR OF PUBLIC WORKS - DATE 8-10-83
CHIEF - BUREAU OF UTILITIES - DATE

Mark L. F. Foy
CHIEF - LAND DEVELOPMENT DIVISION - DATE

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



DES: S.I.	DRN: J.R.K.	CHK: R.B.N.	DATE: 8/3/83
BY: NO.	REVISION: General Revisions	DATE: 8/3/83	

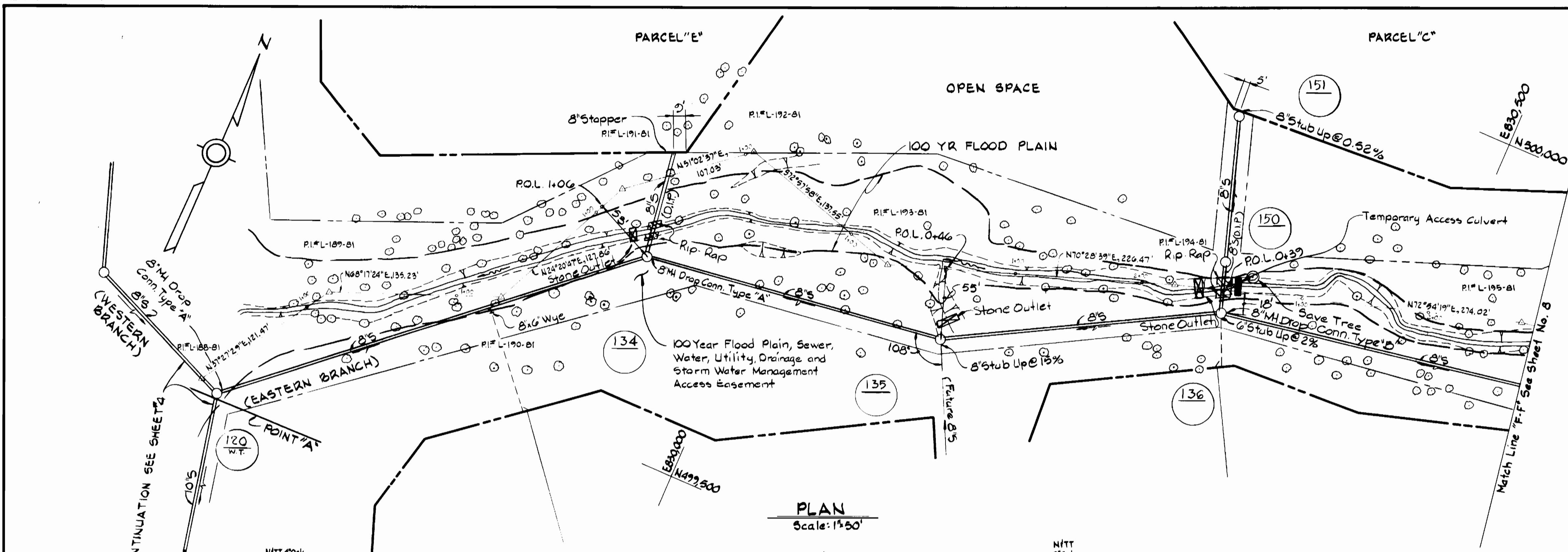
PLAN & PROFILE OF SEWER MAIN

600' SCALE MAP NO. 35 BLOCK NO.

COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA I
ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1141-D

Phase I Part 1
Outfall Sewer System and Major Water Service

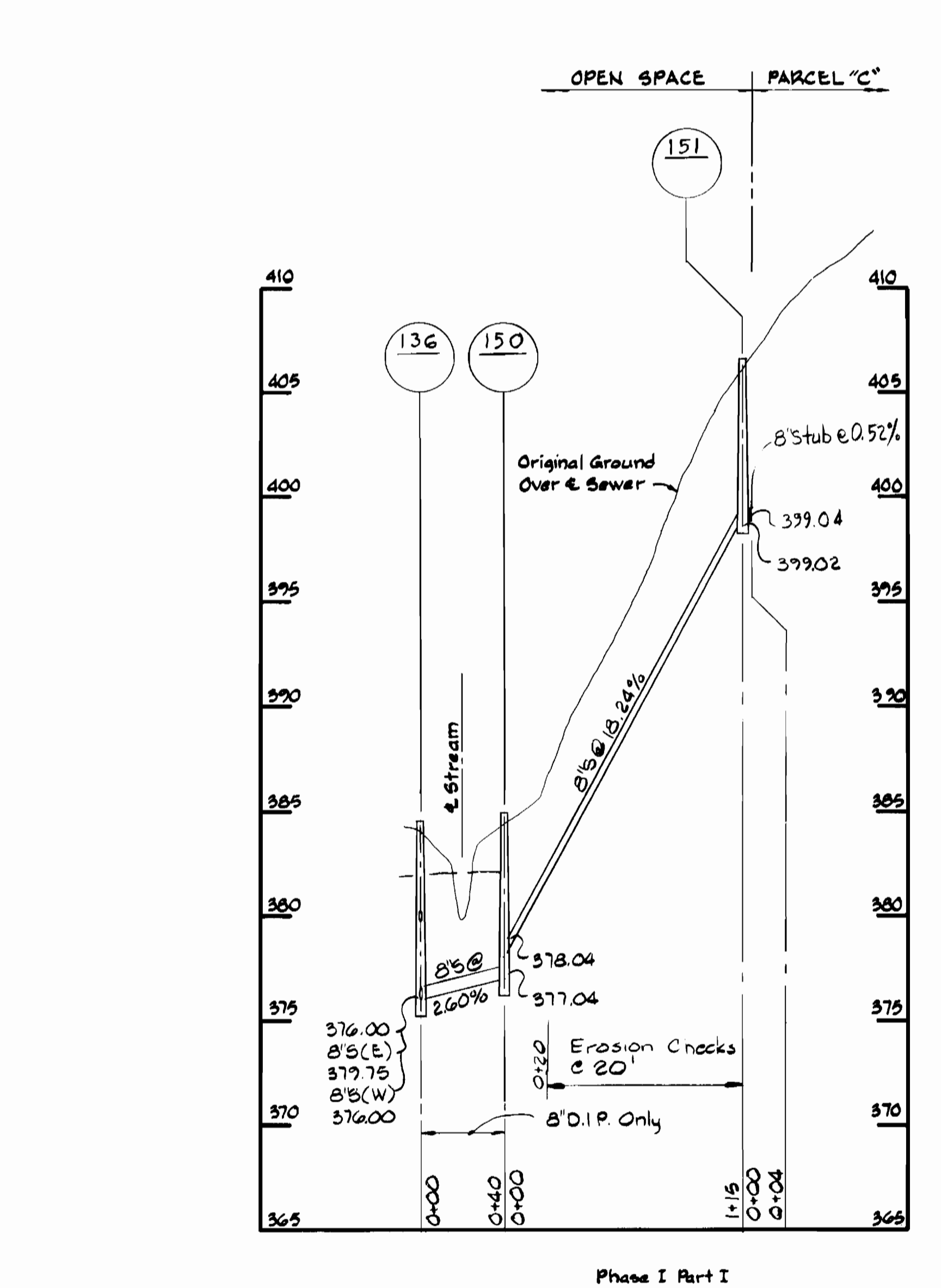
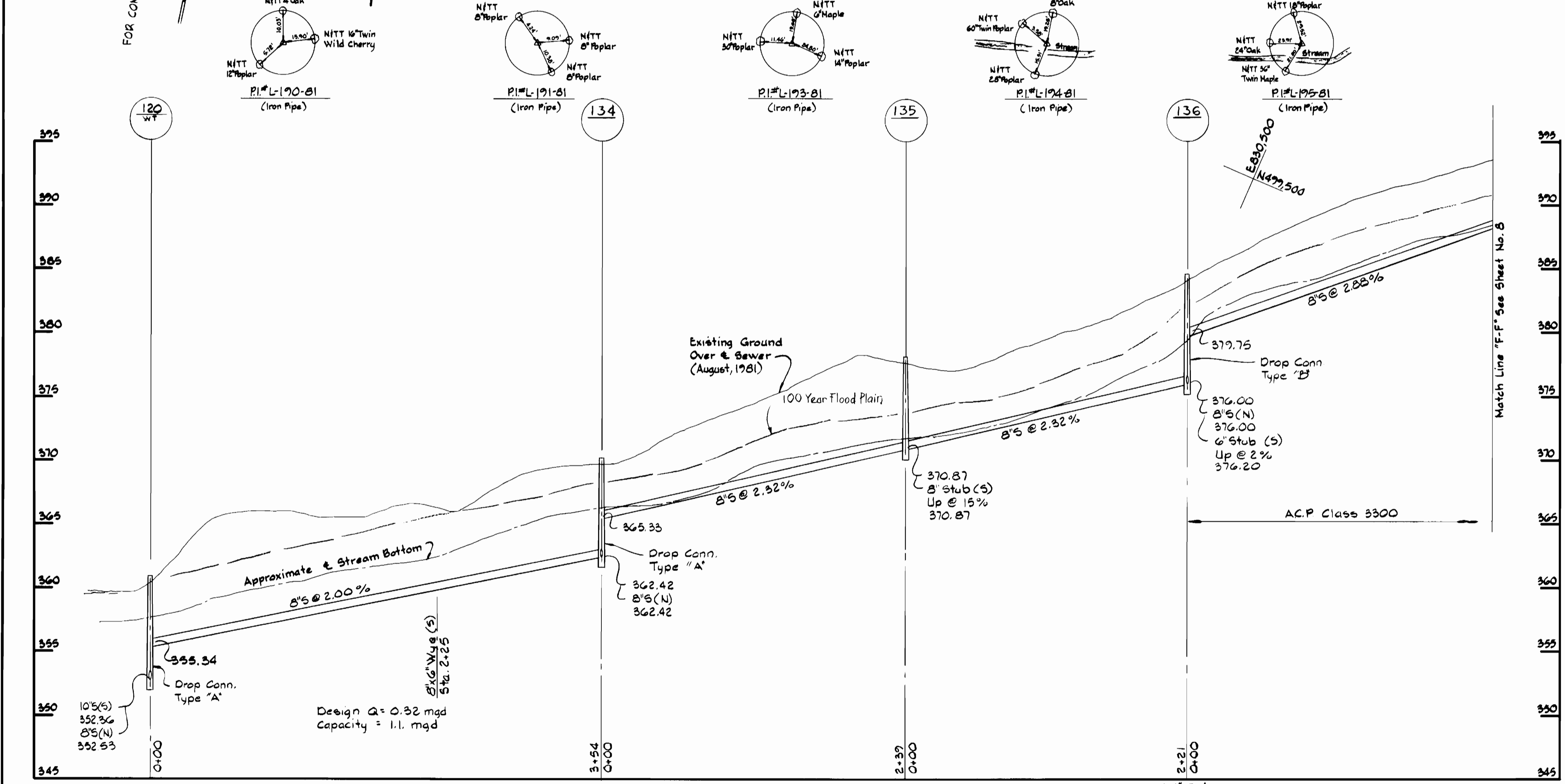
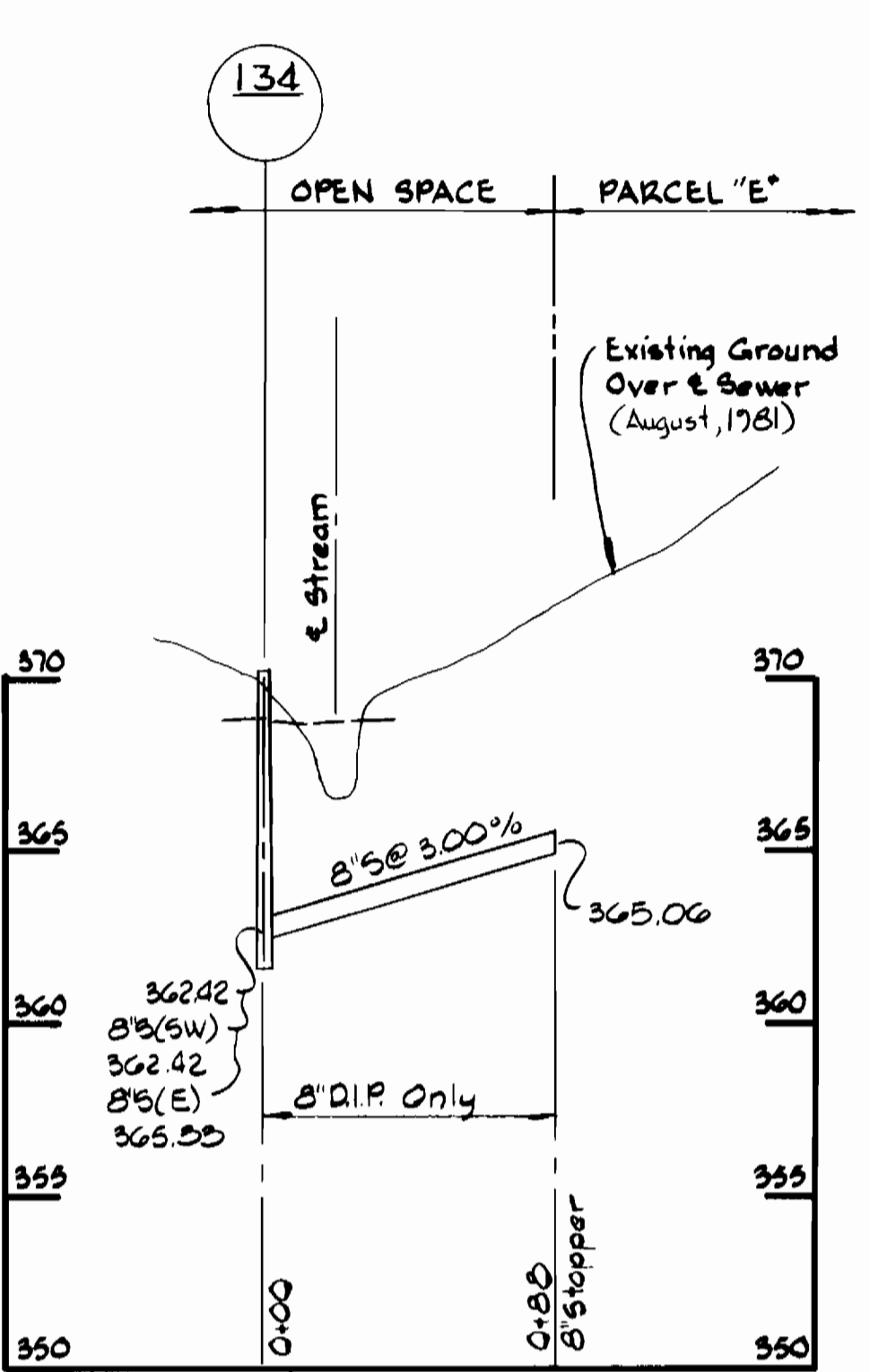
SCALE AS SHOWN
SHEET 6 OF 15



