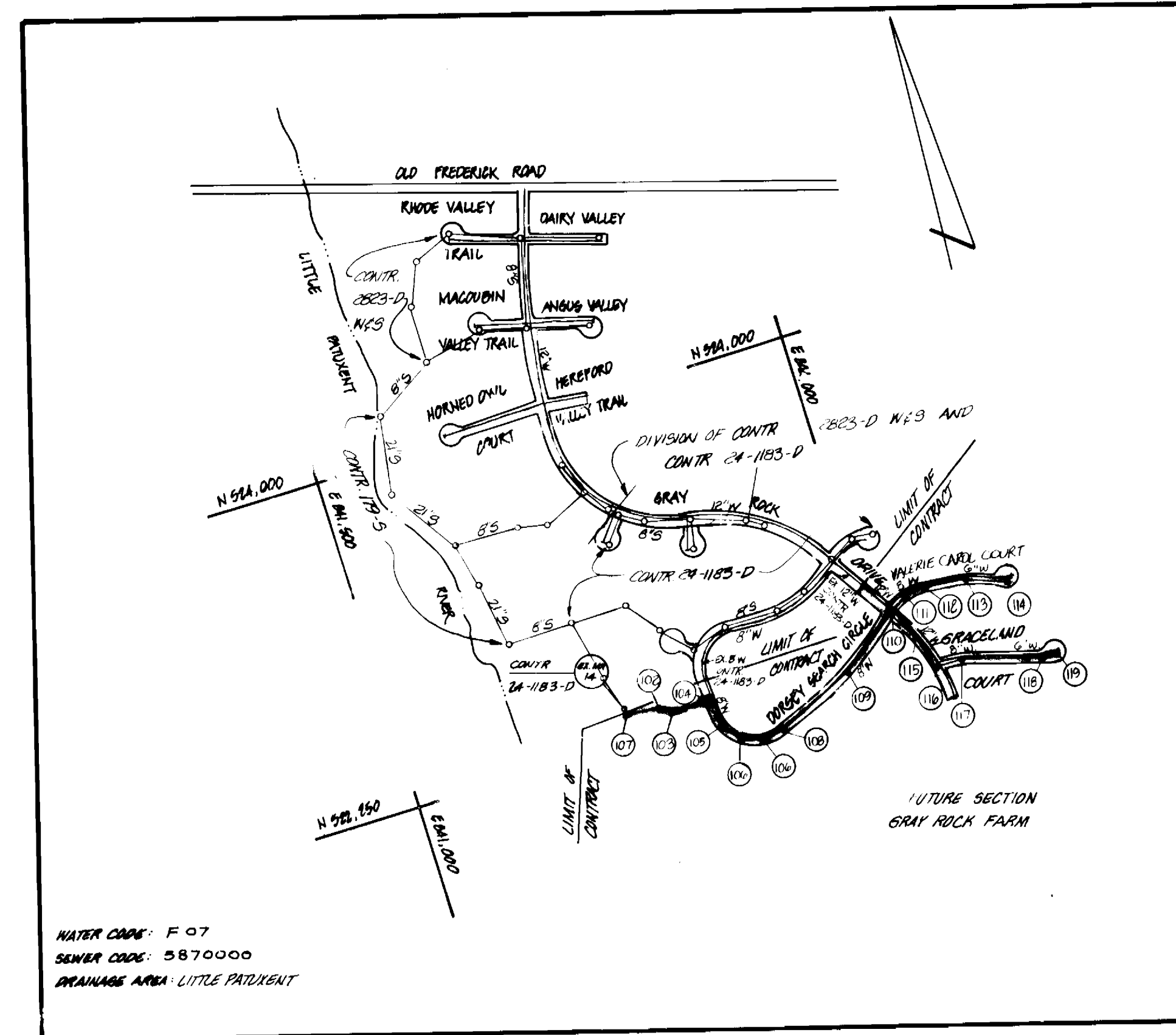


TYPE OF BUILDING	SINGLE FAMILY
NUMBER OF LOTS	52
NUMBER OF SHC's	52
NUMBER OF WHC's	52
DRAINAGE AREA	LITTLE PATUKENT



VICINITY MAP
SCALE: 1" = 1000'

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 MIN. OF 6" CLEAR ALL POLES BY 2'-0" MIN. 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 HO. CO. STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION METHODS USE HO. CO. STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MIN. OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES OR UTILITIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTO. GAS & ELECTRIC CO. - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - 685-0122
 - BALTO. GAS & ELECTRIC CO. - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123
 - ENGINEERING - "DAMAGE CONTROL" - 234-5621
 - "MISS UTILITY" - 1-539-0100
 - CHESAPEAKE & POTOMAC (CBP) TELEPHONE COMPANY - 725-9976
 - AMERICAN TELEPHONE & TELEGRAPH - CABLE LOCATION DIVISION - 393 3553
 - COLONIAL PIPELINE COMPANY - 795-1590
 - BUREAU OF UTILITIES HOWARD COUNTY - 992-2366
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAX. 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 REGULATORY "WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION. MANUAL TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- ALL WATER MAINS TO BE 12" D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS TO HAVE A MIN. OF 3-1/2" COVER UNLESS OTHERWISE NOTED.
- TEES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- BLOCK ALL FITTINGS WITH CONCRETE.
- BURY LINT ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BULGED 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.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL SEWER MAINS SHALL BE CLASS P, R, C, S, P, V, G, S, P, ACP 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.
- MANHOLS SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
- MANHOLS DESIGNATED WT IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 6.5.2. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE, STANDARD DETAIL 6.5.4.
- HOUSE(S) WITH THE SYMBOL CNS INDICATES THAT CELLAR CANNOT BE SERVED.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPE FITTINGS ONLY.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE NO 15 OF THE SPECIFICATIONS AND WITH F-84-143.

