

05-216 CORPORATION
572/430

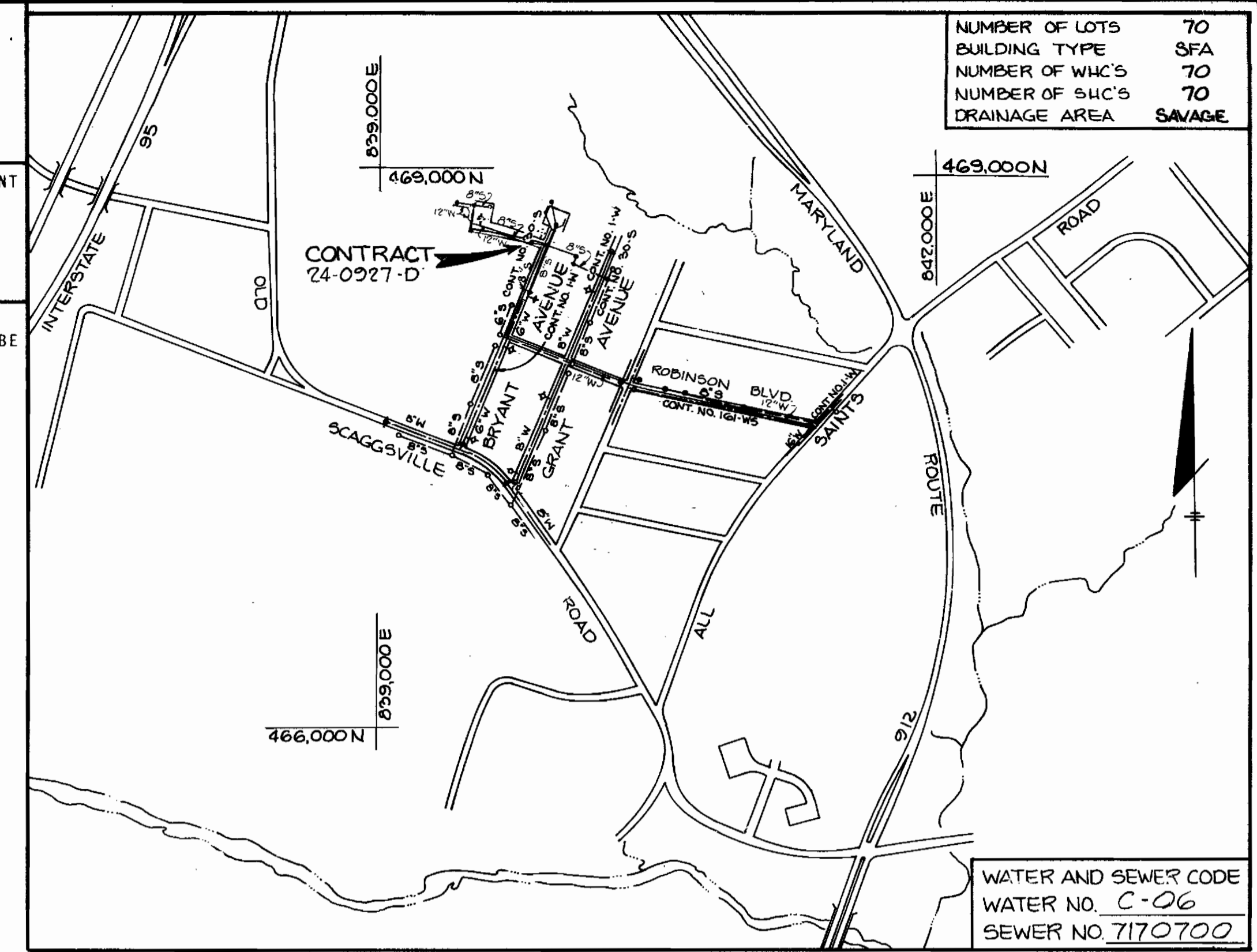
HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT
AND MEETS TECHNICAL REQUIREMENTS.

James M. Helman 3/19/85
U.S. SOIL CONSERVATION SERVICE DATE

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

Robert W. Zedman 3/19/85
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE
IMPLEMENTED IN ACCORDANCE WITH ARTICLE #15 OF THE
HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER
ROAD CONSTRUCTION PLANS #F-84-109.



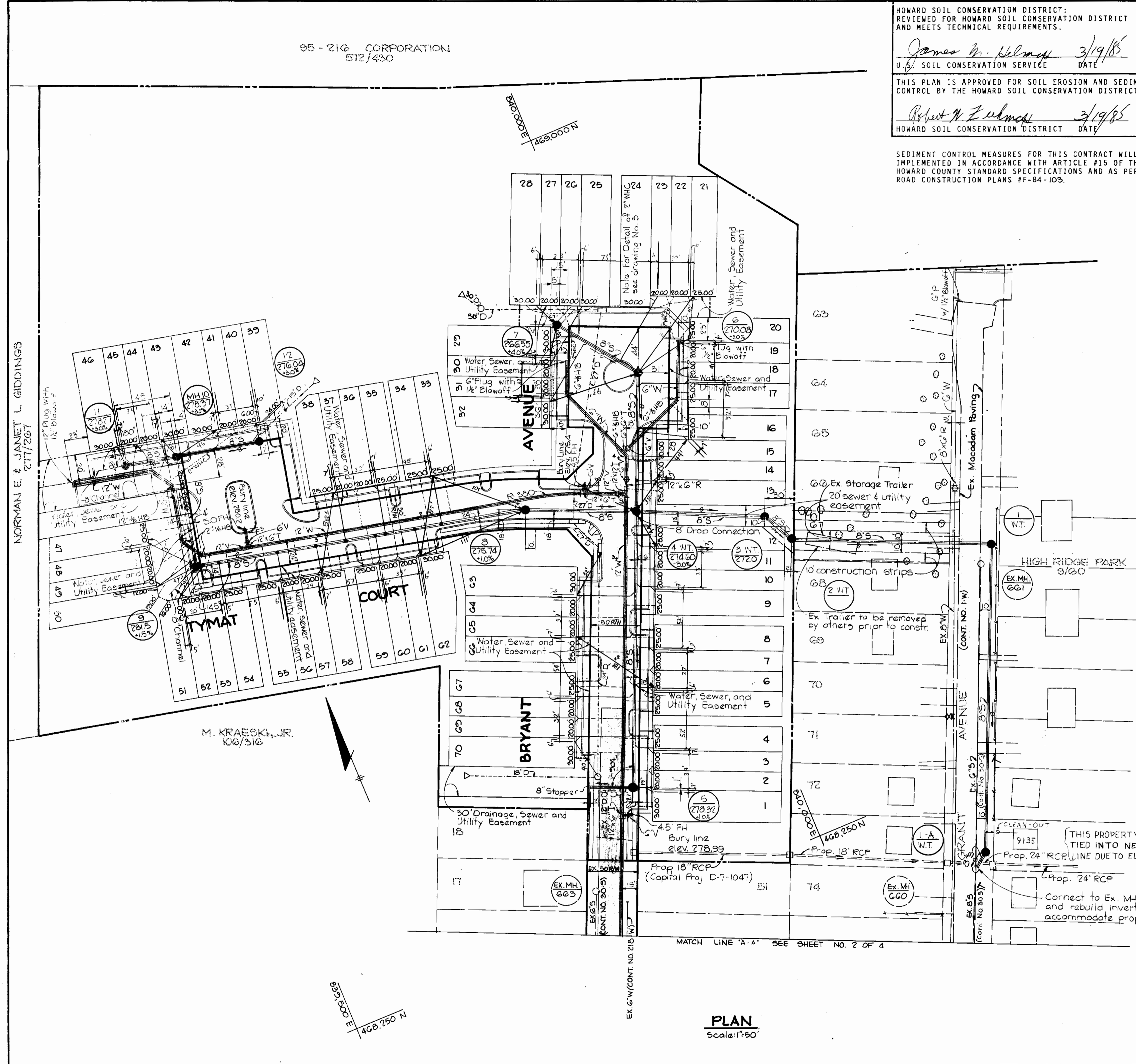
NUMBER OF LOTS	70
BUILDING TYPE	SFA
NUMBER OF WHC'S	70
NUMBER OF SHC'S	70
DRAINAGE AREA	SAVAGE