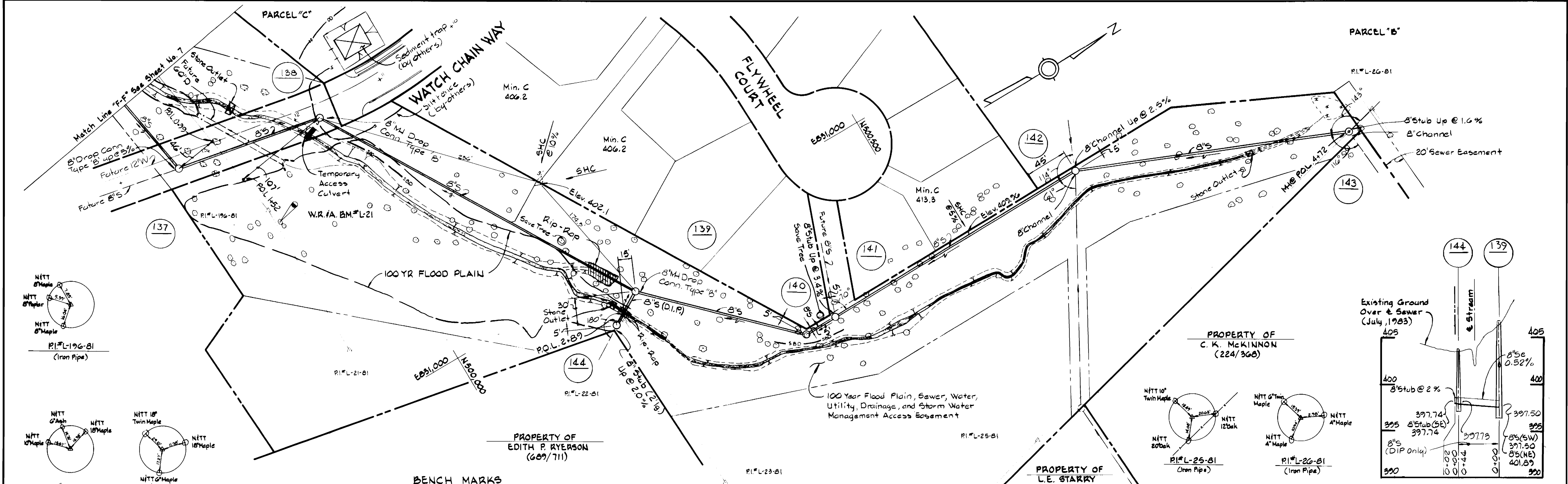
BENCH MARKS

W.R.A. BM# L-20 Elev. 363.10
R.R. Spike in base 14" Poplar 31ft of Sta. 0+00 between PI# L-189-81 and PI# L-187-81.

W.R.A. BM# L-21 Elev. 400.17
R.R. Spike in base 14" Poplar 8' left of Sta. 0+20 between PI# L-190-81 and PI# L-21-81.

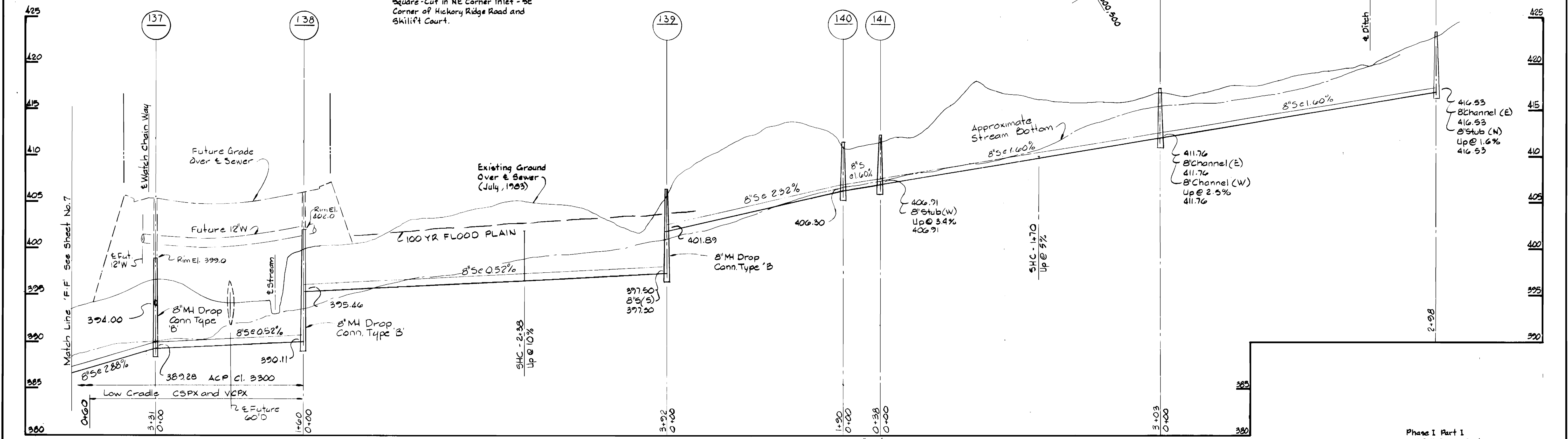


<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>James A. Schenck</i> DIRECTOR OF PUBLIC WORKS - DATE 8-10-83</p> <p><i>Robert M. Beringer</i> CHIEF - BUREAU OF UTILITIES - DATE</p>	<p>WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS 2315 ST. PAUL ST. BALTIMORE, MARYLAND</p> <p><i>Whitman Requardt</i> REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR</p>	<p>DES: S.J.</p> <p>DRN: J.R.K.</p> <p>CHK: R.B.N.</p> <p>DATE: 8/3/83</p>	<p>CRK: I General Revisions</p> <p>BY: NO. REVISION DATE</p>	<p>PLAN & PROFILE OF SEWER MAIN</p> <p>600' SCALE MAP NO. 35 BLOCK NO.</p>	<p>COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA I ELECTION DISTRICT NO. 5 CONTRACT NO. 34-1141-D</p>	<p>SCALE AS SHOWN</p> <p>SHEET 7 OF 15</p>
		<p>Phase I Part I Outfall Sewer System and Major Water Service</p>		<p>August 3, 1983</p>		



BENCH MARKS
 W.R.A. BM#L-21 Elev. 400.17
 R.R. Spike in base 14" Poplar 8' left of Sta. 0+20+ between P.I.#L-196-B1 and P.I.#L-21-B1.
 W.R.A. BM Hickory #99 Elev. 447.83
 Square-Cut in NE Corner Inlet - SE Corner of Hickory Ridge Road and Skillitt Court.