SEDIMENT & EROSION CONTROL

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

James M. Nelson 5-2-86
U.S. SOIL CONSERVATION SERVICE DATE

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

APPROVED:

Stephen L. Hahn 5/2/86
HOWARD S.C.D. DATE

QUANTITIES			
ITEM	ESTIM'D	AS-BUILT	MATERIAL/SUPPLIER
6" MAIN	530	348 LF	CL 52 D.I.P. - GRIFFIN PIPE
8" MAIN	2153	2178 LF	CL 52 D.I.P. - GRIFFIN PIPE
12" MAIN	843	843 LF	CL 52 D.I.P. - GRIFFIN PIPE
FIRE HYDRANT	5	5 EA	929-335 FH - MCH VALVE CO.
6" (ENCL. FHT)	-	-	-
1/4" DRAIN BLINDOFF	3	3 EA	40-2111, F04L - ASTM B62 INCL. 05
3/4" WVC	265	219 LF	ASTM-B88 - HALSTEAD METALS
1" WVC	745	265 LF	-
8" V	4	2 EA	MESH / ANNA CDDU - ASTM A12C
12" V	2	2 EA	-
8" S MAIN	3396	2230	PVC SDR-35 / AMERICAN
6" SHC	885	355 LF	PVC SDR-35 / AMERICAN
WH (DET. 6.5.12)	19	19 EA	ASTM C 478 / ATLANTIC PRECAST

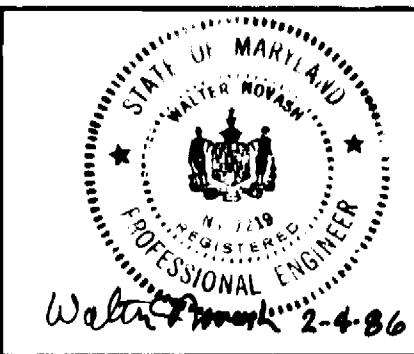
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE
Robert M. Quinn 4-29-86

CHIEF, BUREAU OF ENGINEERING DATE
Michael H. ... 5-2-86

CHIEF, LAND DEVELOPMENT DIV DATE
... 5-2-86

BOENDER ASSOCIATES, INC.
ENGINEERS PLANNERS SURVEYORS
3565 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MARYLAND 21043
465-7777