WATER AND SEWER CODE
WATER NO. C-06
SEWER NO. 710700

VICINITY MAP
SCALE: 1" = 600'
GENERAL NOTES

1. THE APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
3. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITIES 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 MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITIES COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
6. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. 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 AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWING. 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 UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
STATE HIGHWAY ADMINISTRATION 531-5533
BALTIMORE GAS AND ELECTRIC CO. - CONTRACTOR SERVICES 561-2585
BALTIMORE GAS AND ELECTRIC CO. - UNDERGROUND DAMAGE CONTROL 234-5621
BALTIMORE GAS AND ELECTRIC CO. - TROUBLESHOOTING - 298-3013
MISS UTILITY 1-552-0100
COLONIAL PIPELINE CO. 795-1390
BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 332-2366
9. 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.
10. 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.
11. ALL WATER MAINS TO BE DIP UNLESS OTHERWISE NOTED.
12. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 36" COVER UNLESS OTHERWISE NOTED.
13. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
14. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
15. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE 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 SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1009 OF THE STANDARD SPECIFICATIONS.
16. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
17. ALL SEWER MAINS SHALL BE COPX, R.C.S.P., VCPX, PVC OR ACP CLASS 2400 UNLESS OTHERWISE NOTED.
18. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
19. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
20. MANHOLES WITH THE SYMBOL INDICATES THAT CELLARS CANNOT BE SERVED.
21. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
22. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE, SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G.5.2 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
23. ALL WATER HOUSE CONNECTIONS SHALL BE SET FOR INSIDE METER SETTING.

QUANTITIES		
ITEM	BL	AS BUILT MATERIAL/SUPPLIER
1 1/2" BLOWOFF	4	3
16" x 12" 1" VALVE	1	1
FIRE HYDRANT	3	3
12" WATER	5022	2,443
6" WATER	252	524
12" VALVES	3	1
6" VALVES (EX FH)	3	1
2" WHC	100	160
1" WHC	223	428
3/4" WHC	1535	1628
6" SIG	1360	1335
MANHOLES VF	145	145
8" SEWER	1929	1833



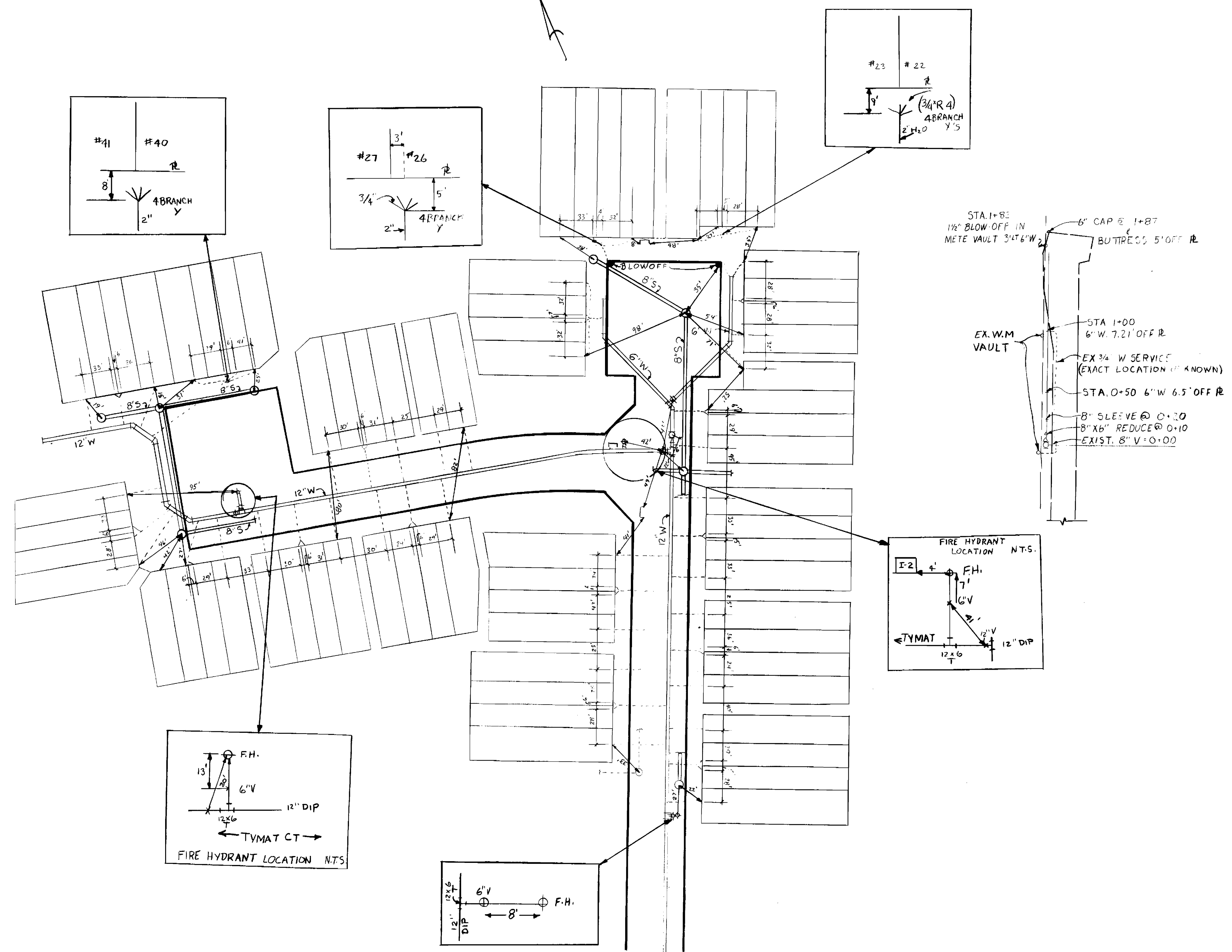
PLAN
Scale: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James M. Helman 3-26-85
DIRECTOR OF PUBLIC WORKS DATE
Robert W. Zedman 3-26-85
CHIEF, BUREAU OF UTILITIES DATE

TRACY, SCHULTE
& ASSOCIATES INC.
planning architecture engineering
6450 Baltimore National Pike Suite 34
Ellicott City, Maryland 21043