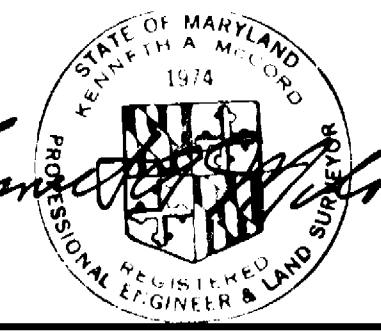
PLAN
 Scale: 1"=50'



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

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
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND

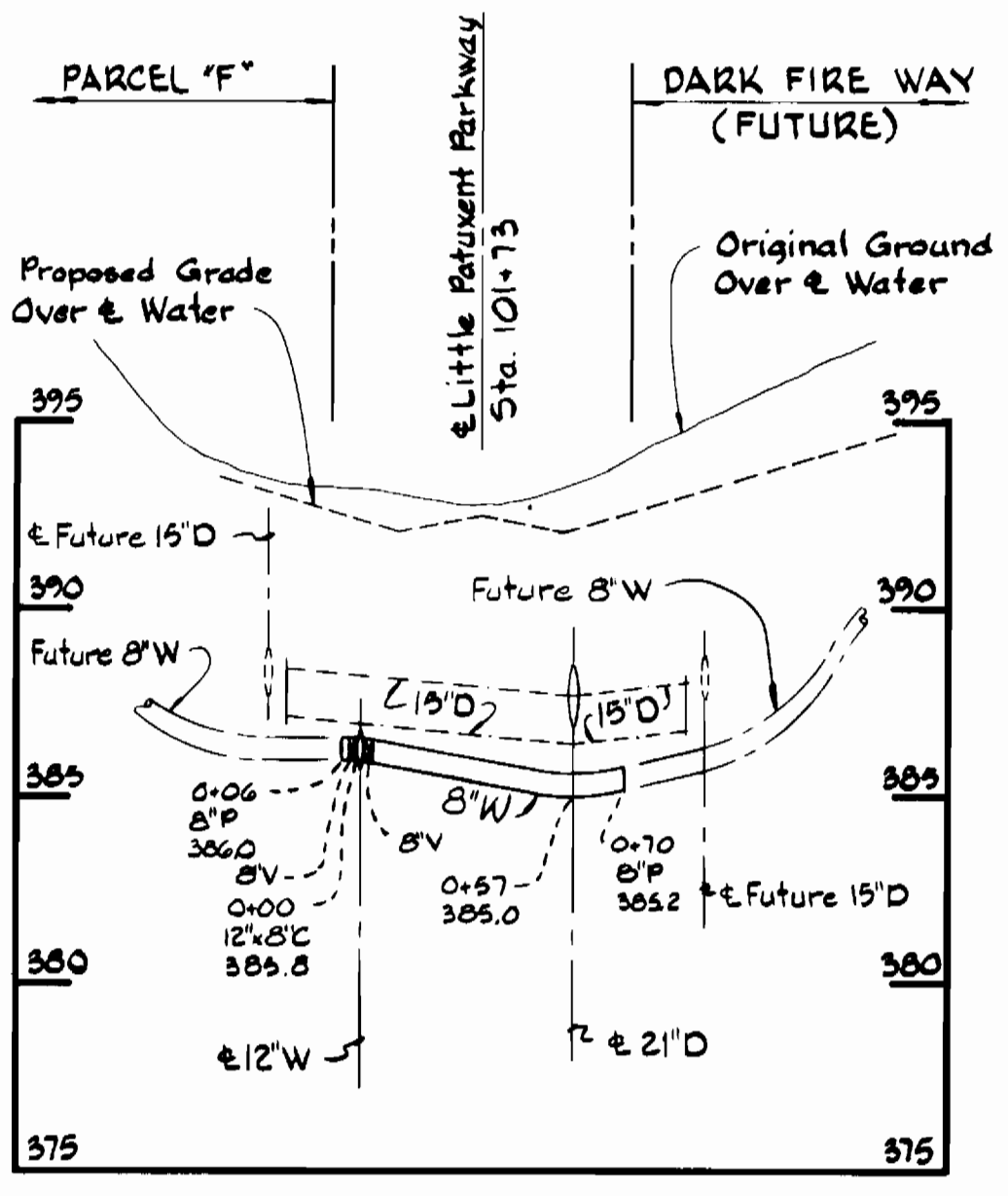
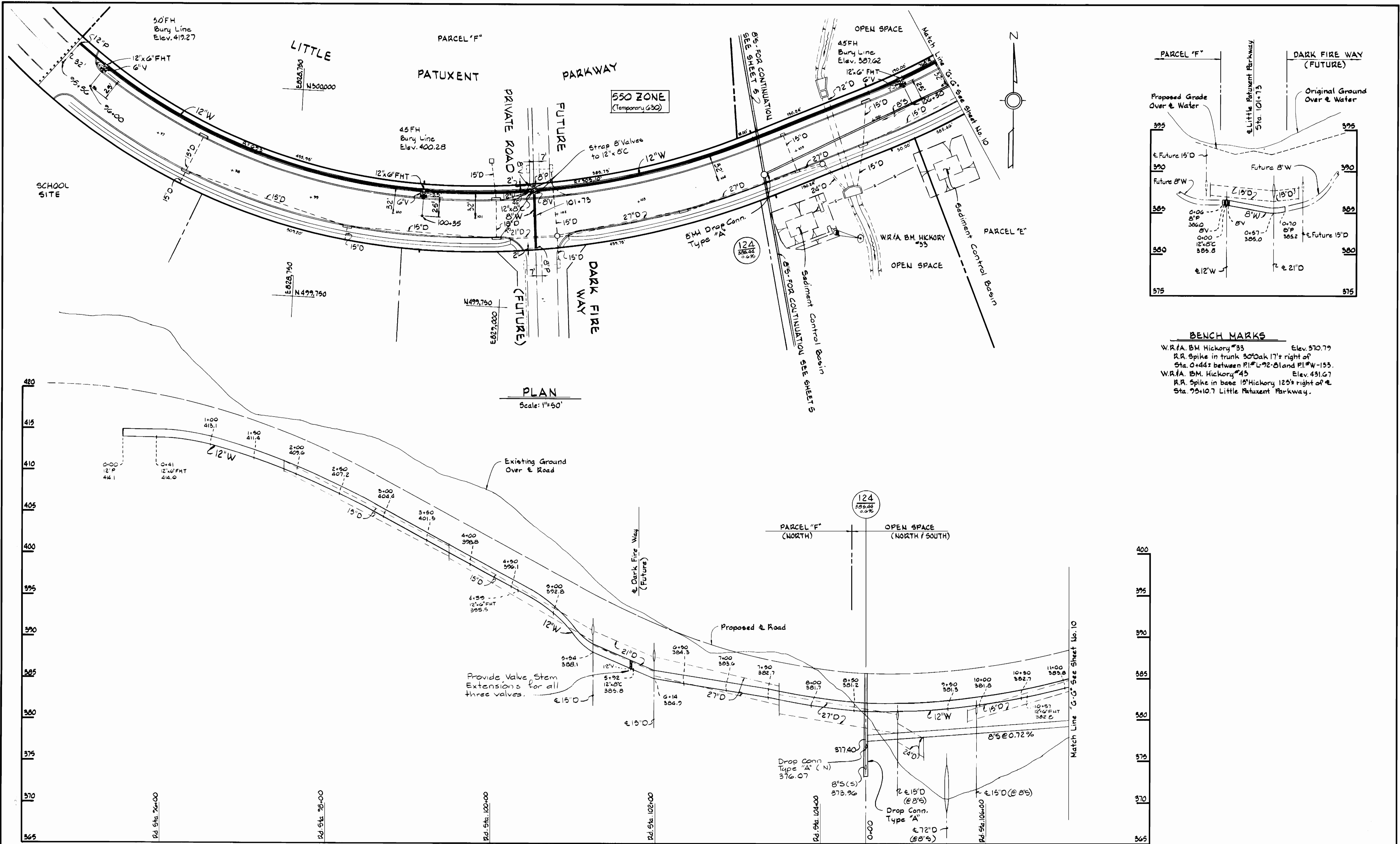


DES	S.J.	BY	NO.	REVISION	DATE
DRN	J.R.K.				
CHK	R.B.N.				
DATE	8/3/83				

PLAN & PROFILE OF SEWER MAIN
 600' SCALE MAP NO. 35 BLOCK NO.