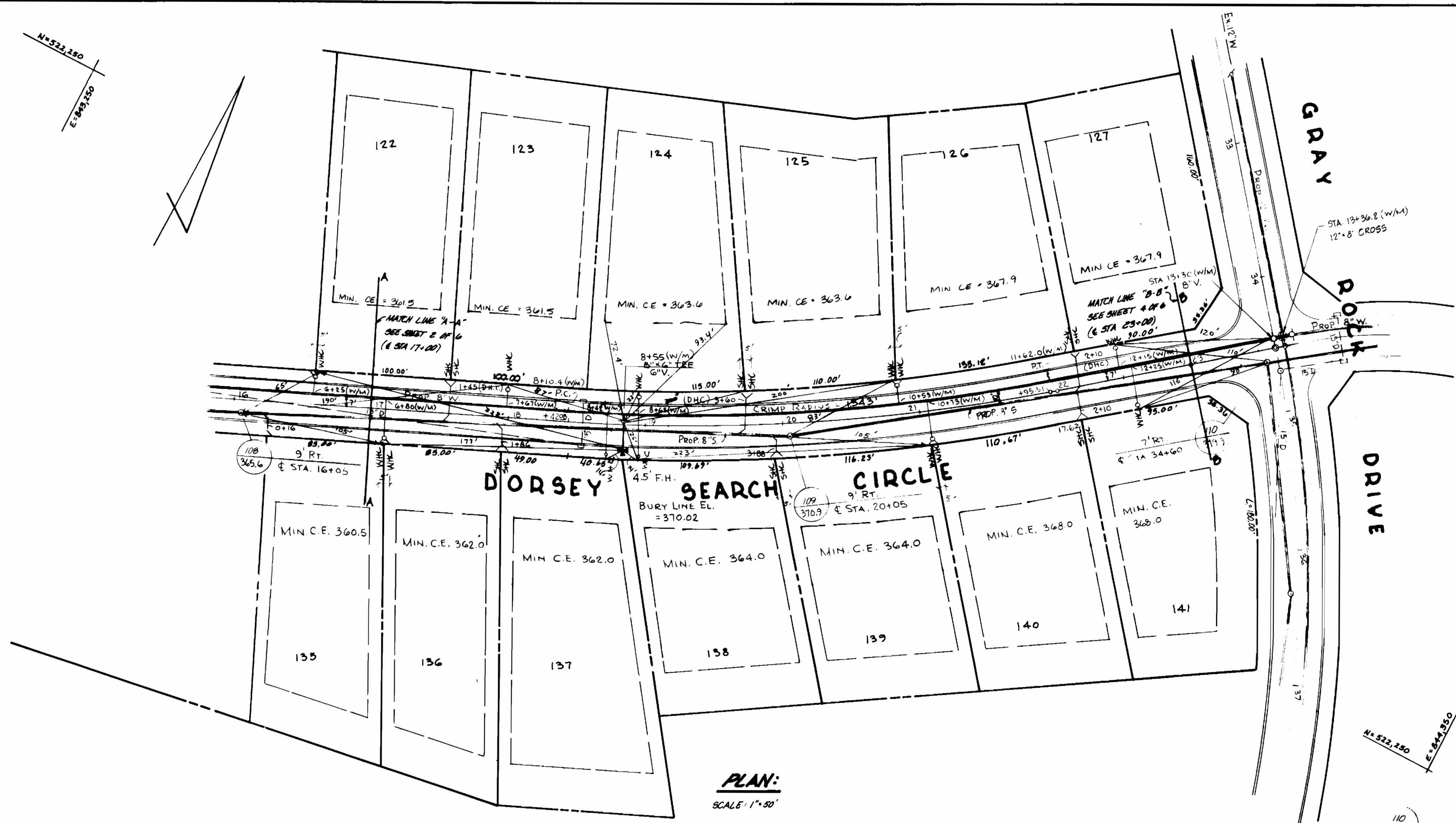


DES. W.H.			
DRN. D.P.			
CHK. W.H.			
DATE JAN 1986	BY	NO.	REVISION

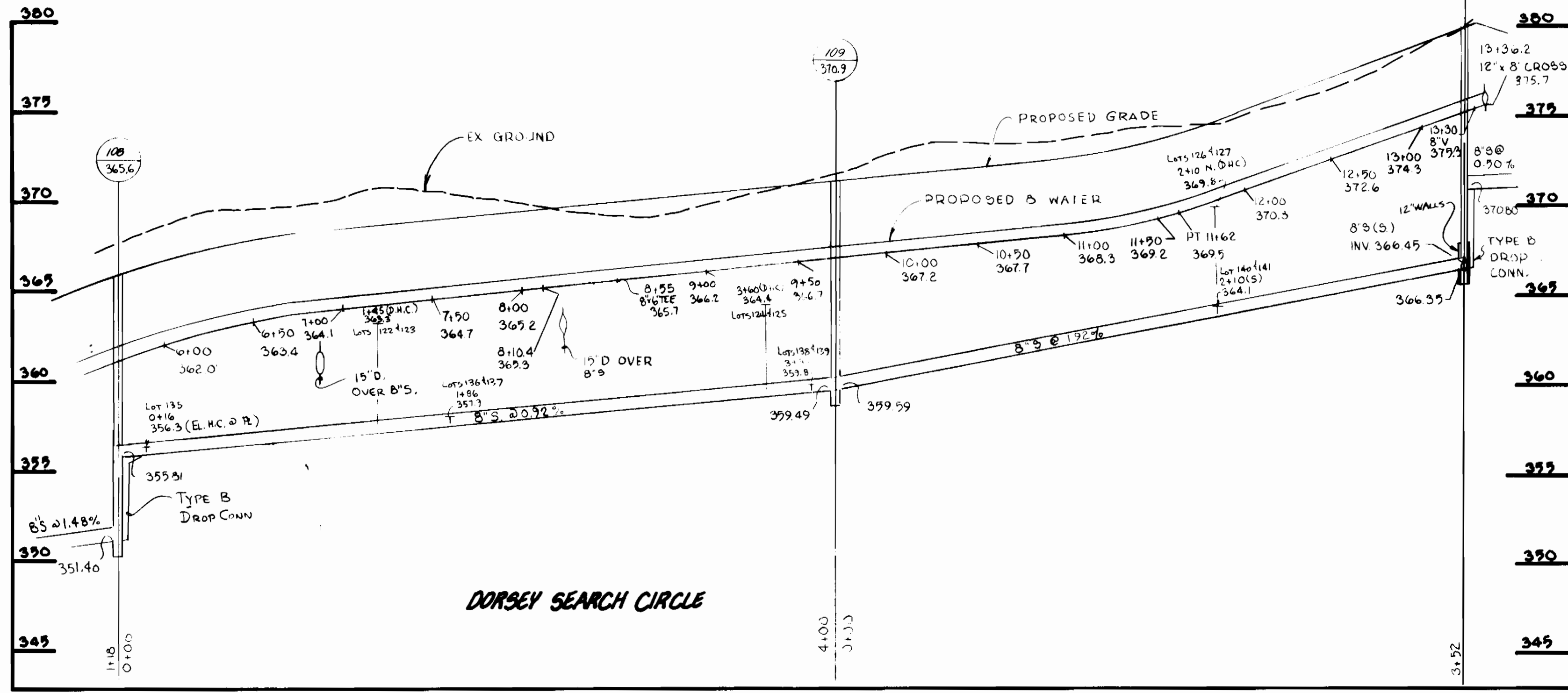
TITLE SHEET

GRAY ROCK FARMS, SECTION THREE
SECOND ELECTION DISTRICT
CONTRACT NO. 24 1442-D

SCALE
AS NOTED
SHEET
1 OF 6



LOT NO.	INV. @ R.	INV. @ SEWER MAIN
122	363.3	357.1
123	364.4	359.1
124	369.8	363.6
125	366.3	356.0
126	357.9	357.5
127	359.8	359.4
128	364.1	363.6



