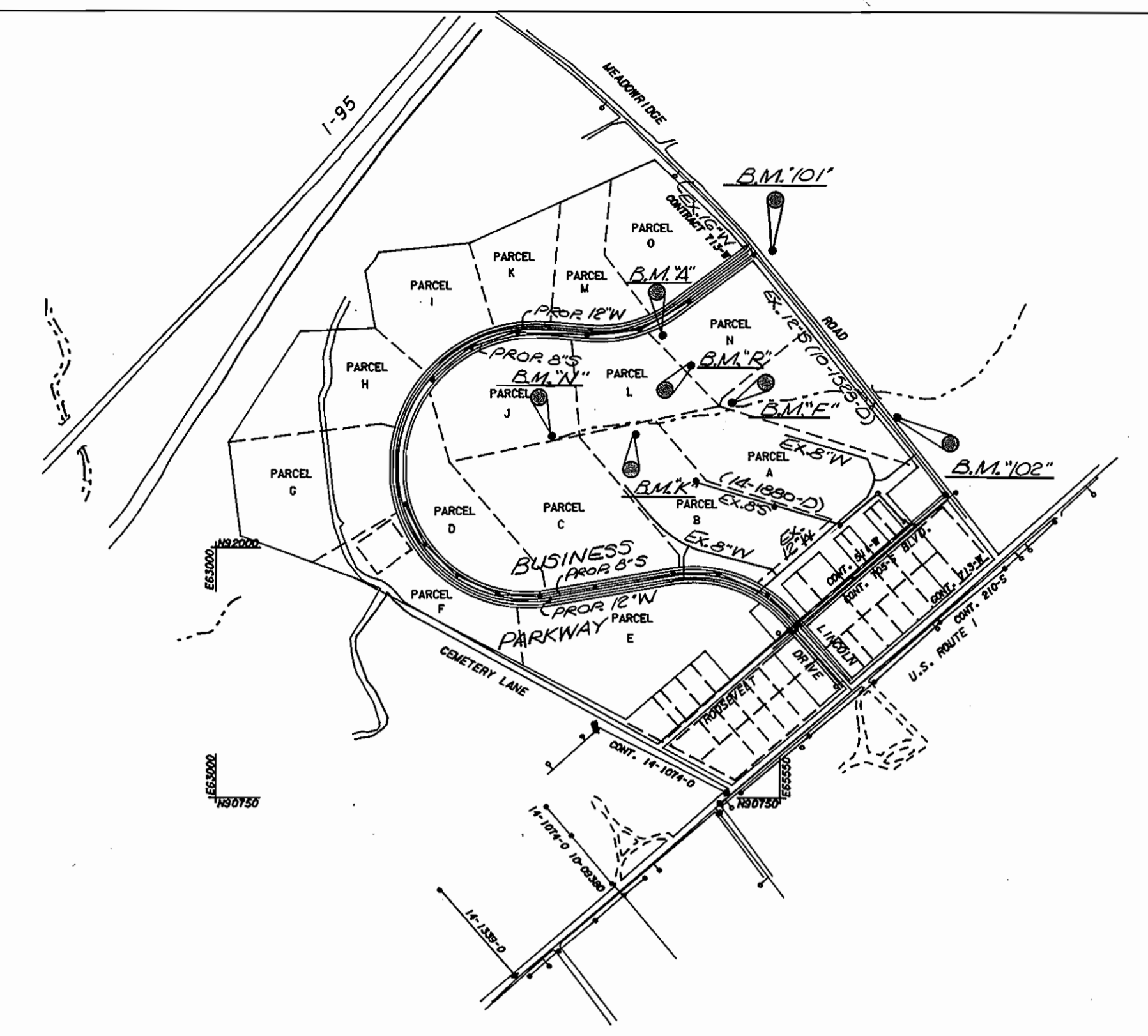


- GENERAL NOTES
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S 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.
 - 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: 1989 AMENDMENT ON THE JOB.
 - 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 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.
 - 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 & ELECTRIC CO.	CONTRACTOR SERVICE 561-2585
BALTIMORE GAS & ELECTRIC CO.	UNDERGROUND DAMAGE CONTROL 234-5621
BALTIMORE GAS & ELECTRIC CO.	TROUBLE SHOOTING 298-9013
MISS UTILITY	1-559-0100
COLONIAL PIPELINE CO.	795-1390
BUREAU OF UTILITIES, HOWARD CO. DEPARTMENT OF PUBLIC WORKS	992-2366
 - 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.
 - CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION.
 - ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 42" COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
 - 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. SOILS AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING, UNLESS OTHERWISE NOTED.
 - EXTEND PIPE AS NECESSARY TO INSTALL PLUG FOR BLOCKING, WHERE WATER MAINS END WITH VALVES.
 - ALL SEWER MAINS SHALL BE C.S.P.X., D.I.P., V.C.P.X., OR RVC UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
 - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - ORIGINAL GROUND OVER SEWER WAS OBTAINED BY FIELD SURVEY IN MAY, 1988
 - STRAW BALE DIKES AND SILT FENCES ARE INTERCHANGEABLE.
 - ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3 INCH THROUGH 12 INCH FOR WATER AND OTHER LIQUIDS.
 - ALL SERVICE CLAMPS ARE TO HAVE STAINLESS STEEL STRAPS.