DES: RJW			
DRN: KAM			
CHK: JKT	L.R.C. 2	ADDED 6" WATER MAIN CRANT AVENUE	12-085
DATE: 8-3-84	L.R.C. 1	REVISED PIPE SIZES FOR DRAINS FROM STRUCTURES E410E-3	11-20-85
BY NO.	REVISION	DATE	600' SCALE MAP NO. 47 BLOCK NO. 20

PLAN OF
WATER AND SEWER MAINS
FIRST RIDGE
SECTION I AREA I
ELECTION DISTRICT NO 6
CONTRACT NO. 24-0927-D
SCALE AS SHOWN
SHEET 1 OF 4



STA. 1+87
1/2" BLOW-OFF IN
METE VAULT 34x6"W

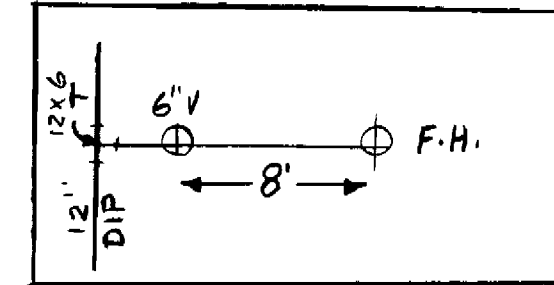
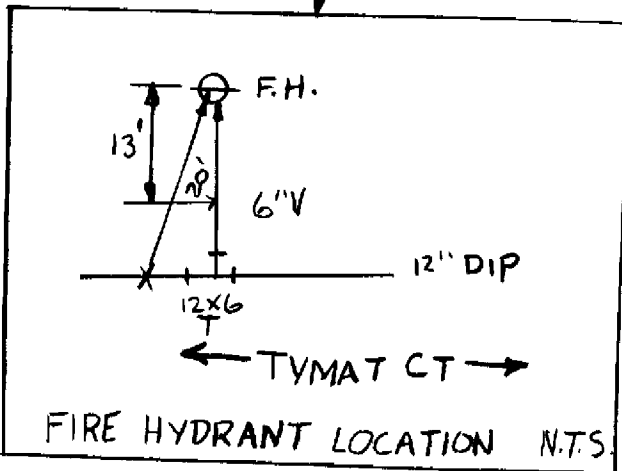
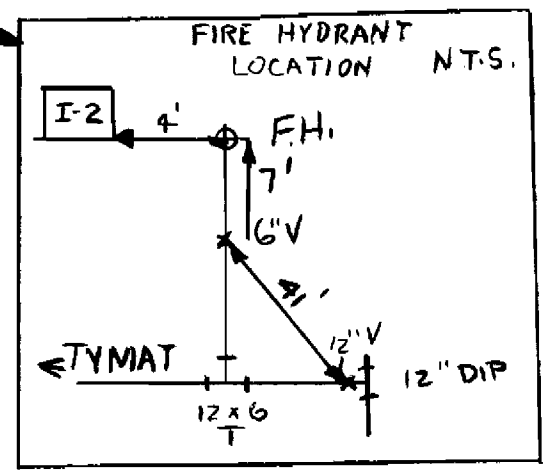
6" CAP @ 1+87
BUTRESS 5' OFF R

STA. 1+00
6" W. 7.21' OFF R

EX 3/4" W SERVICE
(EXACT LOCATION UNKNOWN)

STA. 0+50 6" W 6.5' OFF R

8" SLEEVE @ 0+20
8" x 6" REDUCE @ 0+10
EXIST. 8" V @ 0+00



REFER TO SHEET 1004

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE

DES:			
DRN:			
CHK:			
DATE:	BY	NO.	REVISION

DATE 600' SCALE MAP NO. BLOCK NO.

