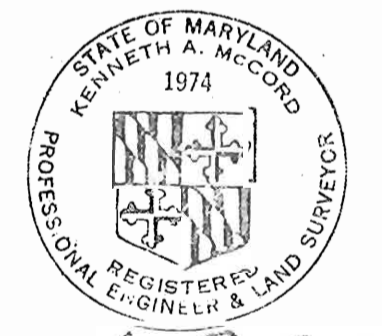


CONTRACT 186-S
SEWER MAIN EXTENSIONS
HOWARD COUNTY METROPOLITAN COMMISSION
ELLICOTT CITY, MARYLAND



Kenneth A. McCord

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION 9-25-68 <i>W.O. Falbert</i> <small>DATE CHAIRMAN</small>	CONTRACT NO. <u>186-S</u>	LOCATION MAP OF SEWER MAIN EXTENSIONS	ELLICOTT CITY FONT HILL MANOR, GLEN BROOK, OAK LEA ELECTION DISTRICT-ELLICOTT CITY No. 2	DRAWING NO. <u>1</u> OF <u>12</u>	SCALE AS SHOWN
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Contract # 186 S

W. O. 5839-2

AS BUILT Dec. 2, 1969

WS 186-S/1

BALTIMORE

NATIONAL

PIKE

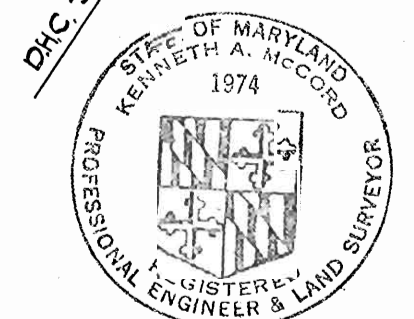
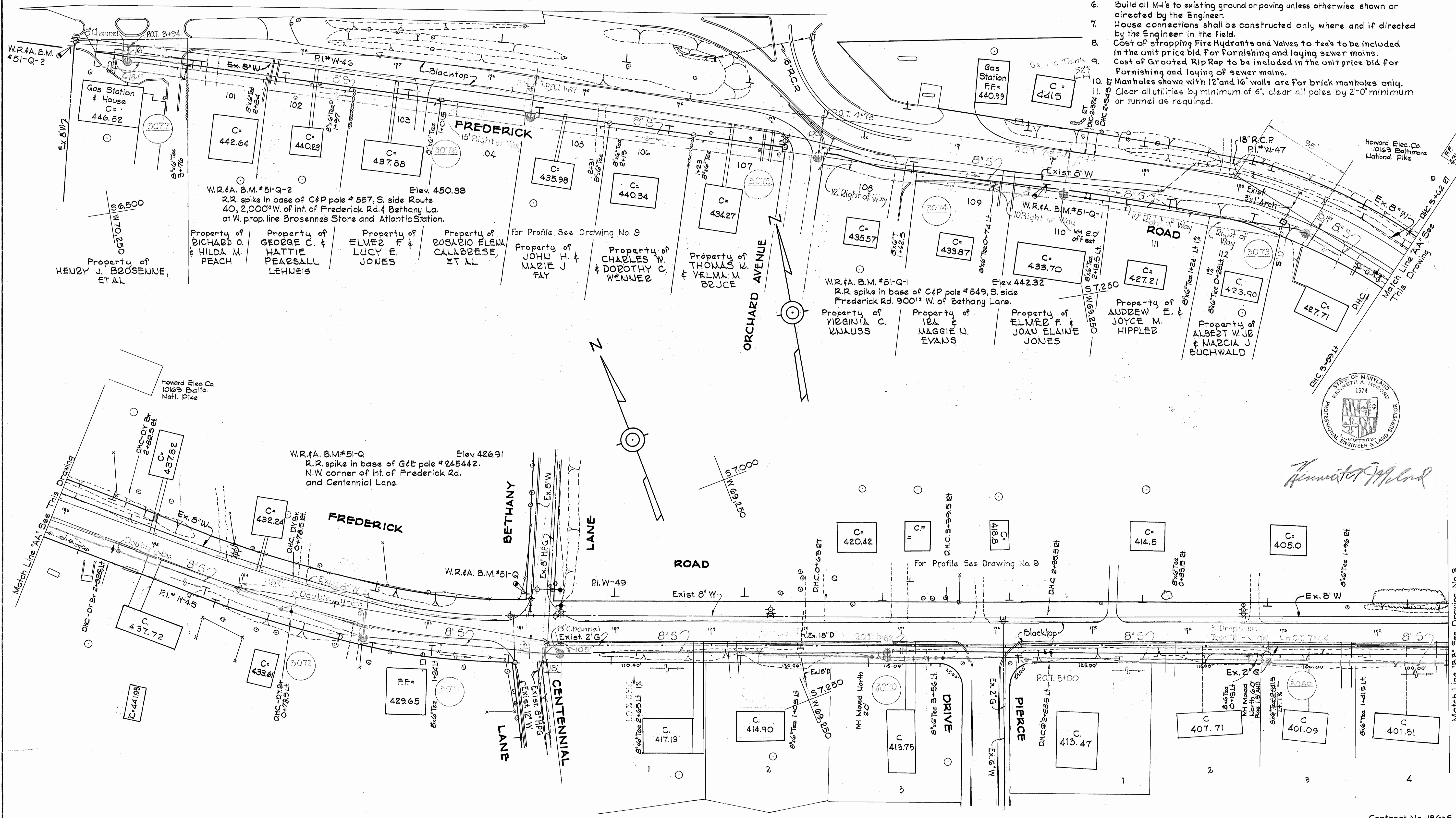
U.S.

ROUTE

40

GENERAL NOTES

1. The Contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole walls. Elevations are based upon Howard County datum. Coordinate values shown are in the Howard County Grid system, unless otherwise noted.
2. Approximate locations of existing mains are shown. The Contractor shall take all necessary precautions to protect the existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately.
3. All pipe elevations shown are invert elevations.
4. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
5. For all standard details, see Standards bound in Specifications.
6. All sewers shall be V.C.P.X., C.S.P.X., or Asbestos Cement Class 2400 unless otherwise noted.
7. Build all M's to existing ground or paving unless otherwise shown or directed by the Engineer.
8. House connections shall be constructed only where and if directed by the Engineer in the field.
9. Cost of strapping Fire Hydrants and Valves to tees to be included in the unit price bid. For furnishing and laying sewer mains.
10. Cost of Grooted Rip Rap to be included in the unit price bid for furnishing and laying of sewer mains.
11. Manholes shown with 12" and 16" walls are for brick manholes only. Clear all utilities by minimum of 6', clear all poles by 2'-0" minimum or tunnel as required.



Kenneth A. Wood

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION 9-25-68 <i>W.O. Paul</i> DATE CHIEF ENGINEER	CONTRACT NO. 186-S	PLAN OF SEWER MAINS	ELLICOTT CITY FONT HILL MANOR, GLEN BROOK, OAK LEA ELECTION DISTRICT-ELLICOTT CITY No. 2	DRAWING NO. 2 OF 12 SCALE 1"=50' 75W48,85W47,85W46
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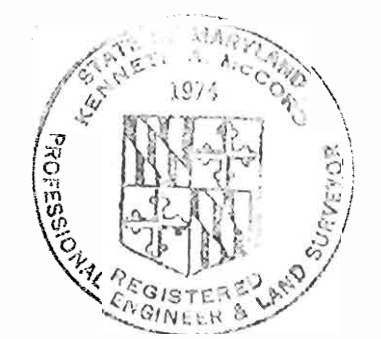
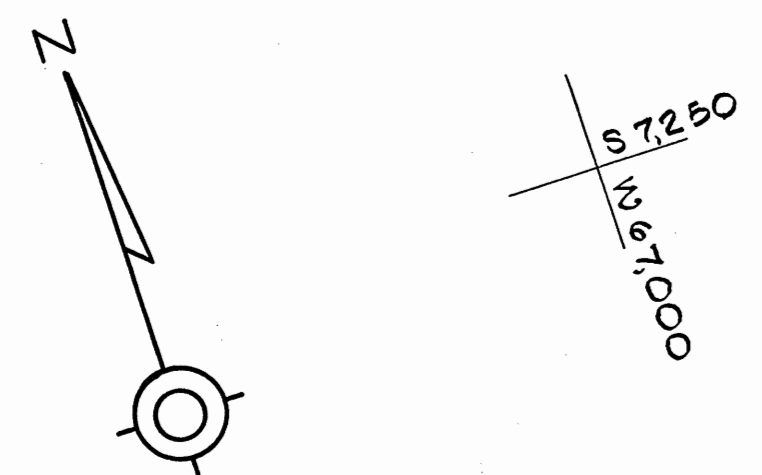
W. O. 5839-2

AS BUILT Dec. 2, 1969

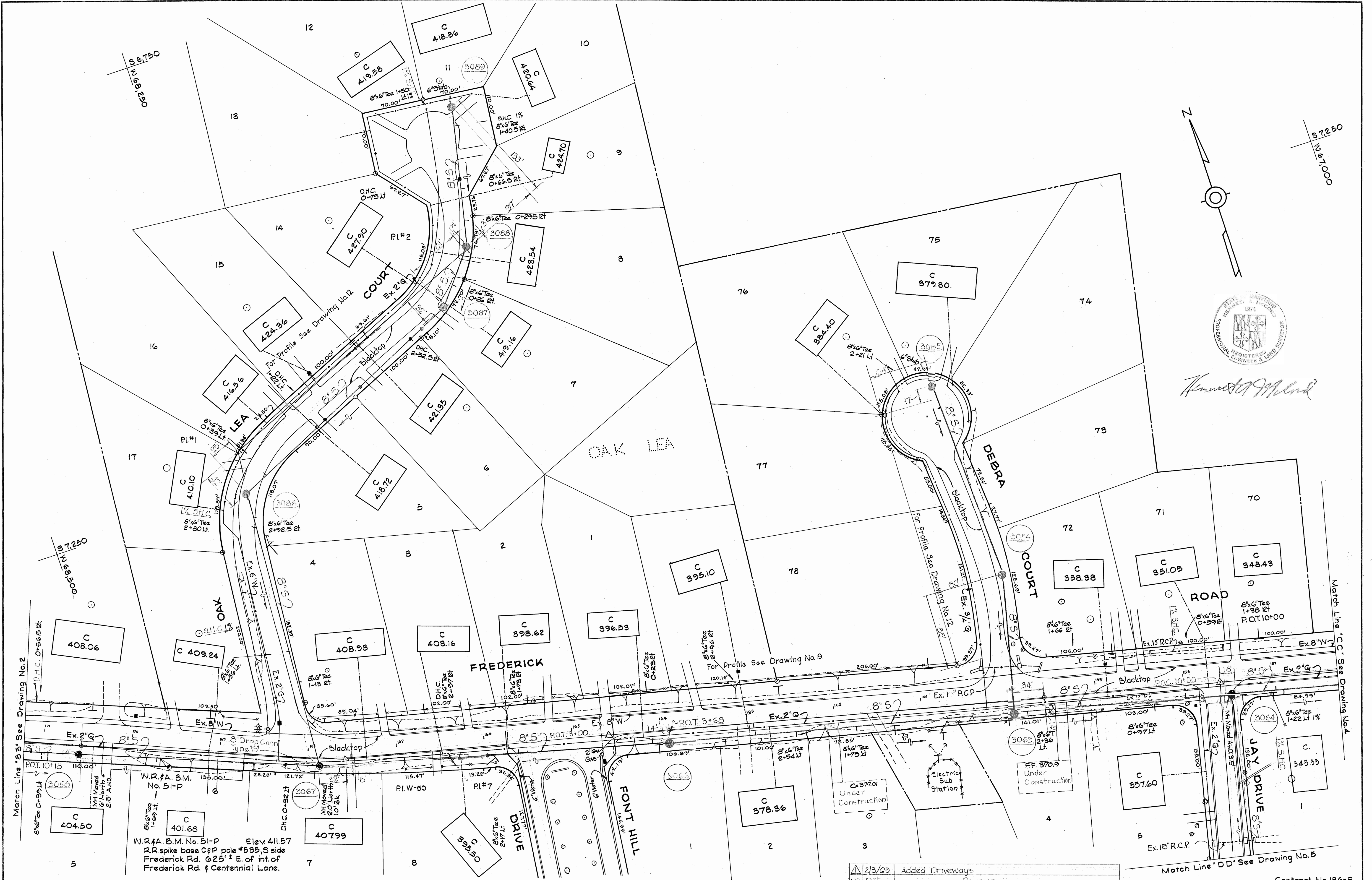
F.B. 2162

186-S/2

WS



Kenneth J. Milrod



W.R.# A.B.M. No. 51-P Elev. 411.57
R.R. spike base C&P pole #535, S side
Frederick Rd. 625' ± E. of int. of
Frederick Rd. & Centennial Lane.

2/13/69	Added Driveways
	Revision

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
9-25-68 *W O Falter*
DATE CHIEF ENGINEER

CONTRACT NO. 186-S

PLAN OF
SEWER MAINS

ELLICOTT CITY
FONT HILL MANOR, GLEN BROOK, OAK LEA
ELECTION DISTRICT ELLICOTT CITY No. 2

DRAWING
NO. 3
OF 12

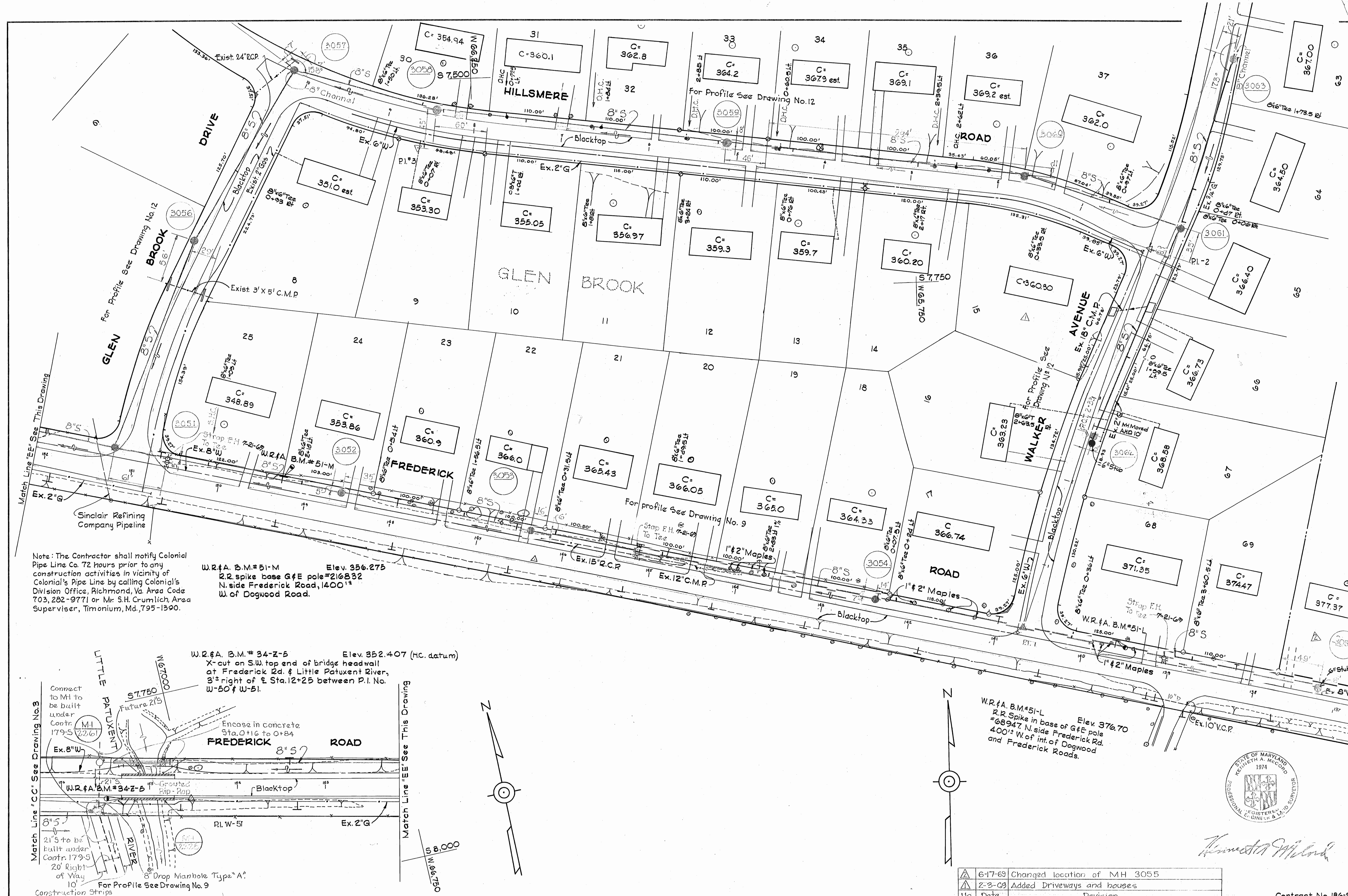
SCALE
1"=50'