COLUMBIA VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA I
 ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-1141-D

SCALE AS SHOWN
 SHEET 8 OF 15



BENCH MARKS

- W.R.A. BM Hickory #33 Elev. 370.79
- R.R. Spike in trunk 30' Oak 17' right of Sta. 0+44.2 between PI#L-92-81 and PI#W-153.
- W.R.A. BM Hickory #45 Elev. 431.67
- R.R. Spike in base 15' Hickory 125' right of Sta. 79+10.7 Little Patuxent Parkway.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Jones 8-10-83
DIRECTOR OF PUBLIC WORKS - DATE

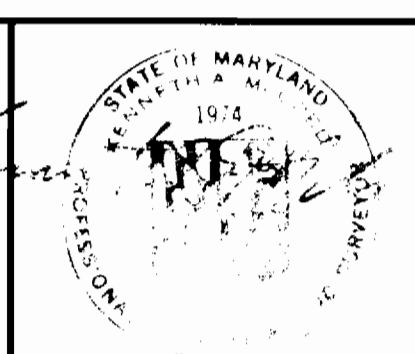
Robert M. Bunker 8-10-83
CHIEF - BUREAU OF UTILITIES - DATE

William B. Reed 8-10-83
CHIEF - BUREAU OF ENGINEERING - DATE

William H. Bloss
CHIEF - LAND DEVELOPMENT DIVISION - DATE

WHITMAN, REQUARDT
AND ASSOCIATES
ENGINEERS

2315 ST. PAUL ST.
BALTIMORE, MARYLAND



DES	S.J.				
DRN	J.R.K.				
CHK	R.B.N.				
DATE	8/5/83	BY	NO.	REVISION	DATE

PLAN & PROFILE OF
WATER & SEWER MAINS

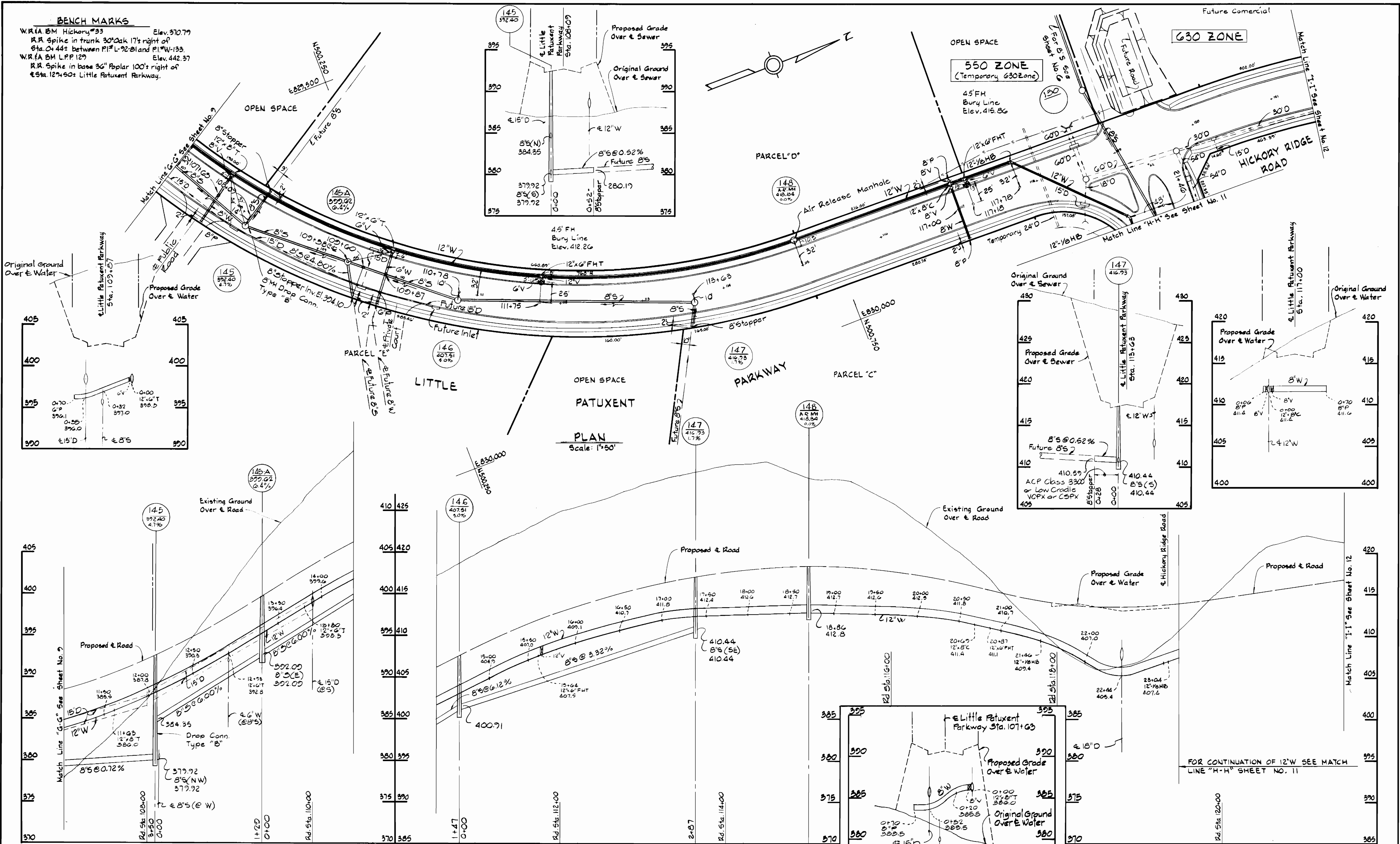
600' SCALE MAP NO. 35 BLOCK NO.

COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 3 AREA I
ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1141-D

SCALE AS SHOWN
SHEET 9 OF 15

BENCH MARKS

W.R.A. BM Hickory #33 Elev. 370.79
R.R. Spike in trunk 30' Oak 17' right of
Sta. 0+44± between P.I. L-92-Bland P.I. W-133
W.R.A. BM L.P.P. 129 Elev. 442.37
R.R. Spike in base 36" Poplar 100' right of
Sta. 12+50± Little Patuxent Parkway.



PLAN
Scale: 1"=50'

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

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



DES	S.J.
DRN	J.R.K.
CHK	R.B.N.
DATE	8/3/83
BY	NO.
REVISION	
CR.H. 1	General Revisions
DATE	8/30/83

**PLAN & PROFILE OF
WATER & SEWER MAINS**

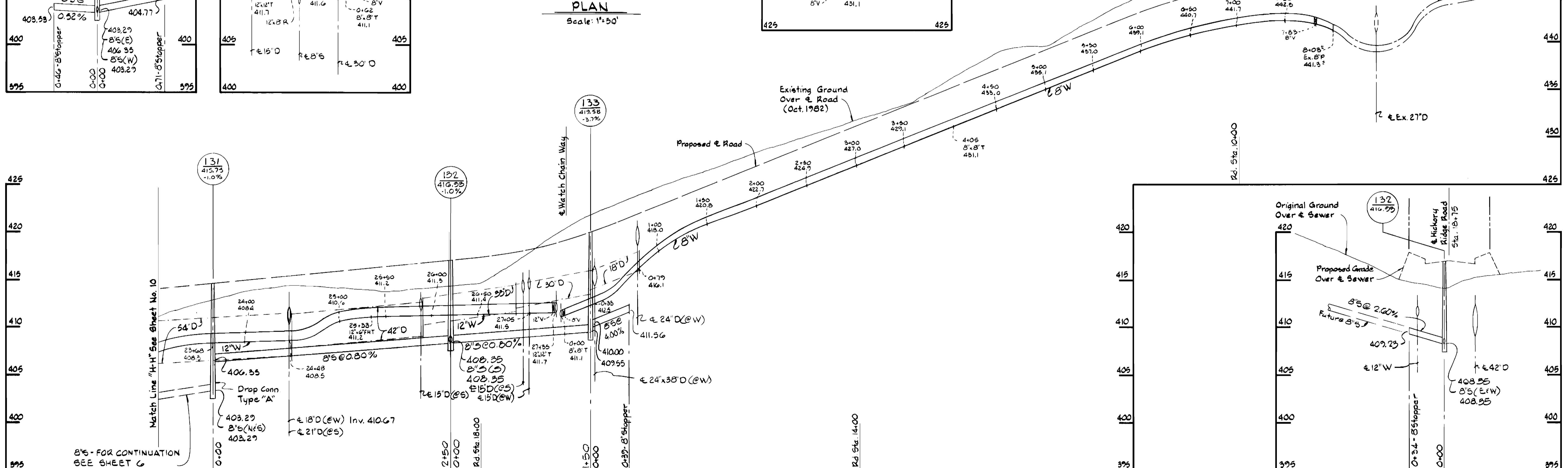
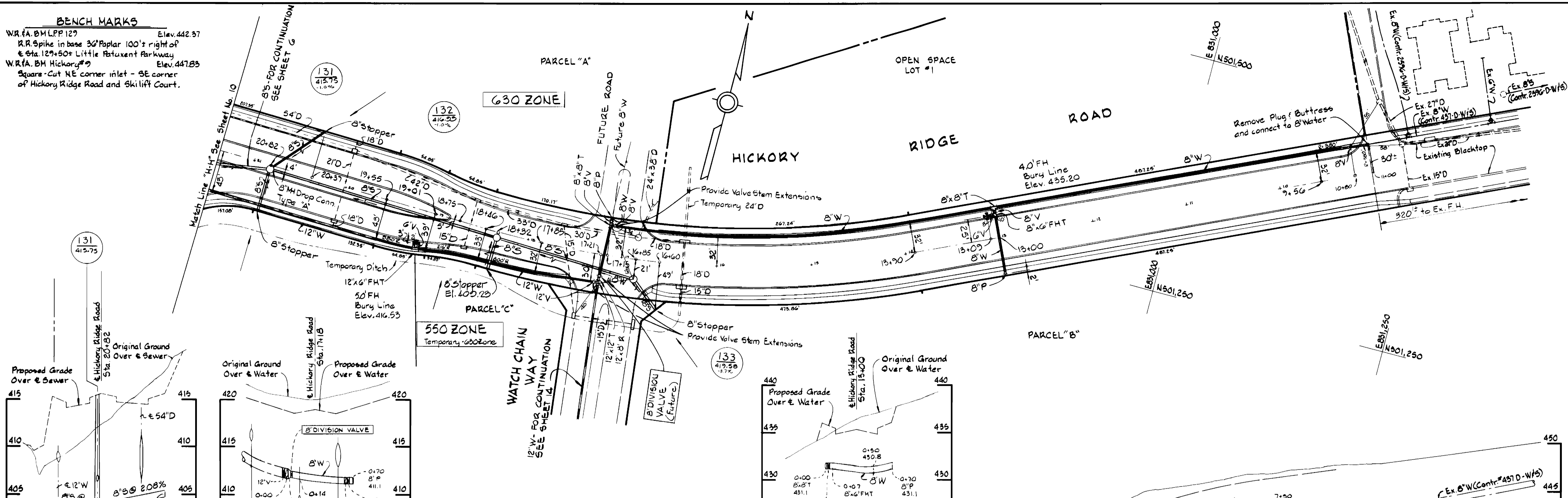
COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 3 AREA 1
ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1141-D

SCALE
AS
SHOWN
SHEET
10 OF 15

Phase I Part I
Outfall Sewer System
and Major Water Service

BENCH MARKS

W.R.A. B.M. LPP 129 Elev. 442.37
 W.R. Spike in base 36" Poplar 100' right of
 & Sta. 129+50+ Little Patuxent Parkway
 W.R.A. B.M. Hickory Elev. 447.83
 Square-Cut NE corner inlet - SE corner
 of Hickory Ridge Road and Skilift Court.