DEPARTMENT OF PUBLIC WORKS
 Director of Public Works: *John F. [Signature]*
 Chief, Bureau of Engineering: *[Signature]*
 Chief, Bureau of Utilities: *[Signature]*
 Chief, Land Development Div.: *[Signature]*
 DATE: 4-29-86

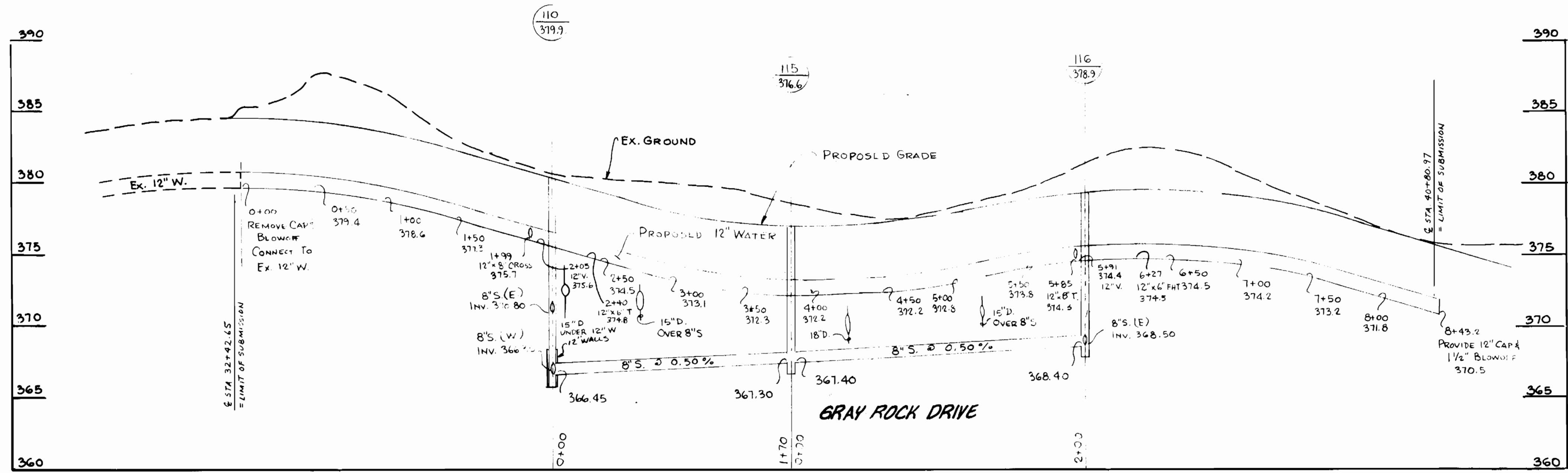
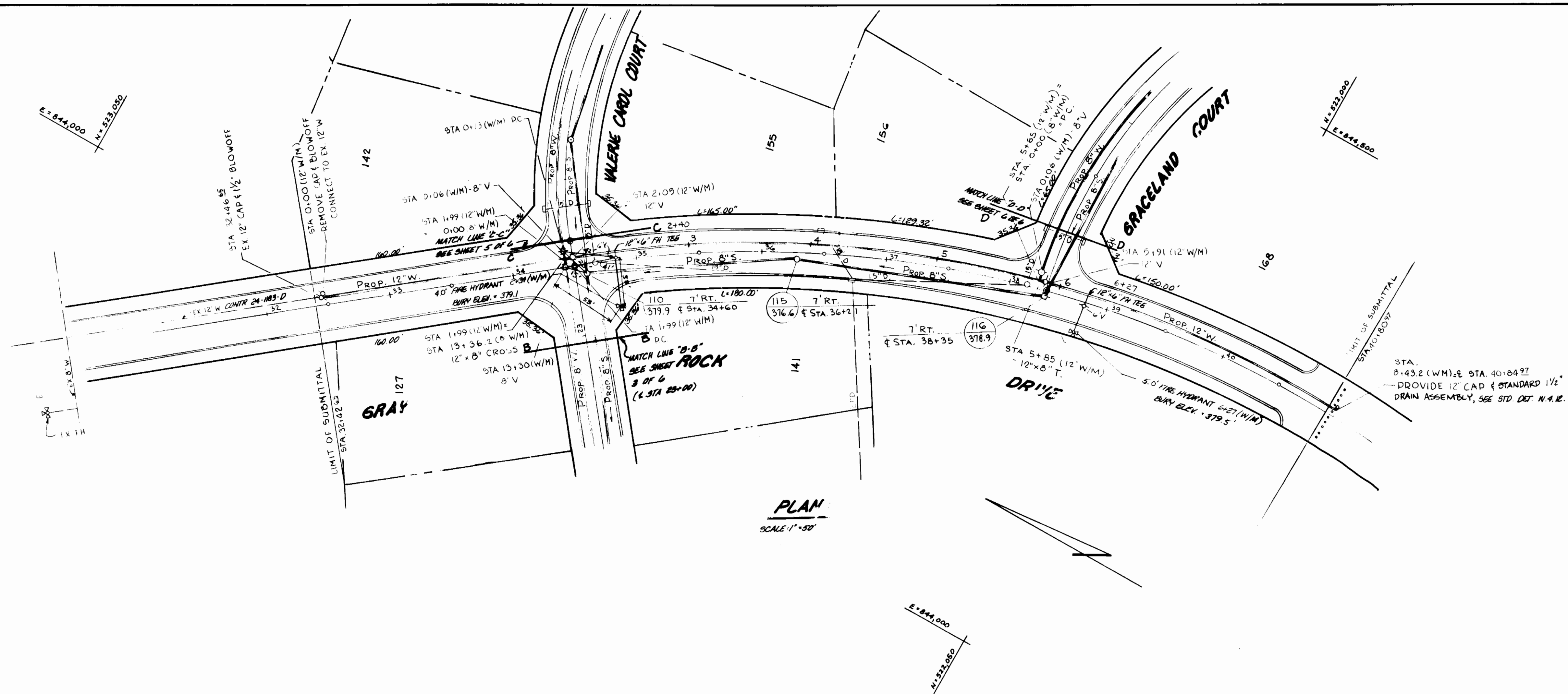
BOENDER ASSOCIATES, INC.
 ENGINEERS · PLANNERS · SURVEYORS
 3565 ELLICOTT MILLS DR.
 ELLICOTT CITY, MARYLAND 21043
 (301) 465-7777