W. O. 5839-2

AS BUILT Dec. 2, 1969

73W46, 83W46
83W45, 93W45
T3, 3396, 4088
1960, 2360, 4016

WS 186-S/3

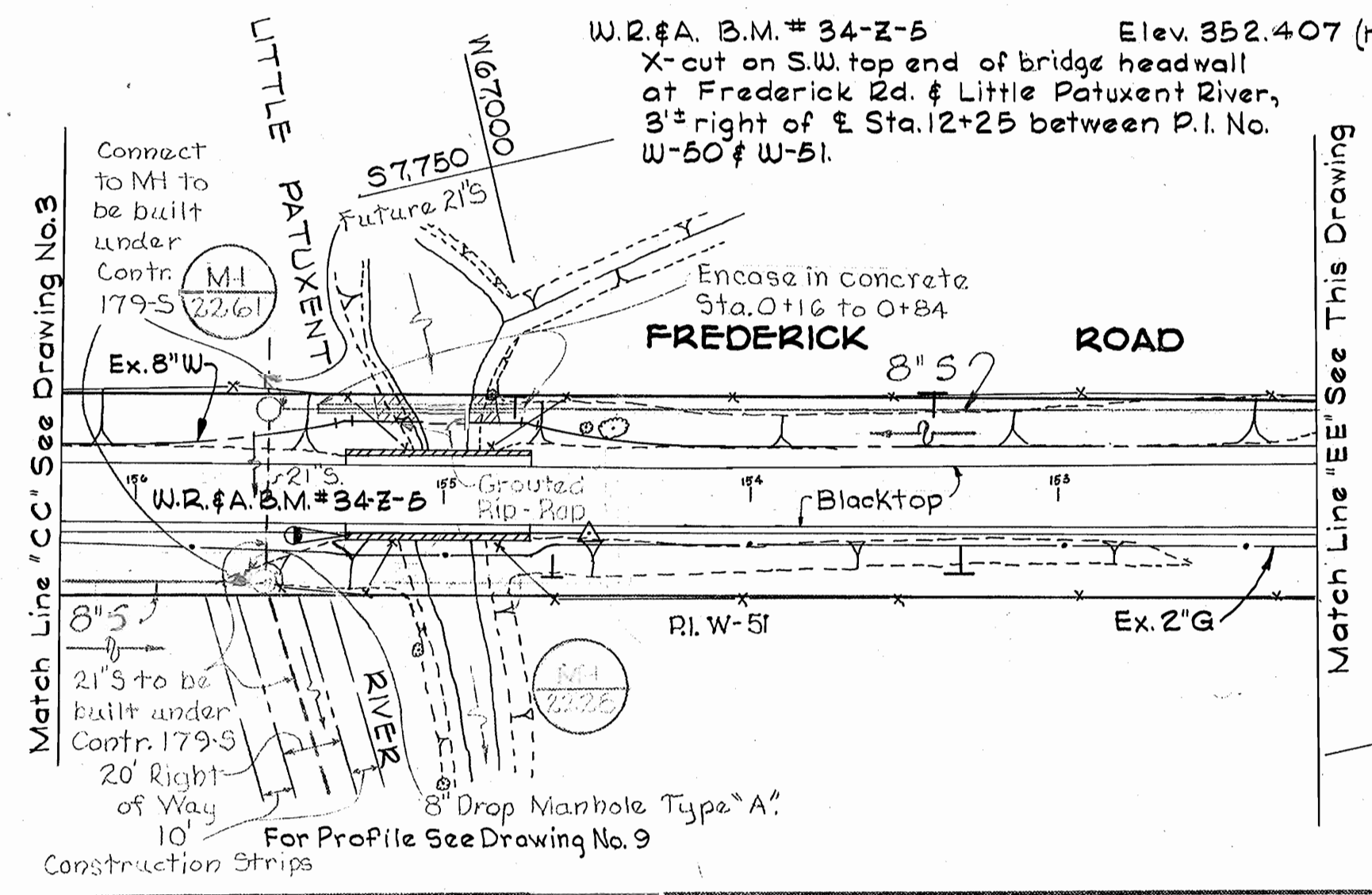


Note: The Contractor shall notify Colonial Pipe Line Co. 72 hours prior to any construction activities in vicinity of Colonial's Pipe Line by calling Colonial's Division Office, Richmond, Va. Area Code 703, 282-9771 or Mr. S.H. Crumlich, Area Supervisor, Timonium, Md., 795-1390.

W.R. & A. B.M.#51-M Elev. 356.275
 2.2 spike base of E pole #216832
 N. side Frederick Road, 1400'±
 W. of Dogwood Road.

W.R. & A. B.M.#34-Z-5 Elev. 352.407 (M.C. datum)
 X-cut on S.W. top end of bridge headwall at Frederick Rd. & Little Patuxent River, 3'± right of E. Sta. 12+25 between P.I. No. W-50 & W-51.

W.R. & A. B.M.#51-L Elev. 376.70
 R.R. Spike in base of G&E pole #68947 N. side Frederick Rd. 400'± W. of int. of Dogwood and Frederick Roads.



6-17-69	Changed location of MH 3055
2-3-69	Added Driveways and houses
11a	Date Revision



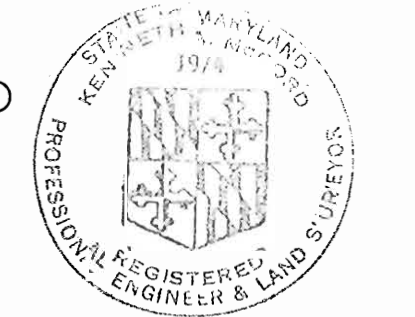
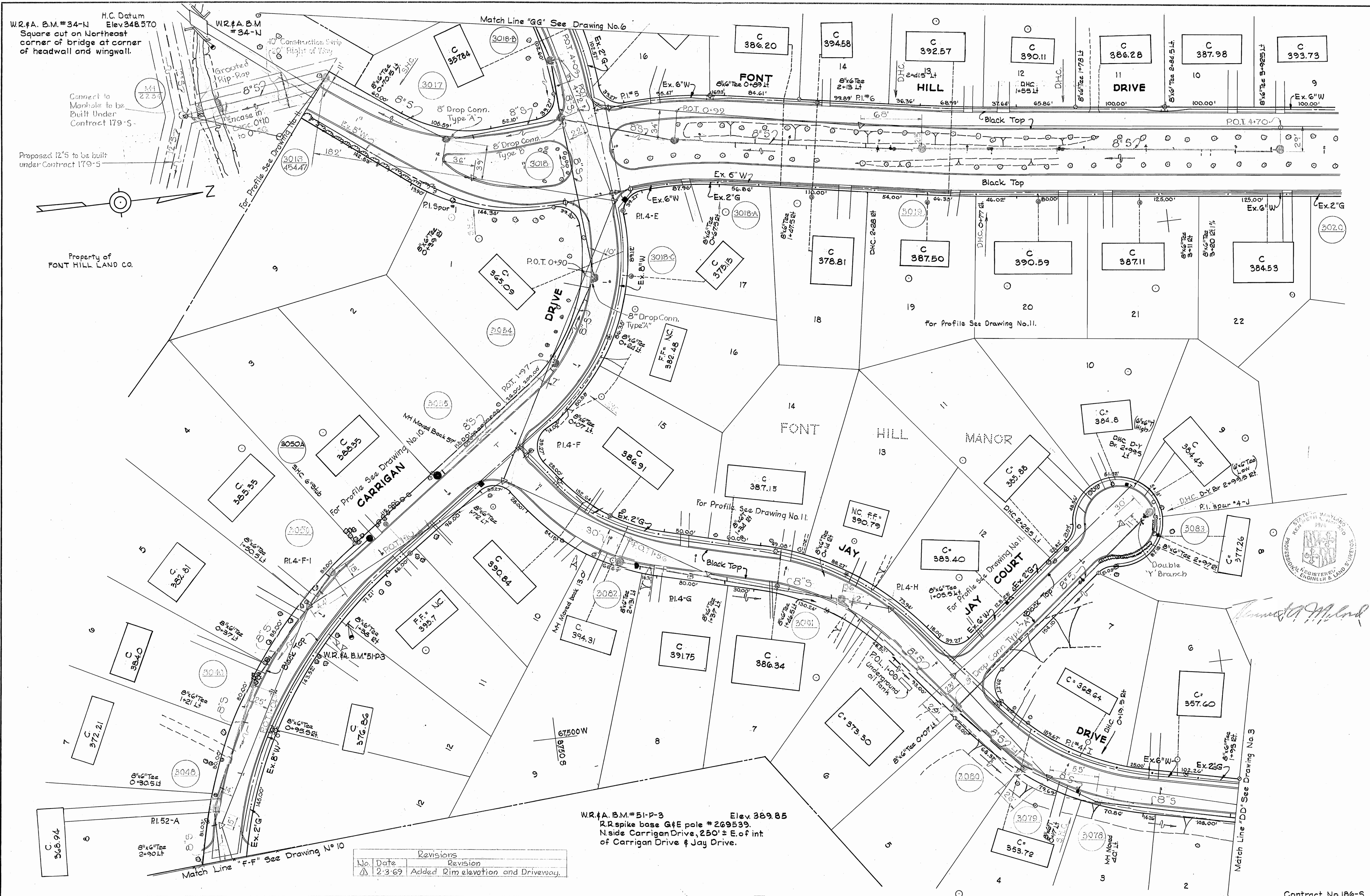
Kenneth A. McCord

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION 9-25-68 W. O. Falter CHIEF ENGINEER	CONTRACT NO. 186-S	PLAN OF SEWER MAINS	ELLICOTT CITY FONT HILL MANOR, GLEN BROOK, OAK LEA ELECTION DISTRICT-ELLICOTT CITY No. 2	DRAWING NO. 4	SCALE 1"=50'
					OF 12	85N44, 93N44 85W25, 85N46

W. O. 5839-2

Dec. 2, 1969 AS BUILT FB 3747, 1560

WS 186-S/4



Thomas J. M. [Signature]

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
9-25-68 *W. O. Palub*
DATE CHIEF ENGINEER

CONTRACT NO. 186-S

PLAN OF
SEWER MAINS

ELLICOTT CITY
FONT HILL MANOR, GLEN BROOK, OAK LEA
ELECTION DISTRICT-ELLICOTT CITY No. 2

DRAWING NO. 5 OF 12
SCALE 1"=50'

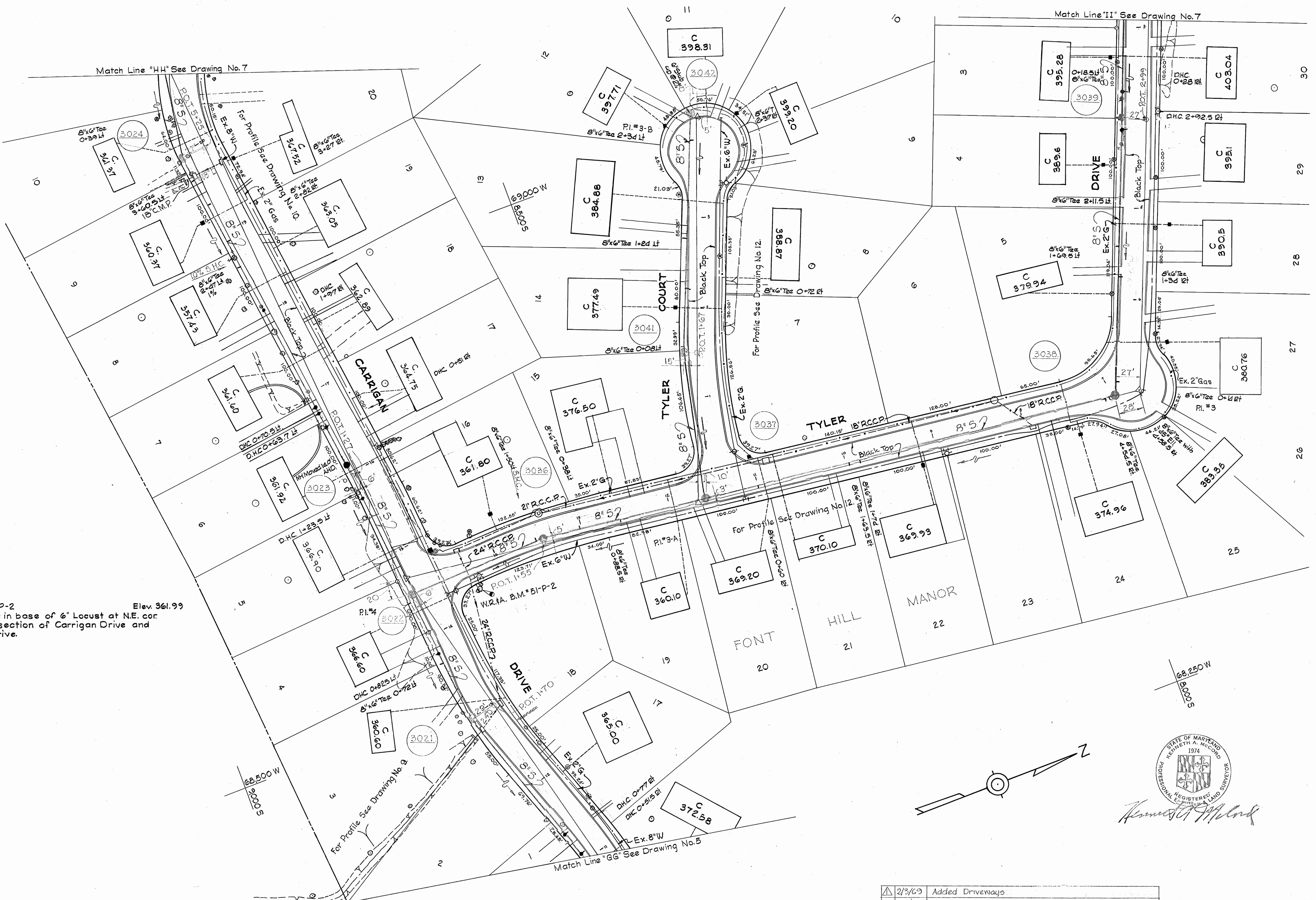
Contract No. 186-S

W. O. 5839-2

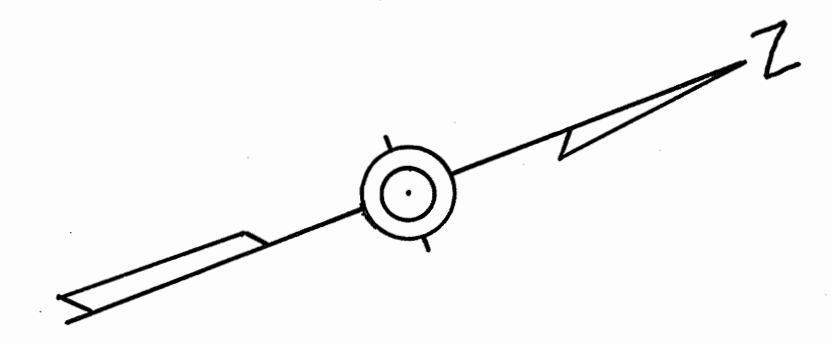
AS BUILT DEC 2, 1969

F.B. 2161, 2360, 4610
2357, 3571

WS 186-S/5



W.R.#A.#51-P-2 Elev. 361.99
 R.R. spike in base of 6" Locust at N.E. cor.
 of intersection of Carrigan Drive and
 Tyler Drive.