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James M. ...
 DIRECTOR OF PUBLIC WORKS - DATE

Robert M. ...
 CHIEF - BUREAU OF UTILITIES - DATE

William E. ...
 CHIEF - BUREAU OF ENGINEERING - DATE

William J. ...
 CHIEF - LAND DEVELOPMENT DIVISION - DATE

WHITMAN, REQUARDT
 AND ASSOCIATES
 ENGINEERS

2315 ST PAUL ST
 BALTIMORE, MARYLAND

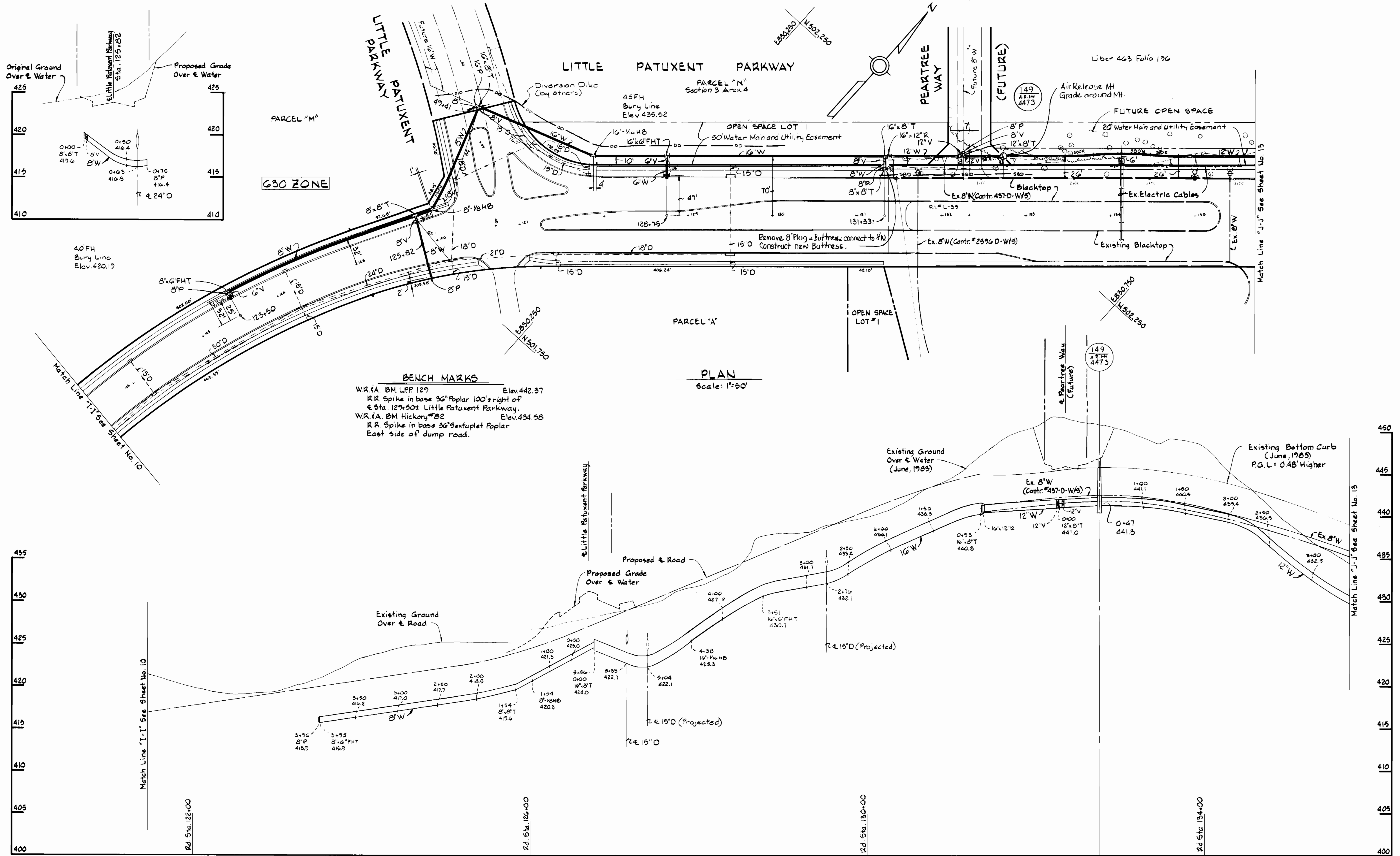
DES: S.J.					
DRN: J.R.K.					
CHK: R.B.N.					
DATE: 8/9/83					
BY: NO.					
REVISION	General Revisions				
DATE	8/30/83				

PLAN & PROFILE OF
 WATER & SEWER MAINS

COLUMBIA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 1
 ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-1141-D

SCALE
 AS
 SHOWN

SHEET
 11 OF 15



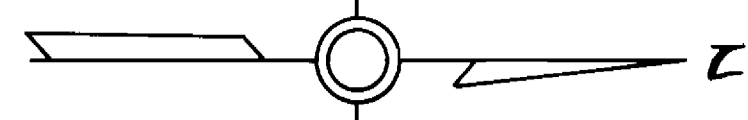
BENCH MARKS
 WR. f.A. BM LPP 129 Elev. 442.37
 R.R. Spike in base 36" Poplar 100' right of
 & Sta. 12+50.3 Little Patuxent Parkway.
 WR. f.A. BM Hickory #B2 Elev. 434.58
 R.R. Spike in base 36" Sextuplet Poplar
 East side of dump road.

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

Phase I Part I
 Outfall Sewer System
 and Major Water Service

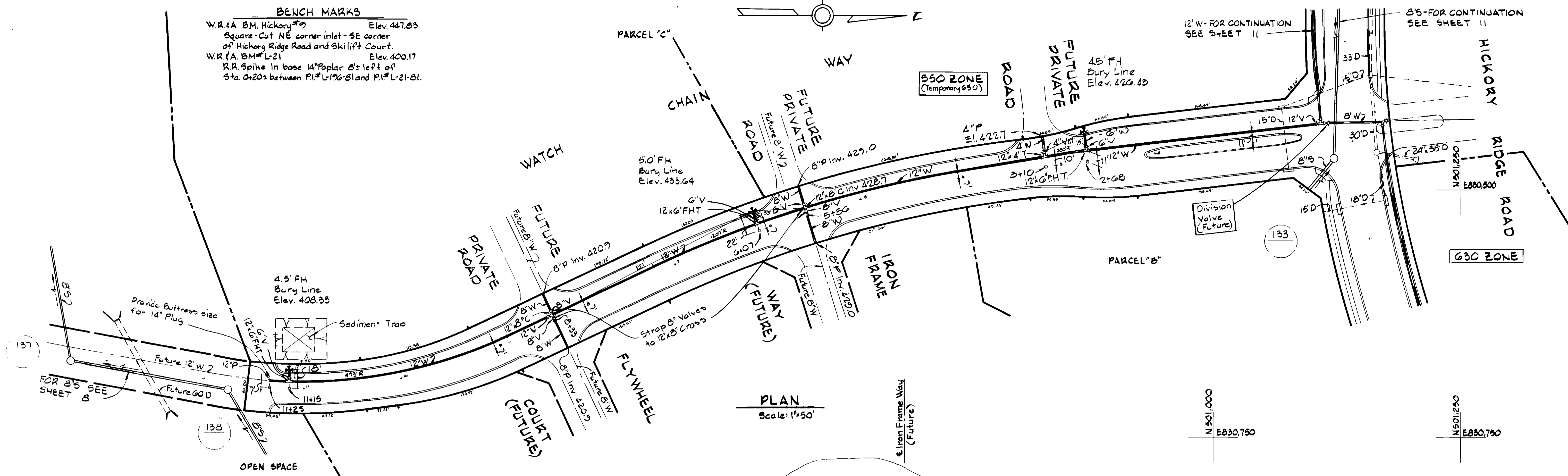
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director: James M. Lewis 8/10/83 Chief-Bureau of Public Works - DATE		WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS 2315 ST. PAUL ST. BALTIMORE, MARYLAND Chief: William B. Reardon 8-10-83 Chief-Bureau of Engineering - DATE		DES. S.J. DRN. J.R.K. CHK. A.B.N. DATE 8/3/83		PLAN & PROFILE OF WATER MAIN 600' SCALE MAP NO. 35 BLOCK NO.		COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 1 ELECTION DISTRICT NO. 5 CONTRACT NO. 34-1141-D AS BUILT, JULY 84 August 3, 1983		SCALE AS SHOWN SHEET 12 OF 15
--	--	---	--	--	--	--	--	---	--	---

BENCH MARKS
 W.R. & A. B.M. Hickory #9 Elev. 447.83
 Square - Cut NE corner inlet - SE corner of Hickory Ridge Road and Skiliff Court.
 W.R. & A. B.M. #L-21 Elev. 400.17
 R.R. Spike In base 14" Poplar 8' left of Sta. 0+20.2 between P.I. #L-19 & 81 and P.I. #L-21 & 81.