MANHOLE STAKE-OUT TABLE		
MH	NORTH	EAST
101	491766.814	865757.158
102	491828.769	865530.842
103	491877.004	865316.925
104	491808.487	864934.366
105	491759.047	864658.085
106	491758.999	864436.393
107	491835.087	864229.544
108	491977.766	864061.561
109	492177.957	863947.256
200	493461.983	865644.508
201	493228.299	865332.275
202	493101.148	865102.676
203	493071.600	864860.269
204	493097.663	864637.899
205	493033.621	864308.797
206	492892.345	864100.833
Ex. 8970	491597.043	865917.251

- B.M. "101" ELEV. 181.636
FH. ON S.W. SIDE OF MEADOWRIDGE ROAD, 600'± EAST OF U.S. RT. 1
- B.M. "102" ELEV. 191.876
FH. OPP SWIM FACILITY @ MEADOWRIDGE ROAD, 900'± E. OF U.S. RT. 1
- B.M. "F" ELEV. 194.945
60 D NAIL IN 12" OAK 350'± NW. OF EX. SED. POND ON MEADOWRIDGE RD.
- B.M. "R" ELEV. 208.075
60 D NAIL IN 14" OAK 150'± S.W. OF E STA. 4+57.99 (PC) @ TIP OF TREE LINE
- B.M. "A" ELEV. 204.105
60 D NAIL IN 12" OAK 100'± N.E. OF SED. TRAP #3
- B.M. "N" ELEV. 198.995
60 D NAIL IN 12" OAK 150'± NW. OF SED. BASIN #2 @ TIP OF TREE LINE
- B.M. "K" ELEV. 191.765
60 D NAIL IN 12" OAK 150'± NW. OF EX. SED. TRAP ALONG MEADOWRIDGE ROAD



VICINITY MAP SCALE: 1" = 600'

WATER & SEWER CODE: (FOR COUNTY USE)	DRAINAGE AREA: PATAPSCO
WATER: 801	TYPE OF BUILDINGS: OFFICE / WAREHOUSE
SEWER: 2153000	NO. OF SHC: 13
	NO. OF WHC: 13
	NO. OF LOTS: 15

MEADOWRIDGE BUSINESS PARK

SANITARY SEWER & WATER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

ITEM	QUANTITIES		
	ESTIMATED	AS-BUILT	MATERIAL / SUPPLIER
12" WATER LF	4249	4831	Asp water & sewer supp. / Atlantic
6" WATER LF	345	499	" " " " " "
8" WATER LF	659	916	" " " " " "
8" SEWER LF	3976	4666	Belair Road Supply / 3/8" MFG.
40" SANS. MH EA	16	16	Atlantic Concrete Prod. / Atlantic Cove.
FIRE HYDRANT EA	20	20	Belair Road Supply / Mueller
16"x12" TS. EV. EA	1	1	" " " " " "
12"x6" T EA	13	13	" " " " / GREEN
6" V EA	14	14	" " " " / Mueller
8" V EA	15	15	" " " " " "
12" V EA	5	5	" " " " " "
12"x12" T EA	2	2	" " " " / GREEN
12"x8" R EA	1	1	" " " " " "
12" 1/2" B EA	1	1	" " " " / GREEN
8"x6" T EA	1	1	" " " " / GREEN
8"x8" T EA	1	1	" " " " " "
16"x6" TS. EV. EA	1	1	" " " " / Mueller
6" 1/2" B EA	2	2	" " " " / GREEN

As Builts by E Scheeler

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
John A. Nelson 8/29/89
U.S. SOIL CONSERVATION SERVICE

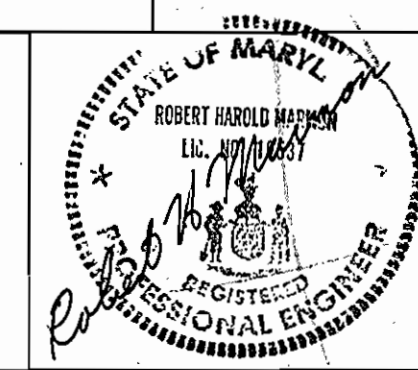
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John R. Robinson 8/29/89
HOWARD S.C.D.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATION, AND FINAL PLANS F-89-163

BEFORE BEGINNING CONSTRUCTION, CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James A. Levin 8/21/89
DIRECTOR OF PUBLIC WORKS
Robert M. Bunker 8-23-89
CHIEF, BUREAU OF UTILITIES

ENGINEERS-ARCHITECTS-PLANNERS-SCIENTISTS SURVEYORS-PHOTOGRAMMETRISTS
GREENHORNE & O'MARA, INC.
113 WEST ROAD, SUITE 208
BALTIMORE, MARYLAND 21204
(301) 296-4100