Kenneth A. McCord

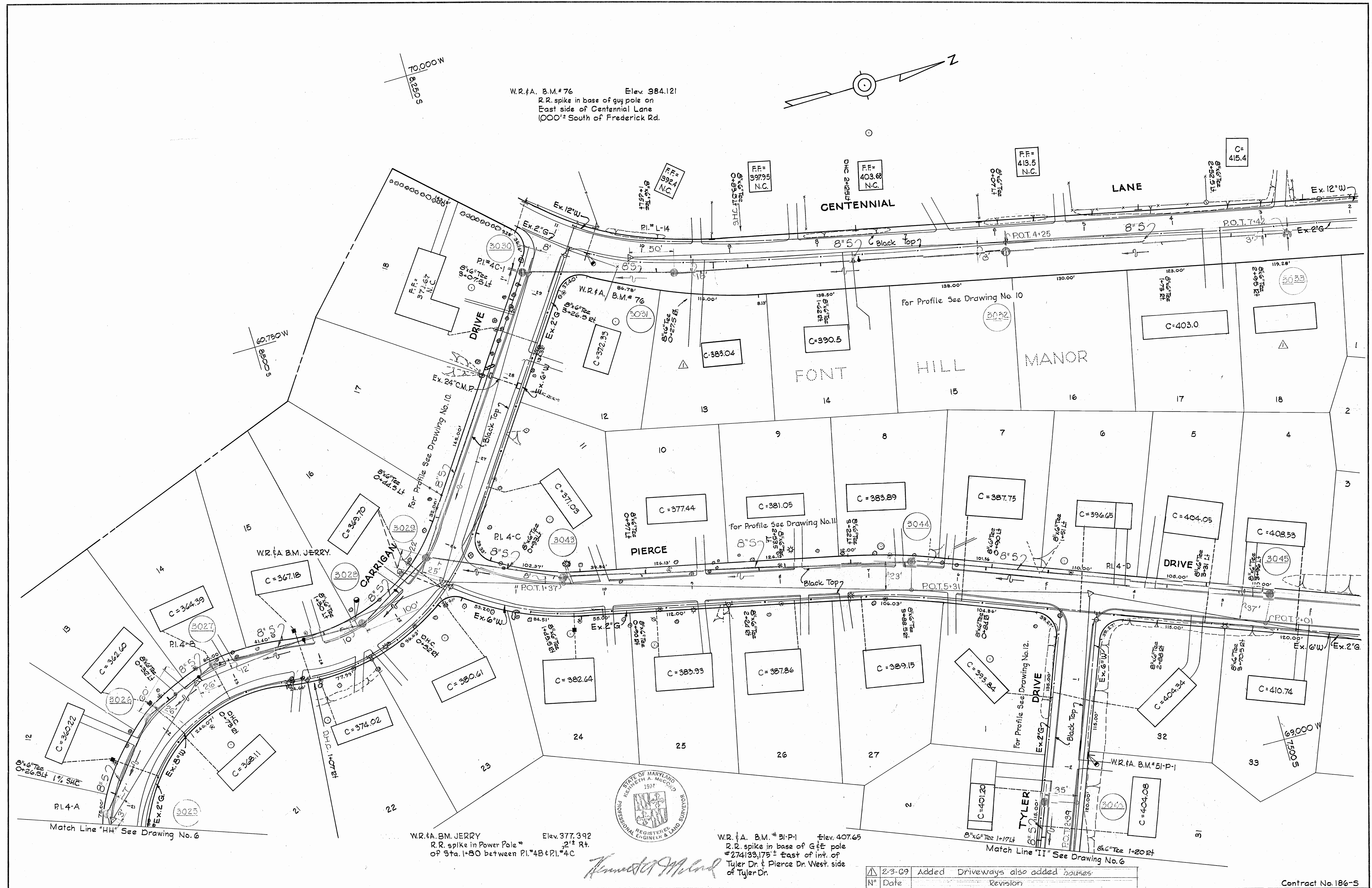
2/3/69	Added Driveways	
No. Date	Revision	
Contract No. 186-S		
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND		HOWARD COUNTY METROPOLITAN COMMISSION 9-25-68 <i>W O Falarak</i> DATE CHIEF ENGINEER
CONTRACT NO. 186-S		PLAN OF SEWER MAINS
ELLICOTT CITY FONT HILL MANOR, GLEN BROOK, OAK LEA ELECTION DISTRICT-ELLICOTT CITY No. 2		DRAWING NO. 6 OF 12
SCALE 1"=50'		85W46,95N46

W. O. 5839-2

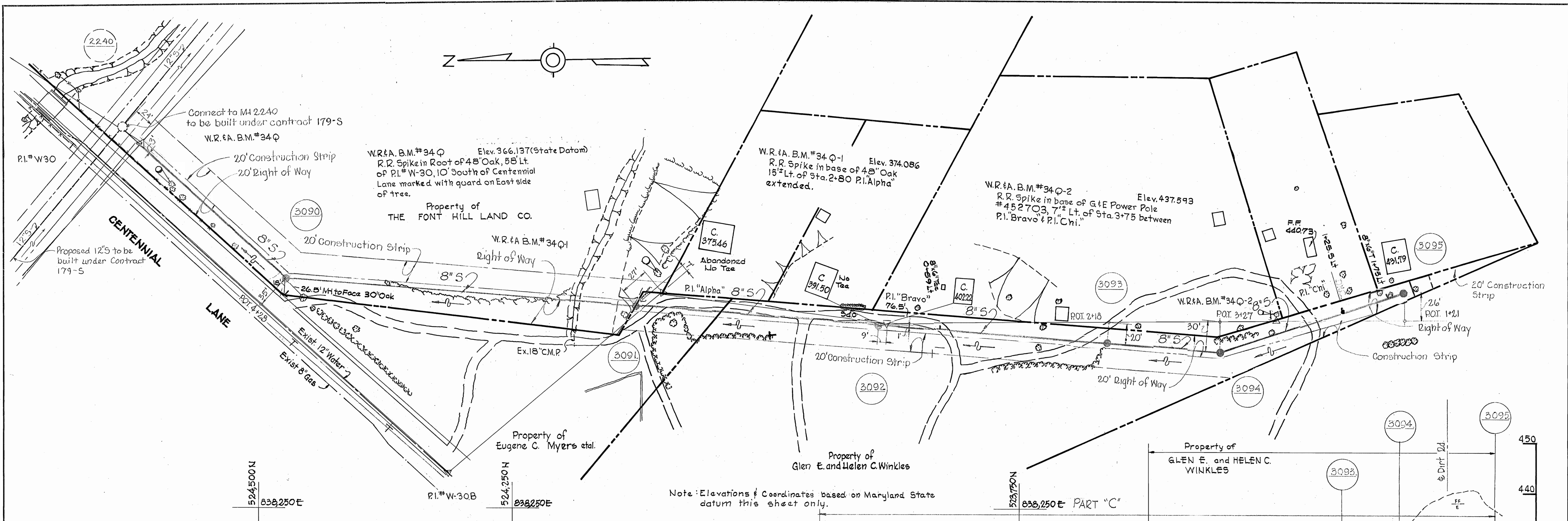
AS BUILT Dec. 2, 1969 FB. 2360, 4610

WS 186-S/6

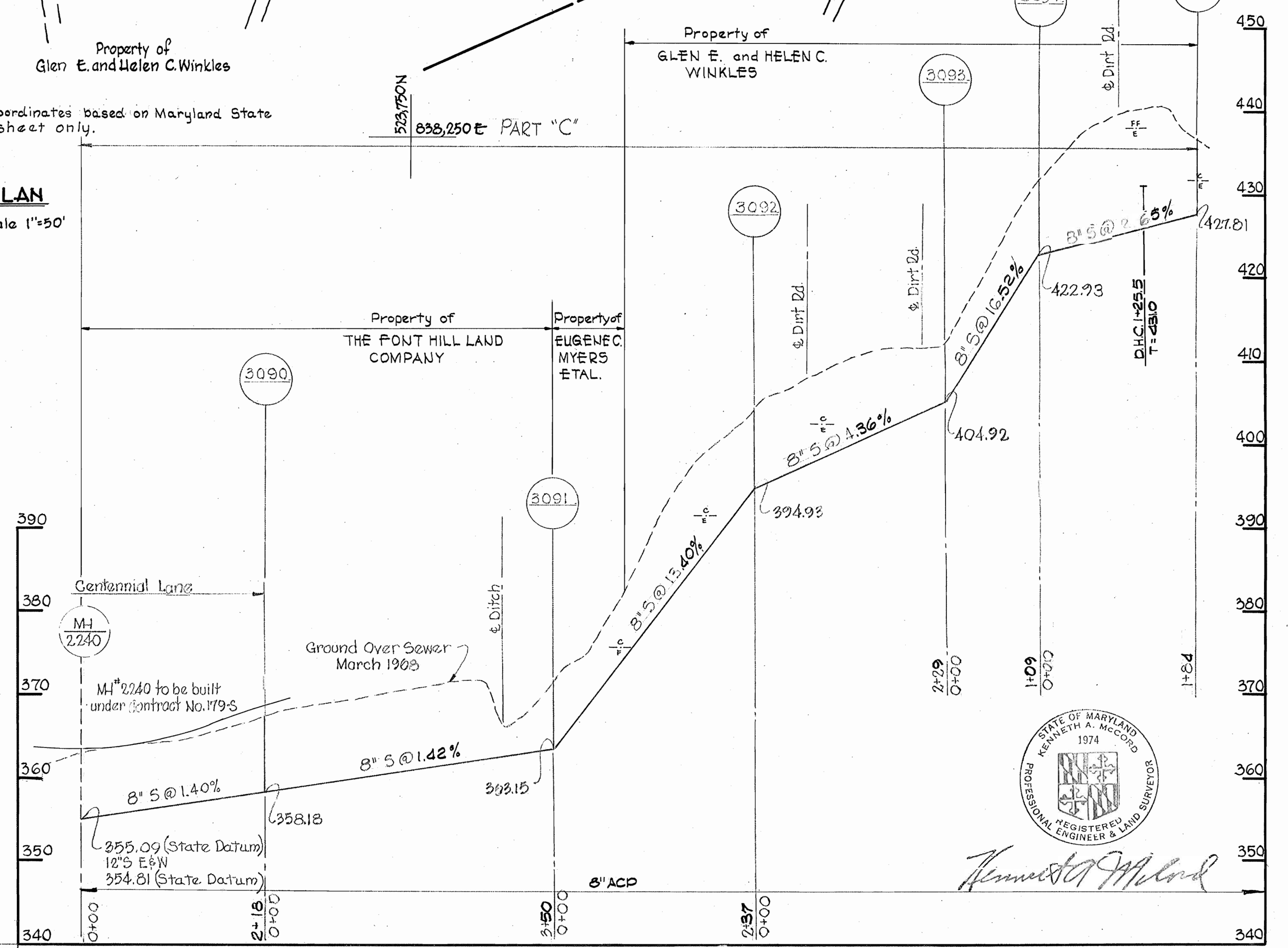
186-S/7
WS



WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION <i>6-25-68</i> <i>W O Falbot</i> DATE CHIEF ENGINEER	CONTRACT NO. 186-S	PLAN OF SEWER MAINS	ELLICOTT CITY FONT HILL MANOR, GLEN BROOK, OAK LEA ELECTION DISTRICT-ELLICOTT CITY No. 2	DRAWING NO. 7 OF 12	SCALE 1"=50' Contract No. 186-S
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PLAN
Scale 1"=50'



PROFILE Scale: H: 1"=100' V: 1"=10'

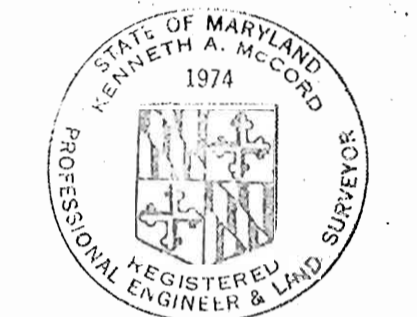
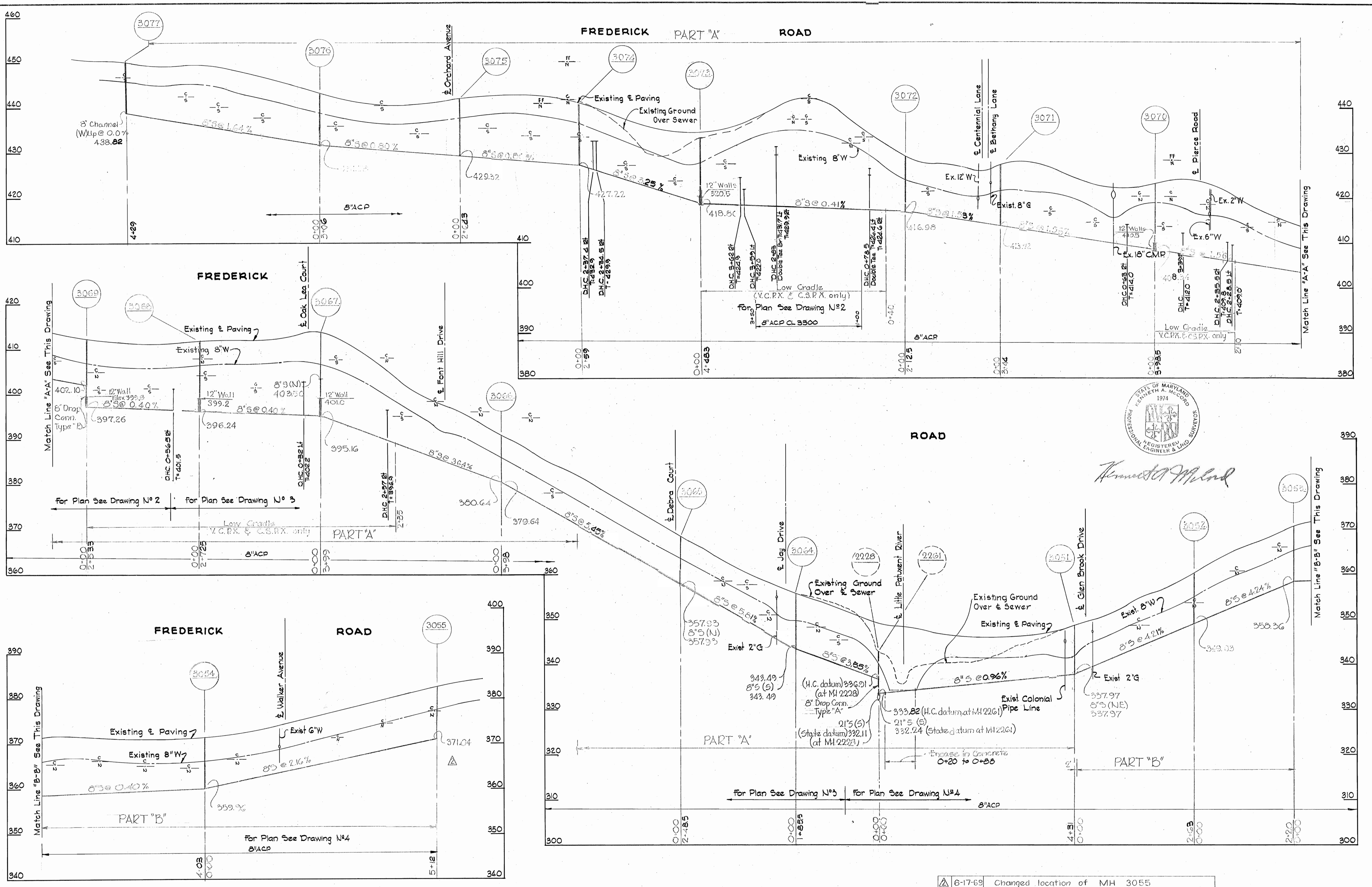
2-3-69	Classified sewer main.
N ^o	Date
	Revision