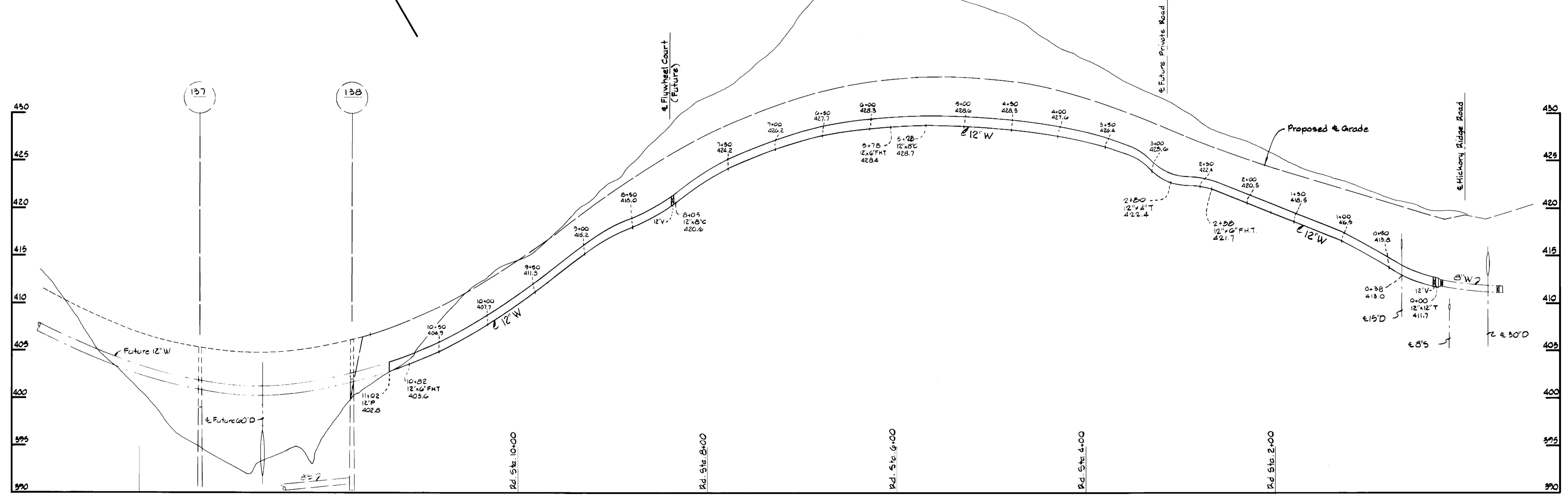


12" W - FOR CONTINUATION SEE SHEET 11

8" S - FOR CONTINUATION SEE SHEET 11



PLAN
 Scale: 1" = 50'



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

Phase I Part I
 Outfall Sewer System
 and Major Water Service

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

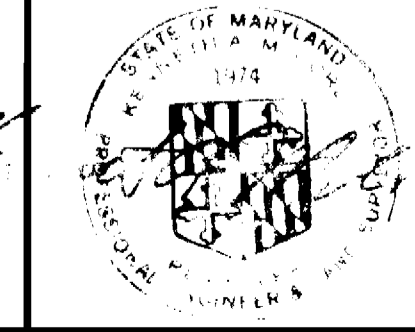
James M. ...
 DIRECTOR OF PUBLIC WORKS - DATE

