

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 UNLESS OTHERWISE NOTED.
- 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:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC COMPANY
 - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - 685-0123
 - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123
 - ENGINEERING - "DAMAGE CONTROL" - 234-5621
 - "MISS UTILITY" - 1-559-0100
 - CHEASAPEAKE & POTOMAC (CAP) TELEPHONE COMPANY - 725-3976
 - AMERICAN TELEPHONE AND TELEGRAPHY- 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 EXCAVATION AND 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.

WATER NOTES:

- ALL WATER MAINS TO BE 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 1002 OF THE STANDARD SPECIFICATIONS. ALSO SEE SECT. 1008, FIRE HYDRANTS. ①
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING. HOUSE CONNECTION SHALL BE 3/4".
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, USE FLARED TYPE FITTINGS ONLY.

SEWER NOTES:

- 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. (SEE DEPTH CHART G5.01.)

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

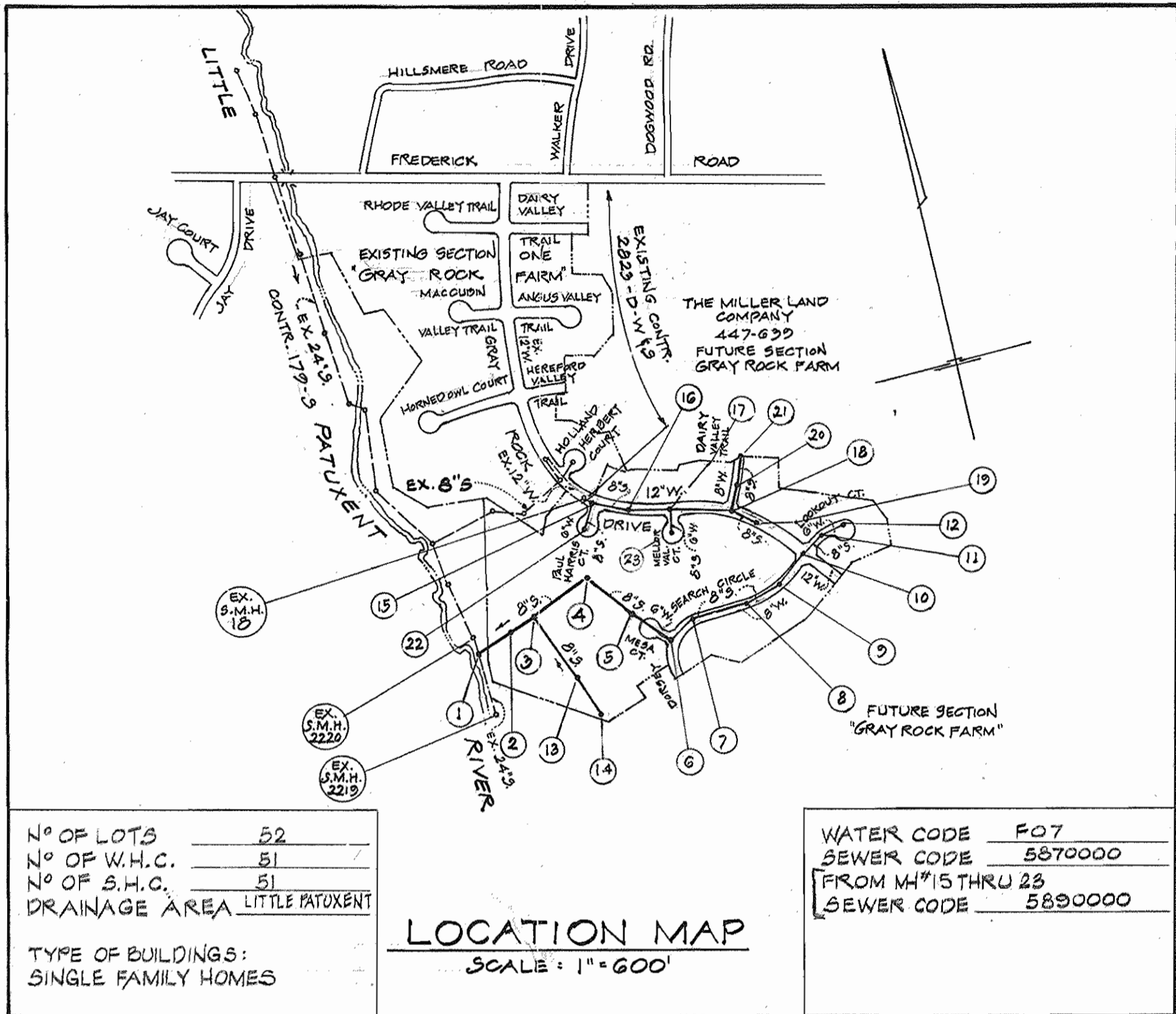
James M. Steln 5-16-84
SIGNATURE DATE

U.S. SOIL CONSERVATION SERVICE

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

APPROVED: *Joseph R. Bonjovich* 5/16/84
HOWARD IS.O. DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE NO. 18 OF THE SPECIFICATIONS WITH ROAD CONSTRUCTION PLAN F 84-32; DRAWING 10 0212; SEDIMENT & EROSION CONTROL.



QUANTITIES

ITEMS	BID	AS BUILT	MATERIAL/SUPPLIER
8" SEWER	4279 L.F.	4011	CertainTeed
6" WATER	723 L.F.	852	GRIFFIN Pipe
8" WATER	1280 L.F.	1327	GRIFFIN Pipe
12" WATER	1413 L.F.	1397	GRIFFIN Pipe
F.H.	5 EA.	5	MUELLER
12" VALVE	2 EA.	2	MUELLER
8" VALVE	5 EA.	4	MUELLER
6" V.(LINE)	3 EA.	3	MUELLER
6" F.H. VALVES	5 EA.	5	MUELLER
SAN. M.H.'S.	23 EA.	23	ATLANTIC PRECAST
1 1/2" BLOW-OFF	7 EA.	7	Ford Meter Box Co.
NOTE: ALL WATER MAIN TO BE D.I.P.			
1,282 L.F.	3/4" W.H.C.	1688	
1,600 L.F.	6" S.H.C.	1064	CertainTeed
N.A.	1" W.H.C.		