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION 9-25-68 DATE	CONTRACT NO. 186-S	PLAN AND PROFILES OF SEWER MAINS	ELLICOTT CITY FONT HILL MANOR, GLEN BROOK, OAK LEA ELECTION DISTRICT ELLICOTT CITY No. 2	DRAWING NO. 8 OF 12	SCALE AS SHOWN
					Contract # 186-S	

W. O. 5829-2

AS BUILT Dec. 2, 1969 FB. 4088

8/S-981 SM



Kenneth A. McLeod

△ 6-17-69	Changed location of MH 3055
△ 2-3-69	Classified sewer main.
No. Date	Revision

Contract #186-5

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
DATE 9-25-68 *W O Fabert*
CHIEF ENGINEER

CONTRACT NO. 186-S

PROFILES OF
SEWER MAINS

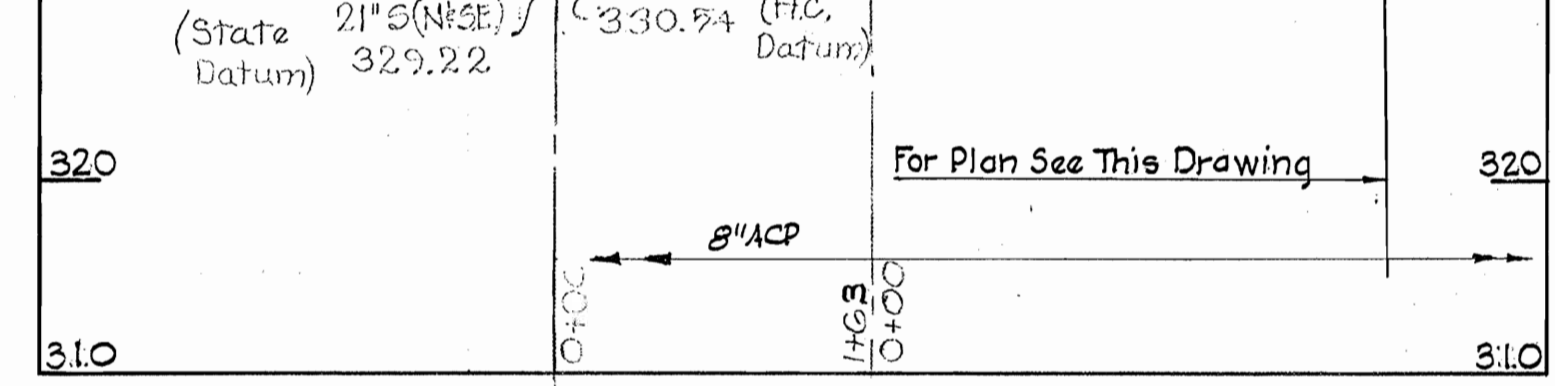
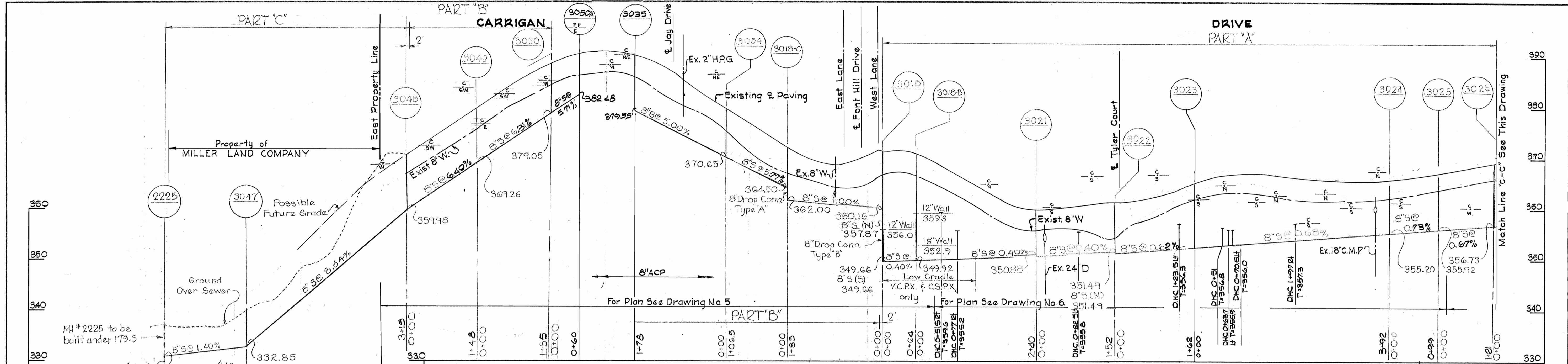
ELLCOTT CITY
FONT HILL MANOR, GLEN BROOK, OAK LEA
ELECTION DISTRICT-ELLCOTT CITY No. 2

DRAWING NO. 9
OF 12
SCALE H: 1"=100'
V: 1"=10'

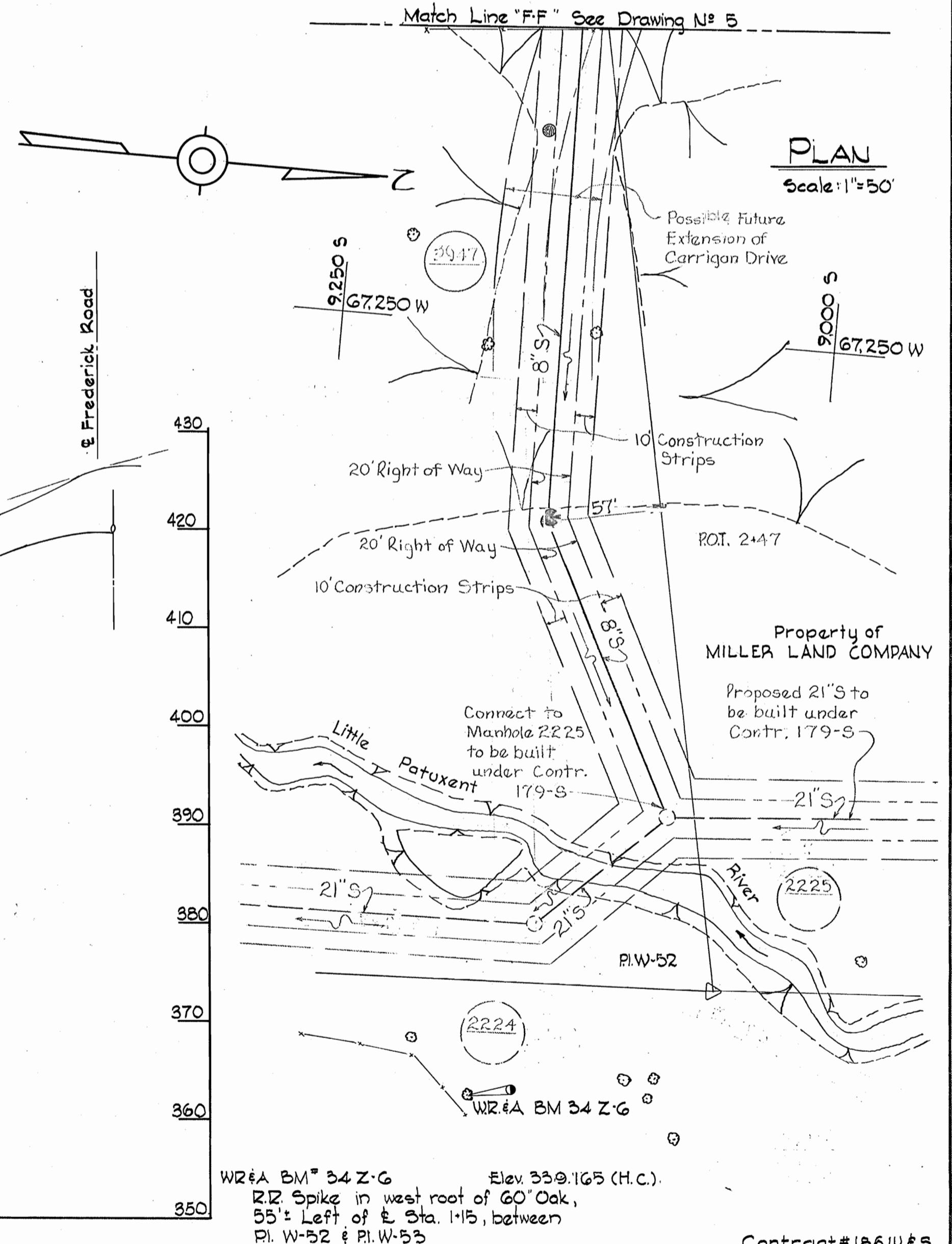
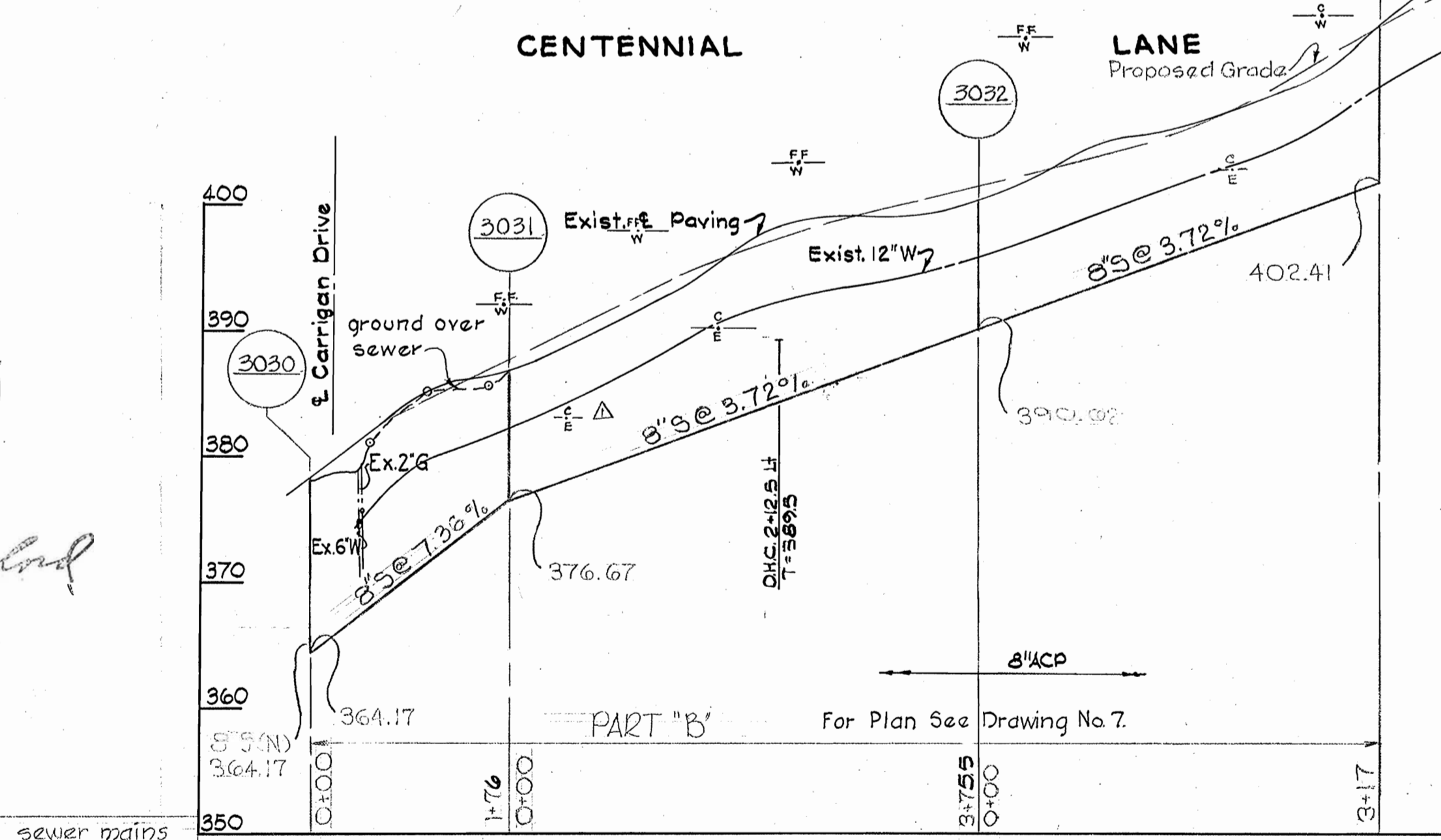
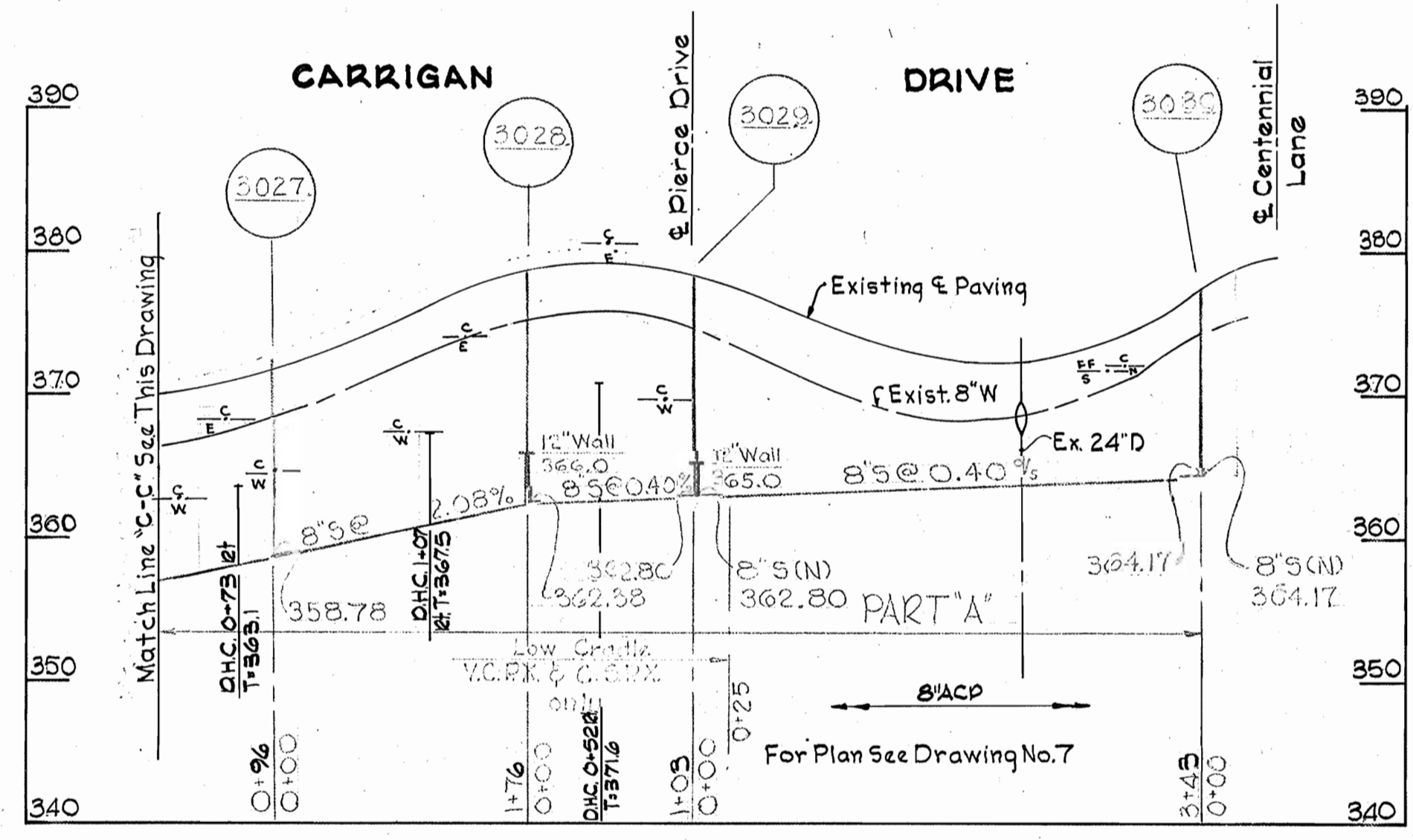
W. O. 5839-2