DES: W.A.			
DRN: B.G.			
CHK: W.A.			
DATE: JAN, 1986	BY	NO.	REVISION

PLAN AND PROFILES

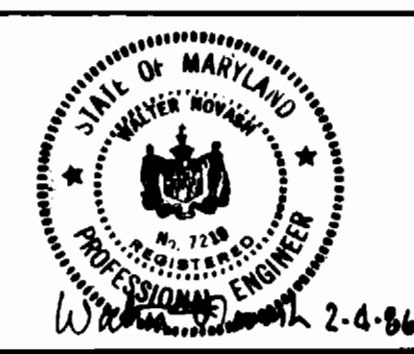
GRAY ROCK FARMS, SECTION THREE
 SECOND ELECTION DISTRICT
 CONTRACT NO. 24-1442-D
 SCALE: AS SHOWN
 SHEET 3 OF 6



PROFILE:
 HOR. 1" = 30'
 VERT. 1" = 5'

DEPARTMENT OF PUBLIC WORKS
 DIRECTOR OF PUBLIC WORKS
 CHIEF, BUREAU OF UTILITIES
 DATE 5-2-86
 DATE 4-29-86

BOENDER ASSOCIATES, INC
 ENGINEERS PLANNERS SURVEYORS
 3565 ELLICOTT MILLS DR
 ELLICOTT CITY, MARYLAND 21043
 (301) 465-7777