CONTRACT NO. 24-1183-D

GRAY ROCK FARM

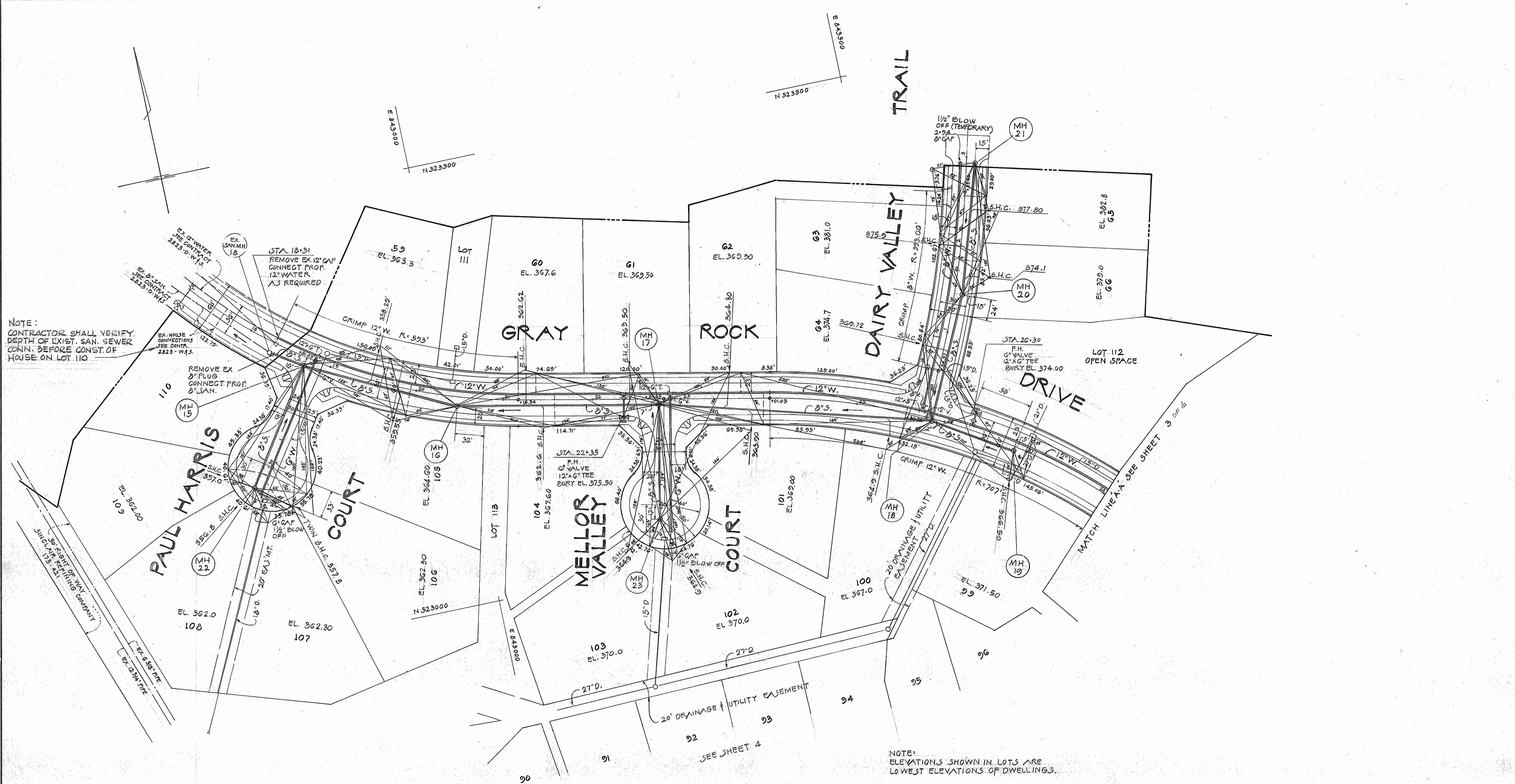
SECTION 2

WATER & SEWERAGE CONSTRUCTION PLANS

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James M. Steln</i> 5-13-84 Chief, Bureau of Engineering Chief, Bureau of Utilities: <i>Joseph R. Bonjovich</i> 5-11-84 Chief, Land Development Div.	KIDDE CONSULTANTS, INC. ENGINEERS • ARCHITECTS • PLANNERS	DES: W.P. DRN: W.B. CHK: W.P. DATE: 2-84 REVISION: ① WATER NOTE 5 6-26-84	TITLE SHEET	GRAY ROCK FARM SECTION 2 2 ND ELECTION DISTRICT HOWARD CO., MD. CONTRACT NO. 24-1183-D	SCALE 1" = 600' SHEET 1 OF 6
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NOTE:
CONTRACTOR SHALL VERIFY
DEPTH OF EXIST. SAN. SEWER
CONN. BEFORE CONST. OF
HOUSE ON LOT 110

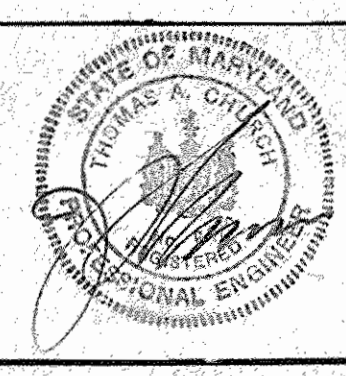
NOTE:
ELEVATIONS SHOWN IN LOTS ARE
LOWEST ELEVATIONS OF DWELLINGS.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Berman 5-11-84
CHIEF, BUREAU OF UTILITIES

Shelton 5-11-84
CHIEF, LAND DEVELOPMENT DIV.

KIDDE CONSULTANTS, INC.
ENGINEERS • ARCHITECTS • PLANNERS



DES: W.P.			
DRN: R.H.			
CHK: R.B.			
DATE: 2-84	BY: NO.	REVISION	DATE

**PLAN
WATER & SEWERAGE**

**GRAY ROCK FARM
SECTION 2**
2ND ELECTION DISTRICT HOWARD CO., MD.
CONTRACT NO. 24-1183-D

SCALE
1"=30'
SHEET
2 OF 6



NOTE:
ELEVATIONS SHOWN IN LOTS ARE
LOWEST ELEVATIONS OF DWELLINGS.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

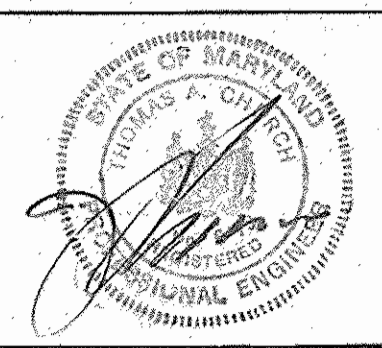
James M. Lane 5/18/84
DIRECTOR OF PUBLIC WORKS DATE