AS BUILT Dec. 2, 1969

WS 186-S/9



PROFILE
Scale: H=1"=10'
V=1"=100'



PLAN
Scale: 1"=50'



Kenneth A. McCord

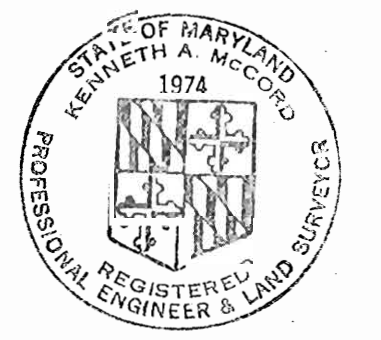
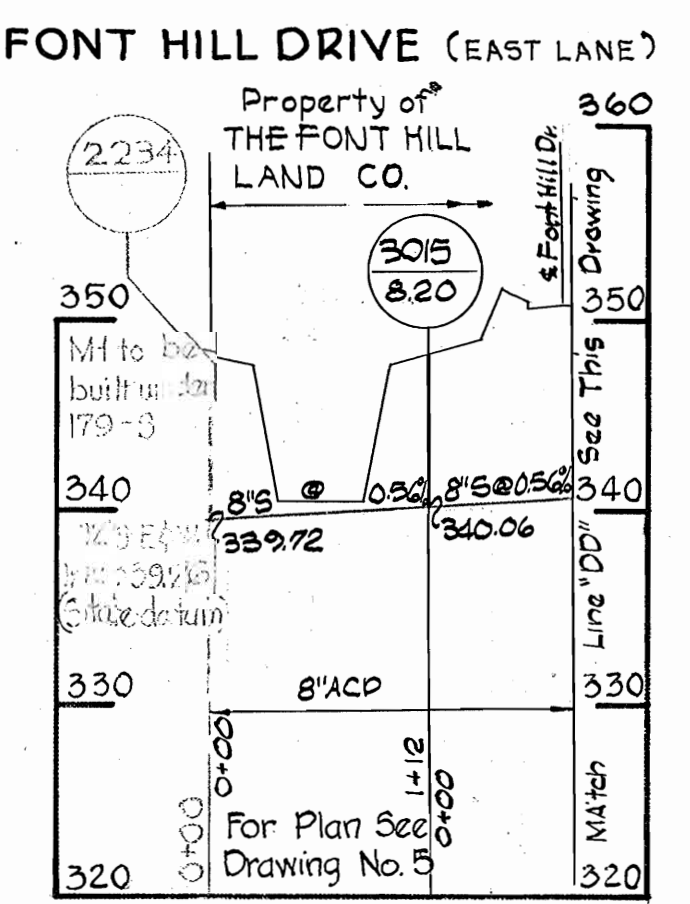
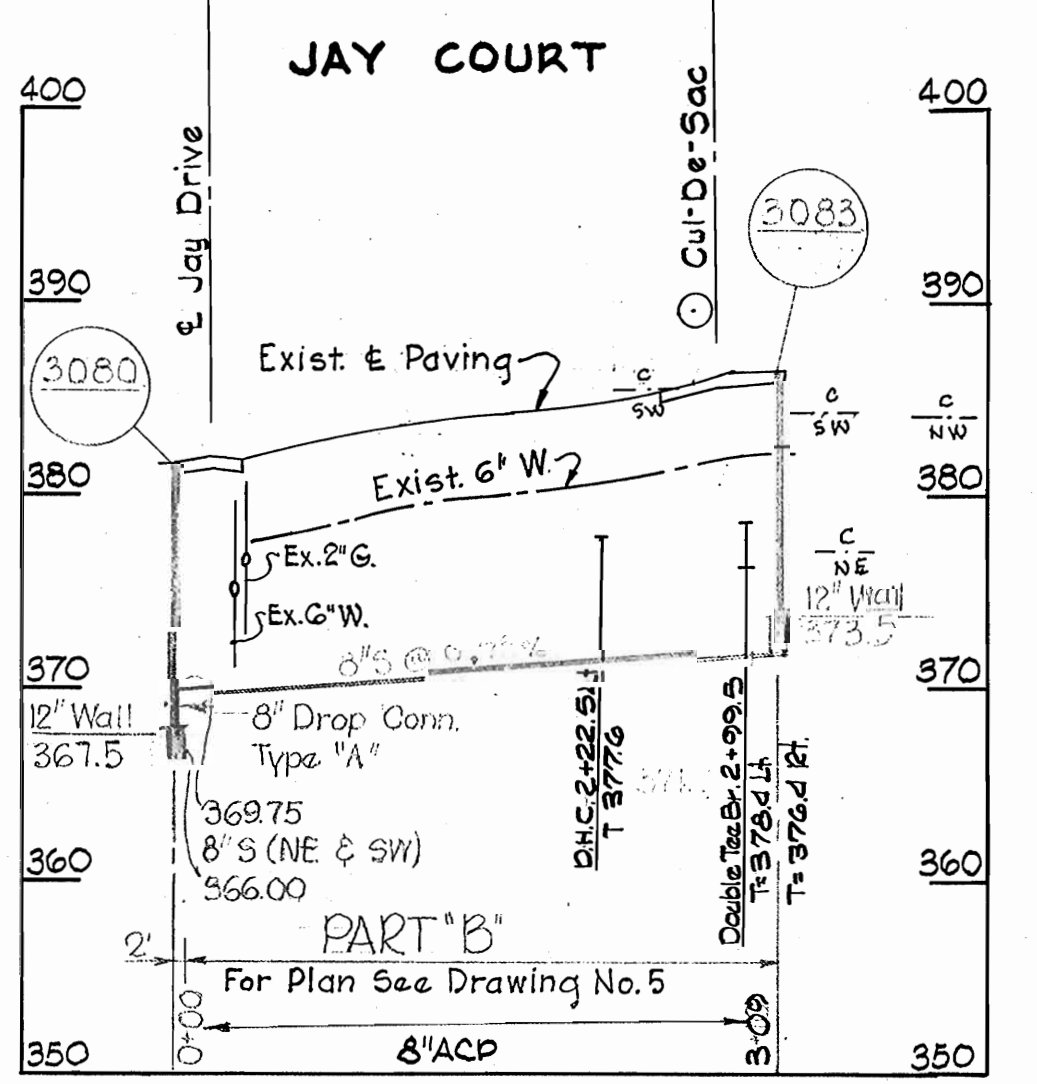
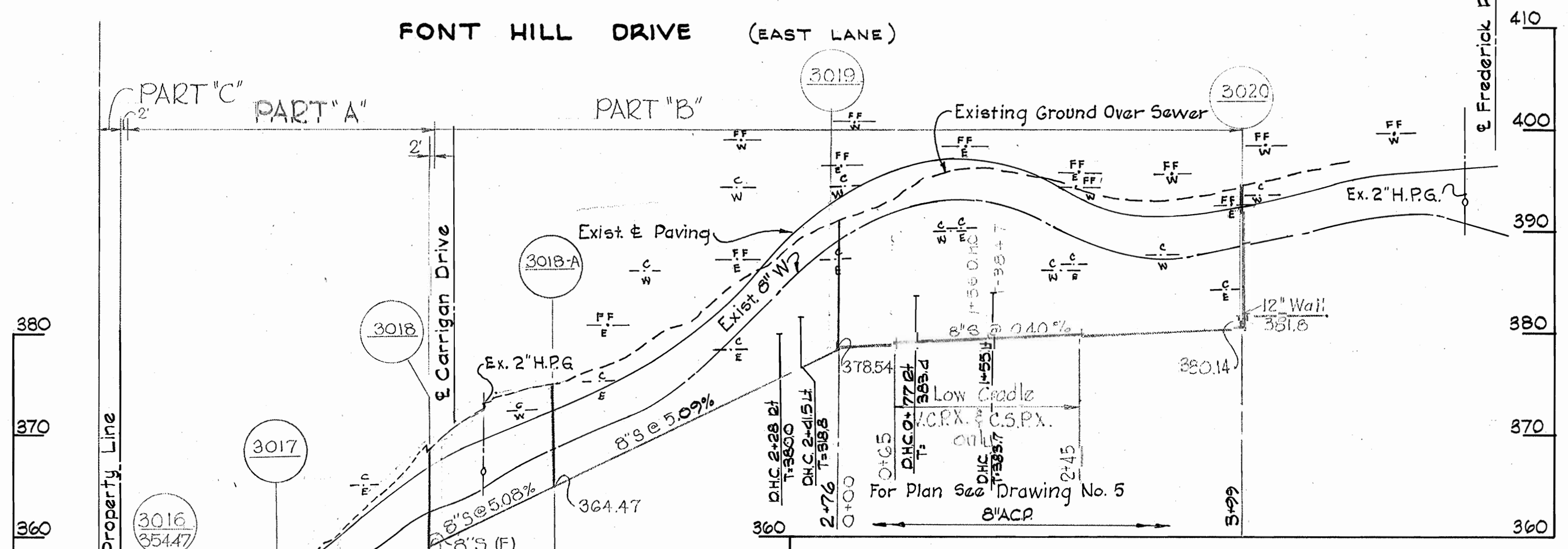
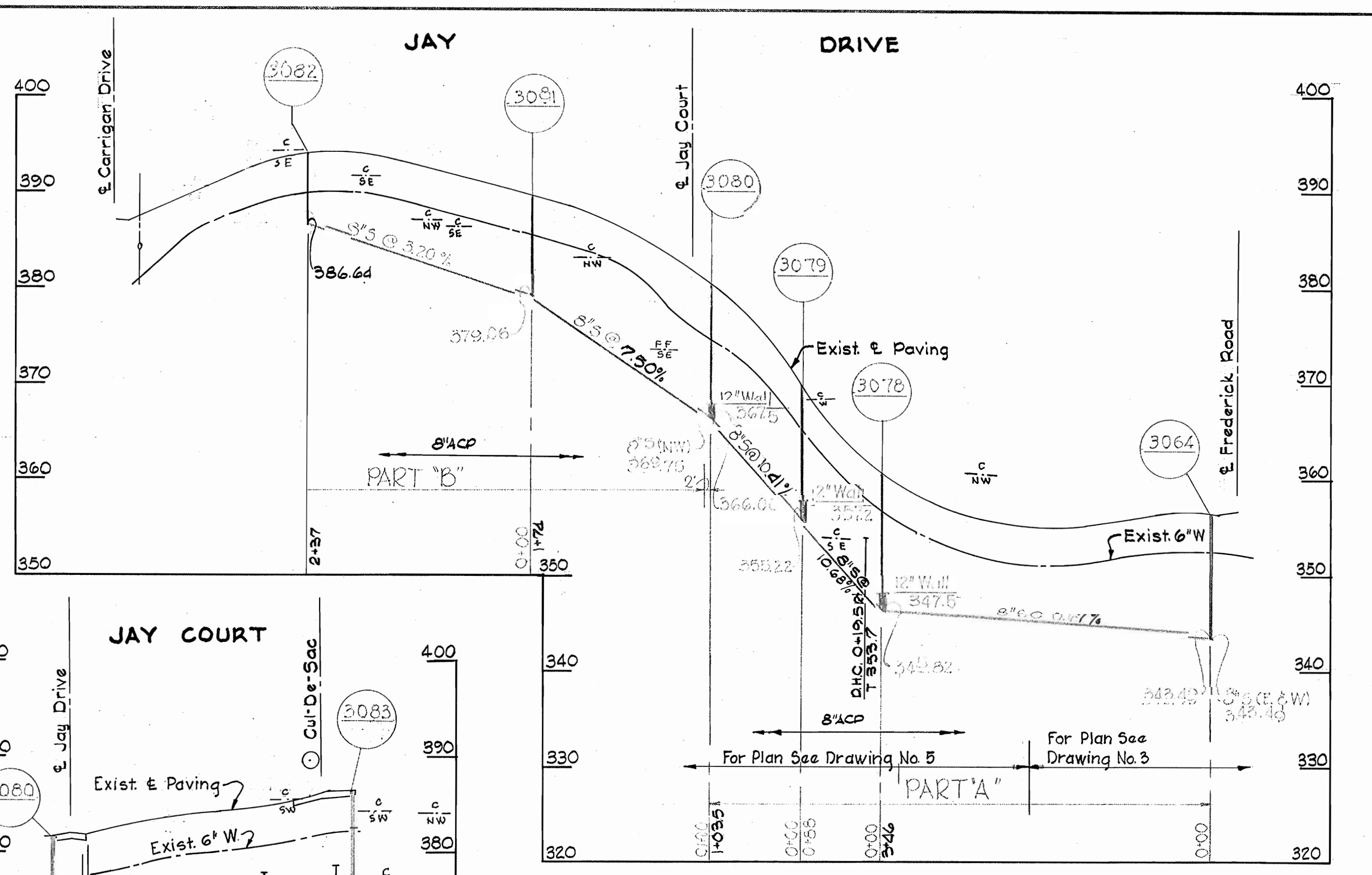
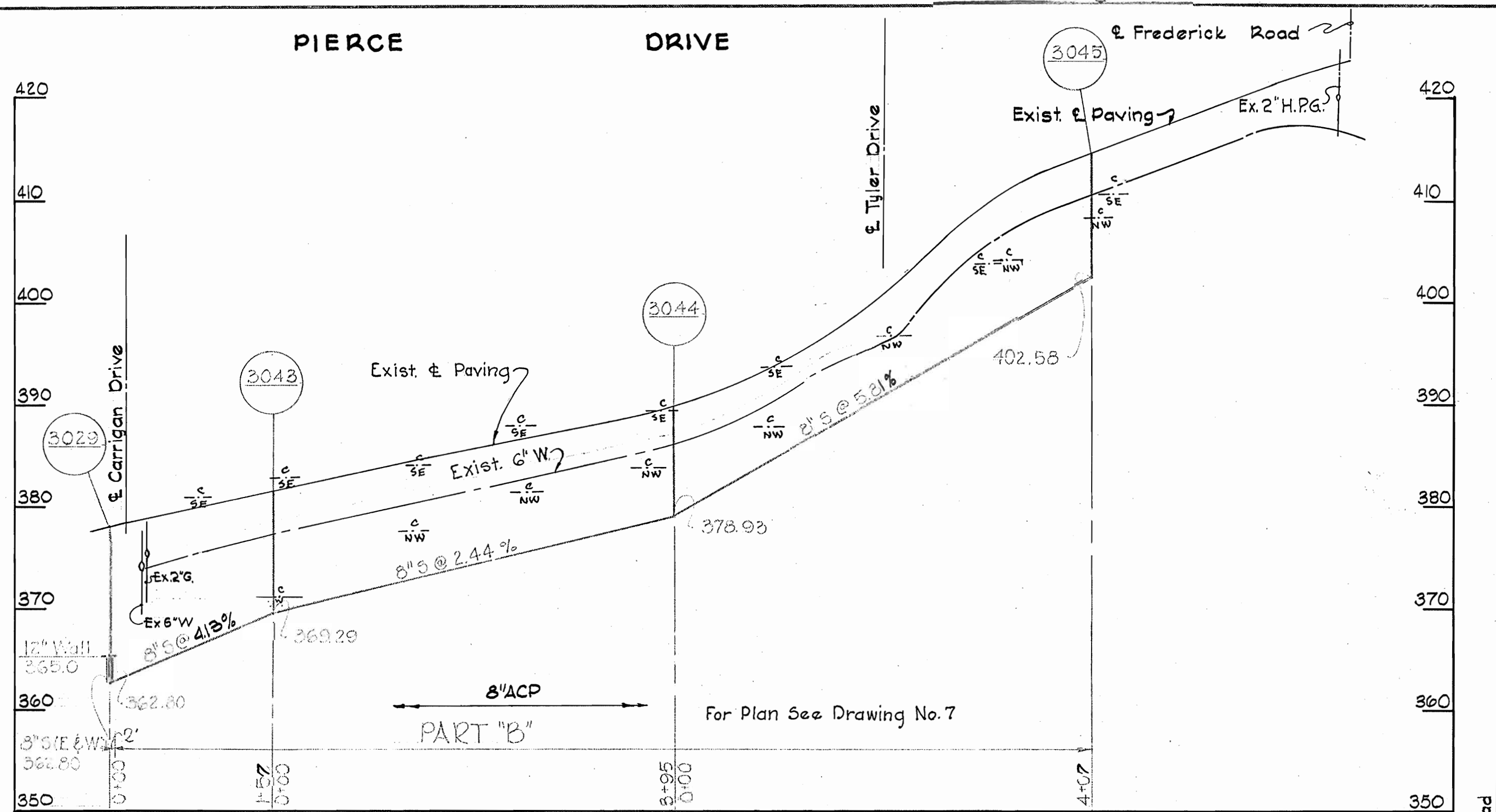
N°	2-3-69	Added cellar elevations also classified sewer mains
N°		Revision