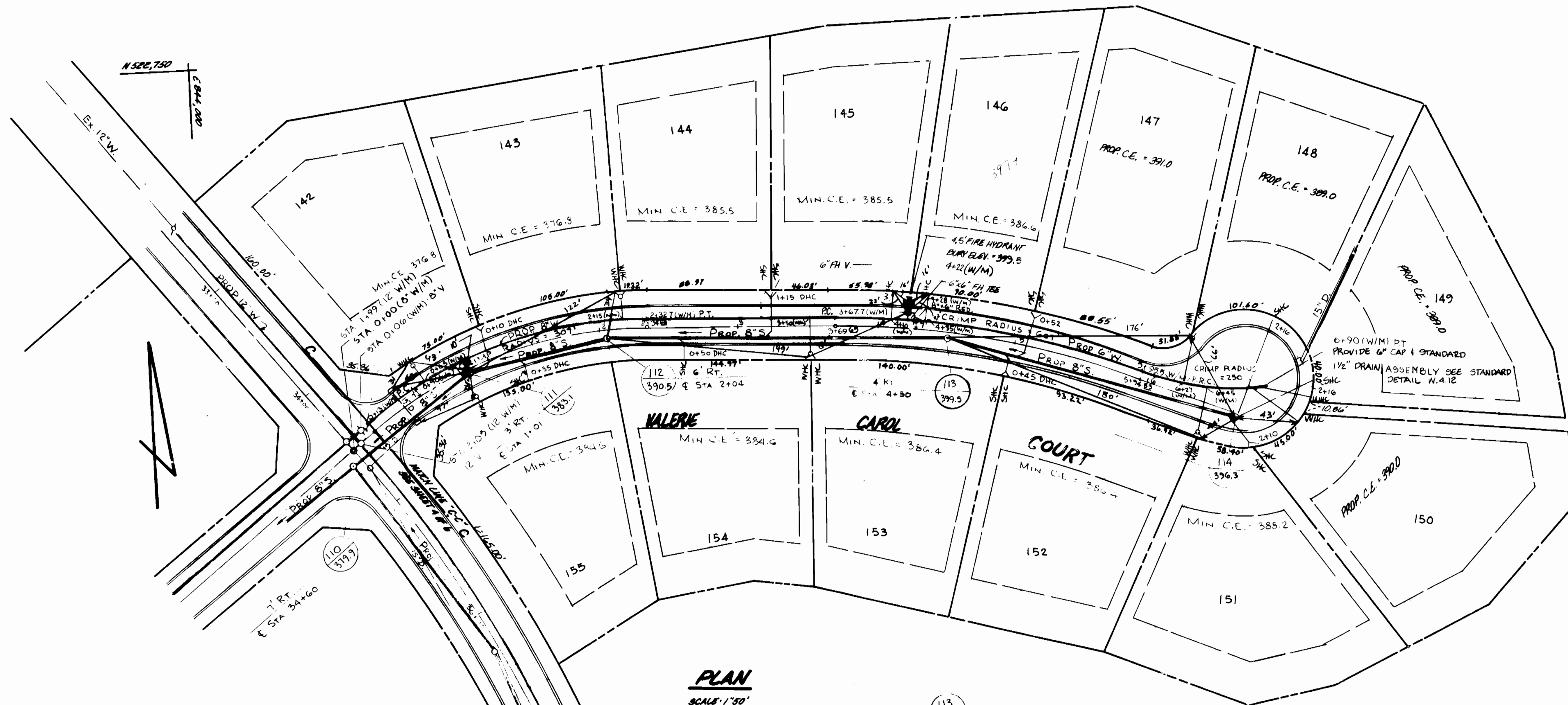


DES. MW				
DRN. BO				
CHK. MW				
DATE JAN, 1986	BY	NO	REVISION	DATE

PLAN AND PROFILES

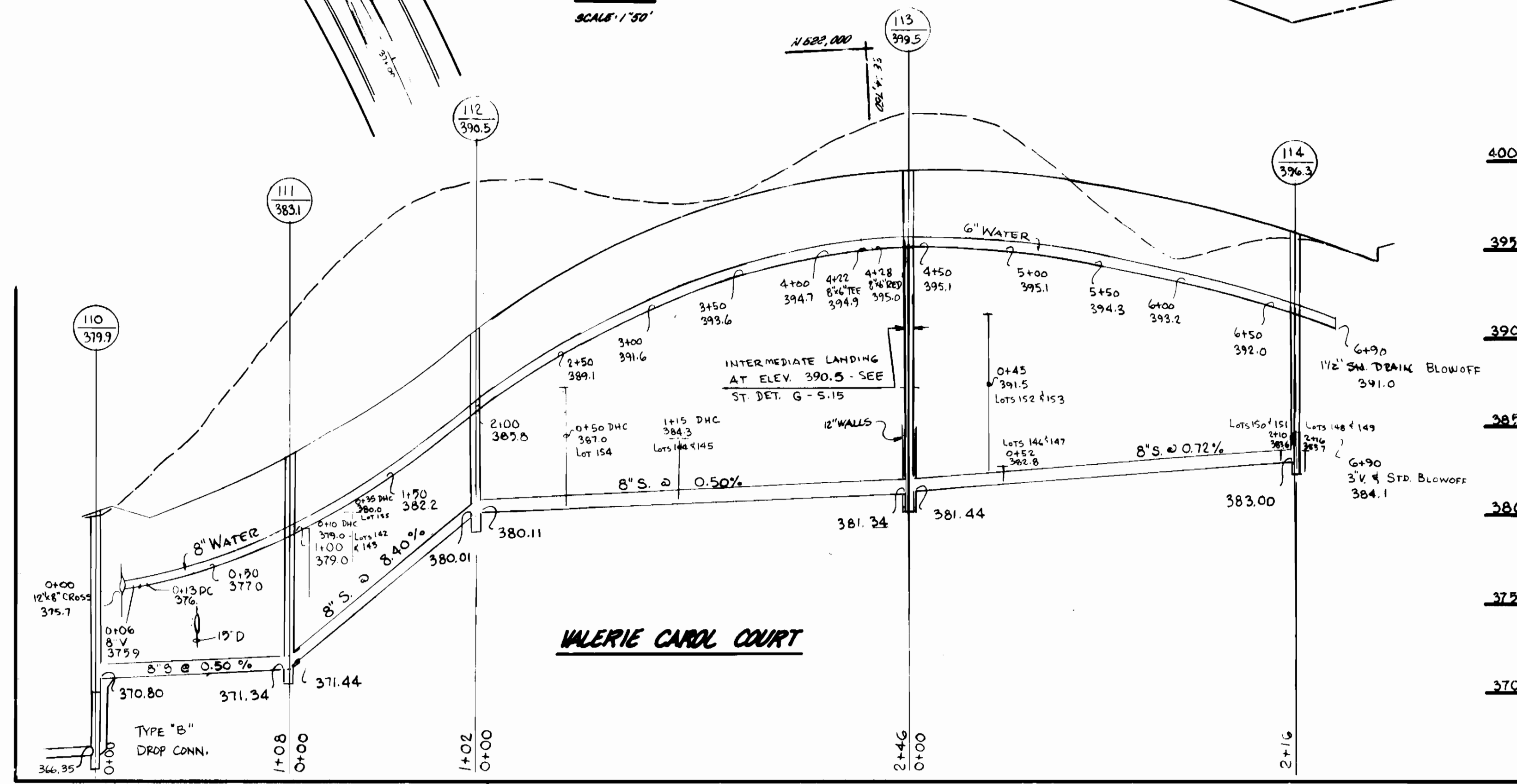
GRAY ROCK FARMS, SECTION THREE
 SECOND ELECTION DISTRICT
 CONTRACT NO. 24-1442-D