Robert M. Reinger 5/14/84
CHIEF, BUREAU OF UTILITIES DATE

Robert M. Reinger 5/14/84
CHIEF, BUREAU OF ENGINEERING DATE

Robert M. Reinger 5/14/84
CHIEF, LAND DEVELOPMENT DIV. DATE

KIDDE CONSULTANTS, INC.
ENGINEERS • ARCHITECTS • PLANNERS



DES. W.P.				
DRN. R.H.				
CHK. R.B.				
DATE: 2-84	BY	NO.	REVISION	DATE

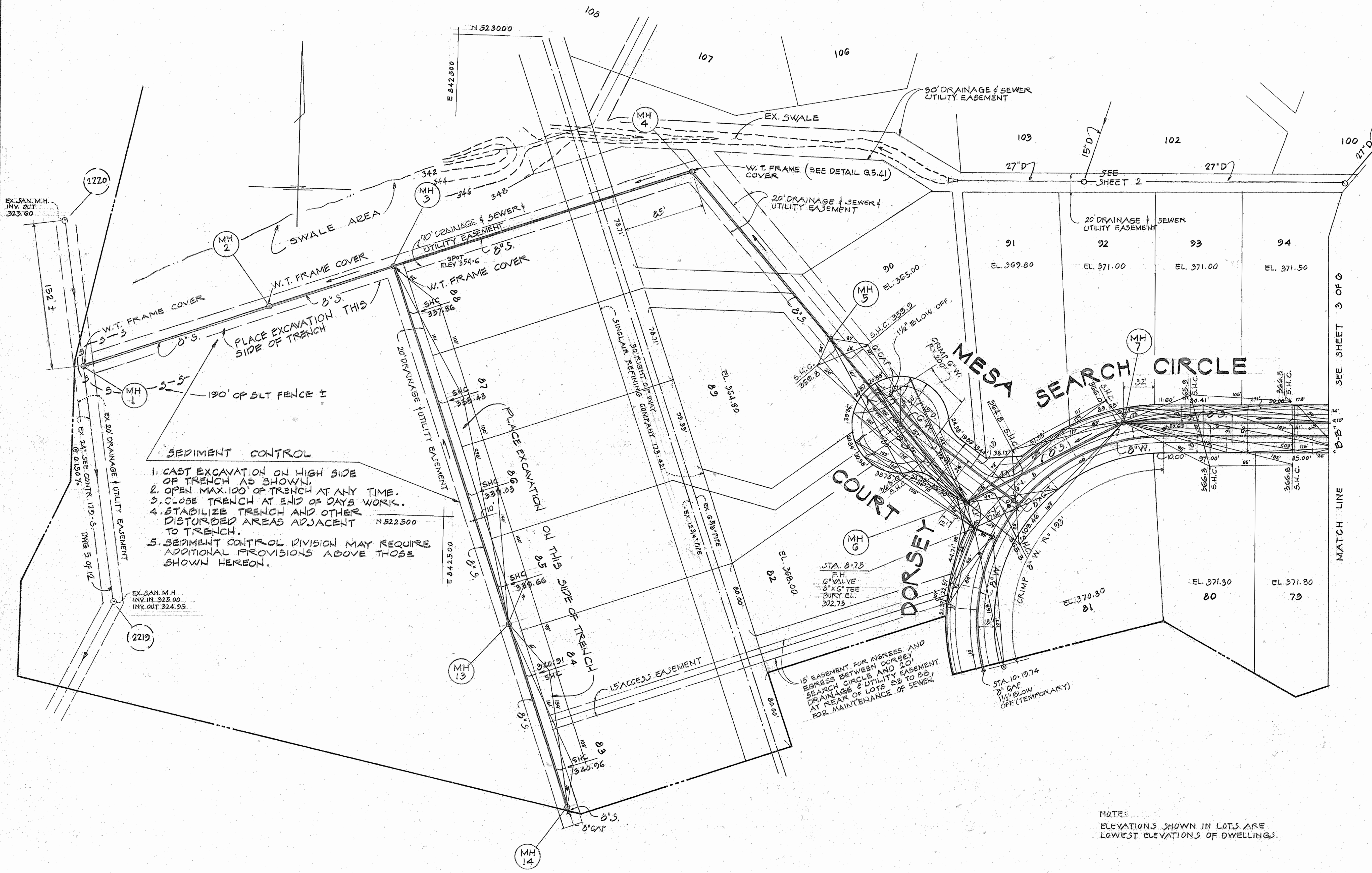
**PLAN
WATER & SEWERAGE**

**GRAY ROCK FARM
SECTION 2**
2ND ELECTION DISTRICT HOWARD CO., MD.
CONTRACT NO. 24-1183-D

SCALE
1"=50'
SHEET
3 OF 6

CONSTRUCTION NOTES -
COLONIAL PIPELINE AREA

1. NOTIFY MR. B. W. CURTIS, P.O. BOX 69, WOODBINE, MARYLAND 21797, PHONE 301/795-1390, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, SUBSEQUENT MAINTENANCE OR REPAIR, SO COLONIAL MAY PROVIDE A REPRESENTATIVE AT THE SITE.
2. NO MECHANIZED DITCHING SHALL BE ALLOWED WITHIN 7 FEET OF THE CENTERLINE OF THE OUTSIDE PIPELINES.
3. TEST HOLES ARE REQUIRED TO DETERMINE THE EXACT LOCATION AND ELEVATION OF THE PIPELINES, COLONIAL WILL PROVIDE A REPRESENTATIVE TO ASSIST IN THE LOCATION OF THE PIPELINES.
4. STOCKPILING OF SPOILAGE OR TOP SOIL OVER THE PIPELINES IS NOT PERMITTED.
- 5/ PERMANENT STRUCTURES ARE NOT PERMITTED ON THE EASEMENT, THIS INCLUDES MANHOLES.
6. THE PROPOSED 8" SEWER INSTALLATION SHALL MAINTAIN A MINIMUM CLEARANCE OF 18 VERTICAL INCHES BELOW THE PIPELINES; THE ANGLE OF CROSSING SHALL BE INDICATED ON THE DRAWINGS.
7. BLASTING IS NOT PERMITTED ON THE EASEMENT. PLEASE NOTIFY COLONIAL AS TO TIME AND PROCEDURE FOR ANY BLASTING IN THE AREA OF THE PIPELINES.
8. SEE PROFILE OF CROSSING ON SHEET 5 OF 6.