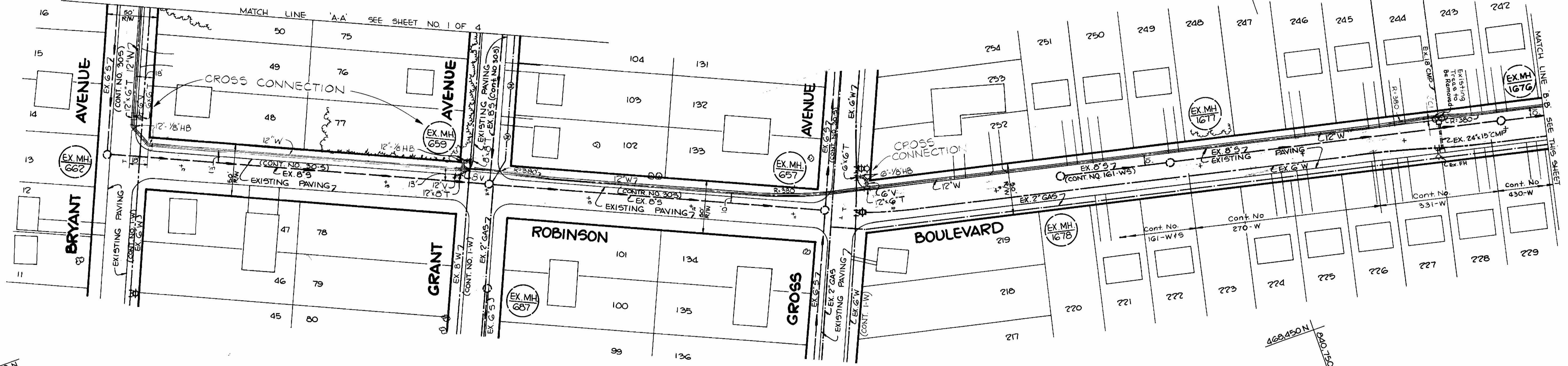
CONTRACT NO 24-0927-D

SCALE AS SHOWN

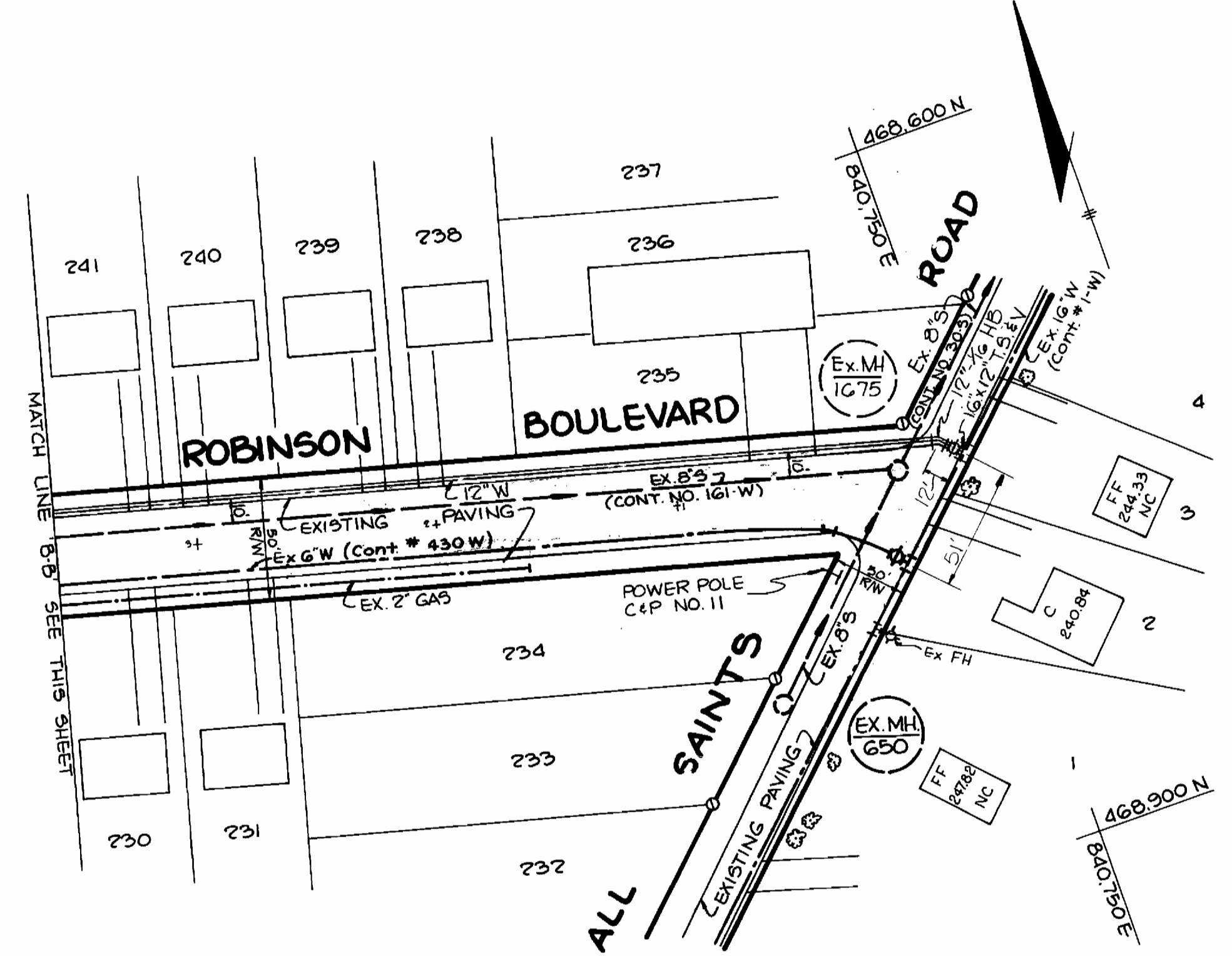
SHEET 1 OF 4

WATER AS-BUILT 6-27-85

BRUNING 44-132 691 50



PLAN
SCALE: 1" = 50'



PLAN
SCALE: 1" = 50'

NOTE:
AT THE TIME OF TIE-IN, CONTACT BUREAU OF UTILITIES AT 532-2366. THE PIECE OF PIPE CUT OUT FROM THE EXISTING WATER MAIN SHALL BE HANDED OVER TO BUREAU OF UTILITIES AT THE SITE FOR INSPECTION AND TO CHECK THE CONDITION OF THE PIPE. TO BE DONE AT CROSS CONNECTION LOCATIONS.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

TRACY, SCHULTE & ASSOCIATES INC.
planning · architecture · engineering
8450 Baltimore National Pike Suite 34
Ellicott City, Maryland 21043