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION 9-25-68 <i>w o Fabat</i> DATE CHIEF ENGINEER	CONTRACT NO. 186-S	PLAN AND PROFILES OF SEWER MAINS	ELLICOTT CITY FONT HILL MANOR, GLEN BROOK, OAK LEA ELECTION DISTRICT-ELLICOTT CITY No. 2	DRAWING NO. 10 OF 12	SCALE AS SHOWN
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W. O. 5839-2

Dec. 2, 1969, AS BUILT

WS 186-S/10



Kenneth A. McCord

2-3-69 Added cellar elevations at classified sewer mains
 N° Date Revision

Contract 186-S

WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL ST.
 BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
 6-25-68
 W. O. Paulbert
 CHIEF ENGINEER

CONTRACT NO. 186-S

PROFILES OF
 SEWER MAINS

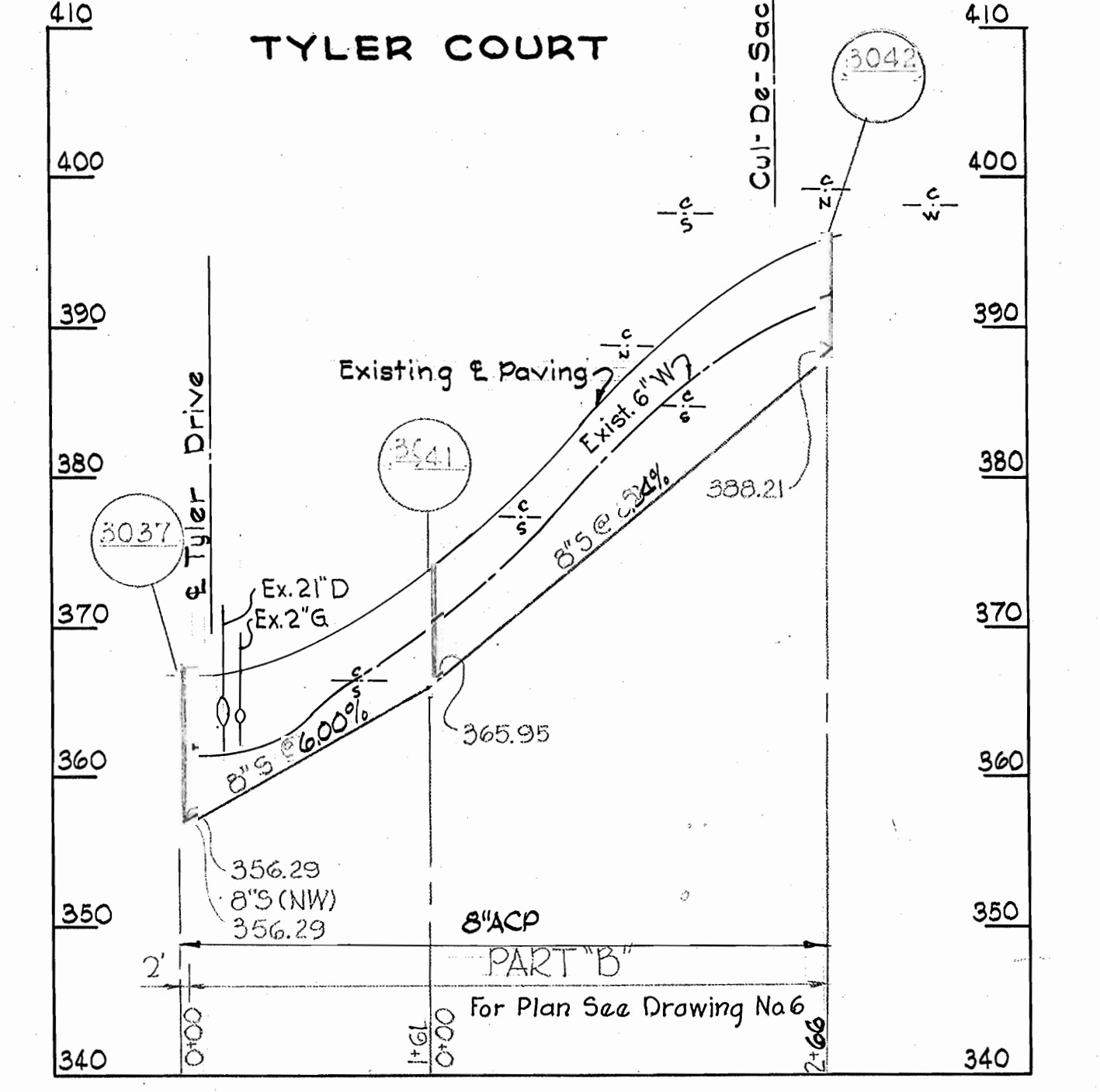
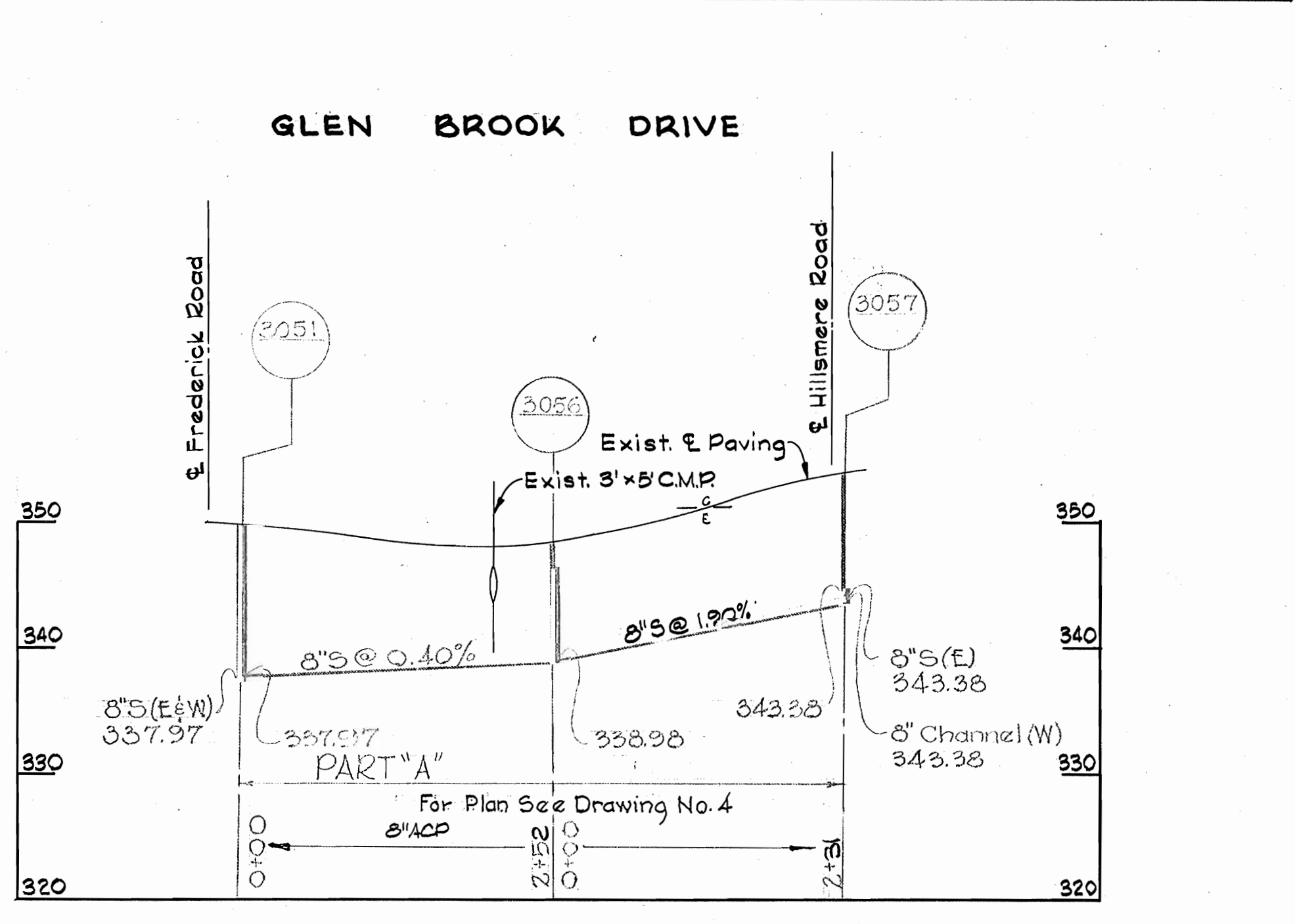
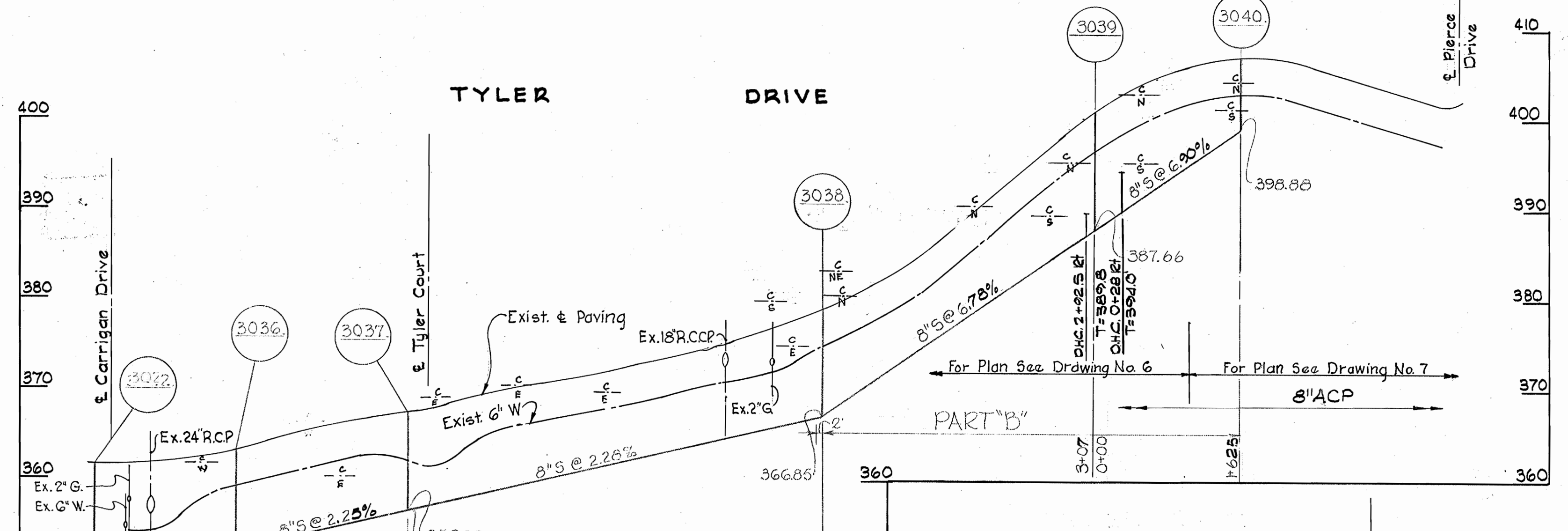
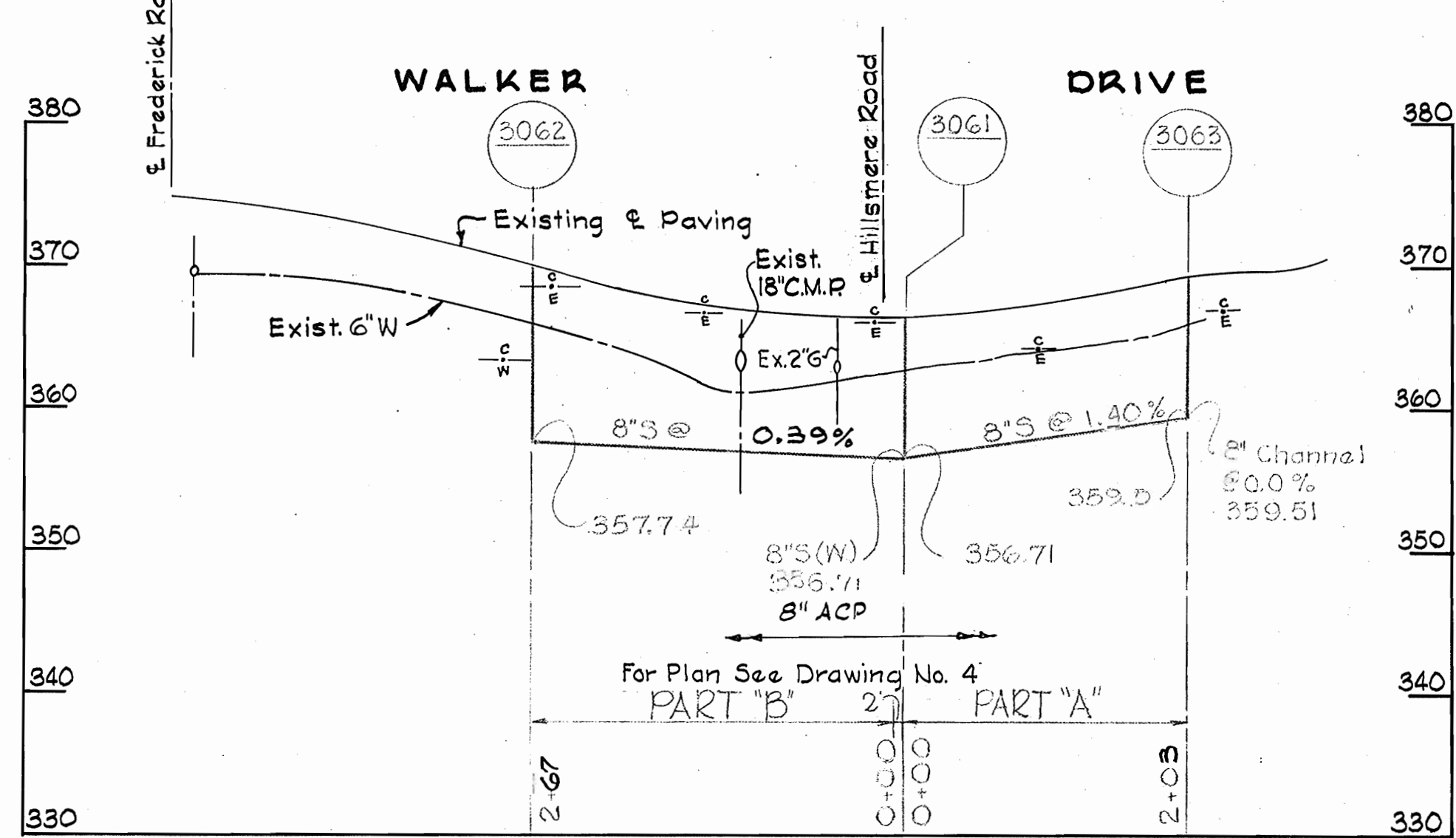
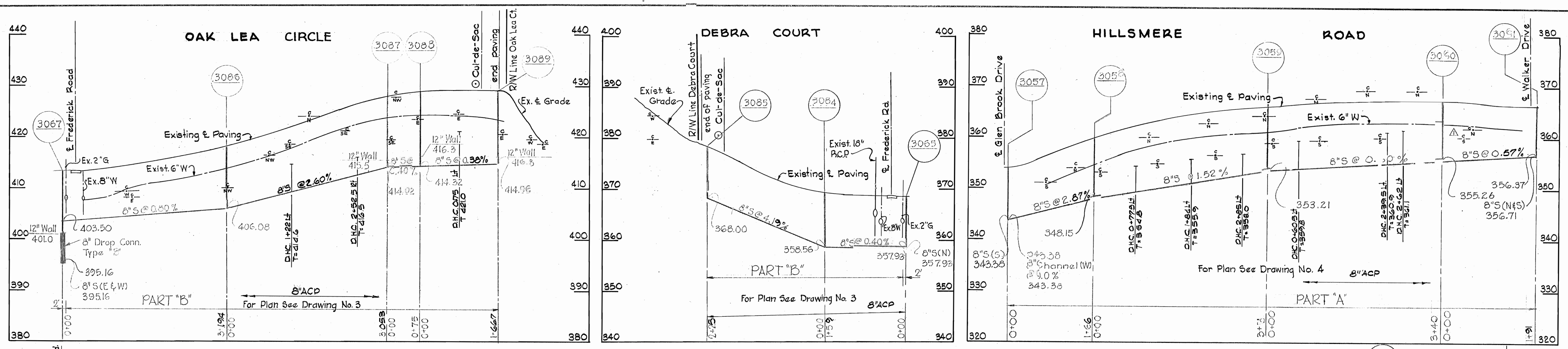
ELLICOTT CITY
 FONT HILL MANOR, GLEN BROOK, OAK LEA
 ELECTION DISTRICT-ELLICOTT CITY No. 2