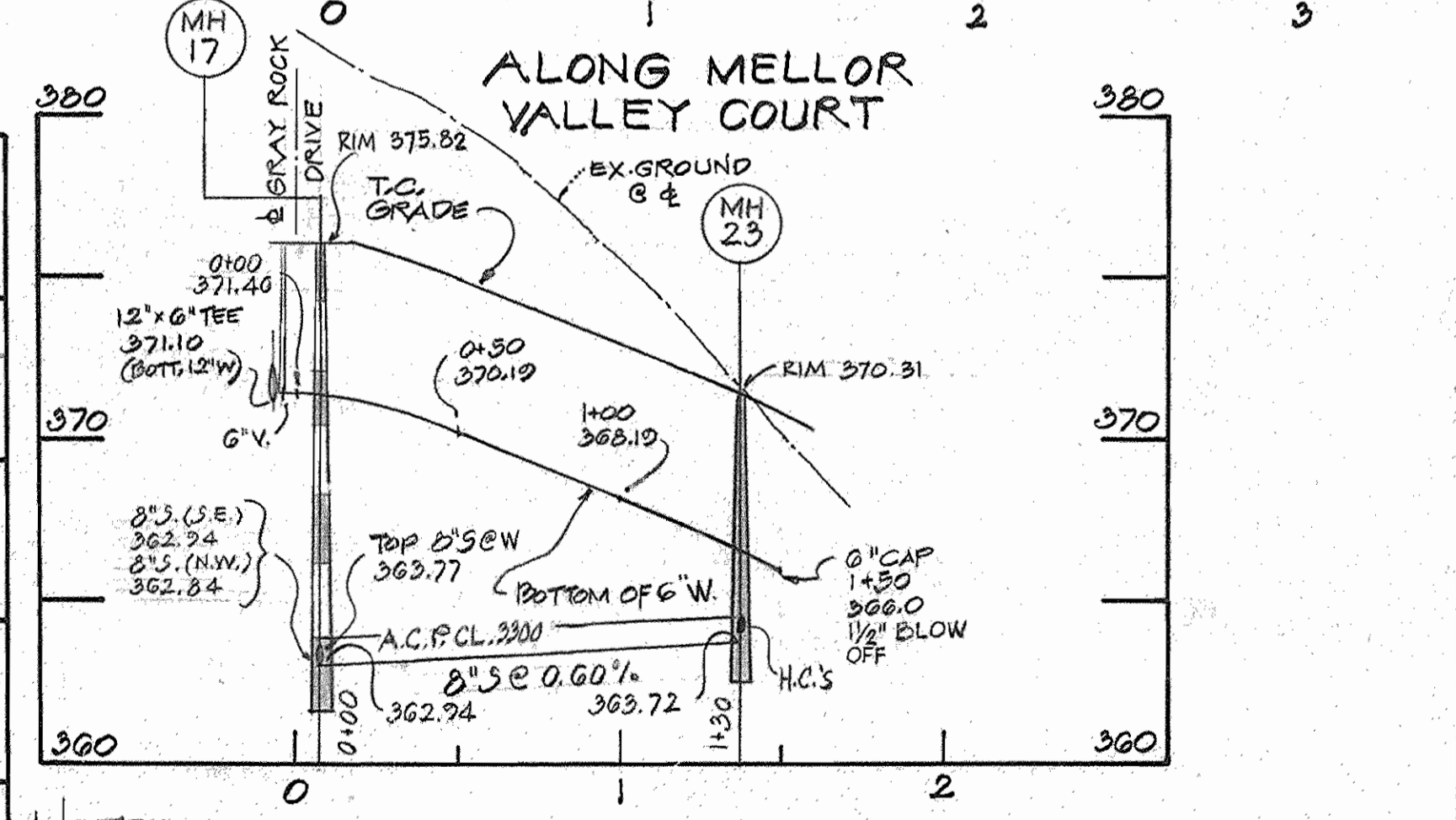
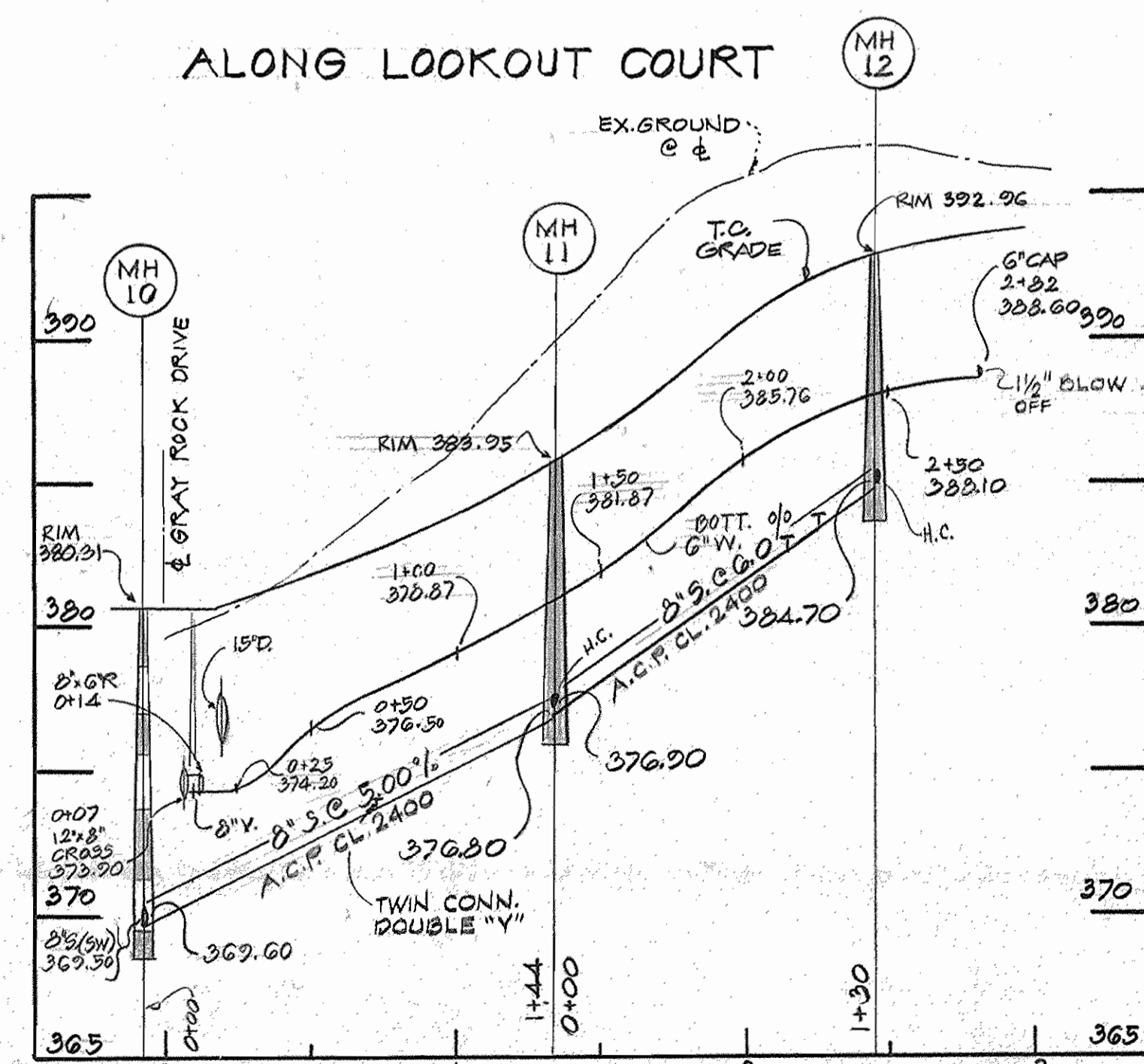