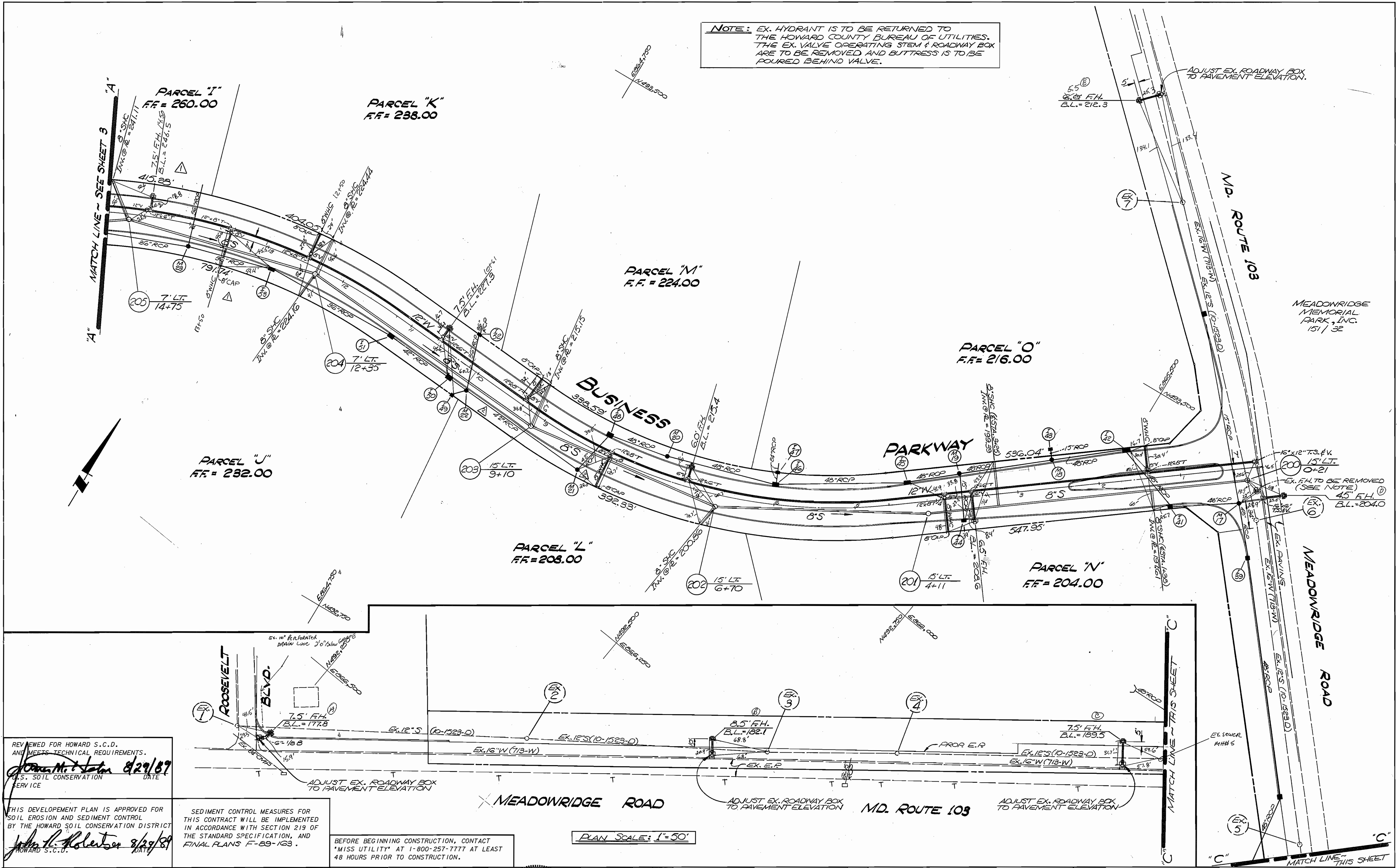


DES:	
DRN:	
CHK:	
DATE:	
BY:	
NO.:	
REVISIONS:	
DATE:	

TITLE SHEET
600' SCALE MAP NO. 37 & 43 BLOCK NO. 22 & 5

MEADOWRIDGE BUSINESS PARK
TAX MAPS 37 & 43 L30 PARCEL 3624/F.470
CONTRACT # 14-1946-D
FIRST ELECTION DISTRICT
HOWARD CO., MARYLAND
SCALE AS SHOWN
SHEET 1 OF 6

NOTE: EX. HYDRANT IS TO BE RETURNED TO THE HOWARD COUNTY BUREAU OF UTILITIES. THE EX. VALVE OPERATING STEM & ROADWAY BOX ARE TO BE REMOVED AND BUTTRESS IS TO BE POURED BEHIND VALVE.



REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
John M. Tolson 8/29/89
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John L. Holbertson 8/29/89
 HOWARD S.C.D.

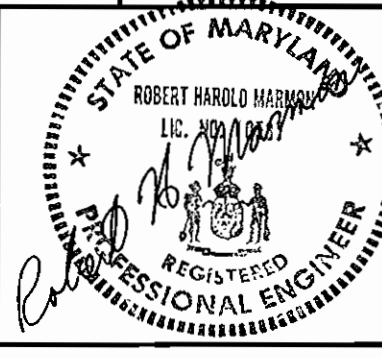
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATION, AND FINAL PLANS F-89-163.

BEFORE BEGINNING CONSTRUCTION, CONTACT 'MISS UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

PLAN SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
James M. ... 8/31/89
 DIRECTOR OF PUBLIC WORKS
Robert ... 8/30/89
 CHIEF, BUREAU OF ENGINEERING
Paul ... 8/30/89
 CHIEF, LAND DEVELOPMENT DIVISION