Robert M. ...
 CHIEF - BUREAU OF UTILITIES - DATE

William B. ...
 CHIEF - BUREAU OF ENGINEERING - DATE

Walter P. ...
 CHIEF - LAND DEVELOPMENT DIVISION - DATE

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



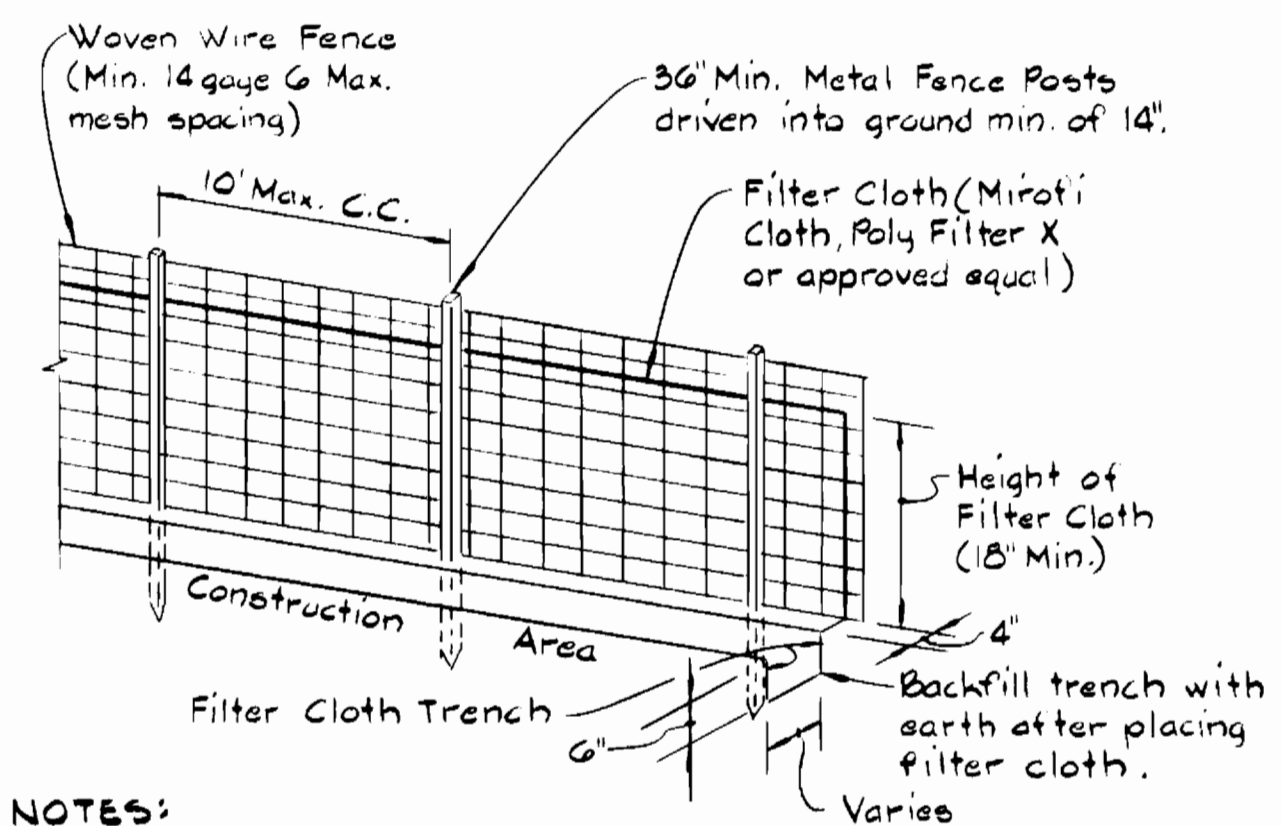
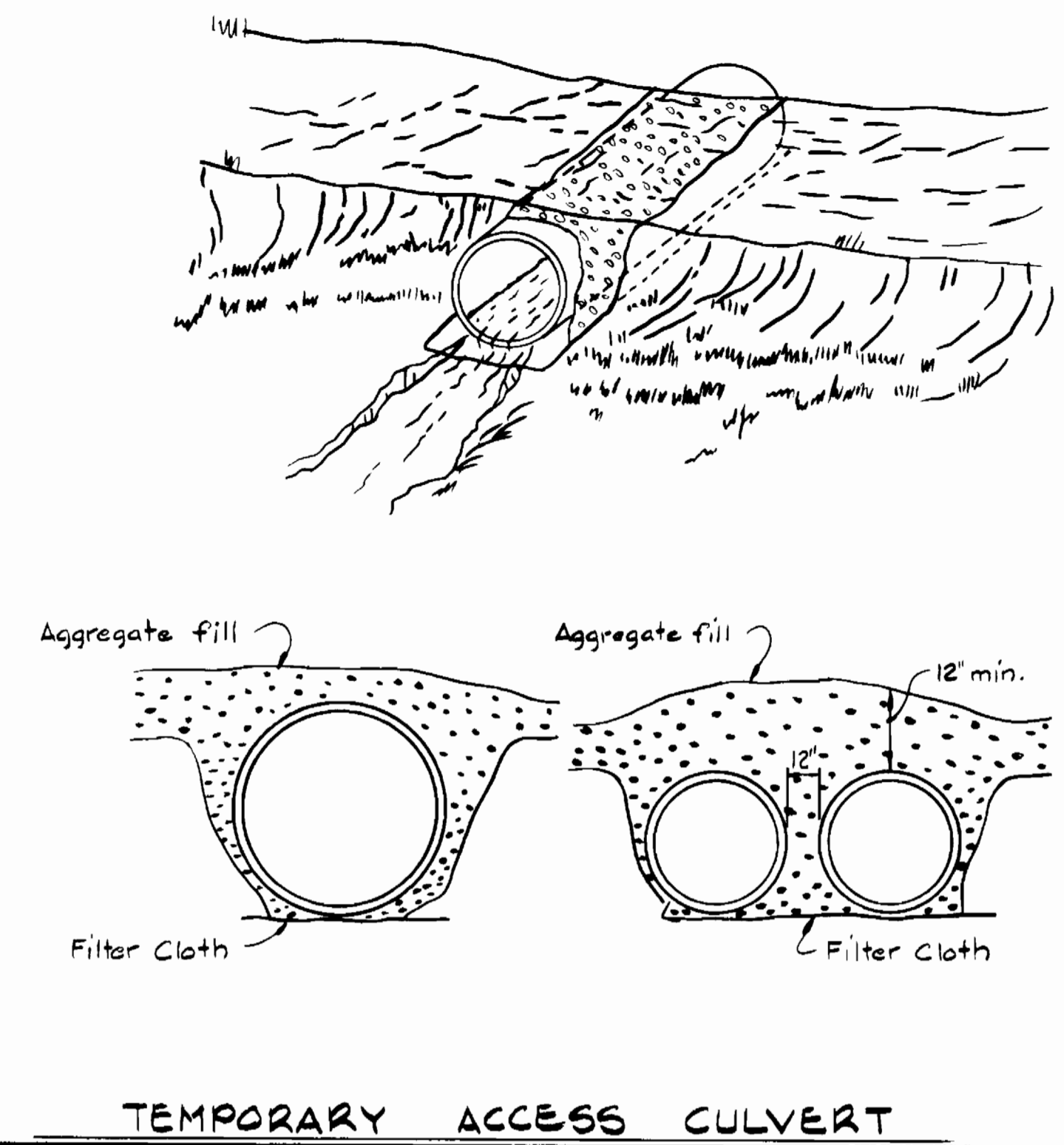
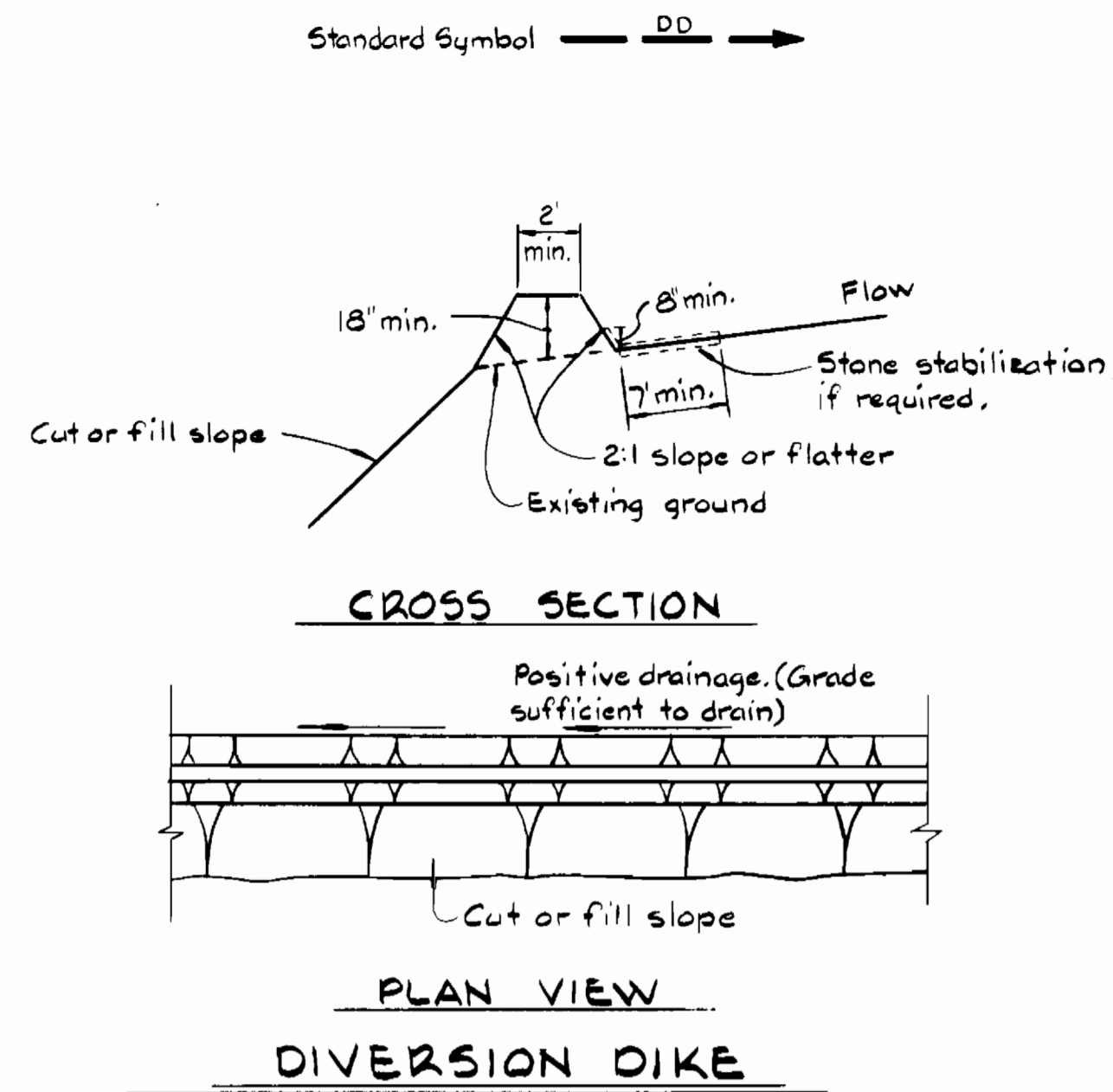
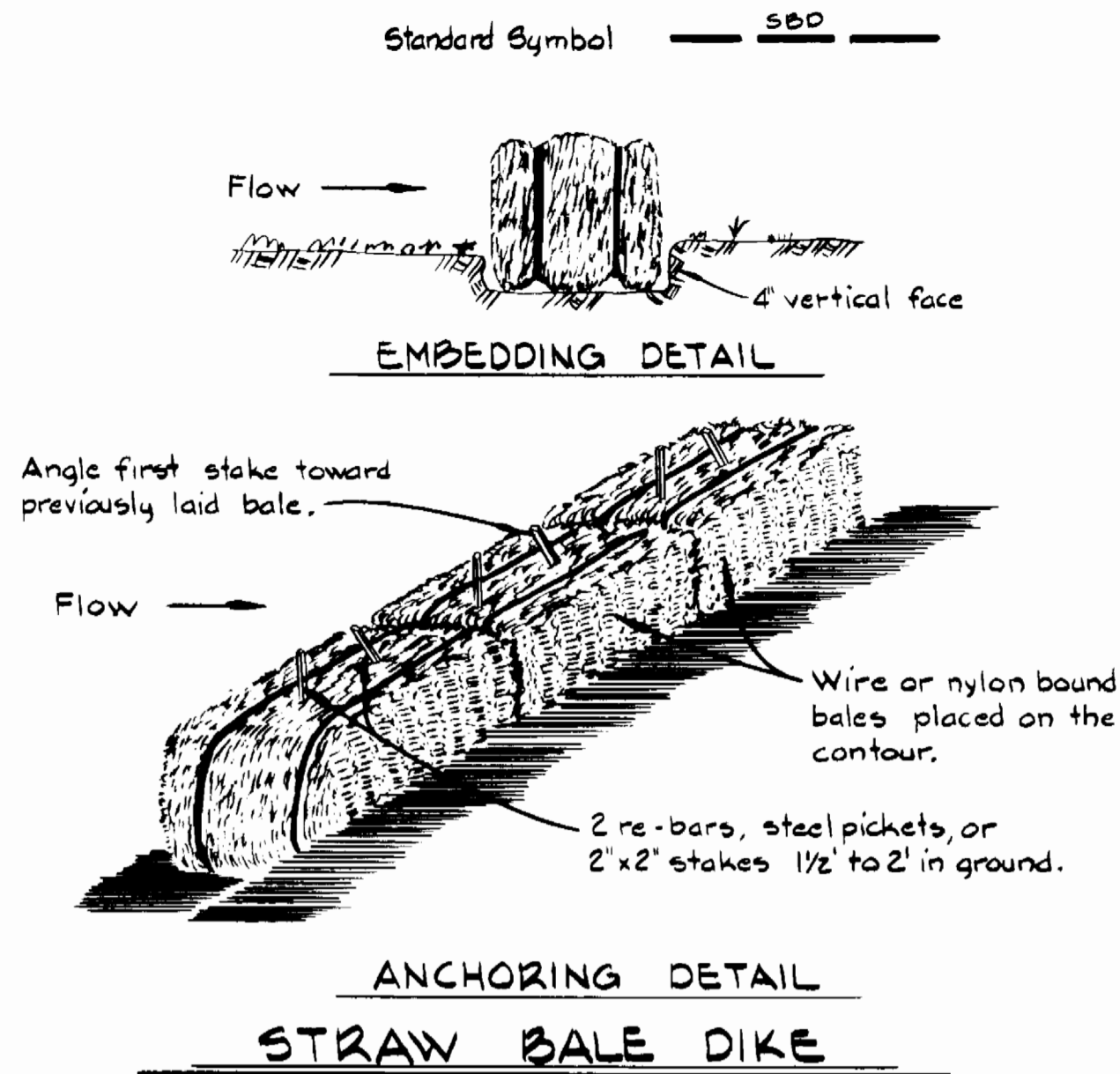
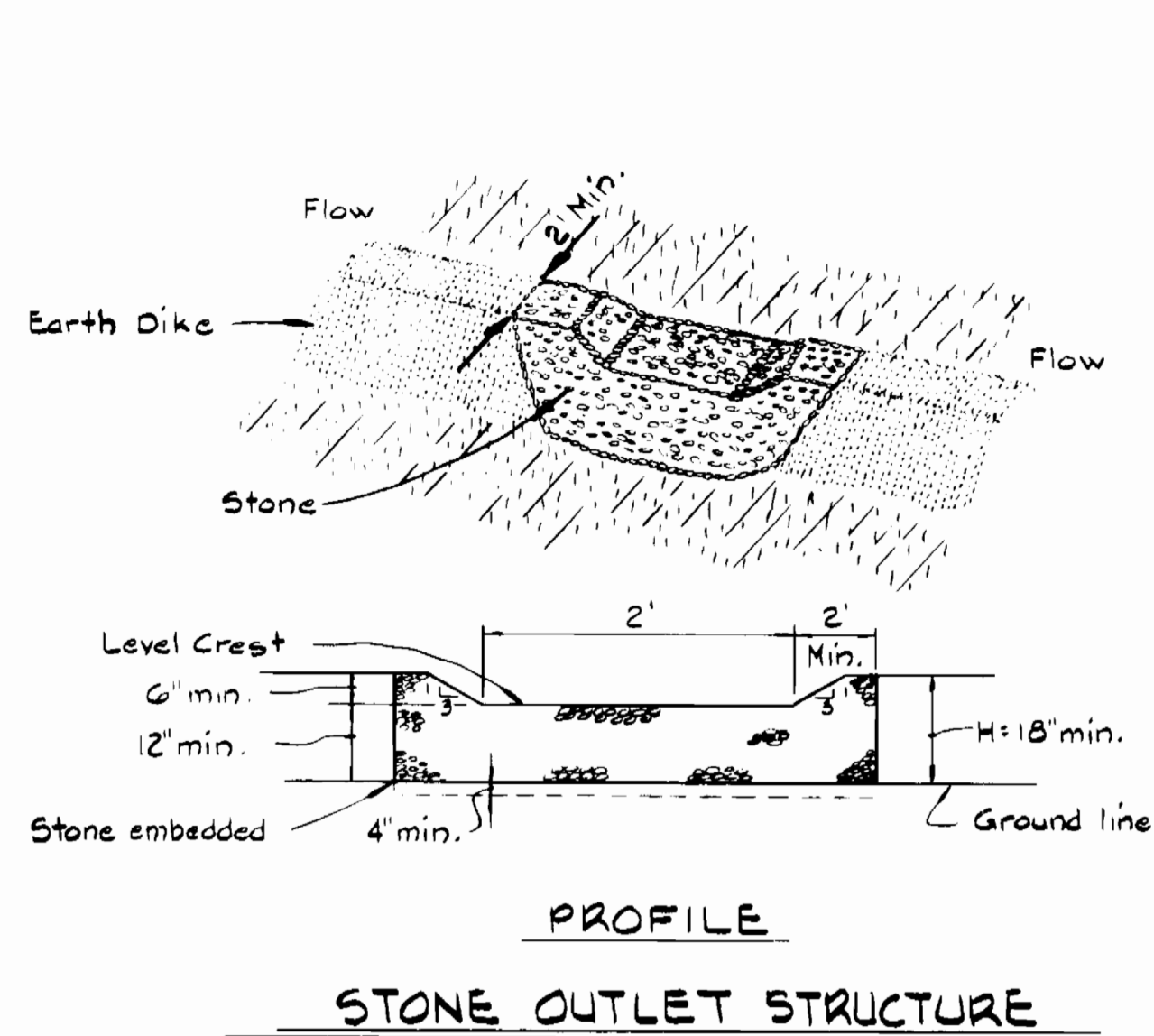
DES: G.J.	DRN: J.R.K.	CHK: R.B.N.	DATE: 8/3/83
REVISION: General Revisions DATE: 8/30/83			