SCALE:
 AS NOTED
 SHEET
 4 OF 6



LOT NO.	HY. @ 12'	HY. @ SEWER MAIN
142 & 143	379.0	372.3
144 & 145	384.3	380.7
146 & 147	382.8	381.8
148 & 149	383.7	383.0
150 & 151	383.6	383.0
152 & 153	391.5	381.8
154	387.0	380.4
155	380.0	374.4

PLAN
SCALE: 1"=50'

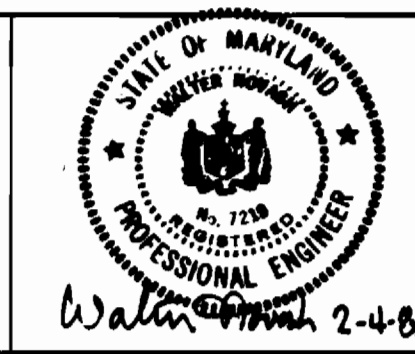


VALERIE CAROL COURT

PROFILE
SCALE: HOR. 1"=50'
VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS
 DATE: 5-6-86
 DATE: 4-29-86
 CHIEF, BUREAU OF ENGINEERING
 CHIEF, LAND DEVELOPMENT DIV.

BOENDER ASSOCIATES, INC.
 ENGINEERS PLANNERS SURVEYORS
 3565 ELLICOTT MILLS DR
 ELLICOTT CITY, MARYLAND 21043
 (301) 465-7777

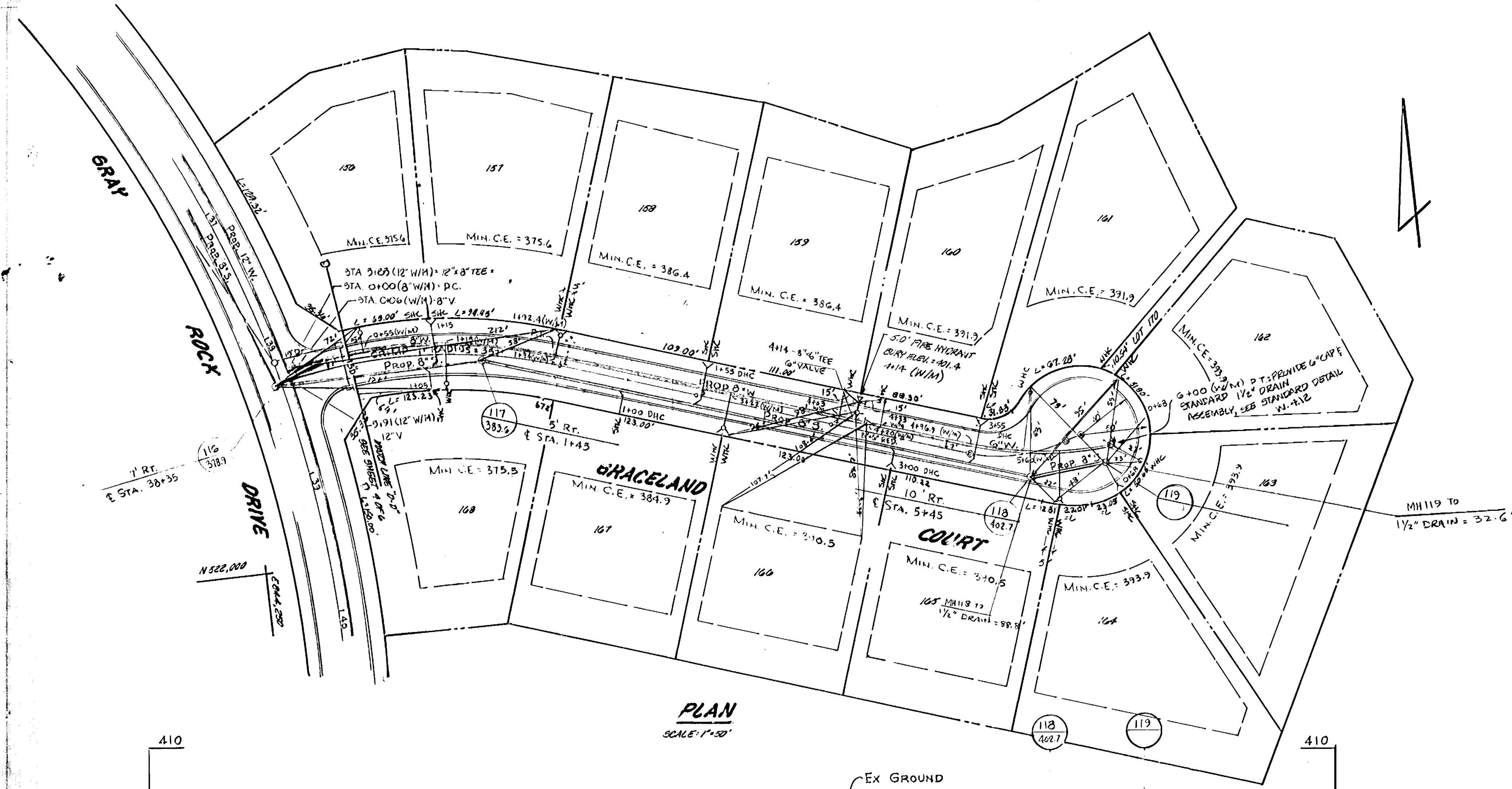


DES. N/A	DRN. S.G.	CHK. N/A	DATE: 4/18/86
BY	NO.	REVISION	DATE

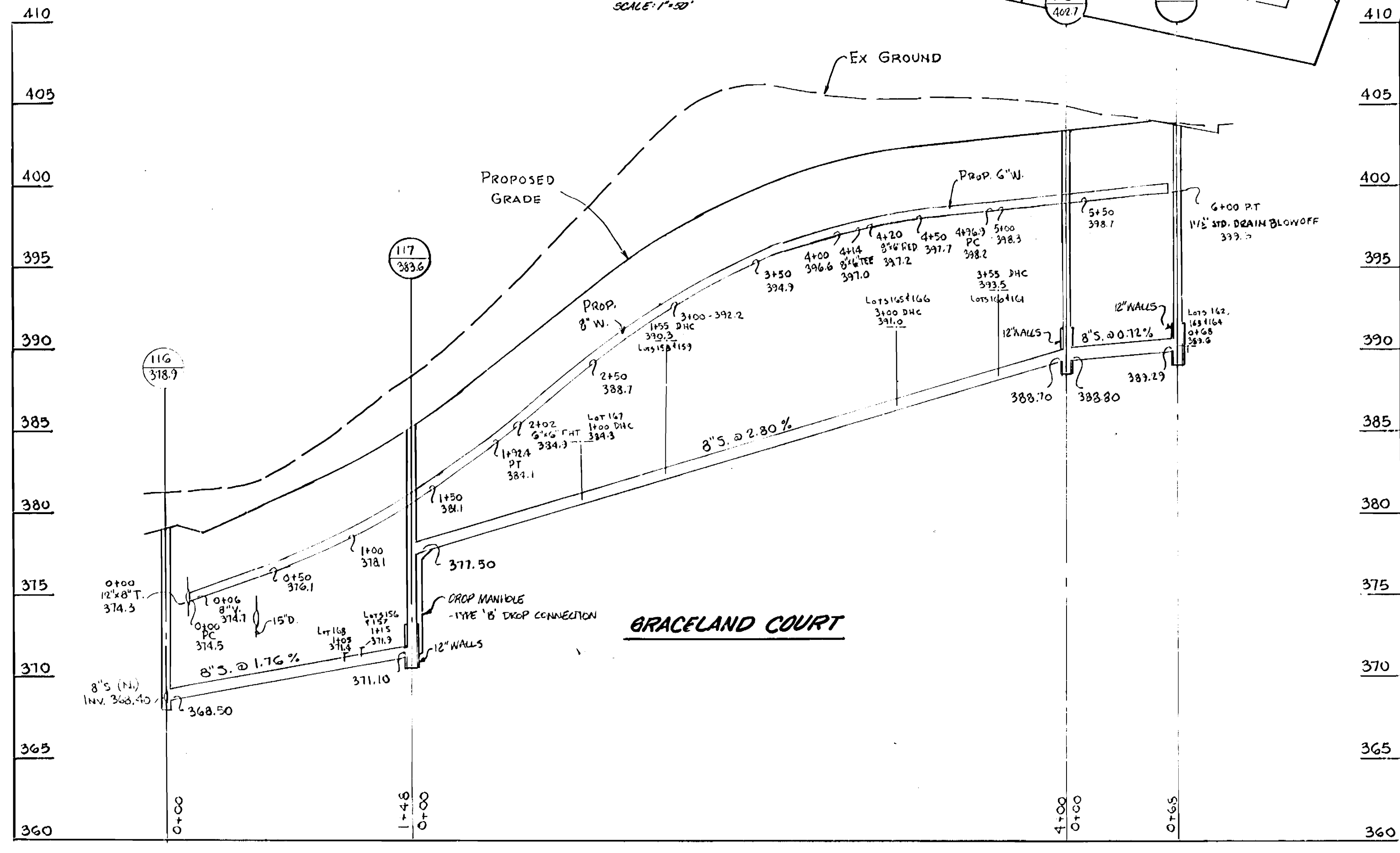
PLAN AND PROFILES

GRAY ROCK FARMS, SECTION THREE
 SECOND ELECTION DISTRICT
 CONTRACT NO. 24-1442-D

SCALE:
 AS NOTED
 SHEET
 5 OF 6



LOT NO.	INR. # 12	INR. @ 50' PER INCH
156 F157	311.9	311.0
158 F159	320.3	321.8
160 F161	323.5	321.4
162	320.1	322.3
163 F164	321.6	322.3
165 F166	321.0	322.9
167	324.3	322.3
168	314.4	315.7



DEPARTMENT OF PUBLIC WORKS
 Director of Public Works
 Chief, Bureau of Engineering
 Chief, Bureau of Utilities
 Chief, Land Development Division

BOENDER ASSOCIATES, INC.
 ENGINEERS · PLANNERS · SURVEYORS
 3565 ELLICOTT MILLS DR
 ELLICOTT CITY, MARYLAND 21043
 (301) 465-7777



DES. H. N.	DRN. #	CHK. H. N.	DATE	BY	NO.	REVISION	DATE
			JAN. 1980				

PLAN AND PROFILES

GRAY ROCK FARMS, SECTION THREE
 SECOND ELECTION DISTRICT
 CONTRACT NO. 24-1442-D

SCALE: AS NOTED
 SHEET: 3 OF 15