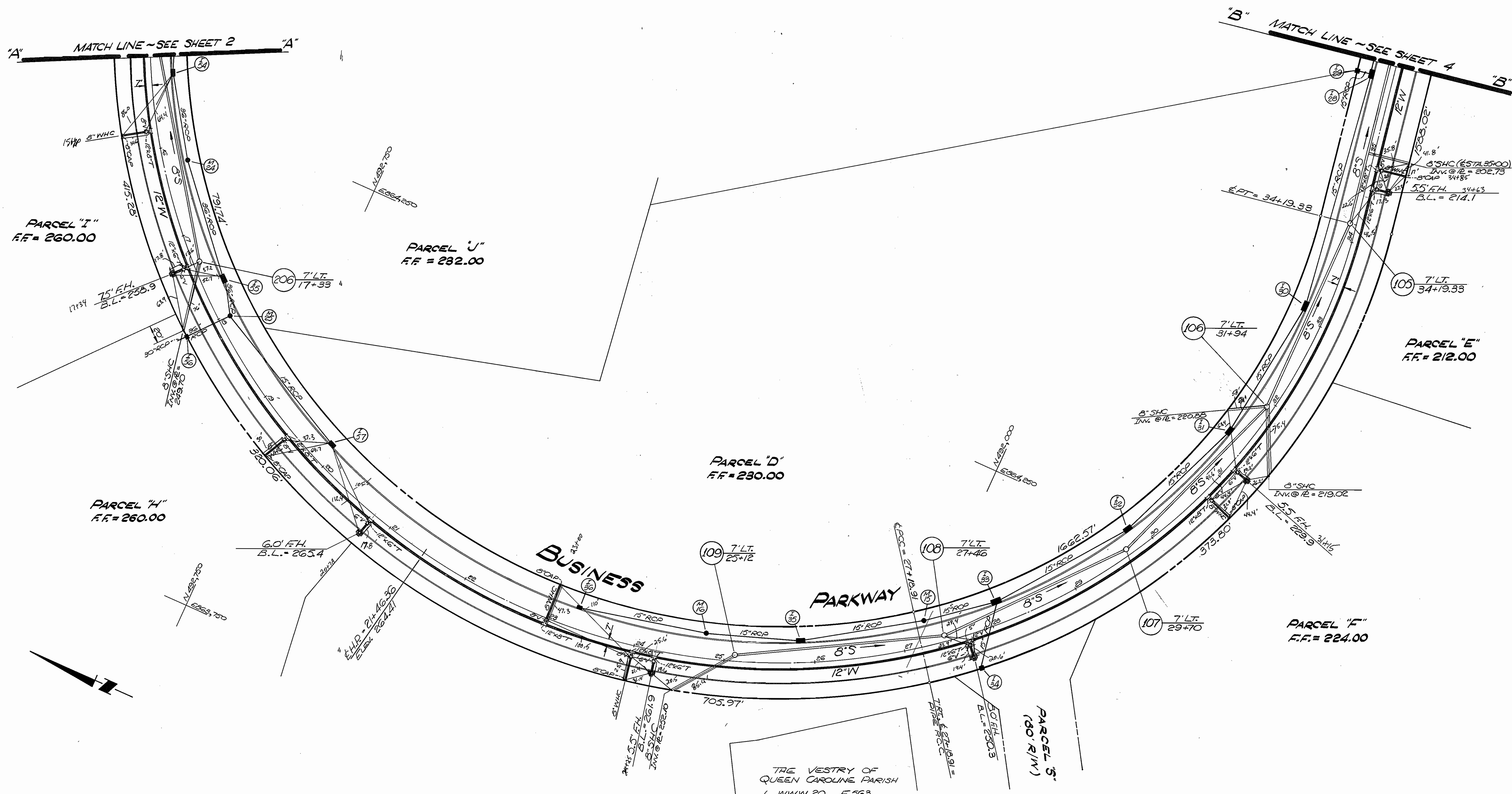
ENGINEERS-ARCHITECTS-PLANNERS-SCIENTISTS
 SURVEYORS-PHOTOGRAMMETRISTS
GREENHORNE & O'MARA, INC.
 113 WEST ROAD, SUITE 208
 BALTIMORE, MARYLAND 21204
 (301) 296-4100



DES:	DATE:	BY:	NO.	REVISIONS	DATE:
JDP	7/13/89			ADDED WHC & MOVE FIRE HYDRANT	7/13/89
JDP	7/22/89			REVISED SIZE OF STORM DRAIN	7/22/89
DRN:		JDP			
CHK:		RHM			
DATE:	FEB 89				

PLAN FOR WATER & SEWER MAIN EXTENSION
 600' SCALE MAP NO. 37 & 43
 BLOCK NO. 22 & 5

MEADOWRIDGE BUSINESS PARK
 TAX MAPS 37 & 43 L.304/R.470 PARCEL 362
 CONTRACT #14-1946-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 2 OF 2



REVIEWED FOR HOWARD S.C.D.
AND MEETS TECHNICAL REQUIREMENTS.
Janet M. Helm 8/24/89
U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John H. Redman 8/29/89
HOWARD S.C.D.

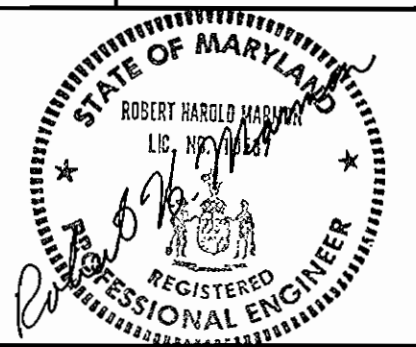
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATION, AND FINAL PLANS F-89-163

BEFORE BEGINNING CONSTRUCTION, CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

PLAN SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James H. Lewis 8/31/89
DIRECTOR OF PUBLIC WORKS
Robert W. Eason 8/30/89
CHIEF, LAND DEVELOPMENT DIVISION

ENGINEERS-ARCHITECTS-PLANNERS-SCIENTISTS
SURVEYORS-PHOTOGRAMMETRISTS
GREENHORNE & O'MARA, INC.
113 WEST ROAD, SUITE 208
BALTIMORE, MARYLAND 21204
(301) 296-4100