PLAN & PROFILE OF WATER MAIN

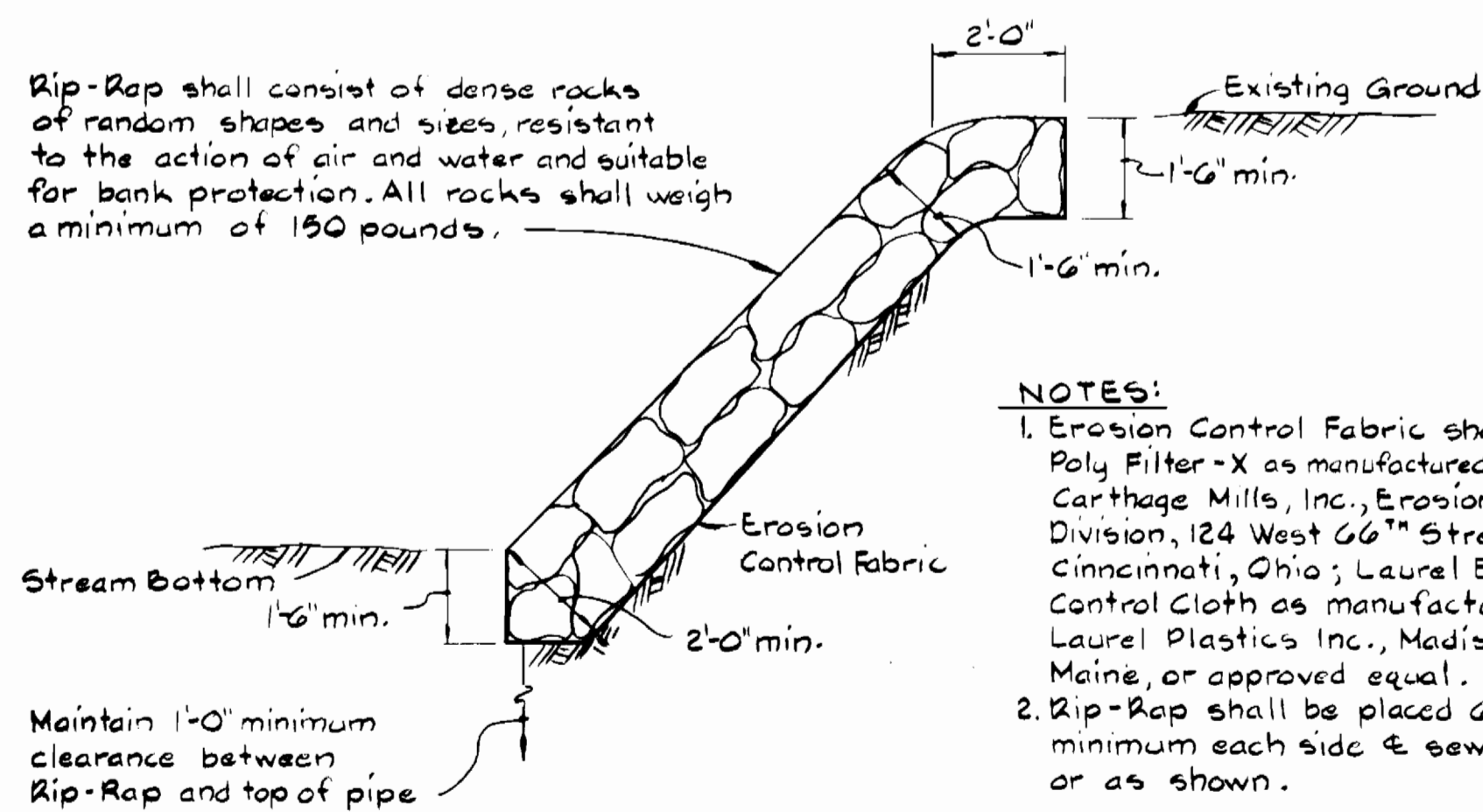
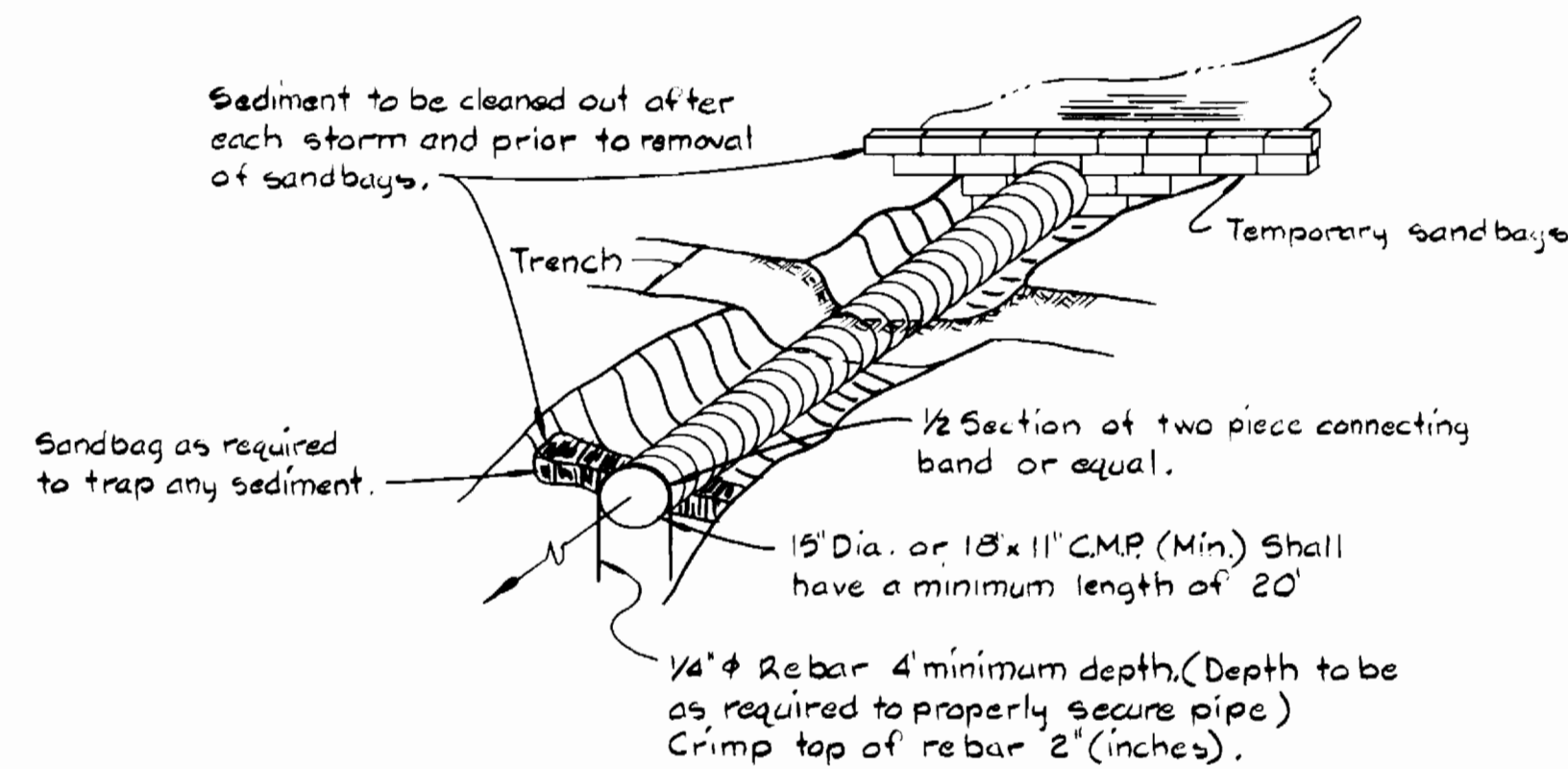
600' SCALE MAP NO. 35 BLOCK NO.

COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 1
 ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-1141-D

SCALE AS SHOWN
 SHEET 14 OF 15



SILT FENCE DETAIL



RIP-RAP DETAIL

Phase I Part I
Outfall Sewer System
and Major Water Service

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works - DATE Robert N. Runyon 8-10-83 Chief - Bureau of Utilities - DATE	WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS 2315 ST. PAUL ST. BALTIMORE, MARYLAND		DES. S.J.			SEDIMENT CONTROL DETAILS	COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA I ELECTION DISTRICT NO. 5 CONTRACT NO. 34-1141-D	SCALE AS SHOWN
			DRN. J.R.K.					DATE 8/8/83