DES: RJW			
DRN: KAM			
CHK: JKT			
DATE: 8-3-84	BY NO.	REVISION	DATE

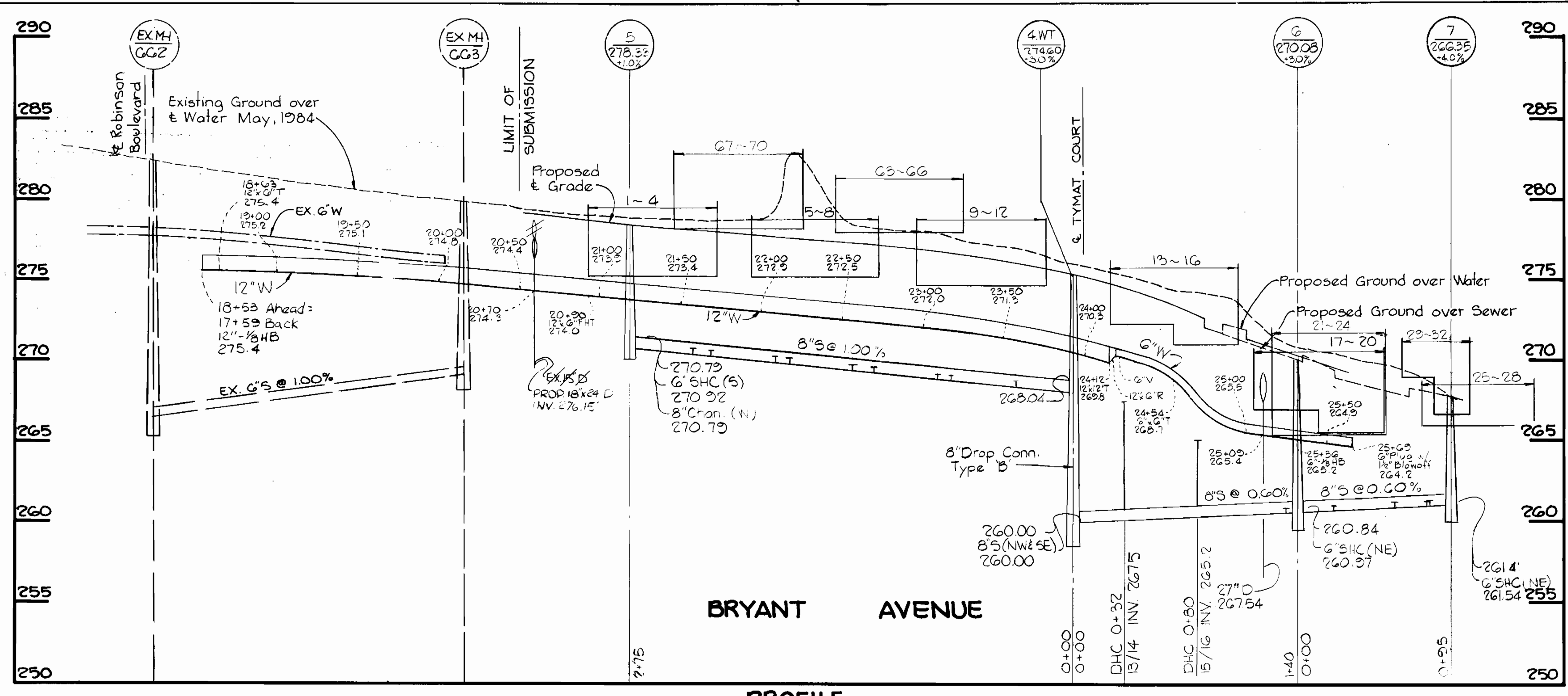
PLAN OF
WATER AND SEWER MAINS

FIRST RIDGE
SECTION I AREA I
ELECTION DISTRICT NO. 6
CONTRACT NO. 24-0927-D

SCALE AS SHOWN
SHEET 2 OF 4

Robert M. Beinner
CHIEF, BUREAU OF UTILITIES
DATE: 3-22-85

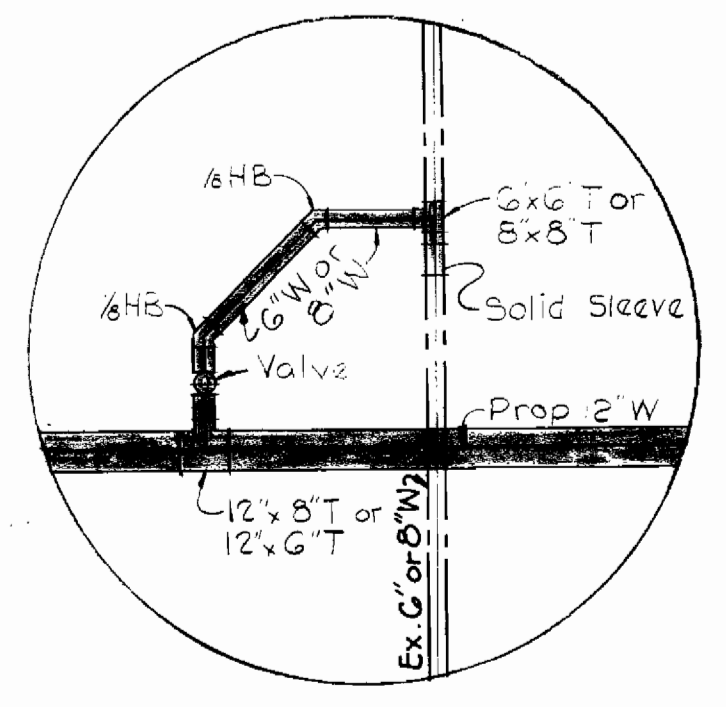
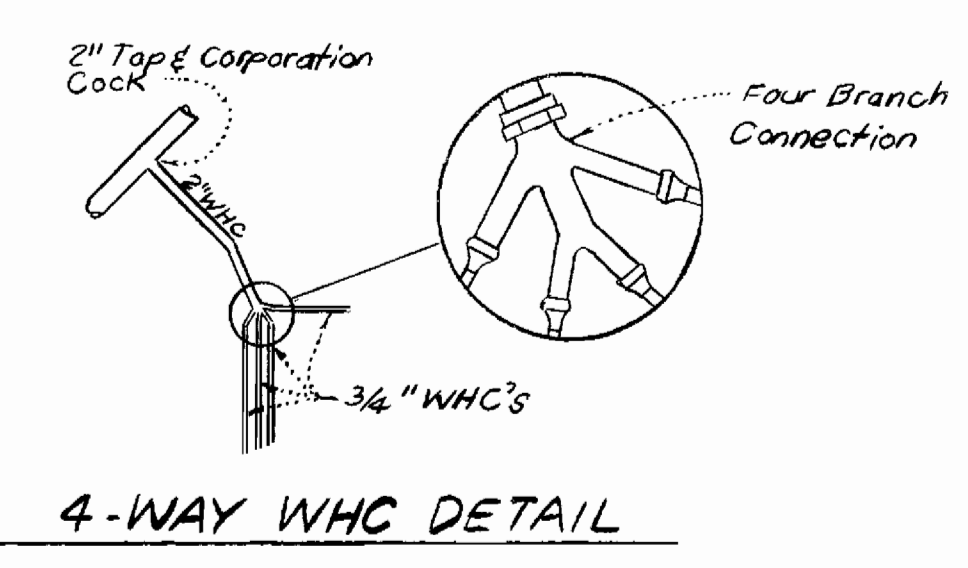
Michael Pope
CHIEF, LAND DEVELOPMENT DIVISION
DATE: 3-22-85



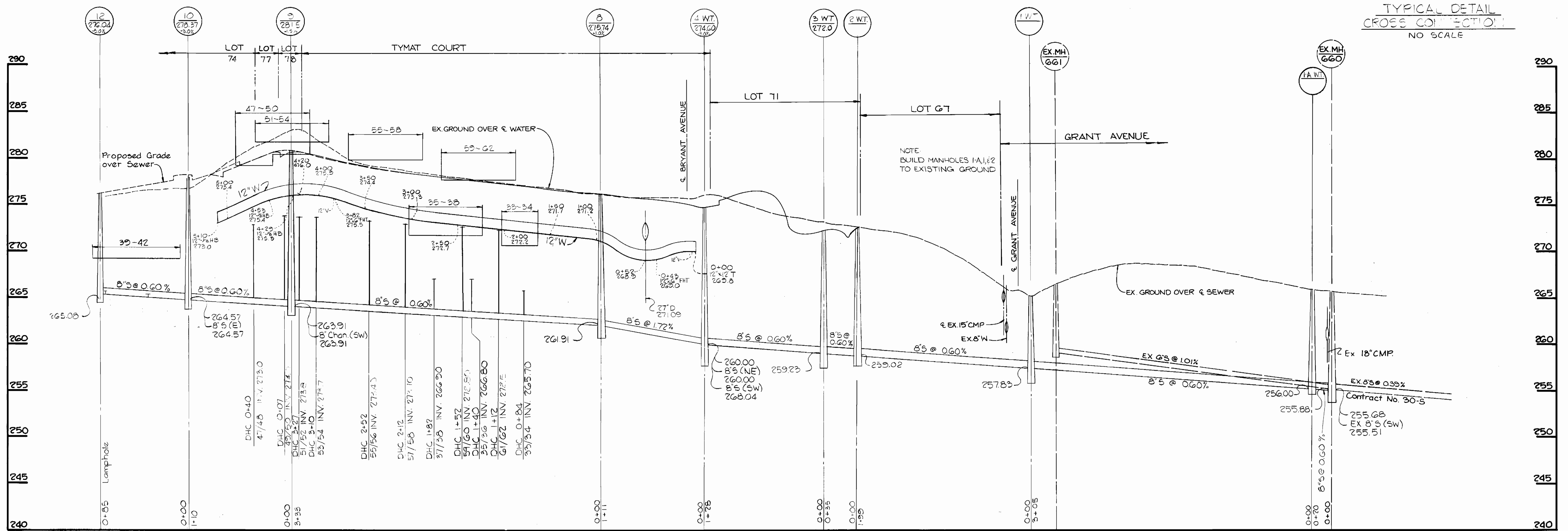
PROFILE
SCALE: H: 1" = 50'
V: 1" = 5'

SEWER HOUSE CONNECTION - INVERT ELEVATION AT PROPERTY LINE

STATION	LOT	INVERT	STATION	LOT	INVERT	STATION	LOT	INVERT
MANHOLE 4 - MANHOLE 5			MANHOLE 6 - MANHOLE 7			MANHOLE 9 - MANHOLE 10		
0+33 L	11,12	268.77	0+22 R	23,24	262.47	0+07 W	49,50	276.36
0+74 L	9,10	269.18	0+60 L	31,32	262.60	0+40 L	47,48	273.88
0+84 R	63,64	270.06	0+80 L	29,30	262.04			
1+25 R	65,66	270.47	0+82 R	25,26	261.93	0+40 L	MANHOLE 10 - MANHOLE 12	265.21
1+35 L	7,8	269.75	MH#7 NW	27,28	262.10	0+80 L	41,42	265.45
1+75 L	5,6	270.19	MANHOLE 8 - MANHOLE 9			0+40 L	39,40	265.21
1+85 R	67,68	271.05	0+84 R	33,34	266.70	0+80 L	MANHOLE 10 - MANHOLE 11	265.00
2+25 R	69,70	271.47	1+12 L	61,62	273.06	0+05 R	43,44	265.00
2+55 L	4,5	270.75	1+42 R	35,36	267.60	0+40 R	45,46	265.21
MH#5 (E)	1,2	271.32	1+52 L	59,60	273.36			
MANHOLE 4 - MANHOLE 6			1+82 R	37,38	267.90			
0+32 R	13,14	267.50	2+12 L	57,58	273.06			
0+80 R	15,16	266.24	2+52 L	55,56	273.56			
1+25 R	17,18	261.75	3+10 L	53,54	274.26			
MH#6 NE	19,20	262.17	3+27 L	51,52	274.00			
MH#6 NE	21,22	262.83						



TYPICAL DETAIL CROSS CONNECTION
NO SCALE



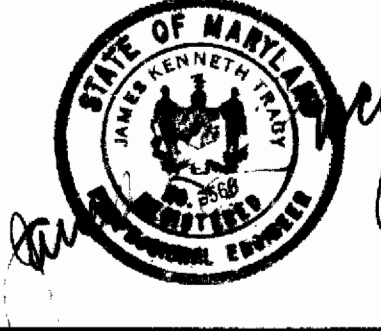
PROFILE
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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Robert M. Brainer* 3-26-85
Chief - Bureau of Utilities

Chief, Bureau of Engineering: *Robert M. Brainer* 3-26-85
Chief - Land Development Div.

TRACY, SCHULTE & ASSOCIATES INC.
planning architecture engineering
8450 Baltimore National Pike Suite 34
Ellicott City, Maryland 21043



DES: RJW			
DRN: KAM			
CHK: JKT	L.R.C. 2	REVISED S.H.C. ELEVATIONS	
DATE:	L.R.C. 1	REVISED WATER LOCATION BETWEEN GRANT AVE & BRYANT AVE	10-1-85
	BY NO.	REVISION	DATE

PROFILES OF WATER AND SEWER MAINS

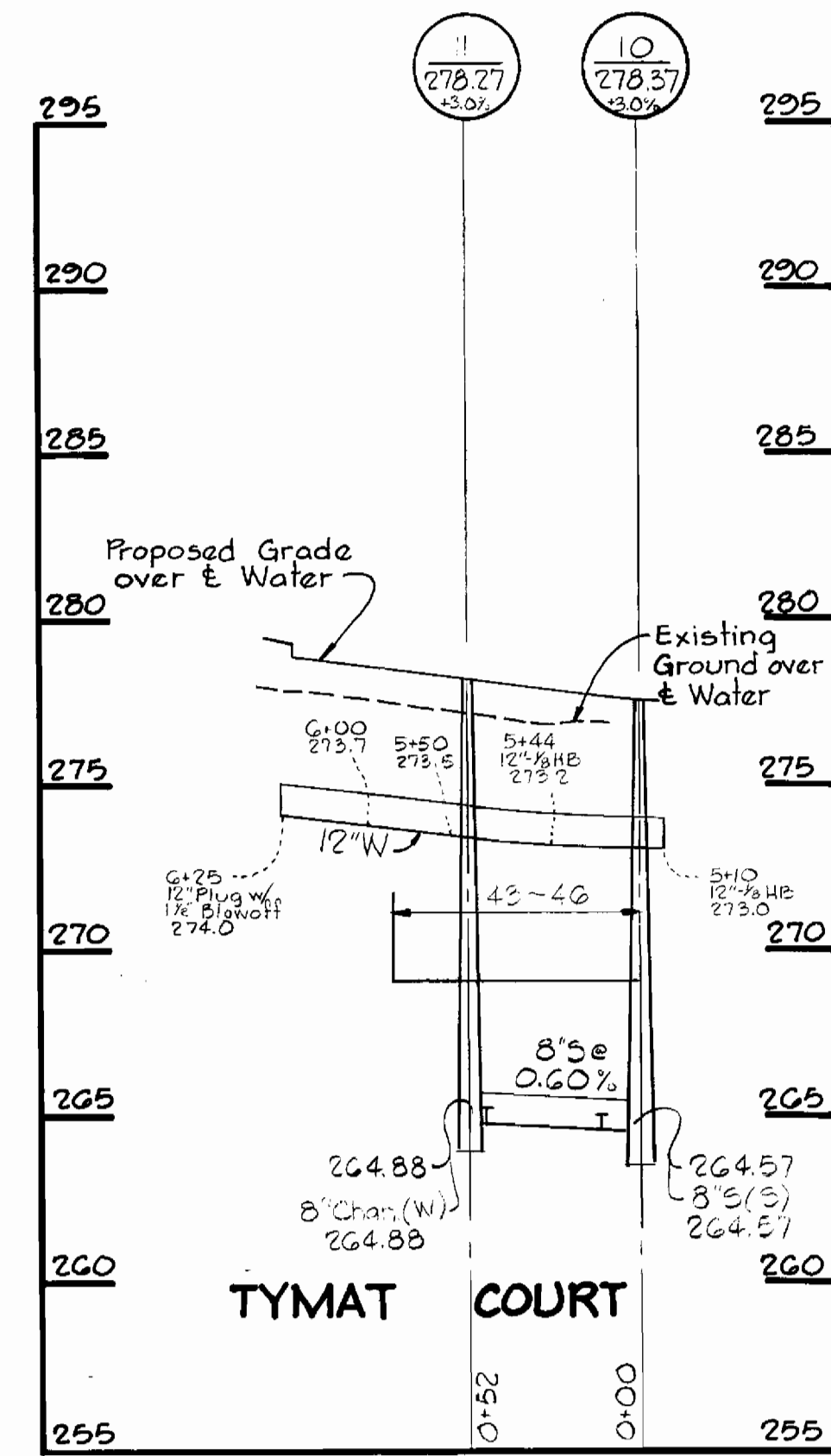
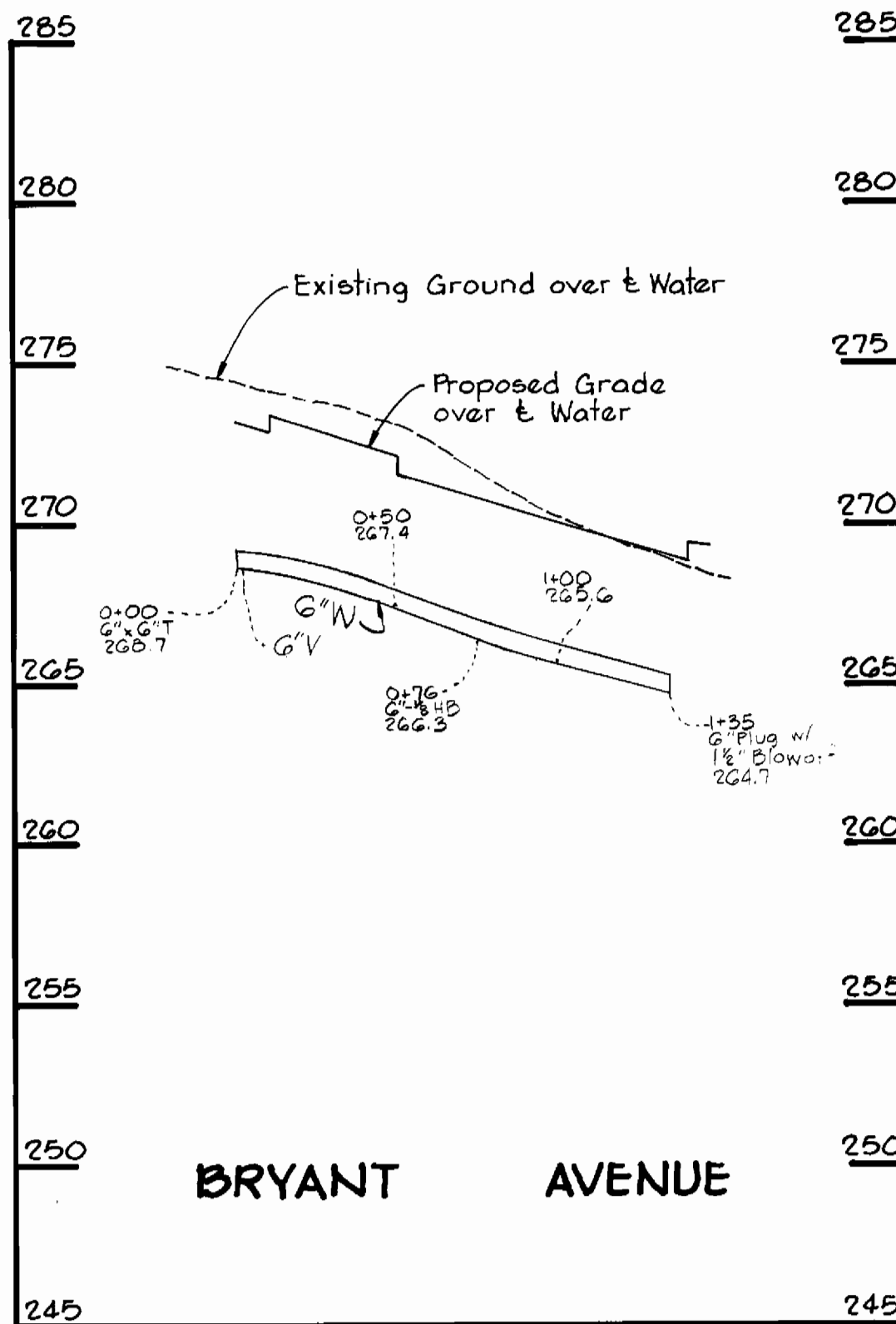
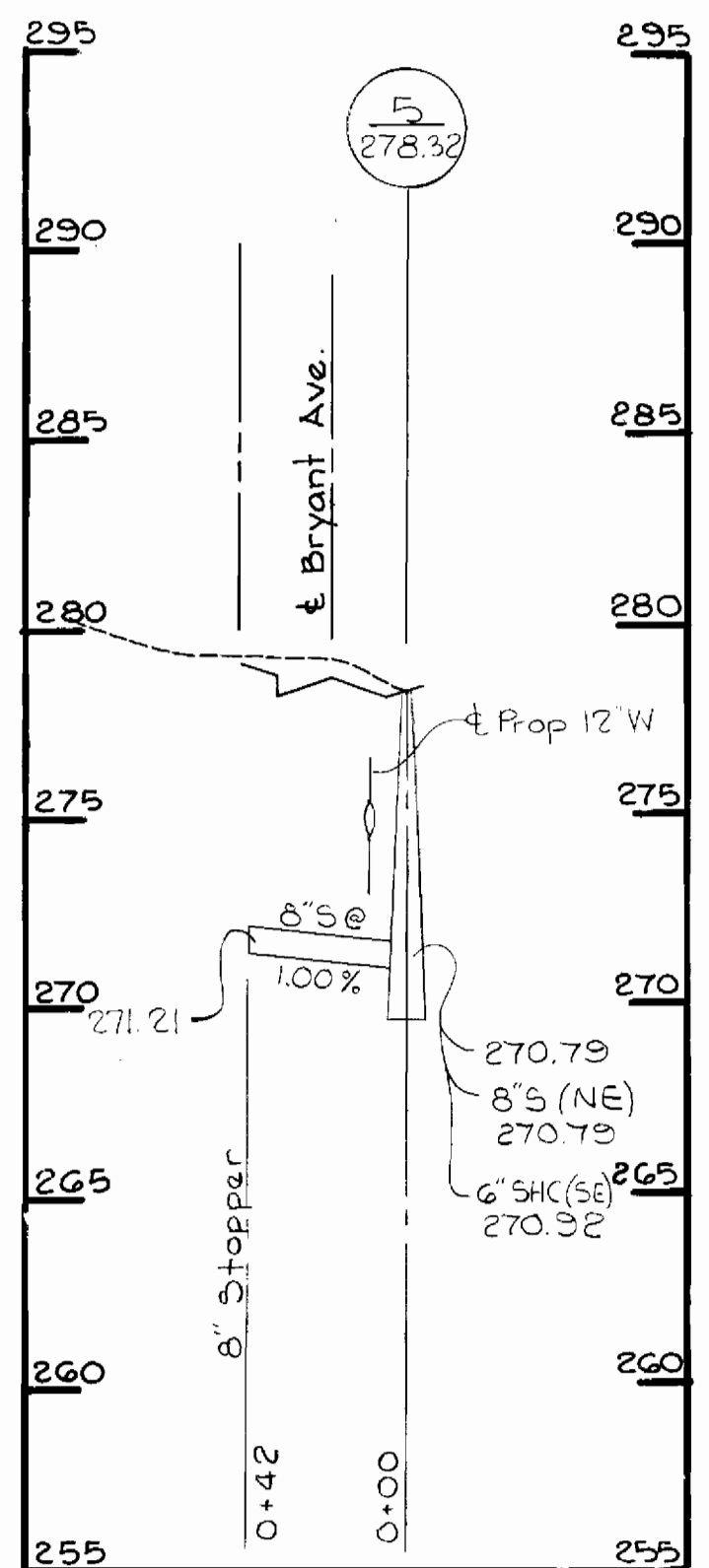
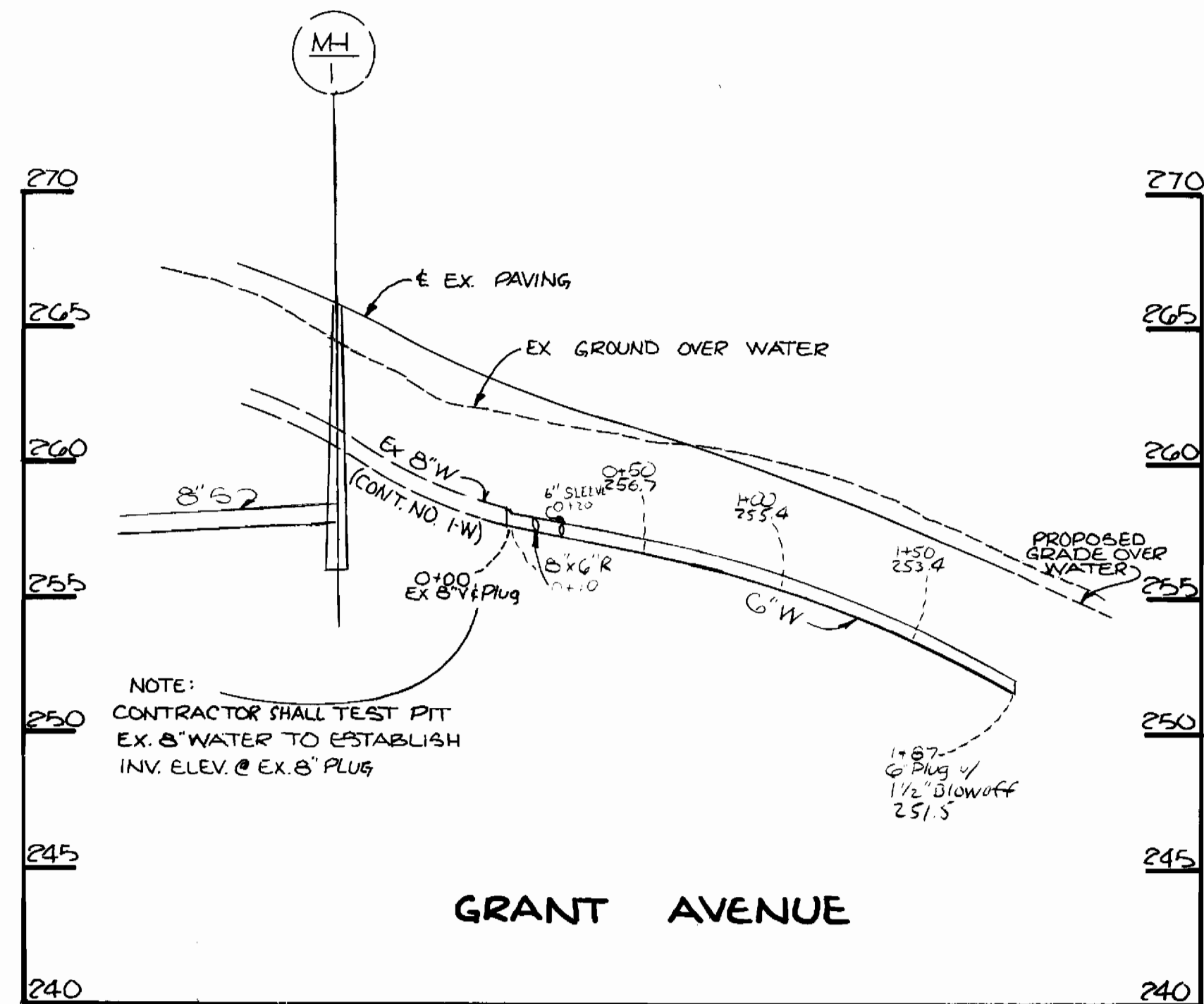
600' SCALE MAP NO. 47 BLOCK NO. 20

FIRST RIDGE SECTION I AREA I
ELECTION DISTRICT NO. 6
CONTRACT NO. 24-0927-D

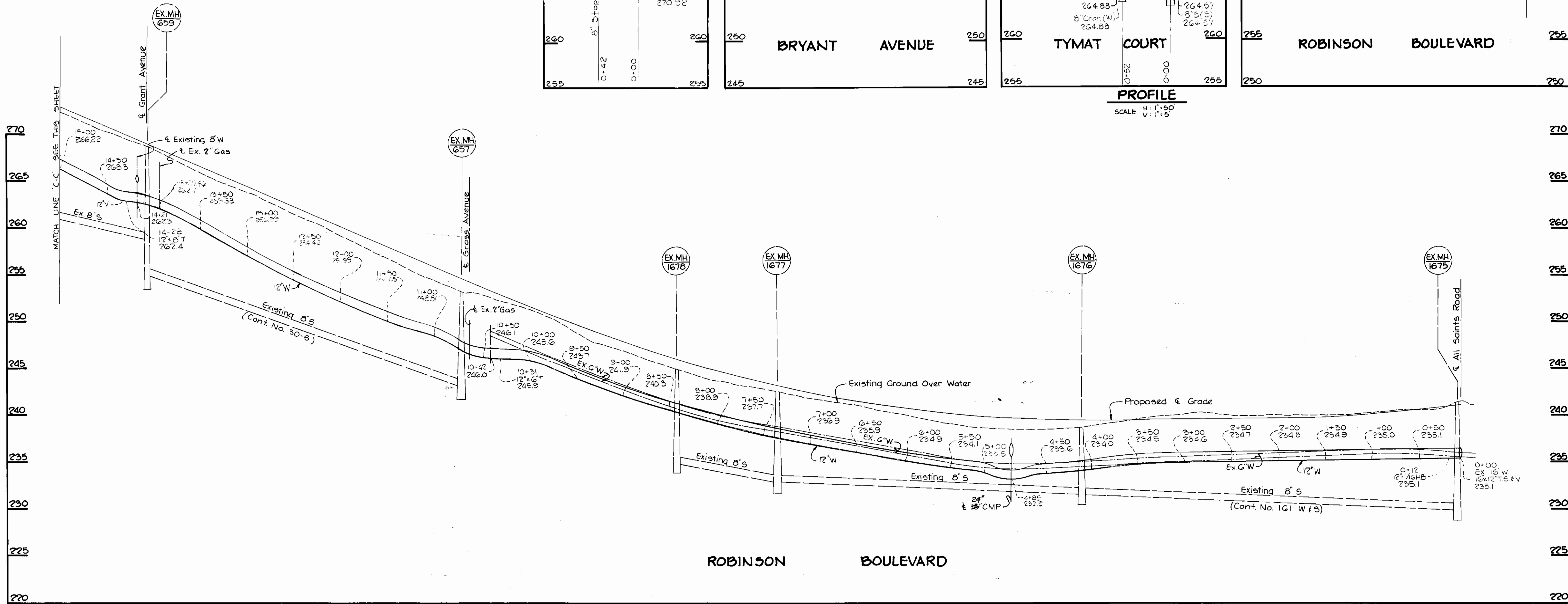
SCALE AS SHOWN
SHEET 3 OF 4

AS BUILT

MARCH 15 1985



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



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

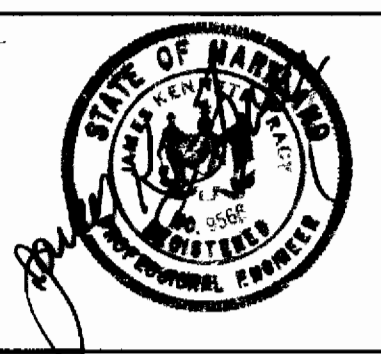
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Beiner
DIRECTOR OF PUBLIC WORKS
DATE: 3-22-85

Michael J. ...
CHIEF, BUREAU OF ENGINEERING
DATE: 3-22-85

Michael J. ...
CHIEF - LAND DEVELOPMENT DIV.
DATE: 3-22-85

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& ASSOCIATES INC.
planning architecture engineering
8450 Baltimore National Pike Suite 34
Ellicott City, Maryland 21043



DES: RJW					
DRN: KAM					
CHK: JKT	LR.C 2	ADDED G" WATER MAIN GRANT AVENUE	12-6-84		
DATE: 8-3-84	LR.C 1	REVISED WATER LOCATION BETWEEN GRANT AVE & BRYANT AVE	10-1-85		
	BY NO.	REVISION	DATE		

PROFILES OF
WATER AND SEWER MAINS

FIRST RIDGE
SECTION I AREA I
ELECTION DISTRICT NO. 6
CONTRACT NO. 24-0927-D

SCALE AS SHOWN
SHEET 4 OF 4