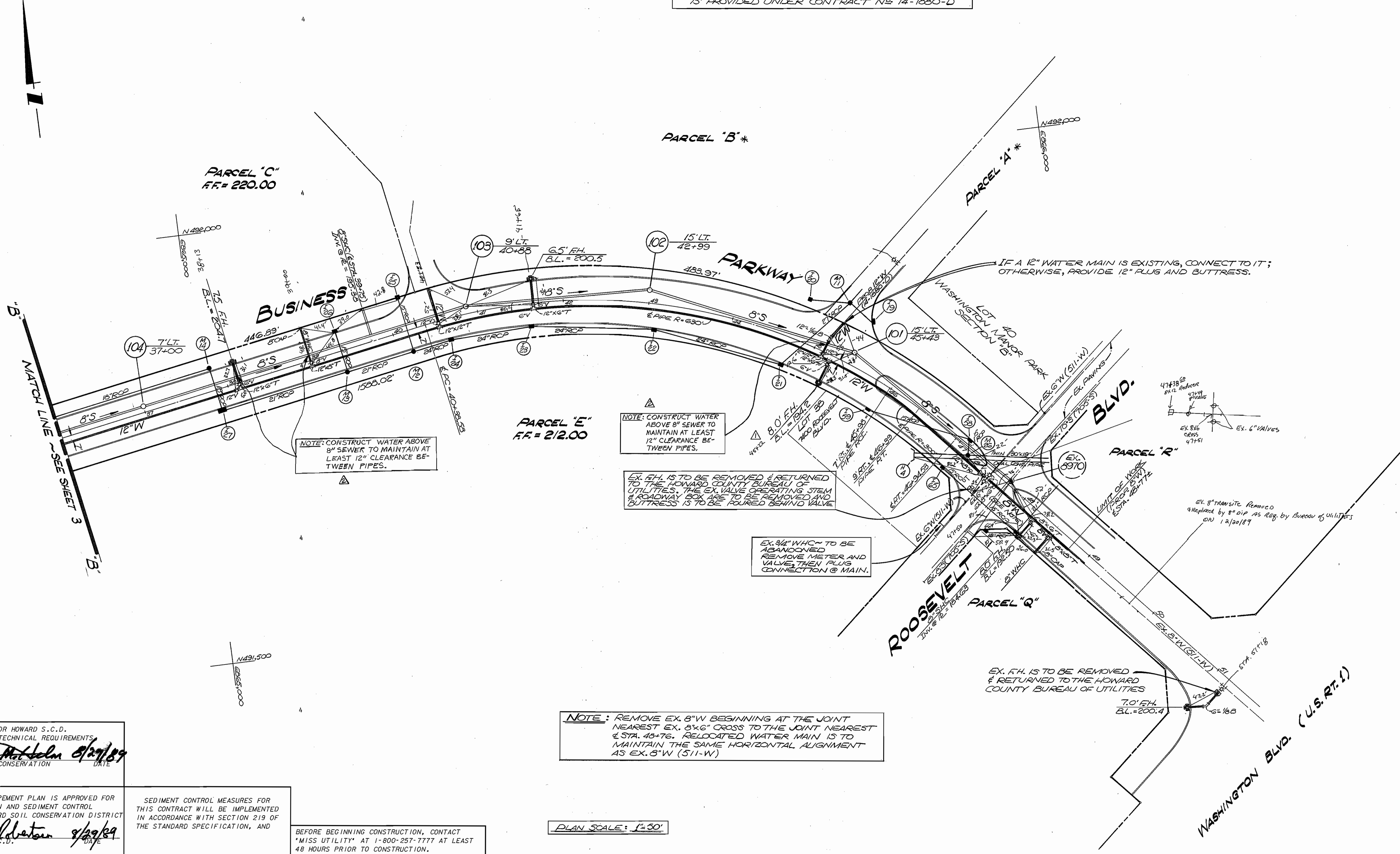
DES: JDP	BY: NO.	REVISIONS	DATE
DRN: JDP/um			
CHK: RHM			
DATE: FEB, 89			

PLAN FOR WATER & SEWER MAIN EXTENSION

MEADOWRIDGE BUSINESS PARK
TAX MAPS 37 & 43 L304/F470 PARCEL 362
CONTRACT # 14-1946-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
SHEET 3 OF 6

* WATER AND SEWER SERVICE TO PARCELS 'A' & 'B' IS PROVIDED UNDER CONTRACT NO. 14-1680-D



NOTE: CONSTRUCT WATER ABOVE 8\"/>

NOTE: CONSTRUCT WATER ABOVE 8\"/>

EX. F.H. IS TO BE REMOVED & RETURNED TO THE HOWARD COUNTY BUREAU OF UTILITIES. THE EX. VALVE OPERATING STEM & ROADWAY BOX ARE TO BE REMOVED AND BUTTRESS IS TO BE POURED BEHIND VALVE