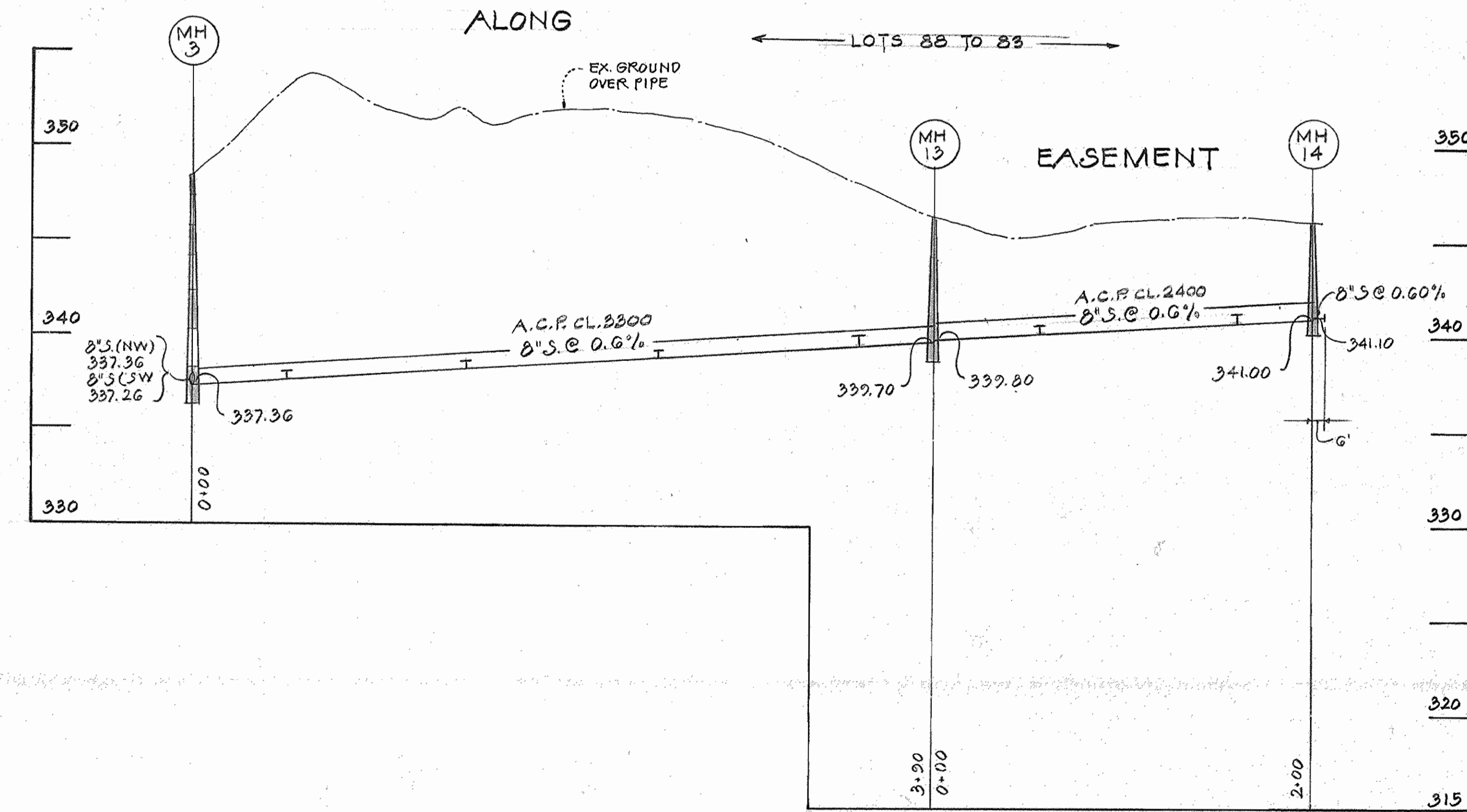
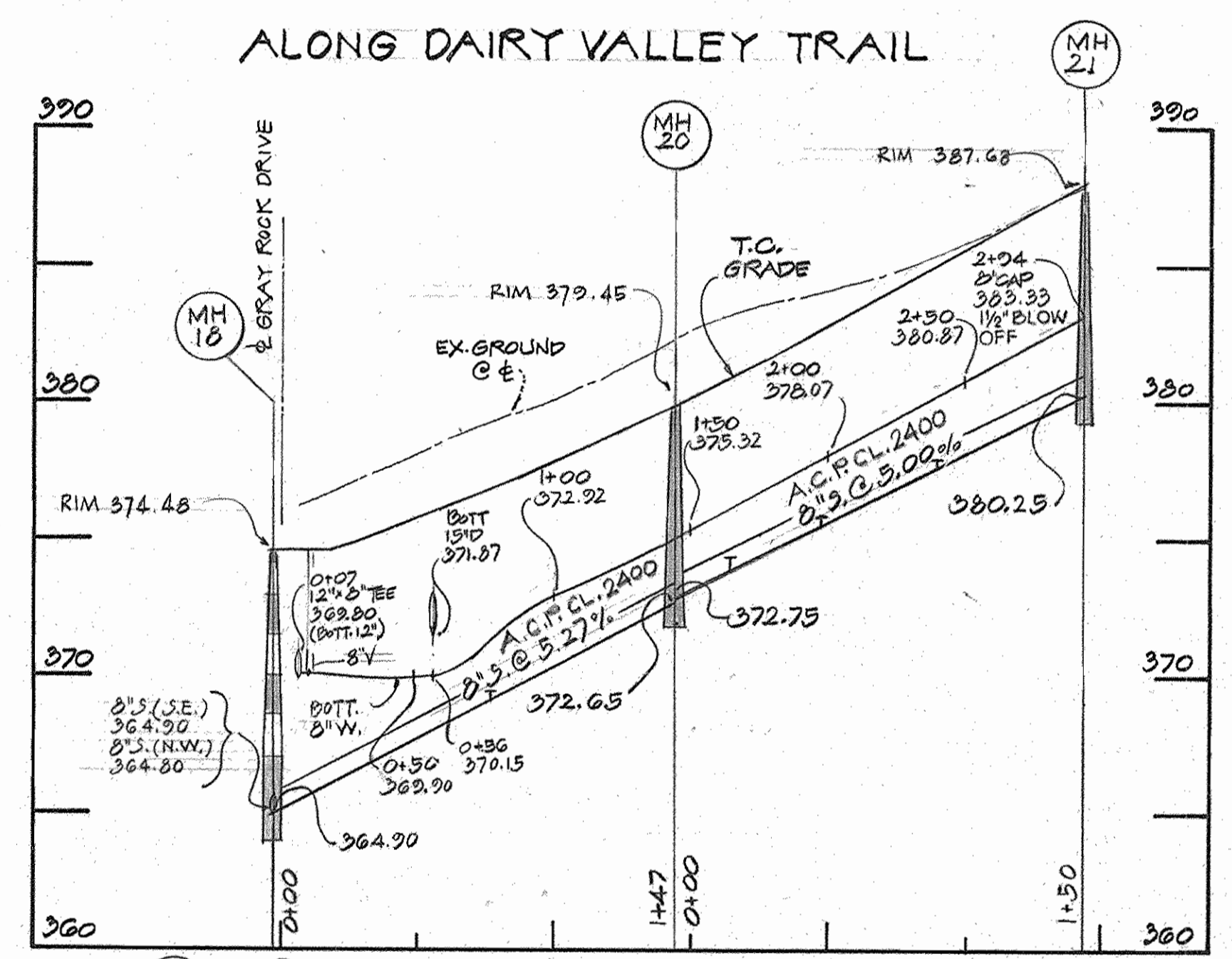