DRAWING NO. 11 OF 12
 SCALE H:1"=100' V:1"=10'

W. O. 5839 - 2

Dec. 2, 1969 AS BUILT

WS 186-S/11



Kenneth A. McLeod

2/3/69	Classified sewer mains.
N°	Date
	Revision

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION 6-28-69 <i>Edward J. Falbert</i> CHIEF ENGINEER	CONTRACT NO. 186-S	PROFILES OF SEWER MAINS	ELLICOTT CITY FONT HILL MANOR, GLEN BROOK, OAK LEA ELECTION DISTRICT-ELLICOTT CITY No. 2	DRAWING NO. 12	SCALE H:1"=100'
					OF 12	V:1"=10'

Dec 2, 1969 AS BULL

WS 186-S/12

W. O. 5839-2

GENERAL NOTES

- 1. APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
2. TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON DECEMBER 2018 BY AB CONSULTANTS INC.
3. HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 24DC, NO. 24AB AND NO. 24M7. ALL VERTICAL CONTROLS ARE BASED ON NAVD '88 VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE AB CONSULTANTS, INC. (ENGINEERING /SURVEY FIRM SHALL PROVIDE DESCRIPTION OF VERTICAL CONTROL POINTS, I.E. IRON BARS, CROSS CUTS ON CONCRETE STRUCTURES, ETC.)
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED 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 MONIES 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 DRAWING AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS 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 [square] AT THE LOCATIONS OF THE TEST PITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS ARE 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. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T 1-800-252-1133
BGE (CONSTRUCTION SERVICES) 410-637-8713
BGE (EMERGENCY) 410-686-0123
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO 410-795-1390
MISS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-5533
VERIZON 1-800-743-0033
9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING /JACKING OF ANY COUNTY ROAD FOR LAYING WATERSER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

SEWER NOTES

- 1. ALL SEWER MAINS SHALL BE D.I.P. OR 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 COVER. STANDARD DETAIL G5.52 WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE 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.

ABBREVIATIONS

- ACP.....ASBESTOS CEMENT PIPE
DIP.....DUCTILE IRON PIPE
EA.....EACH
EX.....EXISTING
INV.....INVERT
LF.....LINEAR FEET
PR.....PROPOSED
RCP.....REINFORCED CONCRETE PIPE
STA.....STATION

DRAWING INDEX

SHEET 23 - SEWER REPLACEMENT TITLE SHEET
SHEET 24 - SEWER REPLACEMENT PLAN AND PROFILE

QUANTITIES

Table with 5 columns: ITEM, UNIT, ESTIMATE, AS-BUILT, MATERIAL SUPPLIER. Includes items like 8" DIP, CL 54 and SMITH-BLAIR NO. 441 COUPLING.

HOWARD COUNTY

Capital Project #W8602
Contract No. 186A
Carrigan Drive
Outfall Stabilization
Sewer Plans



PROFESSIONAL CERTIFICATE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 30912, EXPIRATION DATE: 8/15/2022



PURPOSE STATEMENT

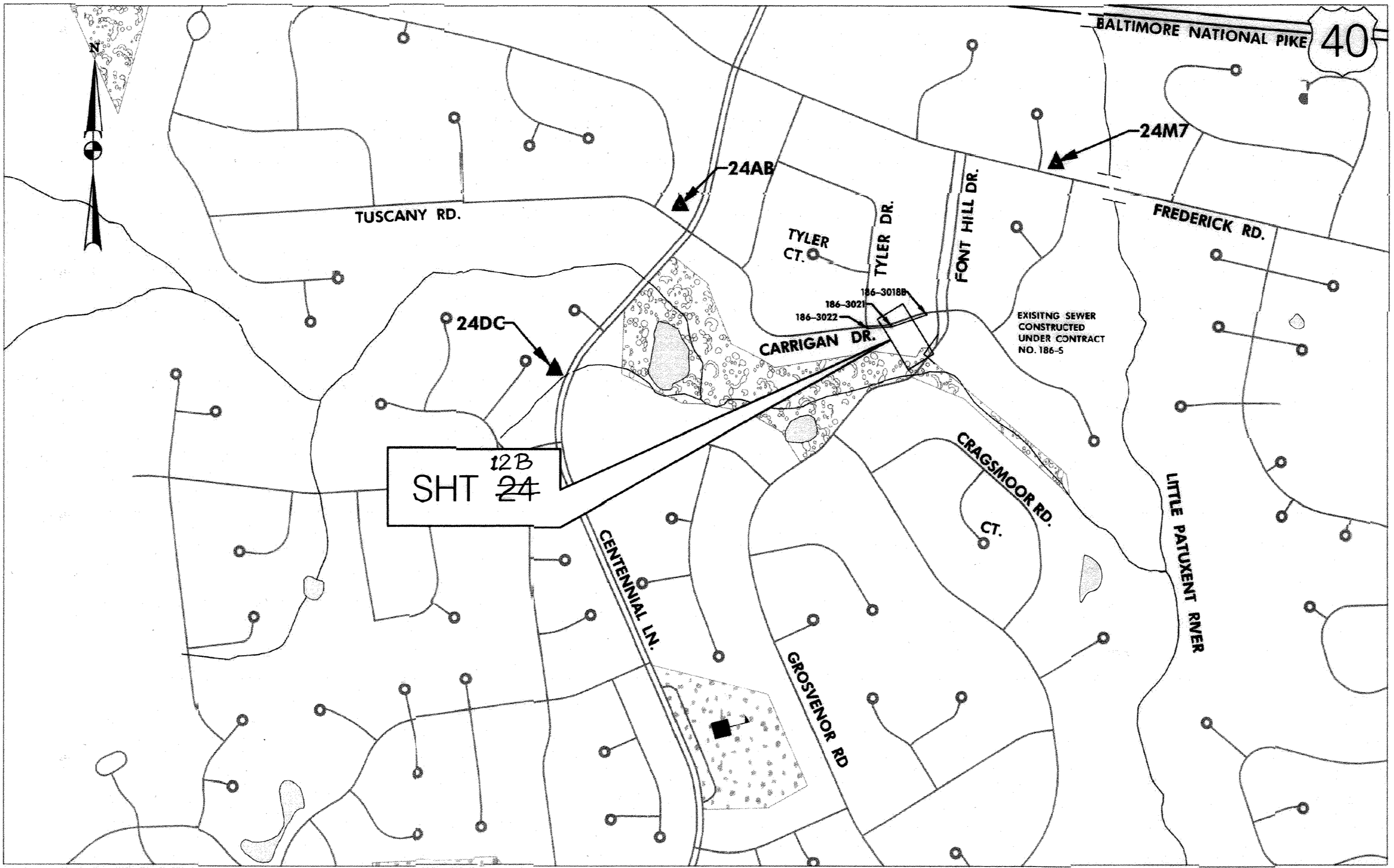
THE PURPOSE OF THIS PROJECT IS TO REMOVE AND REPLACE AN EXISTING 8" SEWER LINE IN COORDINATION WITH THE OUTFALL STABILIZATION PROJECT, CAPITAL PROJECT D-160

DESIGN CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENT OF THE HOWARD SOIL CONSERVATION DISTRICT

John Shen, 2/19/2021
DESIGNERS SIGNATURE DATE

JOHN SHEN, MD REGISTRATION NO. 30912
PRINTED NAME P.E., R.L.S., OR R.L.A.



NUMBER OF LOTS (NA)
WATER HOUSE CONNECTIONS (NA)
NUMBER OF SEWER HOUSE CONNECTIONS (NA)
NUMBER OF BUILDINGS /STRUCTURES (NA)
DRAINAGE AREA (42.8 ACRES)
TREATMENT PLANT SERVICE AREA (PATAPSCO SERVICE AREA)
WATER CODE (NA)
SEWER CODE (NA)

SURVEYOR'S CERTIFICATE
I hereby certify that the as-constructed information shown hereon and the field survey work associated with it (shown in red) is, to the best of my knowledge information and belief, accurate, and was prepared by me or under my direct supervision in compliance with COMAR 09.13.06.12.

Matthew C. Zane, 1/11/22
MATTHEW C. ZANE, PROFESSIONAL LAND SURVEYOR, LICENSE NO. 21739, MARYLAND REGISTRATION NO. 21739, LICENSE EXPIRES 12/12/2023

OWNERS/DEVELOPERS CERTIFICATE

I/WE HEREBY CERTIFY THAT ANY CLEARING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO THE BEGINNING OF THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.

Moumi, 3/25/2021
OWNER/DEVELOPER SIGNATURE DATE

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 30912, EXPIRATION DATE: 8/15/2022

LEGEND table listing symbols for EX. PARCEL BOUNDARY, EX. EASEMENT, EX. CURB, EX. SPLIT RAIL FENCE, EX. MAIL BOX, EX. MAJOR CONTOUR, EX. MINOR CONTOUR, EX. 100 YEAR FLOODPLAIN, EX. STREAM BUFFER, EX. TREE, EX. WATERS OF THE U.S., EX. SANITARY LINE, EX. DRAIN PIPE, EX. WATER UNDERGROUND, ELECTRIC LINE OVER, EX. ELECTRIC UNDERGROUND, EX. GAS LINE (APPROXIMATE LOCATION), EX. UTILITY POLE, EX. SANITARY MH, EX. FIRE HYDRANT, EX. WATER VALVE, EX. INLET, EX. TELEPHONE PED, PR. SANITARY LINE.

UT-01 OF 02

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MARYLAND. Includes signatures and dates for Director of Public Works and Chief Bureau of Engineering.

Stantec and Straughan Environmental logos and contact information for both companies.

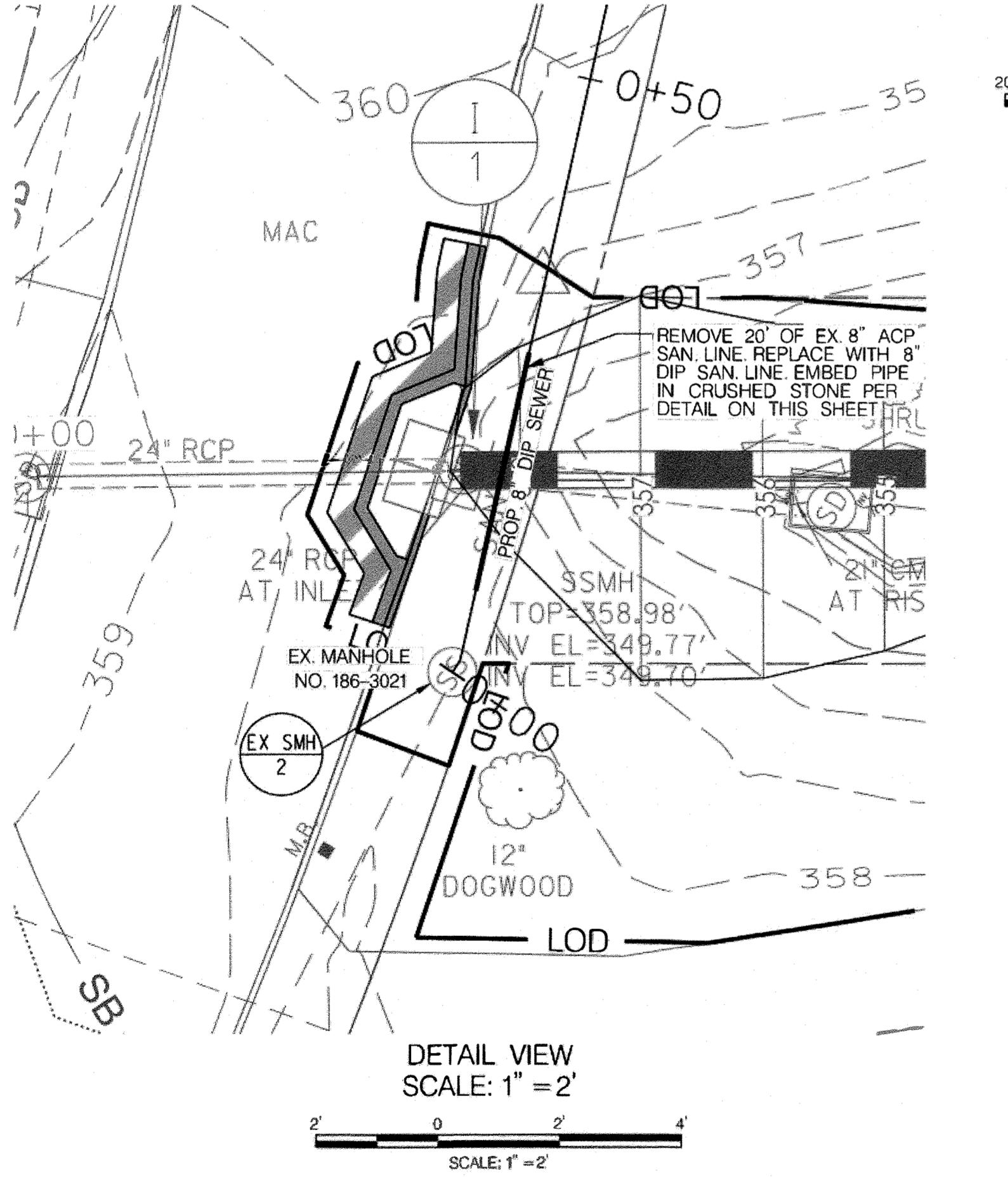
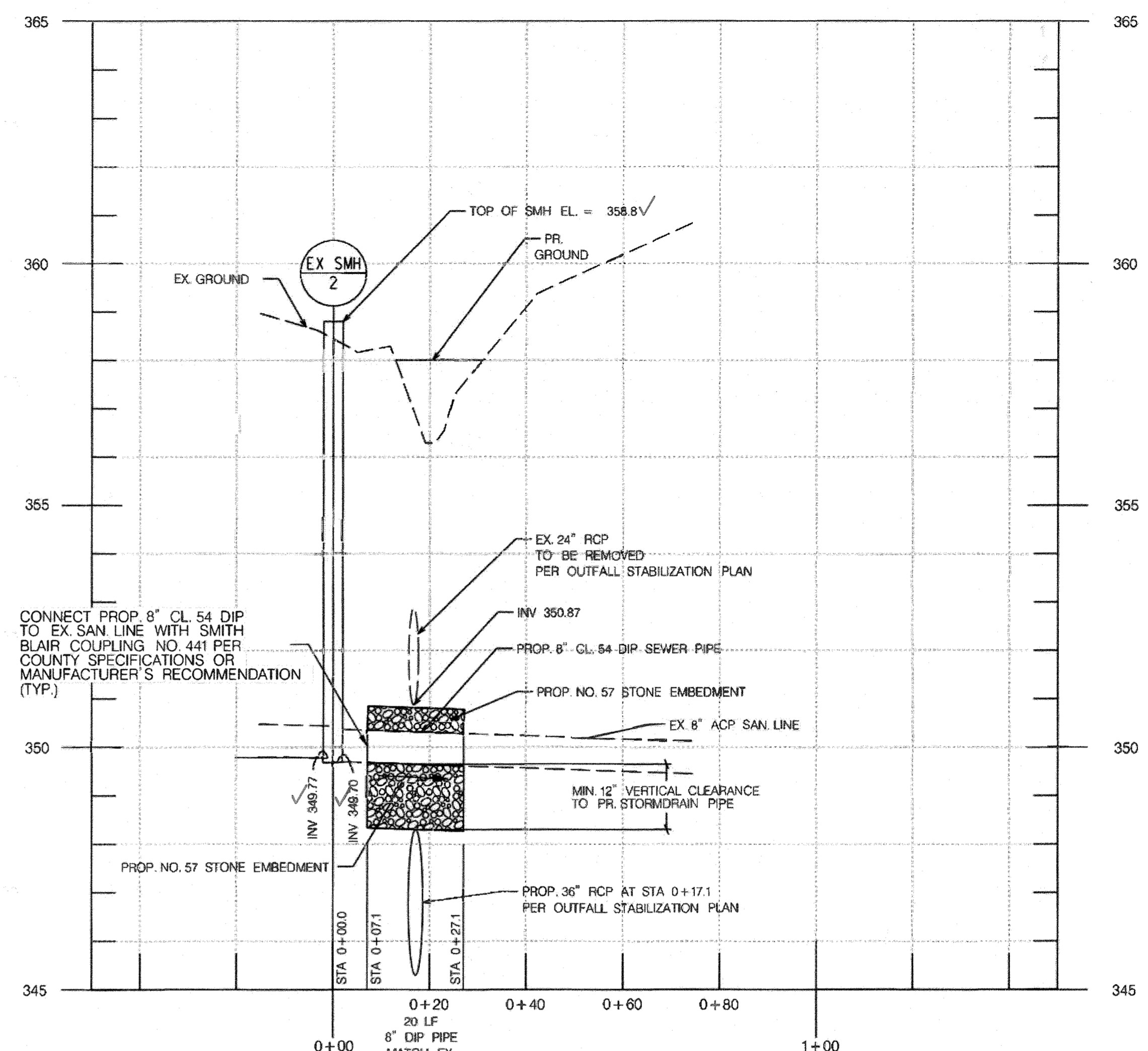
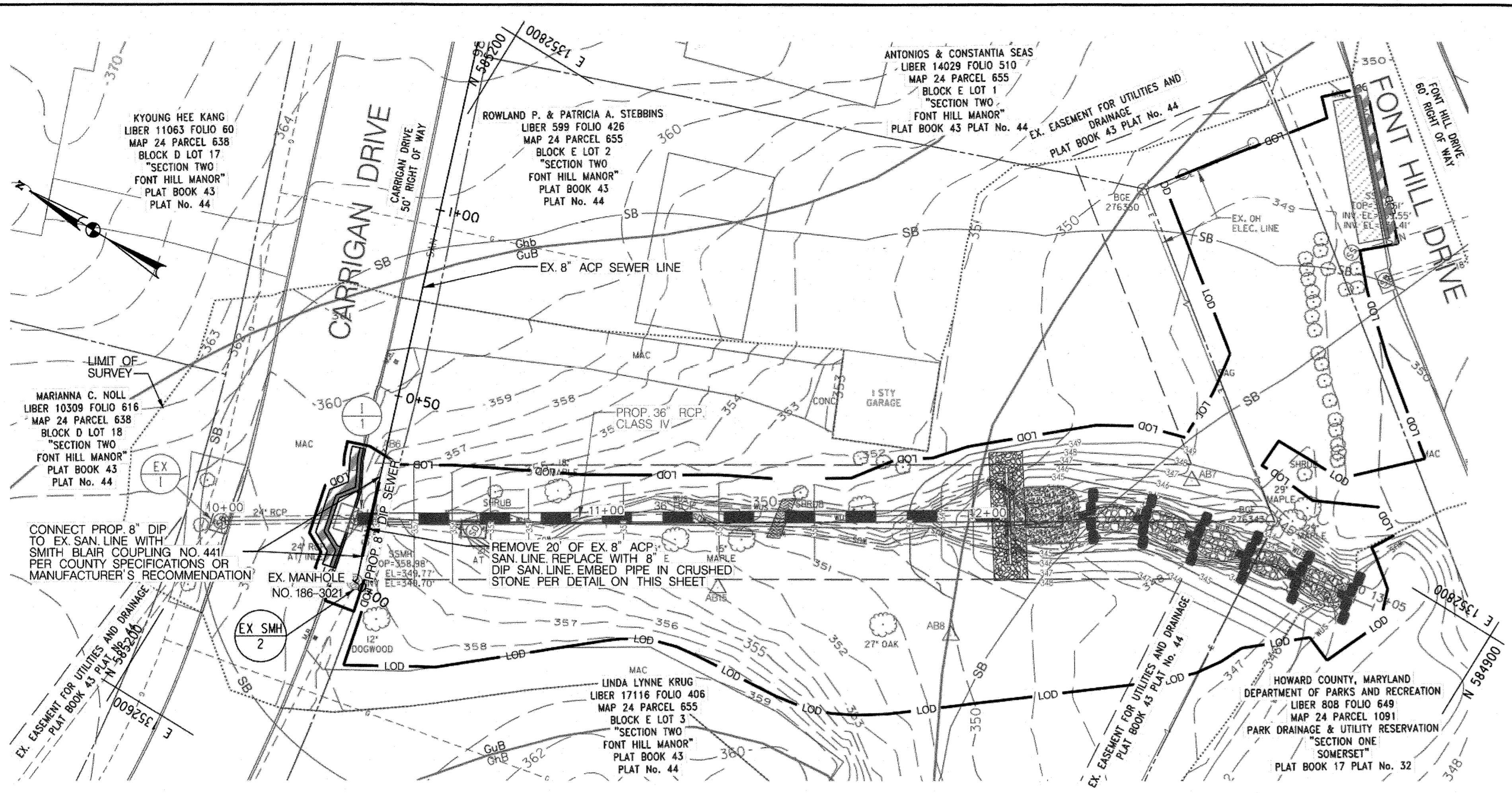
Howard County Maryland Bureau of Engineering contact information.



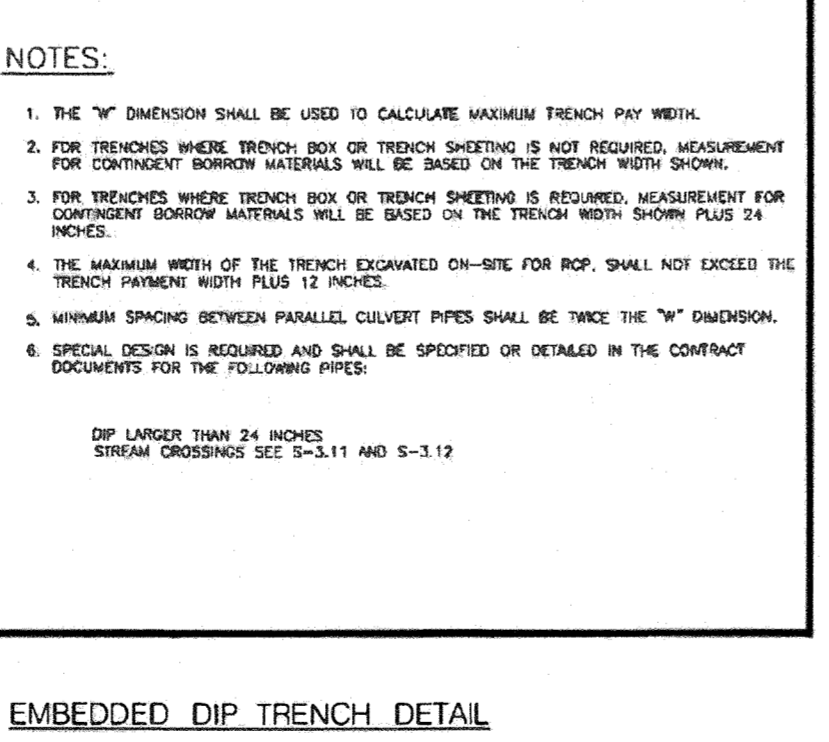
Table with columns: BY, NO., REVISIONS, DATE. Row 1: MCZ, 1, AS CONSTRUCTED SURVEY, 1/11/22.

Table with columns: DESIGNED BY, DRAWN BY, CHECKED BY, DATE. Values: JSFC, PC, JS, 2/19/2021.

CARRIGAN DRIVE OUTFALL STABILIZATION CAPITAL PROJECT W8602 AS-BUILT SEWER REPLACEMENT TITLE SHEET. Includes ELECTION DISTRICT NO. 01, HOWARD CO. MD, TAX MAP 24, GRID NO. 8.



PIPE DIA. (D)	TRENCH WIDTH	TRENCH DEPTH
4	12	20
6	11	26
8	10	26
10	9	26
12	8	26
14	8	30
16	8	32
18	8	34
20	8	36
24	12	48



- NOTES:
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL REGULATIONS DURING WORK TO REMOVE AND DISPOSE OF THE EXISTING ACP SEWER.
 - SEWER REPLACEMENT SHALL BE DONE WHEN THE DITCH IS DRY, OTHERWISE ADDITIONAL EROSION AND SEDIMENT CONTROL AND DOWATERING MEASURES WILL BE REQUIRED.
 - SEE SHEET GR-01 FOR STORM DRAIN PLANS.
 - GAS LINES BASED ON INFORMATION PROVIDED BY BGE.
 - NOT FIELD VERIFIED CONTRACTOR TO VERIFY UTILITY LOCATIONS PRIOR TO STARTING WORK.
 - CONTRACTOR TO FOLLOW SEQUENCE OF CONSTRUCTION IN OUTFALL STABILIZATION PLANS FOR THE UTILITY WORK.
 - CONTRACTOR SHALL USE SMITH BLAIR NO. 441 COUPLINGS IN ACCORDANCE WITH COUNTY SPECIFICATIONS.
 - THE CONTRACTOR SHALL MAINTAIN UNINTERRUPTED SERVICE OF THE EXISTING SEWER LINE WITH A BYPASS SYSTEM OR TEMPORARY CONNECTION CAPABLE OF HANDLING 74,390 GPD. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF THE PROPOSED BYPASS SYSTEM OR CONNECTION TO THE COUNTY FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.
 - REFER TO OUTFALL STABILIZATION EROSION AND SEDIMENT CONTROL PLAN SHEETS FOR ALL E&S CONTROLS FOR SEWER WORK.

FROM	TO	PIPE LENGTH (L.F.)	PIPE SIZE
STA 0+23	STA 0+43	20	8" DIP CL 54

FROM	TO	QTY. (LF)	REMARKS
STA 0+07	STA 0+27	20	EXISTING 8" ACP SEWER PIPE

TEMPORARY SEWER BYPASSING
1 LS

SMITH-BLAIR NO. 441 COUPLING
2 EA

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THIS HIGHLIGHTED AS-BUILT PLAN AS BEING CONSTRUCTED IN CONFORMANCE WITH THE SIGNED ORIGINAL PLANS WITH CHANGES SHOWN IN RED.

Matthew C. Zame
 MATTHEW C. ZAME
 PROFESSIONAL LAND SURVEYOR #21739
 MY LICENSE EXPIRES 12/12/23



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 30912, EXPIRATION DATE: 8/15/2022

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 30912, EXPIRATION DATE: 8/15/2022

6/8/2022

UT-02 OF 02

Y:\2022-001_Carrigan Drive Outfall Stabilization\CAD\p\UT-P000_Carrigan-Drive.dgn

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND			
DIRECTOR OF PUBLIC WORKS	DATE	CHIEF, BUREAU OF ENGINEERING	DATE
CHIEF, BUREAU OF UTILITIES	DATE	CHIEF, UTILITY DESIGN DIVISION	DATE

PREPARED BY:

Stantec | **STRAUGHAN ENVIRONMENTAL**
a joint venture

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 www.stantec.com

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 COLUMBIA, MD 21046
 TEL. 301.362.9200
 FAX. 301-362-9245
 info@straughanenvironmental.com

Howard County
 MARYLAND

Bureau of Engineering
 7125 Riverwood Drive, Suite B
 Columbia, Maryland 21046
 (410) 313-2040



BY	NO.	REVISIONS	DATE
MCZ	1	AS-BUILT	01/11/22

SCALE	1" = 20'
DESIGNED BY	JSPC
DRAWN BY	PC
CHECKED BY	JS
DATE	2/19/2021
SHEET NO.	24 OF 24

CARRIGAN DRIVE OUTFALL STABILIZATION
 CAPITAL PROJECT W8602

**AS-BUILT
 SEWER REPLACEMENT PLAN**

ELECTION DISTRICT NO. 01, HOWARD CO. MD TAX MAP 24 GRID NO. 8