EX. 3/4\"/>

NOTE: REMOVE EX. 8\"/>

PLAN SCALE: 1\"/>

BEFORE BEGINNING CONSTRUCTION, CONTACT 'MISS UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

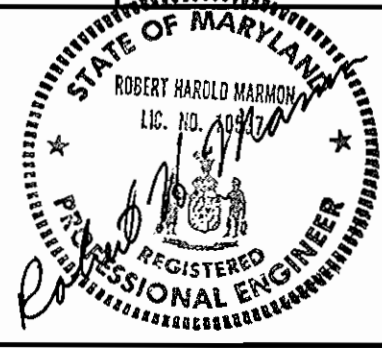
REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
James M. ... 8/29/89
 S.C.D. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John H. ... 8/29/89
 HOWARD S.C.D.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATION, AND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *James M. ...* 8/31/89
 Chief, Bureau of Engineering: *William E. ...* 8/31/89
 Chief, Bureau of Utilities: *John H. ...* 8-23-89
 Chief, Land Development Division: *William E. ...* 8/30/89

ENGINEERS-ARCHITECTS-PLANNERS-SCIENTISTS
 SURVEYORS-PHOTOGRAMMETRISTS
GREENHORNE & O'MARA, INC.
 113 WEST ROAD, SUITE 208
 BALTIMORE, MARYLAND 21204
 (301) 296-4100



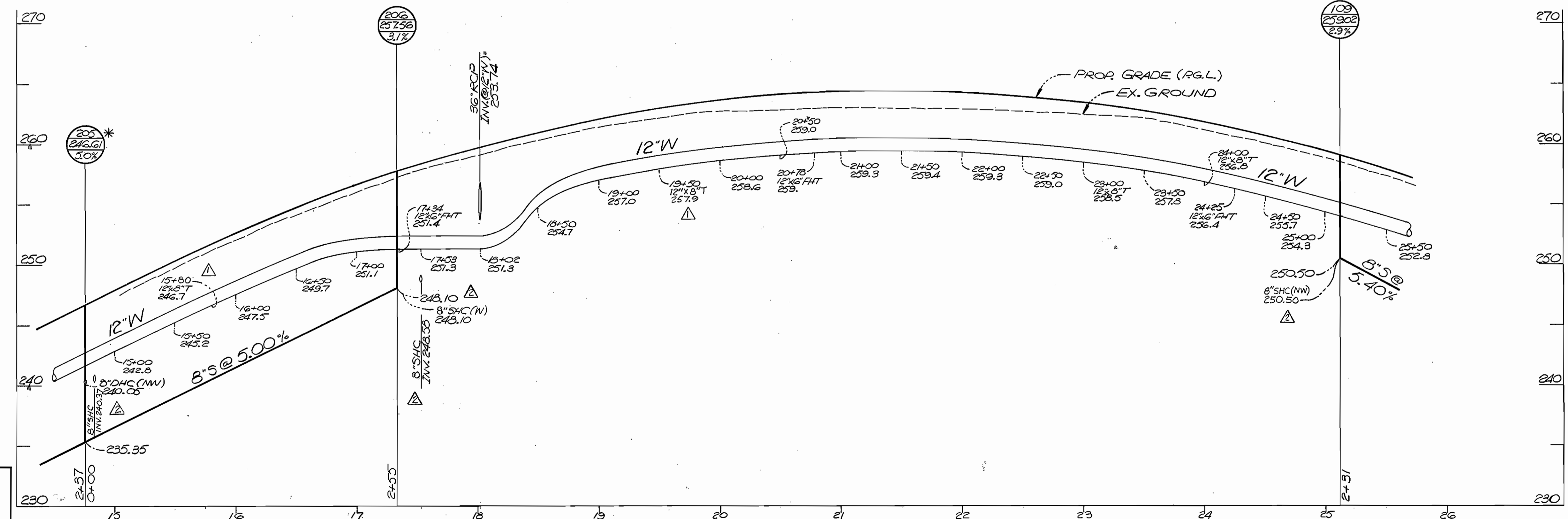
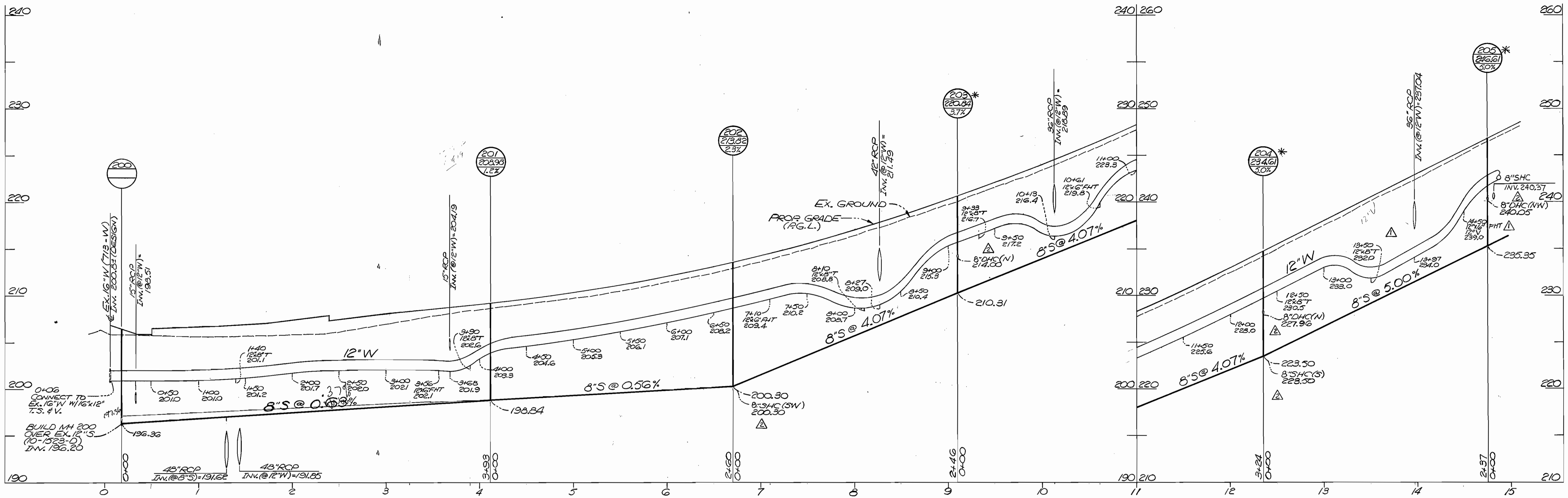
DES: JDP	GFD	FIXED FIRE HYDRANT ELEVATION	9/13/89
DRN: JDP/UM	GA	ADDED NOTE	9/28/89
CHK: RHM			
DATE: FEB, '89	BY: NO.	REVISIONS	DATE