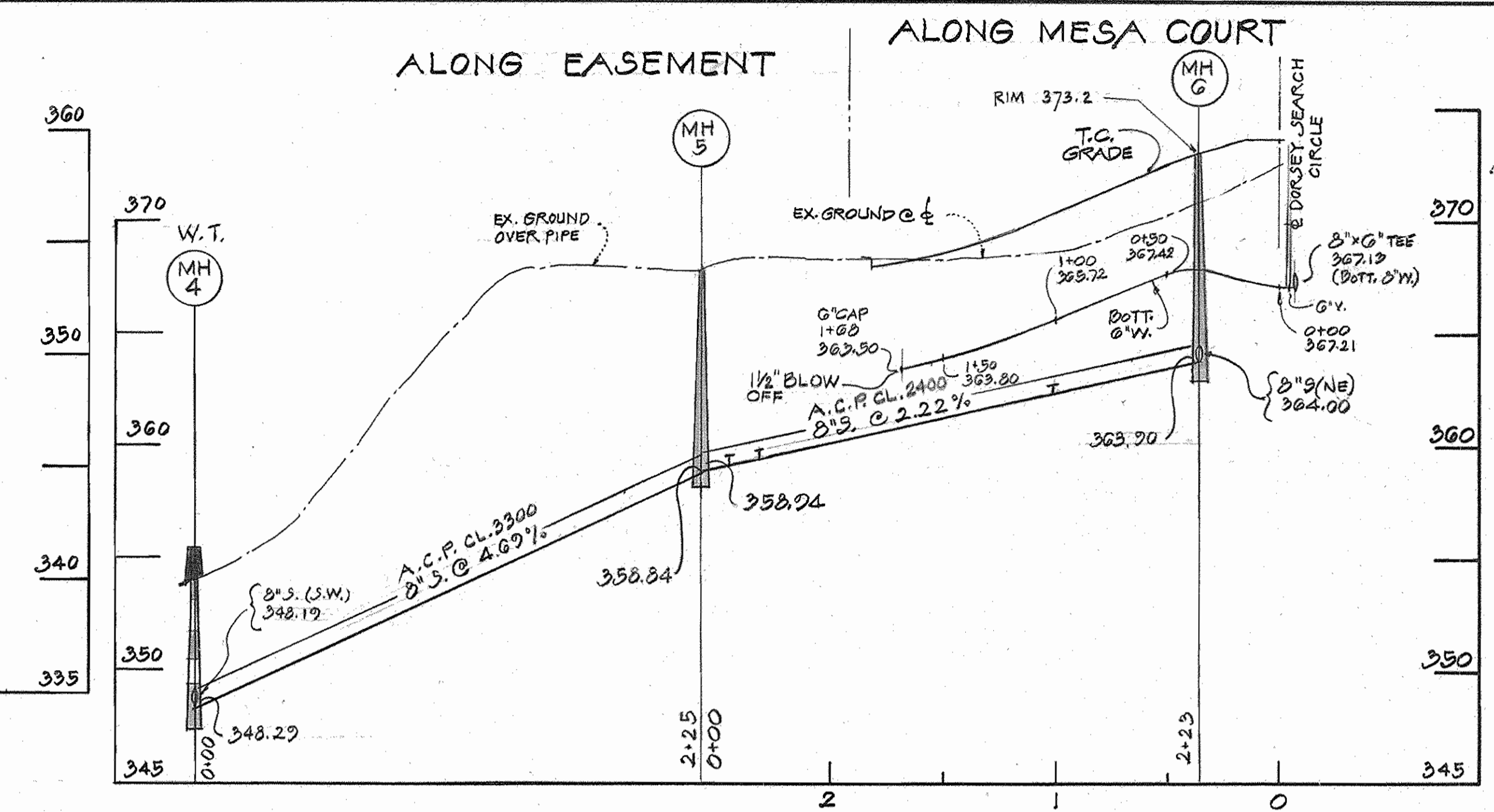
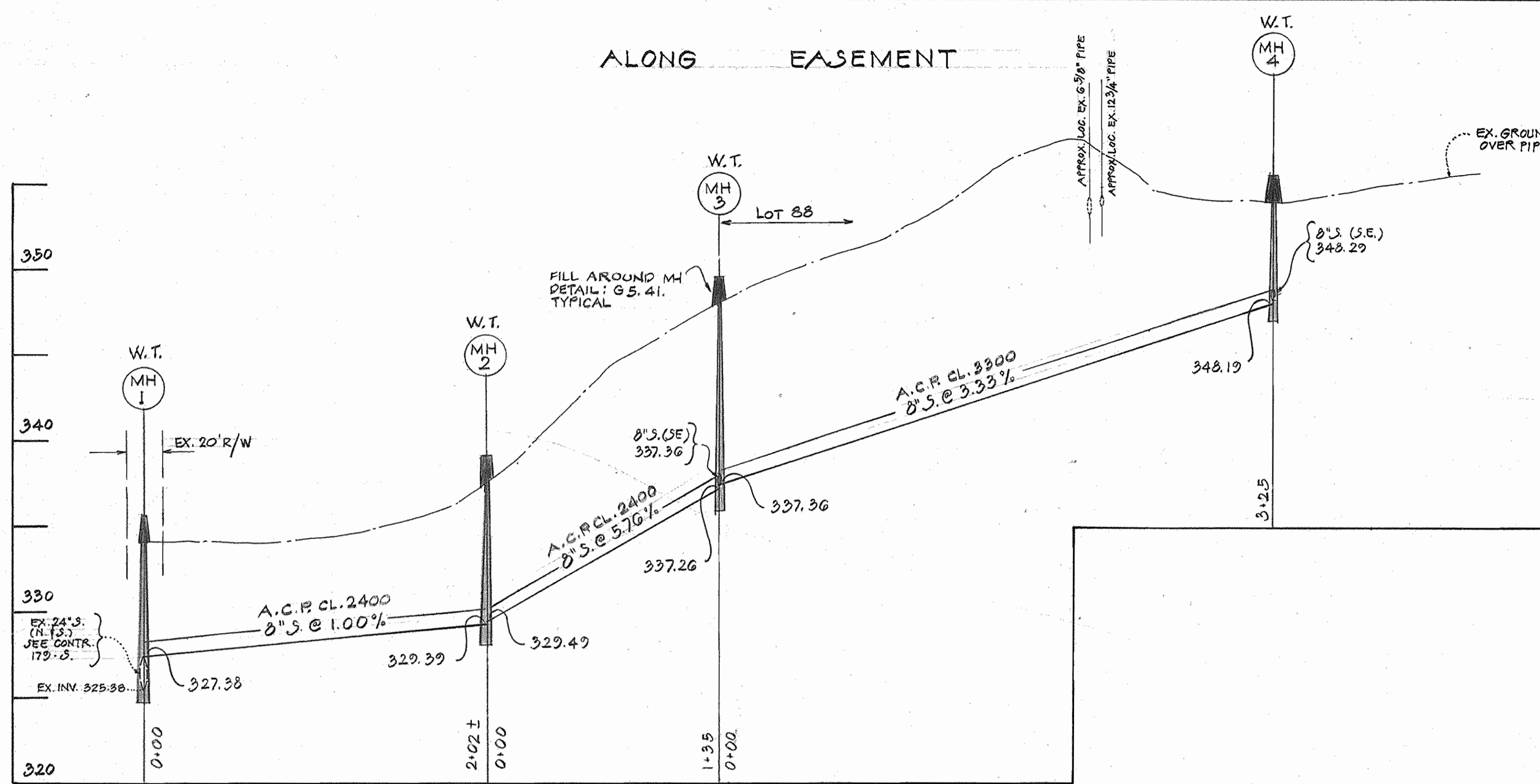


SEDIMENT CONTROL

1. CAST EXCAVATION ON HIGH SIDE OF TRENCH AS SHOWN.
2. OPEN MAX. 100' OF TRENCH AT ANY TIME.
3. CLOSE TRENCH AT END OF DAYS WORK.
4. STABILIZE TRENCH AND OTHER DISTURBED AREAS ADJACENT TO TRENCH.
5. SEDIMENT CONTROL DIVISION MAY REQUIRE ADDITIONAL PROVISIONS ABOVE THOSE SHOWN HEREON.

NOTE:
ELEVATIONS SHOWN IN LOTS ARE
LOWEST ELEVATIONS OF DWELLINGS.

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>James M. ...</i> DIRECTOR OF PUBLIC WORKS</p> <p><i>Robert M. ...</i> CHIEF, BUREAU OF UTILITIES</p>	<p>KIDDE CONSULTANTS, INC. ENGINEERS • ARCHITECTS • PLANNERS</p>		<p>DES: W.P. DRN: R.H. CHK: R.B. DATE: 2-84</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>BY</th> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	BY	NO.	REVISION	DATE					<p>PLAN WATER & SEWERAGE</p>	<p>GRAY ROCK FARM SECTION 2 2ND ELECTION DISTRICT HOWARD CO., MD. CONTRACT NO. 24-1183-D</p>	<p>SCALE 1" = 50'</p> <p>SHEET 4 OF 6</p>
BY	NO.	REVISION	DATE												



NOTE: SET MHS 1, 2, 3, 4, 5, 13, 14 IN FIELD (RIM ELEV.)

NOTE:
 1. ALL P.V.C. PIPE INSTALLED SHALL BE ENCASED IN 4\"/>

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: [Signature]
 Chief, Bureau of Engineering: [Signature]
 Chief, Bureau of Utilities: [Signature]

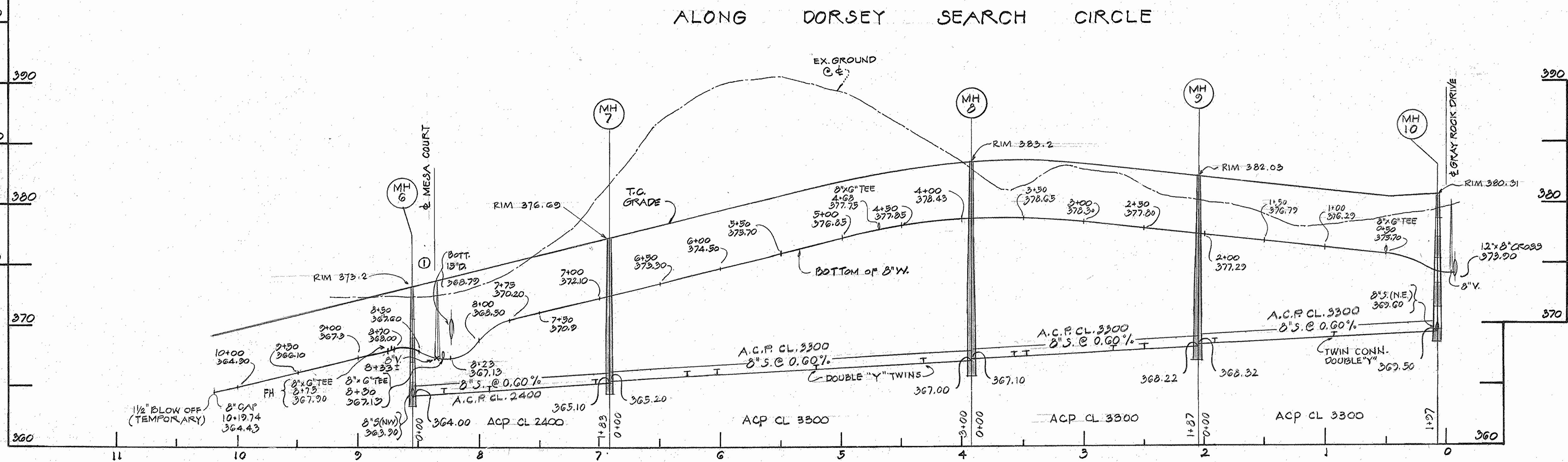
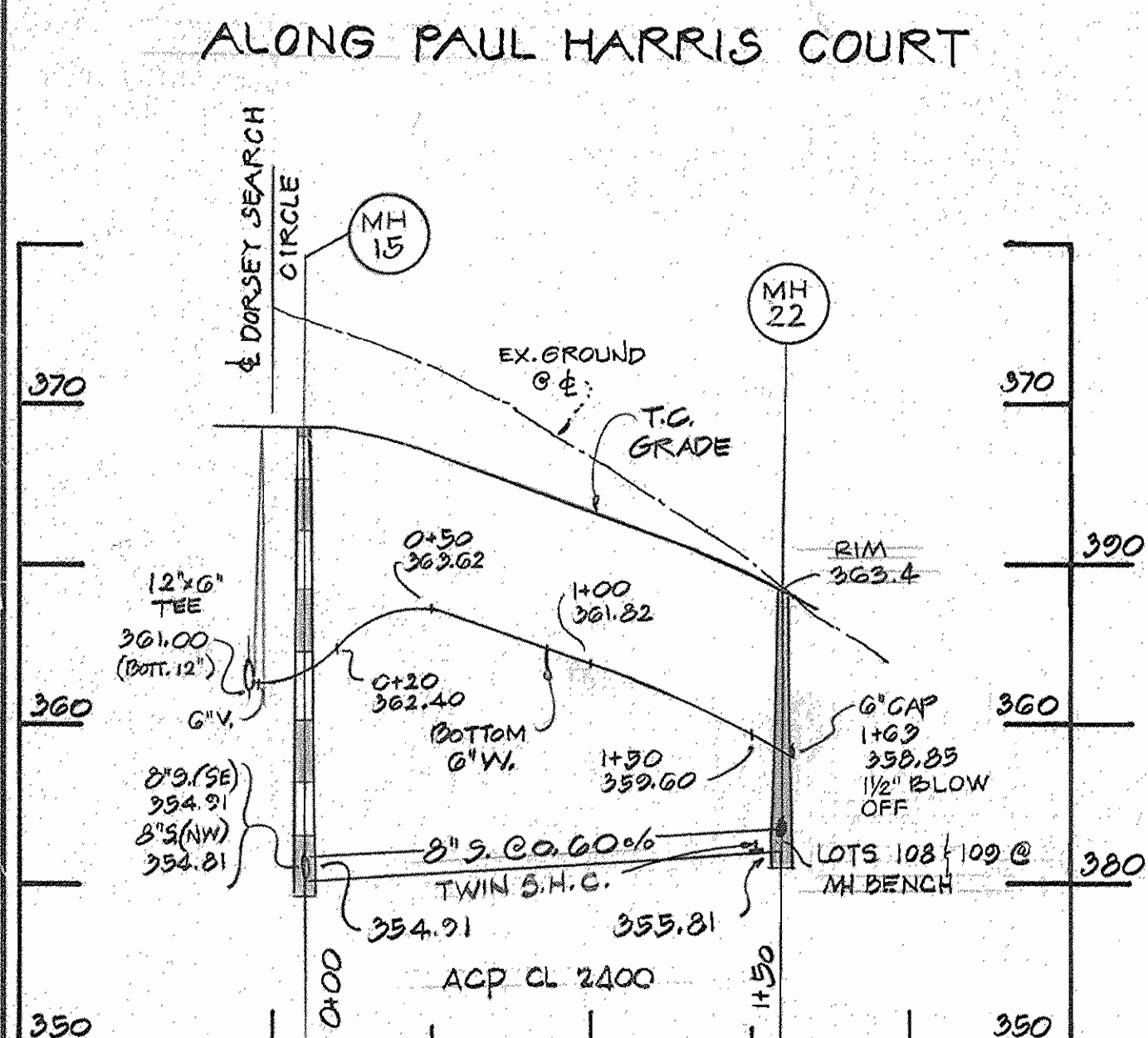
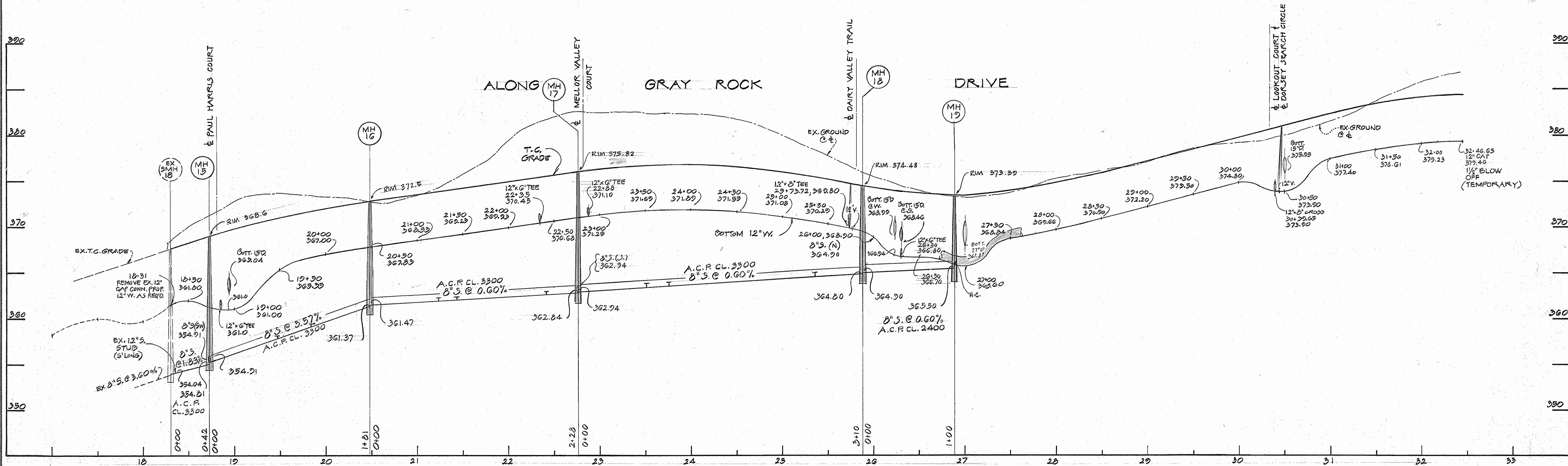
KIDDE CONSULTANTS, INC.
 ENGINEERS • ARCHITECTS • PLANNERS



DES: W.F.	
DRN: R.H.	
CHK: R.B.	
DATE: 2-84	
BY: RB	NO. 1
REVISION: REVISE NOTE 1	DATE: 6-26-84

PROFILES
WATER & SEWERAGE

GRAY ROCK FARM
SECTION 2
 2ND ELECTION DISTRICT HOWARD CO., MD.
 CONTRACT NO. 24-1183-D
 SCALE: 1"=30' HORIZ. / 1"=5' VERT.
 SHEET 5 OF 6
 As Built March 11, 1985



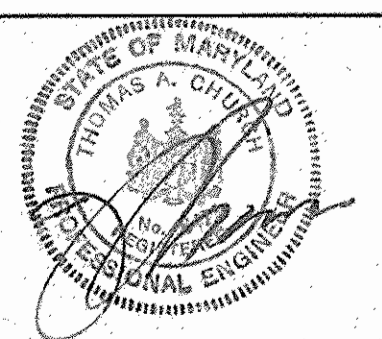
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

January 14, 1984
 Director of Public Works
 Robert Reinger
 Chief, Bureau of Utilities

5-1184
 DATE

KIDDE CONSULTANTS, INC.
 ENGINEERS • ARCHITECTS • PLANNERS

5-1184
 DATE



DES: W.P.	
DRN: R.H.	
CHK: R.B.	
DATE: 2-84	
REVISION	DATE
1	RELOCATE VALVE TO 8+33 - DORSEY SEARCH CIR.
2	

PROFILES
WATER & SEWERAGE

6-26-84

GRAY ROCK FARM
SECTION 2
 2ND ELECTION DISTRICT HOWARD CO., MD.
 CONTRACT NO. 24-1183-D

SCALE
 1" = 50' HORZ.
 1" = 5' VERT

SHEET
 6 OF 6