PLAN FOR WATER & SEWER MAIN EXTENSION

MEADOWRIDGE BUSINESS PARK
 TAX MAPS 37 & 43 L.304/E.470 PARCEL 362
 CONTRACT # 14-1946-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
 SHEET 4 OF 6

* DROP MH, TYPE "B", HCDPW STD. S 132



REVIEWED FOR HOWARD S.C.D.
AND MEETS TECHNICAL REQUIREMENTS.
John M. Miller 8/29/89
U.S. SOIL CONSERVATION SERVICE
DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR
SOIL EROSION AND SEDIMENT CONTROL
BY THE HOWARD SOIL CONSERVATION DISTRICT
John K. Liberman 8/29/89
HOWARD S.C.D. DATE

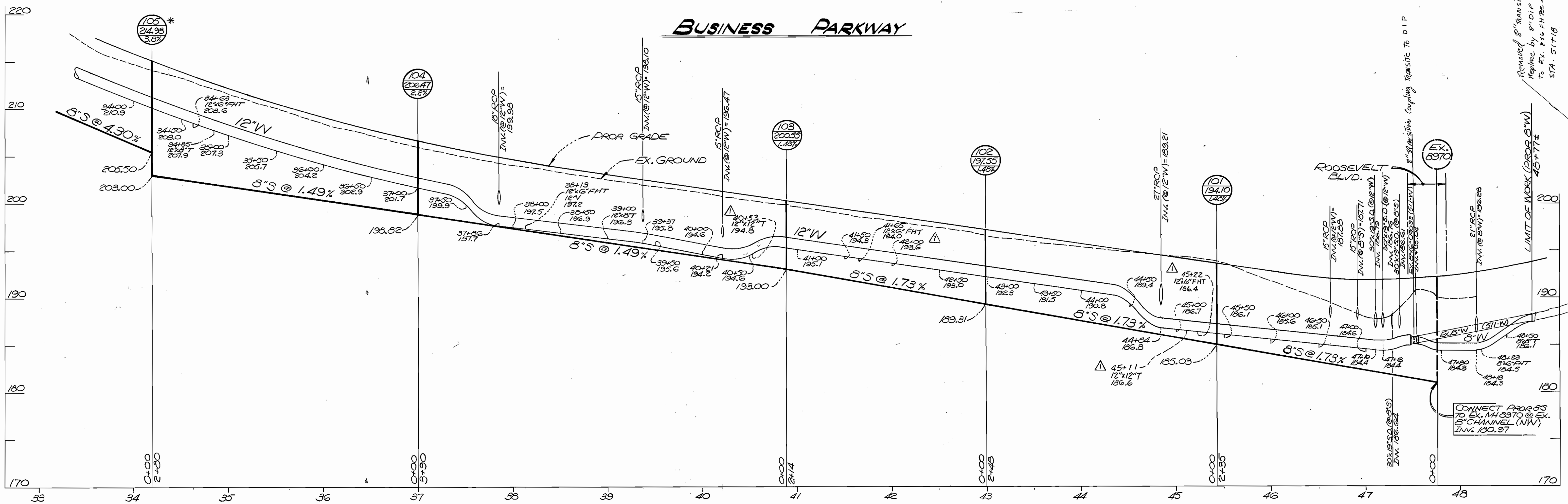
SEDIMENT CONTROL MEASURES FOR
THIS CONTRACT WILL BE IMPLEMENTED IN
ACCORDANCE WITH SECTION 219 OF
THE STANDARD SPECIFICATION, AND
FINAL PLANS F-89-163

BEFORE BEGINNING CONSTRUCTION, CONTACT
"MISS UTILITY" AT 1-800-257-7777 AT LEAST
48 HOURS PRIOR TO CONSTRUCTION.

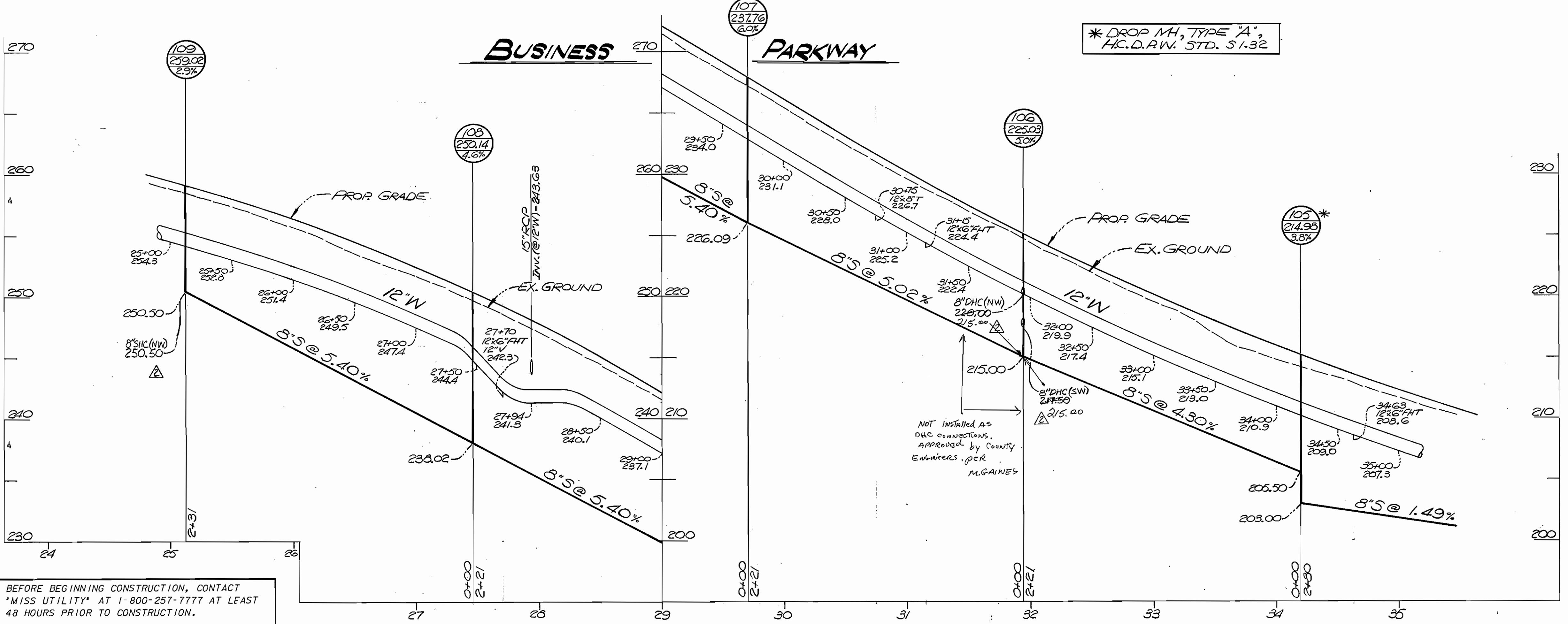
PROFILE SCALE: HORIZ. 1"=50'
VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>James M. Lewis</i> 8/31/89 DIRECTOR OF PUBLIC WORKS DATE <i>Robert J. Quinn</i> 8-23-89 CHIEF, BUREAU OF UTILITIES DATE		ENGINEERS-ARCHITECTS-PLANNERS-SCIENTISTS SURVEYORS-PHOTOGRAMMETRISTS GREENHORNE & O'MARA, INC. 113 WEST ROAD, SUITE 208 BALTIMORE, MARYLAND 21204 (301) 296-4100		STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER ROBERT W. O'DONOGHUE No. 118537		DES: JDP 6/0 DRN: JDP/um 6/0 CHK: RHM DATE: 8/22/89		REVISED AND ADDED HORIZONTAL FITTINGS AS SHOWN ON 9/13/89 THE PLAN. REVISED SIZE ADDED 8" SHC AS SHOWN ON THE PLAN 9/28/89		PLAN FOR WATER & SEWER MAIN EXTENSION		MEADOWRIDGE BUSINESS PARK TAX MAPS 37 & 43 L.304/E.470 PARCEL 362 CONTRACT # 14-1946-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SCALE: AS SHOWN SHEET 5 OF 6
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BUSINESS PARKWAY



BUSINESS PARKWAY



* DROP MH, TYPE 'A', H.C.D.R.W. STD. S-132

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
James M. Lewis 8/29/89
 S.O. SOIL CONSERVATION SERVICE

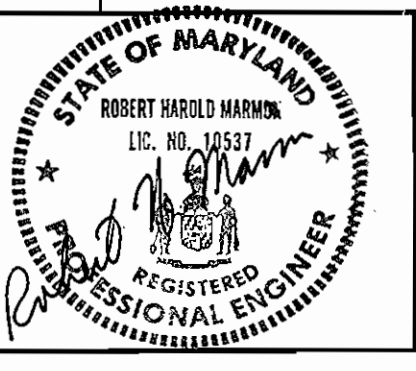
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John L. Robertson 8/29/89
 HOWARD S.C.D.

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DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
James M. Lewis 8/29/89
 DIRECTOR OF PUBLIC WORKS
Robert J. Garrison 8-23-89
 CHIEF, BUREAU OF UTILITIES

ENGINEERS-ARCHITECTS-PLANNERS-SCIENTISTS
 SURVEYORS-PHOTOGRAMMETRISTS
GREENHORNE & O'MARA, INC.
 113 WEST ROAD, SUITE 208
 BALTIMORE, MARYLAND 21204
 (301) 296-4100



DES: JDP	6/0	REVIS	AND ADDED HORIZONTAL FITTINGS AS SHOWN ON THE PLAN.	9/13/89
DRN: JDP/um	6/0	2	ADDED 8\"/>	
CHK: RHM				
DATE: FEB, 89	BY NO.	REVISIONS		DATE

PLAN FOR WATER & SEWER MAIN EXTENSION

MEADOWRIDGE BUSINESS PARK
 TAX MAPS 37 & 43 L. 304/F. 470 PARCEL 362
 CONTRACT # 14-1946-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND