

# SITE DEVELOPMENT PLAN

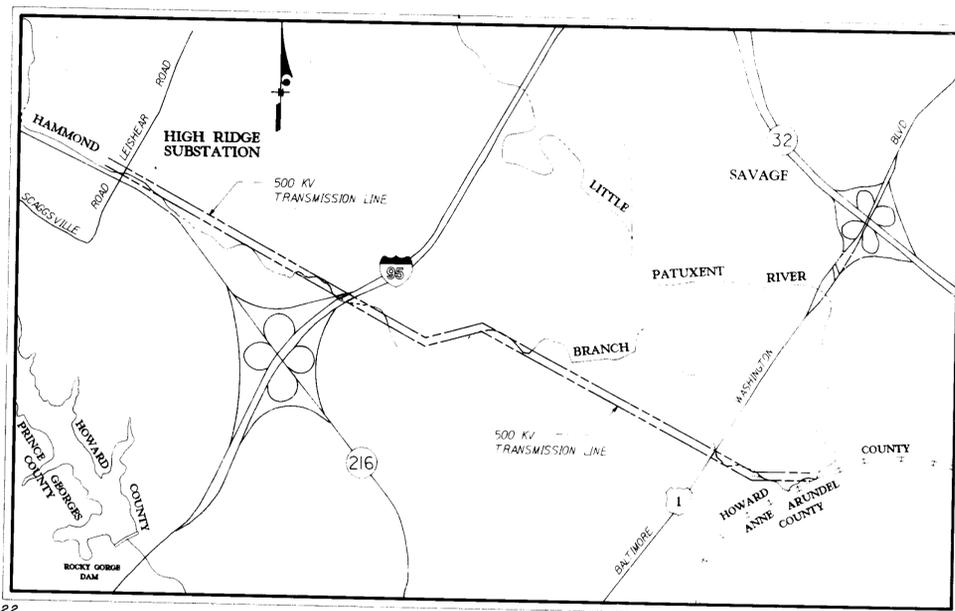
## WAUGH CHAPEL - VICINITY OF HIGH RIDGE

### 500 KV TRANSMISSION LINE

### HOWARD COUNTY, MARYLAND

**GENERAL NOTES**

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications, if applicable.
- The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (301) 792-7272 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-1777 at least 48 hours prior to any excavation work.
- Project Background:**  
Waiver of Section 10.1.1 of Design Manual Volume 1, pertaining to the requirement to provide storm water management, approved November 18, 1991 by the Department of Public Works.
- Project Purpose:**  
The proposed 500 KV Transmission Line will extend from Waugh Chapel Road in Anne Arundel County, Maryland to the vicinity of High Ridge substation located in Howard County, Maryland. This line will extend 17 miles and consist of construction and maintenance of towers, transmission lines and temporary access roads. The purpose is to provide greater stability and more efficient distribution of energy.
- Horizontal Datum:**  
Maryland State Plane Coordinate Grid. Based on the North American Adjustment of 1983.
- Vertical Datum:**  
Mean Sea Level of U.S.C. & G. Survey (1929 Adjustment)
- Topography:**  
Ter Tol, March 91, Contour Interval 2' by M. J. Harden Associates
- Hammond Branch Flood Plain:**  
Study by: Bernard Johnson, Incorporated 1986.
- Wetland delineation study,** January 1992, approved by Howard County Soil Conservation District. The following permits apply to Phase II construction (to be listed upon receipt).  
Wetland approvals for phase II construction.  
 (1) U.S. Army Corps of Engineers - Wetland permit. # 92-62521-8  
 (2) MD. Dept. of Natural Resources - Wetland permit. # 92-NT-0042/199262522  
 (3) MD. Dept. of The Environment - Water quality certification. # 92-WQ-0217



**LOCATION MAP**  
SCALE: 1" = 2000'

SHEET INDEX		
SHEET NO.	DESCRIPTION	POLES
1	Cover Sheet	
2	Index Sheet	
Sediment & Erosion Control		
3	Sta 714.00 to Sta 723.00	1B25K
4	Sta 723.00 to Sta 737.00	1B26K - 1B27K
5	Sta 737.00 to Sta 747.00	1B28K - 1B29K
6	Sta 747.00 to Sta 758.00	1B30K
7	Sta 758.00 to Sta 771.00	1B31K - 1B32K
8	Sta 771.00 to Sta 782.00	1B33K - 1B34K
9	Sta 782.00 to Sta 792.00	1B35K
10	Sta 792.00 to Sta 800.00	
11	Sta 800.00 to Sta 812.00	1B36K - 1B37K
12	Sta 812.00 to Sta 823.00	1B38K - 1B39K
13	Sta 823.00 to Sta 835.00	1B40K
14	Sta 835.00 to Sta 847.00	1B42K
15	Sta 847.00 to Sta 857.00	1B43K - 1B44K
16	Sta 857.00 to Sta 869.00	1B45K
17	Sta 869.00 to Sta 880.00	1B46K
18	Sta 880.00 to Sta 891.00	1B47K - 1B48K
19	Sta 891.00 to Sta 902.00	1B49K - 1B52K
20	Sta 902.00 to Sta 906.00	1B53K
21	Sediment & Erosion Control Details	
22	Sediment & Erosion Control Details	

**CONSTRUCTION PHASING**

**PHASE I - CONSTRUCTION ACTIVITIES IN UPLAND (NON-WETLAND) AREAS.**

**PHASE II - IDENTIFIES CONSTRUCTION ACTIVITIES WITHIN THE WETLAND /STREAM AREAS. CONSTRUCTION CAN NOT PROCEED UNTIL ALL WETLANDS PERMITS AND WATER QUALITY CERTIFICATES ARE OBTAINED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES AND APPROVED COPIES OF THESE PERMITS ARE SUBMITTED TO THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. THE DEVELOPER SHALL REFERENCE THE WETLANDS PERMIT NUMBERS ON THE SITE DEVELOPMENT PLAN AS A NOTE BY THE RED LINE REVISION PROCESS PRIOR TO ISSUANCE OF ANY BUILDING PERMITS FOR PHASE II CONSTRUCTION.**

PHASE II AREAS DESIGNATED AS -

PERMIT INFORMATION BLOCK					
SUBDIVISION NAME BALTIMORE GAS & ELECTRIC TRANSMISSION LINE		SECT./AREA	LOT PARCEL #		
FLAT OR L/F	BLOCK	ZONE	TAX/ZONE MAP	ELECT. DISTRICT	CENSUS TR.
	7,12,13,14,15, 16,23,24	R-SC, R-20, M-1, M-2, PFC	46, 47	6	6068.02 6068.03
WATER CODE		SEWER CODE			

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
SUBSTATION	8345 LEISHEAR ROAD

DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
CHANGED PHASE II SYMBOL, ADDED DELETION INFORMATION, RELOCATE STR'S 1B25K, 1B40K, 1B47K & 1B48K. REMOVE STR. 1B41K, 629-3							

**BLACK & VEATCH**



ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
**GREENHORNE & O'MARA, INC.**  
 113 WEST ROAD, SUITE 206  
 BALTIMORE, MD. 21204  
 (301) 286-6100 © LATEST DATE HEREON



**COVER SHEET**

**WAUGH CHAPEL - TO VICINITY OF HIGH RIDGE**  
**500 KV TRANSMISSION LINE**  
**HOWARD COUNTY SEGMENT**

ZONE: R-SC, R-20, M-1, M-2, PFC  
 ELECTION DISTRICT 5  
 HOWARD COUNTY, MARYLAND  
 ZONING TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC	
SCALE AS SHOWN	APPD APPD APPD APPD
DATE	
DR. BY	
CHKD.	
INSP.	
DESIGN: KM	DRAWN: KRM
DATE: NOV. 31 1992	FILE NO. B-1210-1

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS & STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
 HOWARD COUNTY HEALTH DEPARTMENT

*Joseph J. Zupke* 10-13-92  
 COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
 HOWARD COUNTY DEPT. OF PUBLIC WORKS

*Elizabeth A. Lala* 10/7/92  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*James S. Hahn* 10/16/92  
 PLANNING DIRECTOR DATE

*John A. Hahn* 10/15/92  
 CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ALSO, A MONTHLY PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

*Brian F. Medcroft* 8/1/92  
 SIGNATURE OF DEVELOPER DATE

**BRIAN F. MEDCROFT**  
 Printed Name

BY THE ENGINEER:

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.

*Jeffrey B. Retterer* 7-29-92  
 SIGNATURE OF ENGINEER DATE

**JEFFREY B. RETTERER**  
 Printed Name

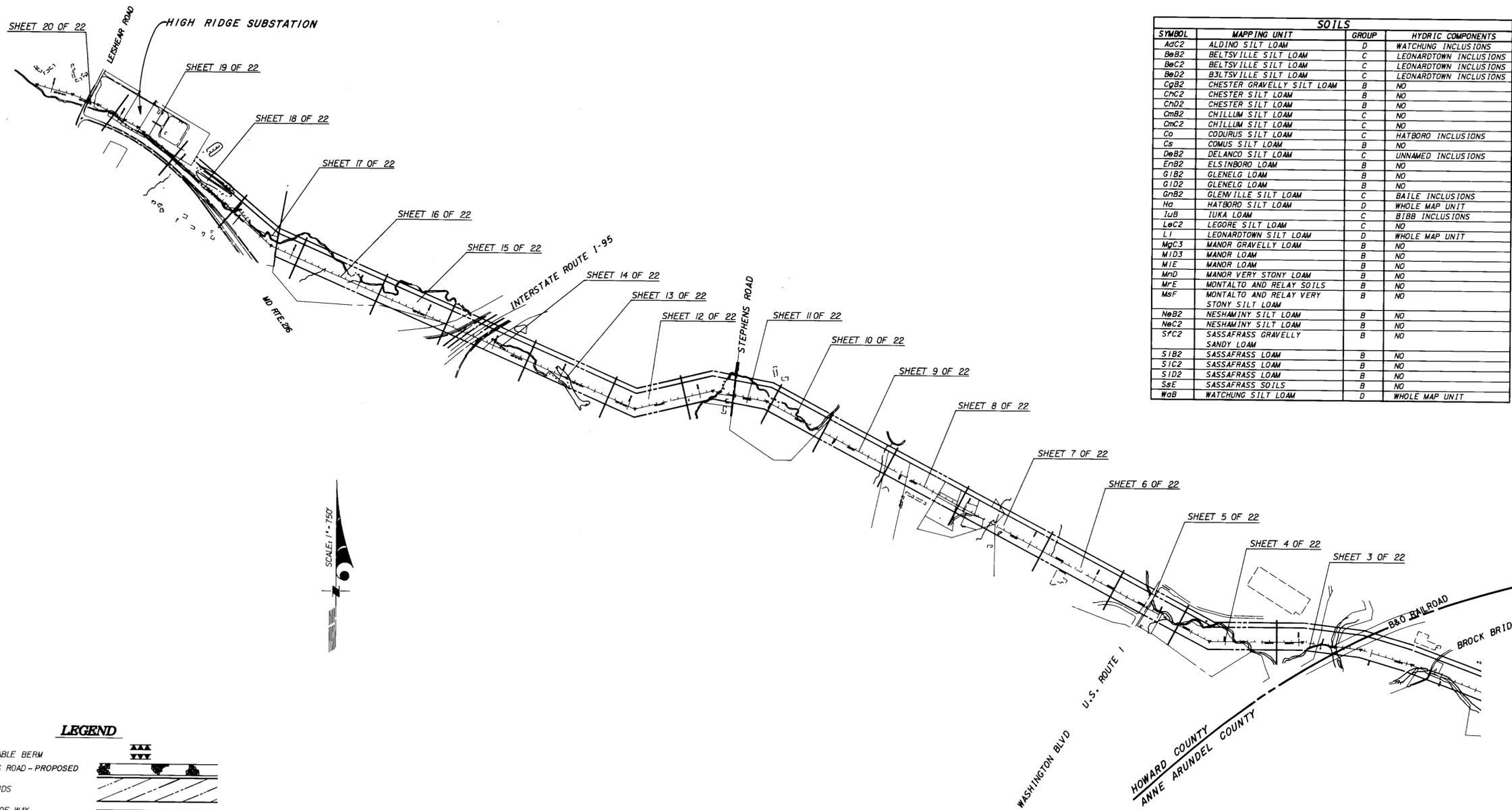
Reviewed for HOWARD S.C.D. and meet technical requirements

*James S. Hahn* 10/1/92  
 S.C.D. SOIL CONSERVATION SERVICE DATE

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

*Jeffrey B. Retterer* 10/1/92  
 HOWARD S.C.D. DATE

BEFORE BEGINNING CONSTRUCTION, CONTACT MISS UTILITY AT 1-800-257-1777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.



SOILS			
SYMBOL	MAPPING UNIT	GROUP	HYDRIC COMPONENTS
AOC2	ALDING SILT LOAM	D	WATCHUNG INCLUSIONS
BbB2	BELTSVILLE SILT LOAM	C	LEONARDTOWN INCLUSIONS
BcC2	BELTSVILLE SILT LOAM	C	LEONARDTOWN INCLUSIONS
BdD2	BELTSVILLE SILT LOAM	C	LEONARDTOWN INCLUSIONS
CgB2	CHESTER GRAVELLY SILT LOAM	B	NO
ChC2	CHESTER SILT LOAM	B	NO
ChD2	CHESTER SILT LOAM	B	NO
CmB2	CHILLUM SILT LOAM	C	NO
CmC2	CHILLUM SILT LOAM	C	NO
Co	CODURUS SILT LOAM	C	HATBORO INCLUSIONS
Cs	COMUS SILT LOAM	B	NO
DeB2	DELANCO SILT LOAM	C	UNNAMED INCLUSIONS
EmB2	ELSBORO LOAM	B	NO
G1B2	GLENELG LOAM	B	NO
G1D2	GLENELG LOAM	B	NO
GnB2	GLENVILLE SILT LOAM	C	BAILE INCLUSIONS
Hs	HATBORO SILT LOAM	D	WHOLE MAP UNIT
IuB	IUKA LOAM	C	BTBB INCLUSIONS
LcC2	LEGORE SILT LOAM	C	NO
LI	LEONARDTOWN SILT LOAM	D	WHOLE MAP UNIT
MqC3	MANOR GRAVELLY LOAM	B	NO
MID3	MANOR LOAM	B	NO
MIE	MANOR LOAM	B	NO
MnD	MANOR VERY STONY LOAM	B	NO
MpE	MONTALTO AND RELAY SOILS	B	NO
Msf	MONTALTO AND RELAY VERY STONY SILT LOAM	B	NO
NbB2	NESHAMINY SILT LOAM	B	NO
NcC2	NESHAMINY SILT LOAM	B	NO
SfC2	SASSAFRASS GRAVELLY SANDY LOAM	B	NO
SIB2	SASSAFRASS LOAM	B	NO
SIC2	SASSAFRASS LOAM	B	NO
SID2	SASSAFRASS LOAM	B	NO
SsE	SASSAFRASS SOILS	B	NO
WgB	WATCHUNG SILT LOAM	D	WHOLE MAP UNIT



**LEGEND**

- MOUNTABLE BERM
- ACCESS ROAD - PROPOSED
- WETLANDS
- RIGHT OF WAY
- 6' OF PROPOSED TRANSMISSION LINE
- EXISTING TOWER
- PROP. 3-POLE STRUCTURE
- PROP. 2-POLE STRUCTURE
- PROP. SINGLE POLE STRUCTURE
- LIMIT OF DISTURBANCE
- SILT FENCE
- SOIL LIMITS
- STABILIZED CONSTR. ENTRANCE
- EXISTING INDEX CONTOURS
- EXISTING INTER. CONTOURS
- A-1 EARTH DIKE
- STEEP SLOPES > 25%
- STEEP SLOPES 15 - 24.9%
- ZONING LINE

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*John M. Zook* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James H. Lewis* 10/7/92  
*Charles W. Patten* 10/11/92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING

*James R. Roth* 10/16/92  
*Mina H. Homan* 10/15/92  
LAWYER DIRECTOR DATE  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

BY THE DEVELOPER:

\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.\*

*Brian F. Medcroft* 8/11/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. MEDCROFT  
Printed Name

BY THE ENGINEER:

\* I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.\*

*Jeffrey B. Retterer* 7-29-92  
SIGNATURE OF ENGINEER DATE  
JEFFREY B. RETTERER  
Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements

*John W. Stalm* 10/1/92  
S.C.D. SOIL CONSERVATION DISTRICT DATE

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

*John W. Stalm* 10/1/92  
HOWARD S.C.D. DATE

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

DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD

BLACK & VEATCH

ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS

**GREENHORNE & O'MARA, INC.**  
113 WEST ROAD, SUITE 208  
BALTIMORE, MD. 21204  
(301) 228-4100

© LATEST DATE HEREON

*John B. ...*  
7-29-92

**INDEX SHEET**

WAUGH CHAPEL TO HIGH RIDGE  
500 K V TRANSMISSION LINE  
HOWARD COUNTY SEGMENT

ZONE: R-SC, R-20, M-1, M-2, PEC  
ELECTION DISTRICT 6

HOWARD COUNTY, MARYLAND  
ZONING / TAX MAPS 46 & 47

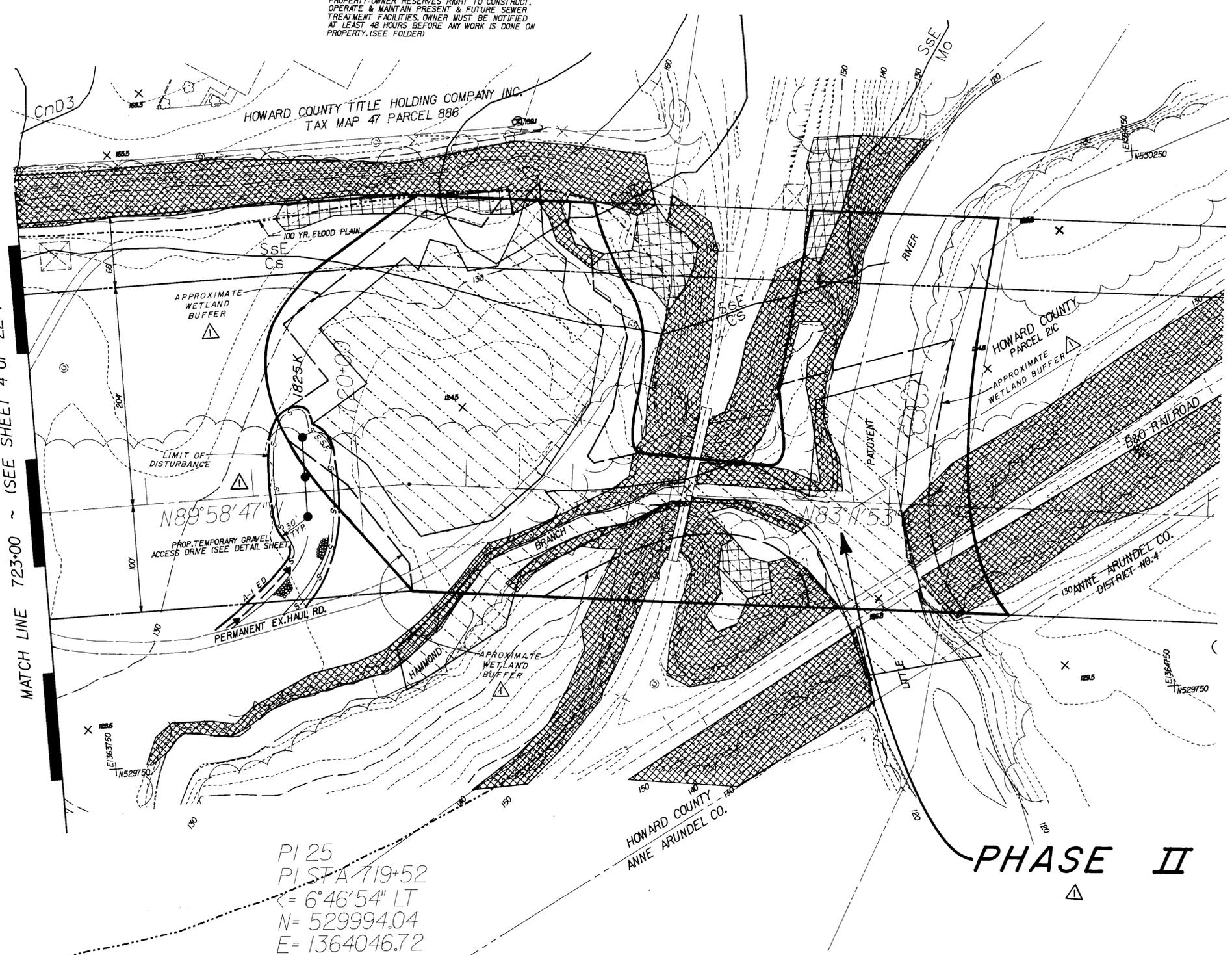
BALTIMORE GAS & ELECTRIC

SCALE	APPD	APPD	APPD	APPD
DATE				
DR. BY				
CHKD. <i>Retterer</i>				
INSP.				

DESIGN: KM DRAWN: HRM CHK: R DATE: B-J210-X FILE NO.

PROPERTY OWNER RESERVES RIGHT TO CONSTRUCT, OPERATE & MAINTAIN PRESENT & FUTURE SEWER TREATMENT FACILITIES. OWNER MUST BE NOTIFIED AT LEAST 48 HOURS BEFORE ANY WORK IS DONE ON PROPERTY. (SEE FOLDER)

MATCH LINE 723+00 ~ (SEE SHEET 4 OF 22)



$N89^{\circ}58'47''$

$N83^{\circ}4'53''$

PI 25  
 PI STA 719+52  
 $\angle = 6^{\circ}46'54''$  LT  
 N = 529994.04  
 E = 1364046.72

PHASE II

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 J. J. [Signature] 10-13-92  
 COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
 HOWARD CO. DEPT. OF PUBLIC WORKS  
 J. J. [Signature] 10/13/92  
 CHIEF, DEPT. OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 J. J. [Signature] 10/16/92  
 PLANNING DIRECTOR DATE  
 J. J. [Signature] 10/15/92  
 CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

BY THE DEVELOPER:  
 \* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 B. F. [Signature] 10/11/92  
 SIGNATURE OF DEVELOPER DATE  
 BRIAN F. WEDCROFT  
 Printed Name

BY THE ENGINEER:  
 \* I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 J. B. [Signature] 10/13/92  
 SIGNATURE OF ENGINEER DATE  
 JEFFREY B. RETTERER  
 Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements  
 J. J. [Signature] 10/11/92  
 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 J. J. [Signature] 10/11/92  
 HOWARD S.C.D. DATE

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

STA. 714+00 TO 723+00  
 POLE #1825K  
 WAUGH CHAPEL TO HIGH RIDGE  
 500 KV TRANSMISSION LINE  
 HOWARD COUNTY SEGMENT

ZONE: R-SC, R-20, M-L, M-2, PEC  
 ELECTION DISTRICT 6  
 HOWARD COUNTY, MARYLAND  
 ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE 1" = 50'	APPD	APPD	APPD	APPD	3 OF 22
DATE					
DR. BY					
CHKD. INSP.					

DESIGN: KM DRAWN: CHK: R DATE: NOV. 91 FILE NO. B-1210-X

RELOCATE STR. 1825K, CHANGE PHASE II SYMBOL, ADDED APPROX. WETLAND BUFFER.	MCN 7-12-93	SA 11/1/93							
HOWI	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD	APPD

27-JAN-1992 REVISIONS

BLACK & VEATCH

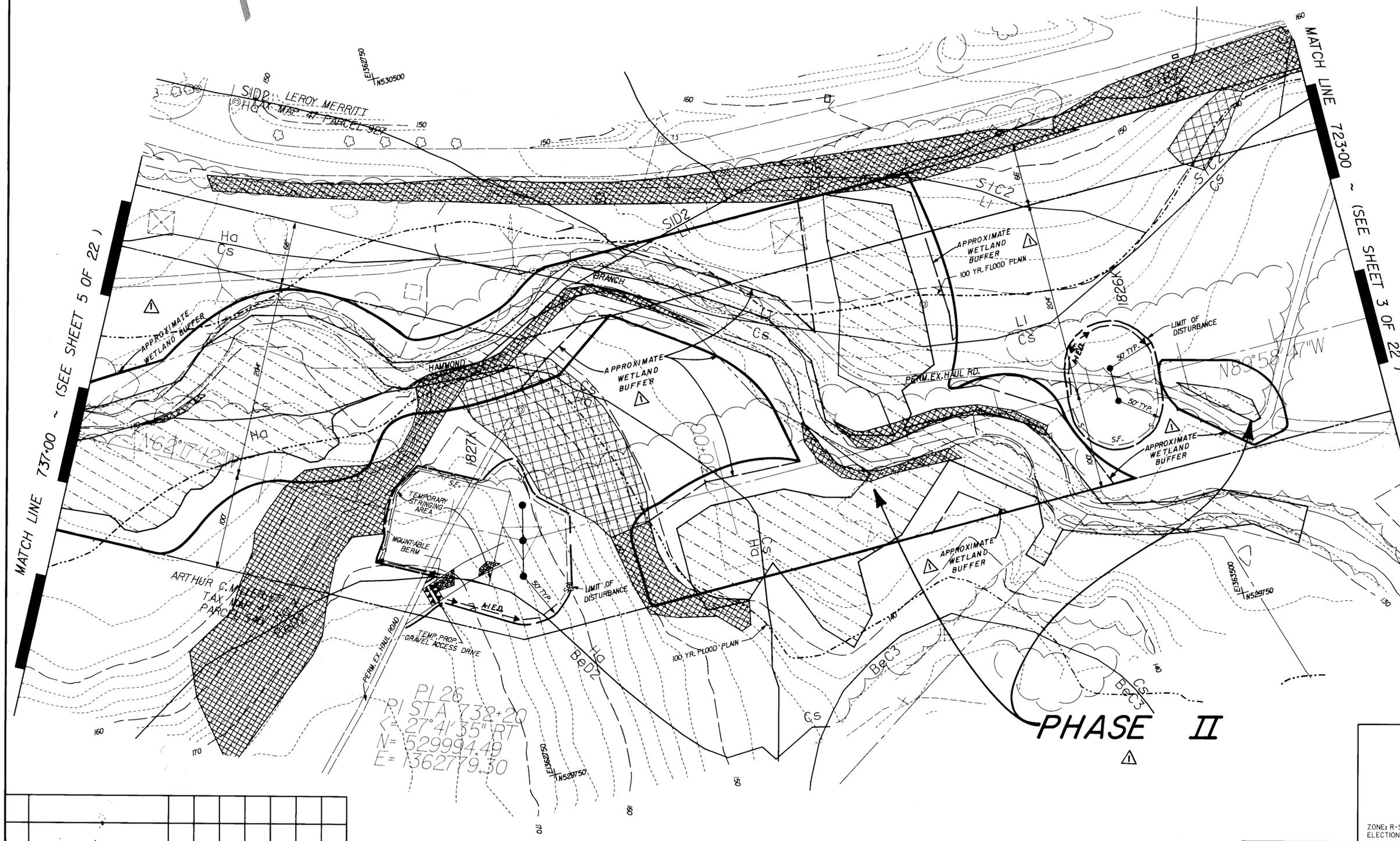
ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
**GREENHORNE & O'MARA, INC.**  
 113 WEST ROAD, SUITE 208  
 BALTIMORE, MD. 21204  
 (301) 228-4100  
 © LATEST DATE HEREON



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 LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL

7-21-92 DESIGN: KM DRAWN: CHK: R DATE: NOV. 91 FILE NO. B-1210-X

PROPERTY OWNER RESERVES RIGHT TO CONSTRUCT, OPERATE & MAINTAIN PRESENT & FUTURE SEWER TREATMENT FACILITIES. OWNER MUST BE NOTIFIED AT LEAST 48 HOURS BEFORE ANY WORK IS DONE ON PROPERTY. (SEE FOLDER)



MATCH LINE 737+00 ~ (SEE SHEET 5 OF 22)

MATCH LINE 723+00 ~ (SEE SHEET 3 OF 22)

PI 26  
RI STA 732+20  
K= 27°41'35" RT  
N= 529994.49  
E= 1362779.30

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*James M. Boyd* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James M. Boyd* 10/17/92  
DIRECTOR DATE  
*James M. Boyd* 10/17/92  
CHIEF, BUREAU OF ENGINEERING DATE SH

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*James M. Boyd* 10/16/92  
PLANNING DIRECTOR DATE  
*Bluma J. Blumenthal* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE JS

SEDIMENT CONTROL

BY THE DEVELOPER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Brian F. Wedcroft* 2/1/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. WEDCROFT  
Printed Name

BY THE ENGINEER:  
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site, conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

*Jeffrey B. Retterer* 7-29-92  
SIGNATURE OF ENGINEER DATE

**JEFFREY B. RETTERER**  
Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements

*John M. Stoltz* 10/1/92  
U.S. SOIL CONSERVATION SERVICE DATE

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

*Jeffrey B. Retterer* 10/1/92  
HOWARD S.C.D. DATE

BEFORE BEGINNING CONSTRUCTION, CONTACT MISS UTILITY AT 1-800-251-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

STA. 723+00 TO 737+00  
POLE #1826K, #1827K  
**WAUGH CHAPEL TO HIGH RIDGE  
500 kV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**

ZONE: R-SC, R-20, M-1, M-2, PEC  
ELECTION DISTRICT 6  
HOWARD COUNTY, MARYLAND  
ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE 1"=50'	APPD	APPD	APPD	APPD	4 OF 22
DATE					
DR. BY					
CHKD. <i>Retterer</i>					
INSP.					
DESIGN: KM	DRAWN: KRM	CHK: R	DATE: NOV. 91	B-1210-X	
			FILE NO.		

CHANGED PHASE II SYMBOL, REVISED APPROX. WETLAND BUFFER.	MCN 7/12/93	SA 11/14/92					
HOW2 DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
REVISIONS							

**BLACK & VEATCH**



ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
**GREENHORNE & O'MARA, INC.**  
113 WEST ROAD, SUITE 200  
BALTIMORE, MD. 21204  
(301) 238-6100  
© LATEST DATE HEREON  
ANNAPOLIS, MD • ATLANTA, GA • AURORA, CO • BALTIMORE, MD • CULPEPER, VA • DULUTH, GA • FAIRFAX, VA • GREENBELT, MD  
LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL



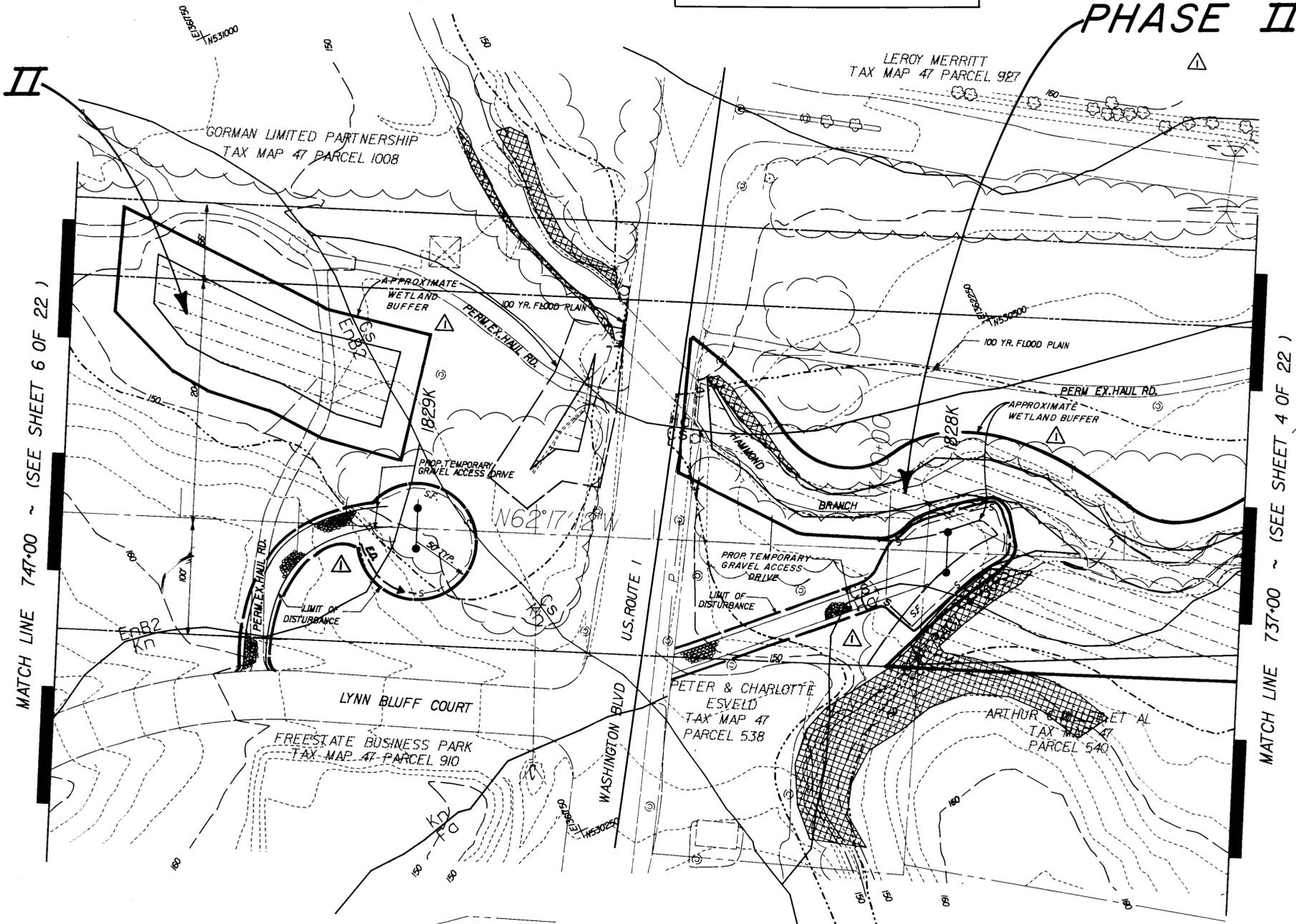
7-29-92

SDP-92-71

SEDIMENT CONTROL  
PLACED PER FIELD CONDITIONS  
WITH CONCURRENCE OF  
INSPECTOR

PHASE II

PHASE II



MATCH LINE 747+00 ~ (SEE SHEET 6 OF 22)

MATCH LINE 737+00 ~ (SEE SHEET 4 OF 22)

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
*[Signature]* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC WORKS  
HOWARD CO. DEPT. OF PUBLIC WORKS  
*[Signature]* 10-15-92  
DIRECTOR DATE  
*[Signature]* 10-27-92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING  
*[Signature]* 10-16-92  
PLANNING DIRECTOR DATE  
*[Signature]* 10-15-92  
CHIEF, OFFICE OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

BY THE DEVELOPER:  
\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION  
WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY  
RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION  
PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A  
DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING  
PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION  
BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE  
PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL  
CONSERVATION DISTRICT.  
*[Signature]* 8/1/92  
SIGNATURE OF DEVELOPER DATE

BRIAN F. MEDCROFT  
Printed Name

BY THE ENGINEER:  
\* I certify that this plan for erosion and sediment  
control represents a practical and workable plan based  
on my personal knowledge of the site conditions and that  
it was prepared in accordance with the requirements of  
the Howard Soil Conservation District.  
*[Signature]* 7-29-92  
SIGNATURE OF ENGINEER DATE

JEFFREY B. RETTZER  
Printed Name

Reviewed for HOWARD S.C.D. and  
meets technical requirements  
*[Signature]* 10/1/92  
U.S. SOIL CONSERVATION  
SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND  
SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*[Signature]* 10/1/92  
HOWARD S.C.D. DATE

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

STA. 737+00 TO 747+00  
POLE \*1828K, \*1829K

WAUGH CHAPEL TO HIGH RIDGE  
500 KV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT

ZONE: R-SC, R-20, M-1, M-2, PEC HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT 6 ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE	1" = 50'	APPD	APPD	APPD	APPD
DATE					
DR. BY					
CHKD.	<i>[Signature]</i>				
INSP.					
					5 OF 22
DESIGN	KIM	DRAWN	KRM	CHKD.	2
NOV. 91	B-1210-X				
DATE	FILE NO.				

HOW3	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD
	REVISIONS						

BLACK & VEATCH

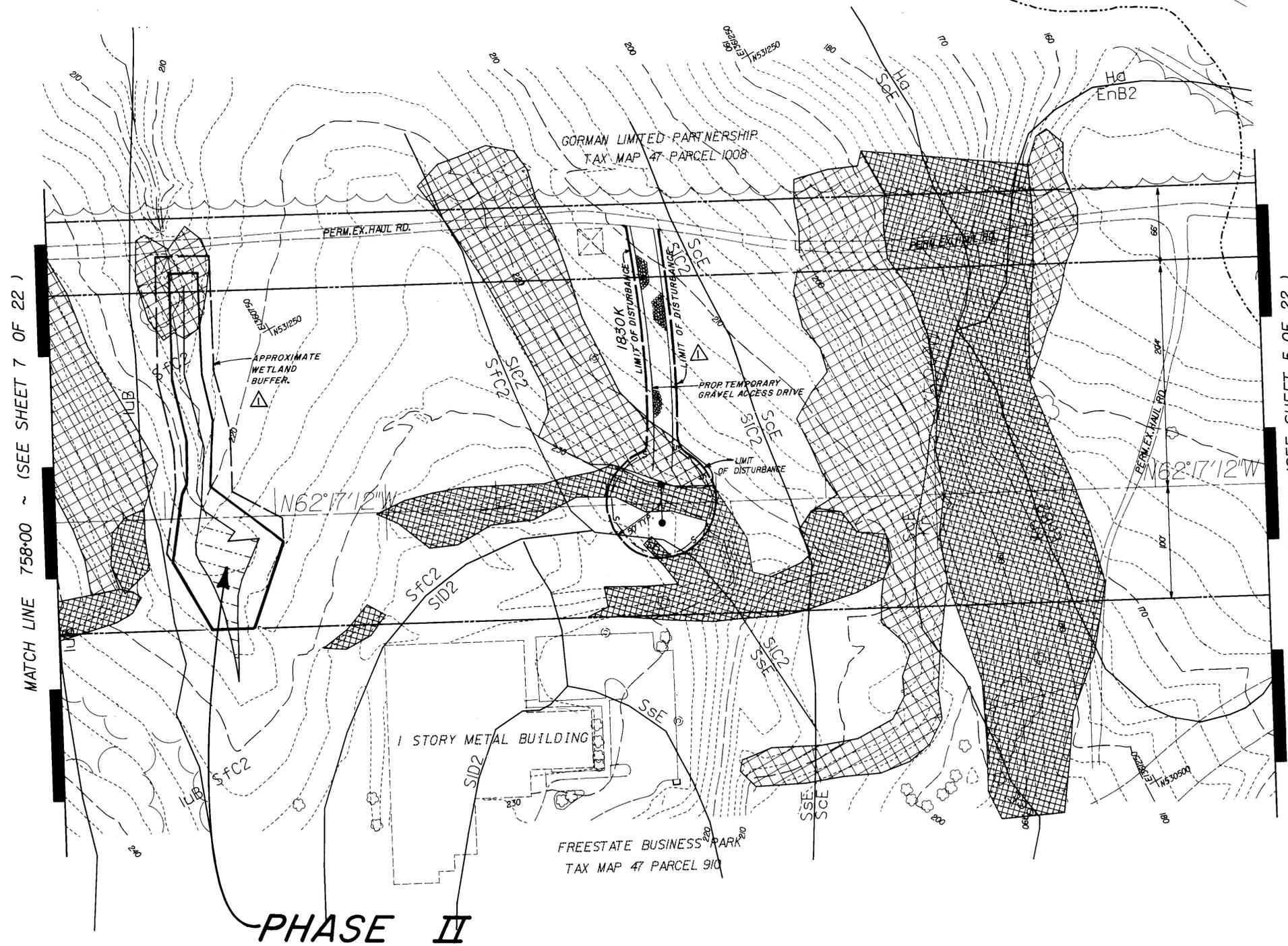


ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
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© LATEST DATE HEREON

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LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL



△ SEDIMENT CONTROL  
PLACED PER FIELD CONDITIONS  
WITH CONCURRENCE OF  
INSPECTOR



APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*Joseph M. Fogarty* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James P. Shreve* 10-7-92  
*Charles Blaney* 10-7-92  
INSPECTOR DATE  
CHIEF, BUREAU OF ENGINEERING act. DATE SA

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING

*James Smith* 10-14-92  
*William J. Holman* 10-15-92  
PLANNING DIRECTOR DATE  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE SA

SEDIMENT CONTROL

BY THE DEVELOPER:  
\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION  
WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY  
RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION  
PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A  
DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING  
PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION  
BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE  
PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL  
CONSERVATION DISTRICT.\*

*Brian F. Medcroft* 8/1/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. MEDCROFT  
Printed Name

BY THE ENGINEER:  
\* I certify that this plan for erosion and sediment  
control represents a practical and workable plan based  
on my personal knowledge of the site conditions and that  
it was prepared in accordance with the requirements of  
the Howard Soil Conservation District.\*

*Jeffrey B. Retterge* 7-29-92  
SIGNATURE OF ENGINEER DATE  
JEFFREY B. RETTERGE  
Printed Name

Reviewed for HOWARD S.C.D. and  
meets technical requirements

*James M. Hester* 10/1/92  
HOWARD S.C.D. SERVICE DATE

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

*Jeffrey B. Retterge* 10/1/92  
HOWARD S.C.D. DATE

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

STA. 747+00 TO 758+00  
POLE #1830K  
WAUGH CHAPEL TO HIGH RIDGE  
500 KV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT

ZONE: R-SC, R-20, M-1, M-2, PEC HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT 6 ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE 1"=50'	APPD	APPD	APPD	APPD	6 OF 22
DATE					
DR. BY					
CHKD. <i>Retterge</i>					
INSP.					

DESIGN: KJM DRAWN: KRM CHK: J DATE: NOV. 91 FILE NO. B-1210-X

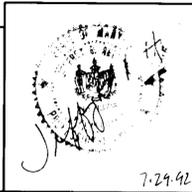
HOW4	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
△	REVISED ACCESS ROAD TO STR. 1830K, CHANGED PHASE II SYMBOL, ADDED NOTE AND APPROXIMATE WETLAND BUFFER.							

28-JUL-1992 REVISIONS

BLACK & VEATCH

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BALTIMORE, MD. 21204  
(301)296-6100 © LATEST DATE HEREON

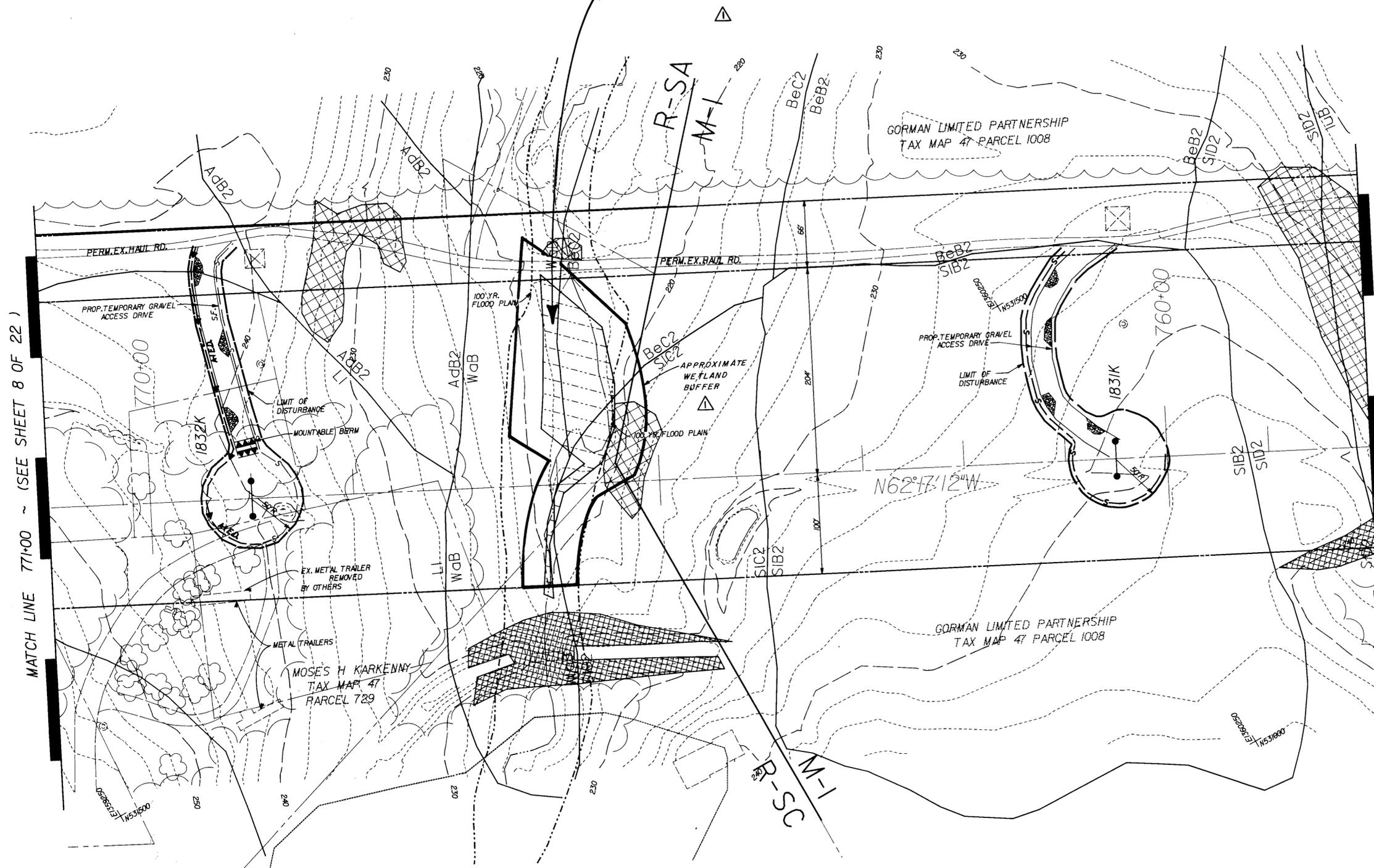
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LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL



7-29-92

SDP-92-71

# PHASE II



MATCH LINE 771+00 ~ (SEE SHEET 8 OF 22)

MATCH LINE 758+00 ~ (SEE SHEET 6 OF 22)

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
*[Signature]* 10/13/92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS  
*[Signature]* 10/7/92  
DIRECTOR DATE  
*[Signature]* 10/1/92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*[Signature]* 10/16/92  
PLANNING DIRECTOR DATE  
*[Signature]* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

SEDIMENT CONTROL  
BY THE DEVELOPER:  
\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.\*  
*[Signature]* 8/1/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. MEDCROFT  
Printed Name

BY THE ENGINEER:  
\* I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.\*  
*[Signature]* 7/24/92  
SIGNATURE OF ENGINEER DATE  
JEFFREY B. RETTEREE  
Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements  
*[Signature]* 10/1/92  
SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*[Signature]* 10/1/92  
HOWARD S.C.D. DATE

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

STA. 758+00 TO 771+00  
POLE #1831K, #1832K  
**WAUGH CHAPEL TO HIGH RIDGE  
500 kV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**

ZONE: R-SC, R-20, M-I, M-2, PEC HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT 6 ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE 1"=50'	APPD	APPD	APPD	APPD	7 OF 22
DATE					
DR. BY					
CHKD. <i>[Signature]</i>					
INSPECTION					
DESIGN: <i>[Signature]</i>	KRM	KRM	CHK: <i>[Signature]</i>	DATE: NOV. 91	B-1210-X
				FILE NO.	

NO.	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
1	CHANGED PHASE II SYMBOL. ADDED APPROXIMATE WETLAND BUFFER.							

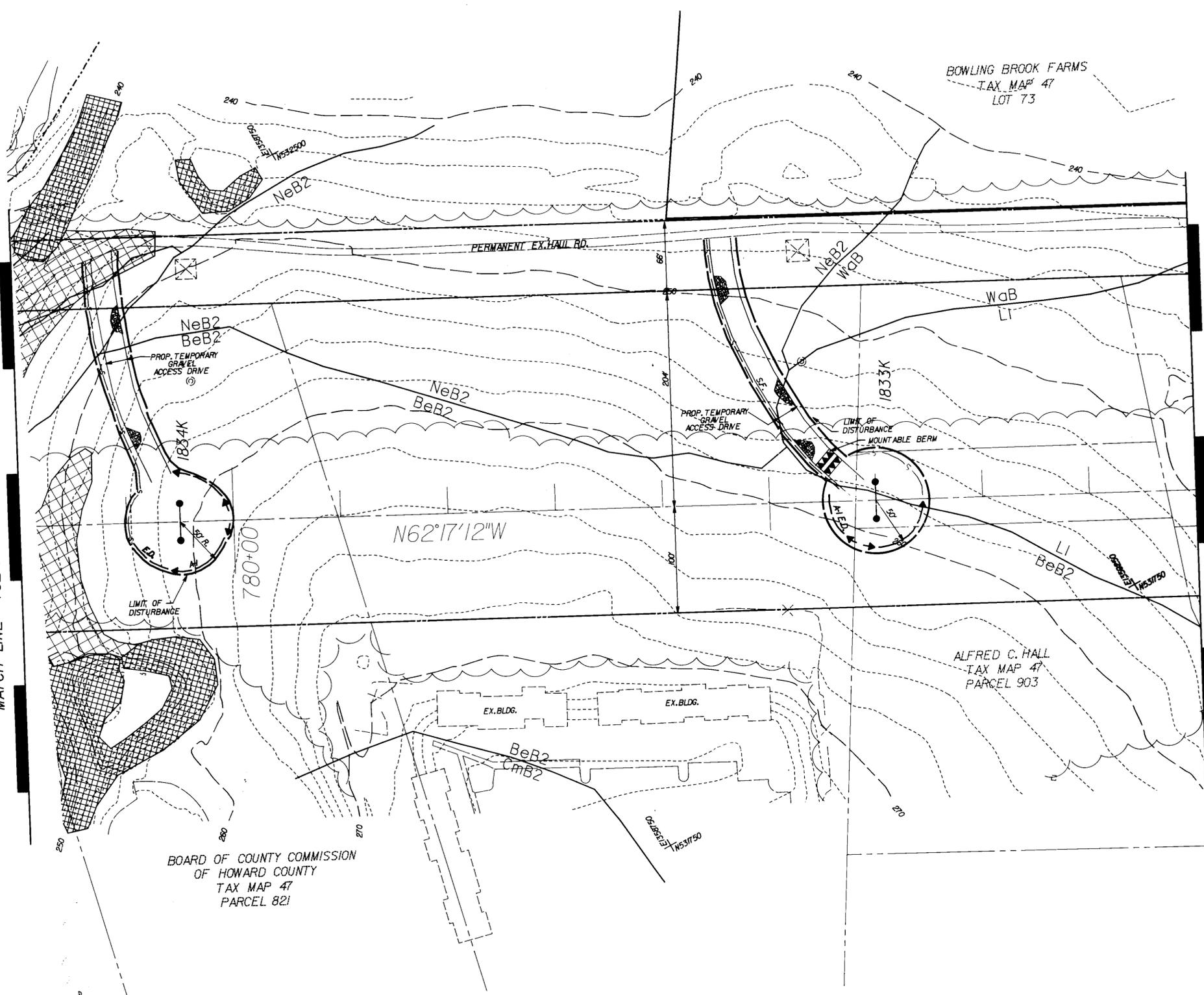


ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
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BALTIMORE, MD. 21204  
(301)296-6100  
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LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL



MATCH LINE 782+00 ~ (SEE SHEET 9 OF 22)

MATCH LINE 771+00 ~ (SEE SHEET 7 OF 22)



APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*James W. DeWitt* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James W. DeWitt* 10/17/92  
DIRECTOR DATE  
*James W. DeWitt* 10/17/92  
CHIEF, BUREAU OF ENGINEERING DATE  
JH

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING

*James W. DeWitt* 10/16/92  
PLANNING DIRECTOR DATE  
*James W. DeWitt* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE  
JH

SEDIMENT CONTROL

BY THE DEVELOPER:  
I, THE DEVELOPER, CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Brian F. Wedcroft* 8/11/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. WEDCROFT  
Printed Name

BY THE ENGINEER:

I, THE ENGINEER, CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Jeffrey B. Retterek* 10/11/92  
SIGNATURE OF ENGINEER DATE  
JEFFREY B. RETTEREK  
Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements

*James W. DeWitt* 10/11/92  
HOWARD S.C.D. SERVICE DATE

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

*Jeffrey B. Retterek* 10/11/92  
HOWARD S.C.D. DATE

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

STA. 771+00 TO 782+00  
POLE #1833K, #1834K  
**WAUGH CHAPEL TO HIGH RIDGE  
500 KV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**

ZONE: R-SC, R-20, M-1, M-2, PEC  
ELECTION DISTRICT 6  
HOWARD COUNTY, MARYLAND  
ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE: 1"=50'	APPD	APPD	APPD	APPD	8 OF 22
DATE:					
DR. BY:					
CHKD. INSP.:					

DESIGN: KIM DRAWN: KRM CHK: R DATE: NOV. 91 B-1210-X  
FILE NO.

NO.	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD

29-JUL-1992 REVISIONS

**BLACK & VEATCH**



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BALTIMORE, MD. 21204  
(301) 206-4100  
© LATEST DATE HEREON

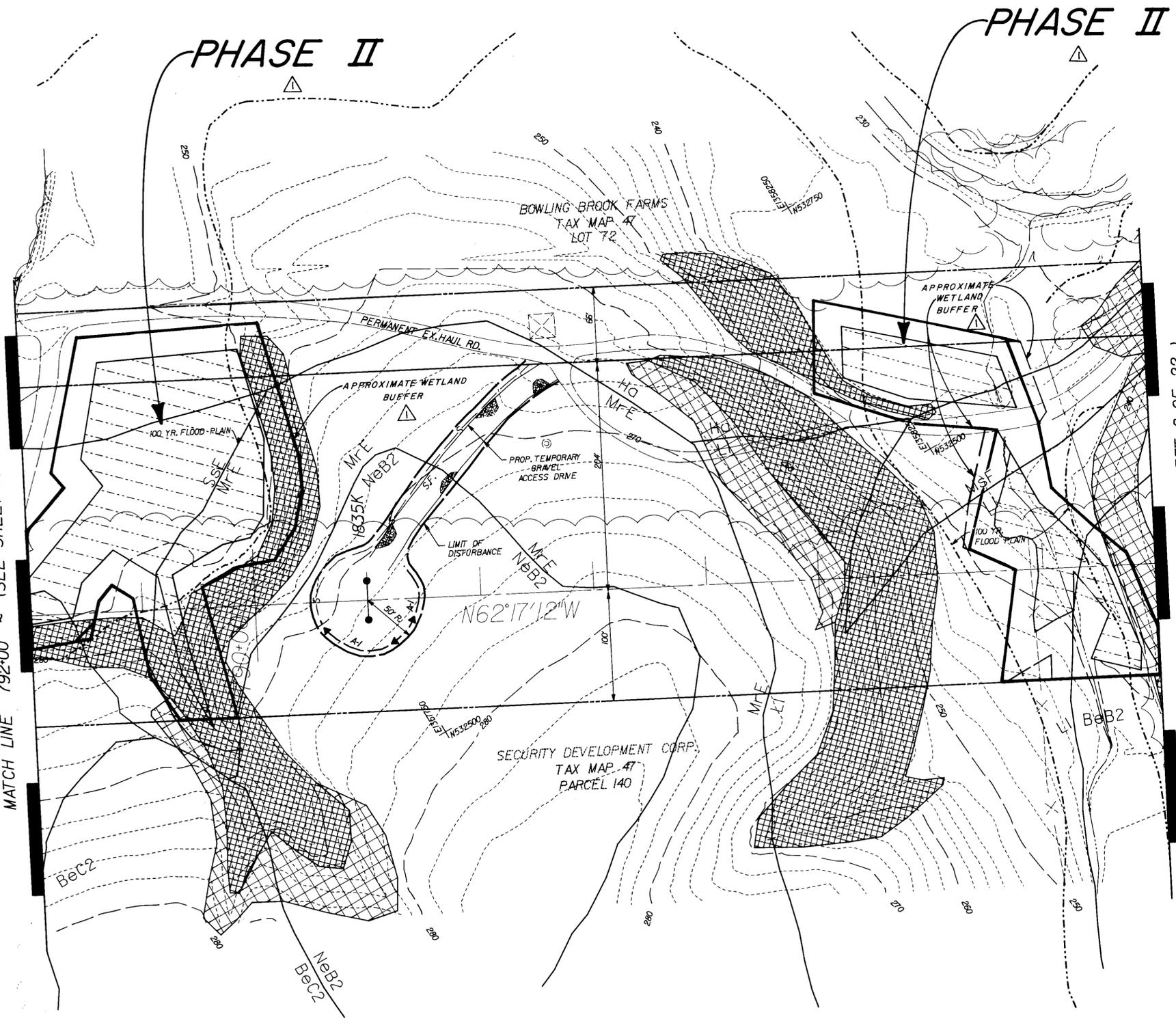
ANNAPOLIS, MD • ATLANTA, GA • AURORA, CO • BALTIMORE, MD • CULPEPER, VA • DULUTH, GA • FAIRFAX, VA • GREENBELT, MD  
LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL

*Jeffrey B. Retterek*  
7.21.92

SDP-92-71

MATCH LINE 792+00 ~ (SEE SHEET 10 OF 22)

MATCH LINE 782+00 ~ (SEE SHEET 8 OF 22)



APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
*Joseph M. [Signature]* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS  
*James G. [Signature]* 10/19/92  
DIRECTOR DATE  
*Edward O. [Signature]* 10/19/92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING  
*James [Signature]* 10/16/92  
PLANNING DIRECTOR DATE  
*William [Signature]* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

SEDIMENT CONTROL  
BY THE DEVELOPER:  
\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION  
WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY  
RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION  
PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A  
DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING  
PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION  
BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE  
PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL  
CONSERVATION DISTRICT.  
*Brian F. [Signature]* 8/11/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. MEDCROFT  
Printed Name

BY THE ENGINEER:  
\* I certify that this plan for erosion and sediment  
control represents a practical and workable plan based  
on my personal knowledge of the site conditions and that  
it was prepared in accordance with the requirements of  
the Howard Soil Conservation District.  
*Jeffrey B. [Signature]* 7-29-92  
SIGNATURE OF ENGINEER DATE  
JEFFREY B. RETTERER  
Printed Name

Reviewed for HOWARD S.C.D. and  
meets technical requirements  
*James [Signature]* 10/1/92  
U.S. SOIL CONSERVATION  
SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND  
SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*John [Signature]* 10/1/92  
HOWARD S.C.D. DATE

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

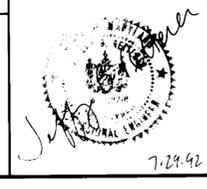
STA. 782+00 TO 792+00  
POLE #1835K  
**WAUGH CHAPEL TO HIGH RIDGE  
500 KV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**  
ZONE: R-SC, R-20, M-1, M-2, PEC HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT 6 ZONING / TAX MAPS 46 & 47

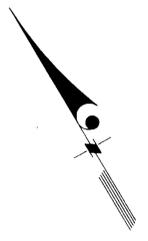
BALTIMORE GAS & ELECTRIC  
SCALE 1"=50'  
DATE  
DR. BY  
CHKD. *[Signature]*  
INSPECTION  
DESIGN: *[Signature]* DRAWN: KRM  
NOV. 91 B-1210-X  
DATE: FILE NO.

HOWT	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
	CHANGED PHASE II SYMBOL ADDED APPROXIMATE WETLAND BUFFER.							
	M/C/N SA 7-12-93 11/17/93							

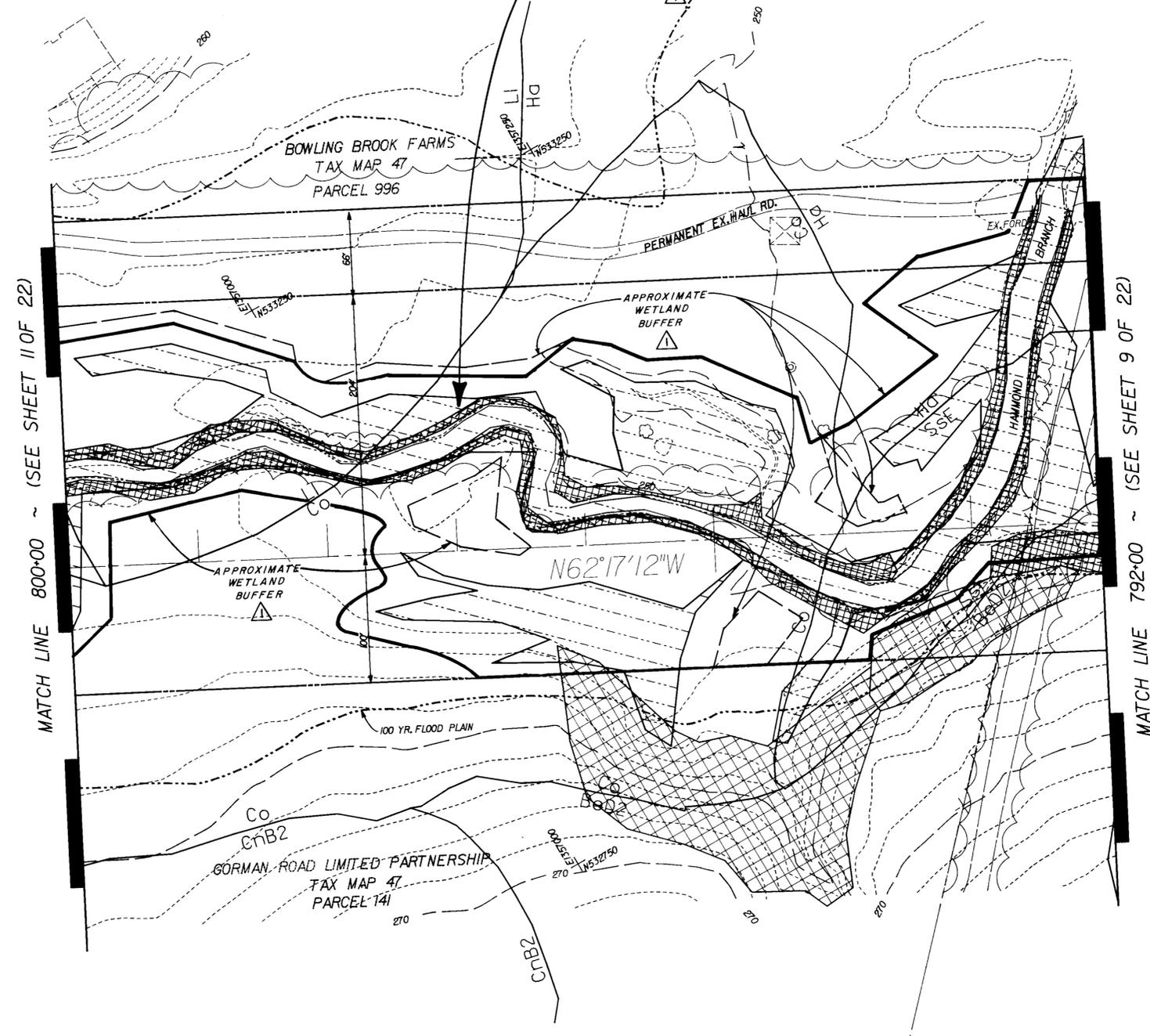


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(301) 296-4100  
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LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL





# PHASE II



MATCH LINE 800+00 ~ (SEE SHEET 11 OF 22)

MATCH LINE 792+00 ~ (SEE SHEET 9 OF 22)

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*John W. Boyce* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James M. Shan* 10/2/92  
DIRECTOR DATE  
*Charles A. Cohen* 10/7/92  
CHIEF, BUREAU OF ENGINEERING DATE  
CO. 10114 JH

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*James R. Smith* 10/16/92  
PLANNING DIRECTOR DATE  
*Summa J. Blomatt* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE  
35  
SEDIMENT CONTROL

BY THE DEVELOPER:  
\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.\*

*Brian F. Medcroft* 8/16/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. MEDCROFT  
Printed Name

BY THE ENGINEER:  
\* I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.\*

*Jeffrey B. Retterer* 7-29-92  
SIGNATURE OF ENGINEER DATE  
JEFFREY B. RETTERER  
Printed Name

Reviews for HOWARD S.C.D. and meets technical requirements  
*James M. Retterer* 10/1/92  
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*James M. Retterer* 10/1/92  
HOWARD S.C.D. DATE

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

STA. 792+00 TO 800+00

**WAUGH CHAPEL TO HIGH RIDGE  
500 kV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**

ZONE: R-SC, R-20, M-1, M-2, PEC HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT 6 ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE	1"=50'	APPD	APPD	APPD	APPD	10 OF 22
DATE						
DR. BY						
CHKD.	<i>WTR</i>					
INSP.						
DESIGN	KM	DRAWN	KRM	CHKD.	2	NOV. 91 DATE: FILE NO.

NO.	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
1	CHANGED PHASE II SYMBOL. ADDED APPROXIMATE WETLAND BUFFER.							



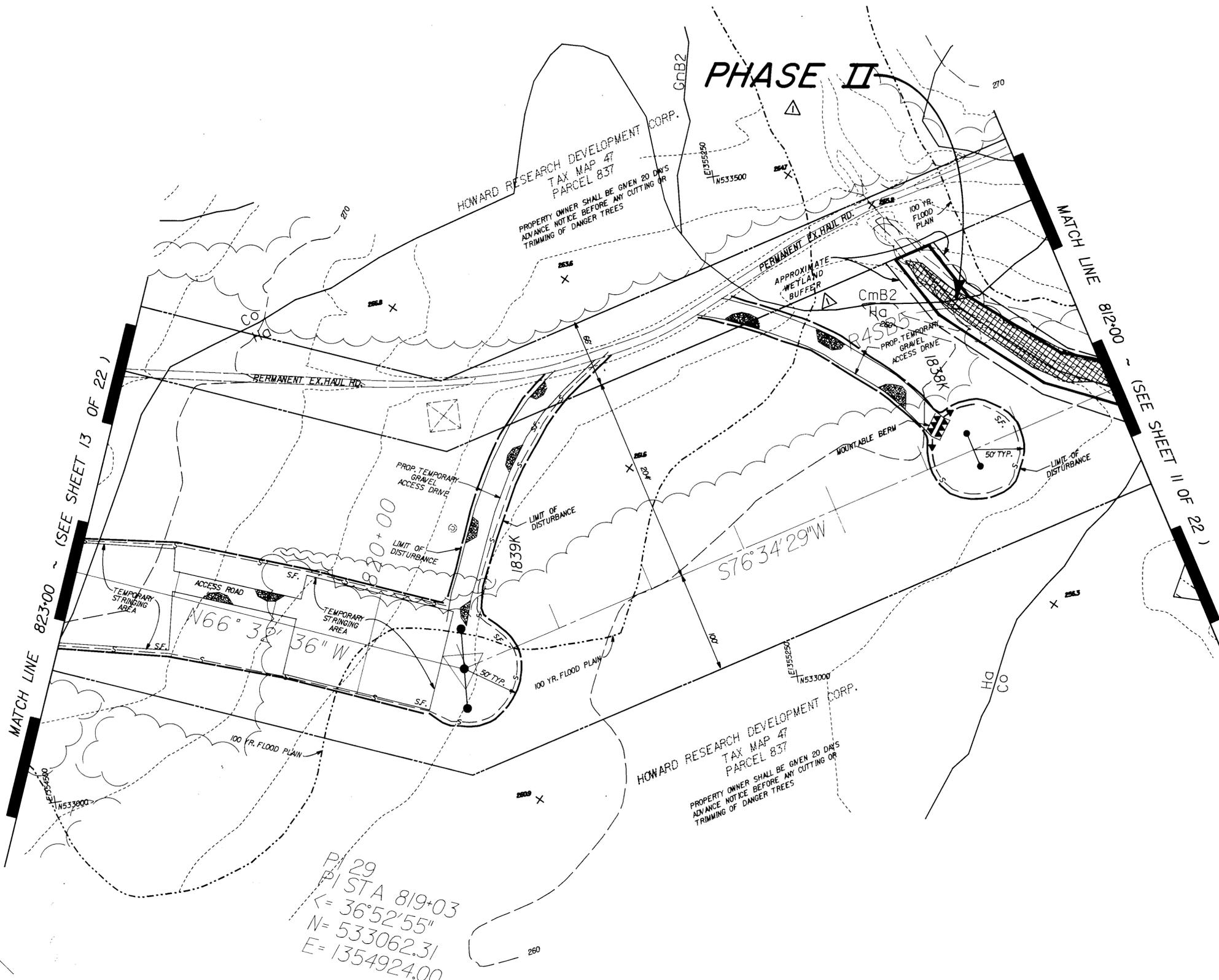
ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
**GREENHORNE & O'MARA, INC.**  
113 WEST ROAD, SUITE 200  
BALTIMORE, MD. 21204  
(301) 236-6100  
© LATEST DATE HEREON



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LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL

28-JUL-1992 REVISIONS





P.I. 29  
 P.I. STA 819+03  
 $\angle = 36^{\circ}52'55''$   
 $N = 533062.31$   
 $E = 1354924.00$

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
*James B. ...* 10-17-92  
 COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
 STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
 HOWARD CO. DEPT. OF PUBLIC WORKS  
*James M. ...* 10/17/92  
 DIRECTOR DATE  
*Robert A. ...* 10/15/92  
 CHIEF, BUREAU OF ENGINEERING DATE  
 CO. 0141-

APPROVED: HOWARD COUNTY DEPARTMENT OF  
 PLANNING & ZONING  
*James ...* 10/16/92  
 PLANNING DIRECTOR DATE  
*William ...* 10/15/92  
 CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE  
 CO. 0141-

BY THE DEVELOPER:  
 \* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION  
 WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY  
 RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION  
 PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A  
 DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING  
 PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION  
 BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE  
 PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL  
 CONSERVATION DISTRICT.  
*Brian F. Medcroft* 8/11/92  
 SIGNATURE OF DEVELOPER DATE  
 BRIAN F. MEDCROFT  
 Printed Name

BY THE ENGINEER:  
 \* I certify that this plan for erosion and sediment  
 control represents a practical and workable plan based  
 on my personal knowledge of the site conditions and that  
 it was prepared in accordance with the requirements of  
 the Howard Soil Conservation District.  
*Jeffrey B. Retterer* 7-29-92  
 SIGNATURE OF ENGINEER DATE  
 JEFFREY B. RETTERER  
 Printed Name

Reviewed for HOWARD S.C.D. and  
 meets technical requirements  
*James ...* 10/16/92  
 U.S. SOIL CONSERVATION  
 SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND  
 SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*John V. ...* 10/12  
 HOWARD S.C.D. DATE

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

STA. 812+00 TO 823+00  
 POLE \*1838K, \*1839K  
**WAUGH CHAPEL TO HIGH RIDGE  
 500 KV TRANSMISSION LINE  
 HOWARD COUNTY SEGMENT**

ZONE: R-SC, R-20, M-1, M-2, PEC  
 ELECTION DISTRICT 6  
 HOWARD COUNTY, MARYLAND  
 ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE 1" = 50'	APPD	APPD	APPD	APPD	12 OF 22
DATE					
DR. BY					
CHKD. <i>Retterer</i>					
INSP.					

DESIGN: KLM DRAWN: KRM CHK: [initials] NOV. 91 B-1210-X  
 DATE: 7-29-92 FILE NO.

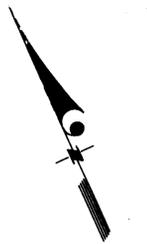
NO.	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
1	CHANGED PHASE II SYMBOL ADDED APPROXIMATE WETLAND BUFFER.							

28-JUL-1992 REVISIONS

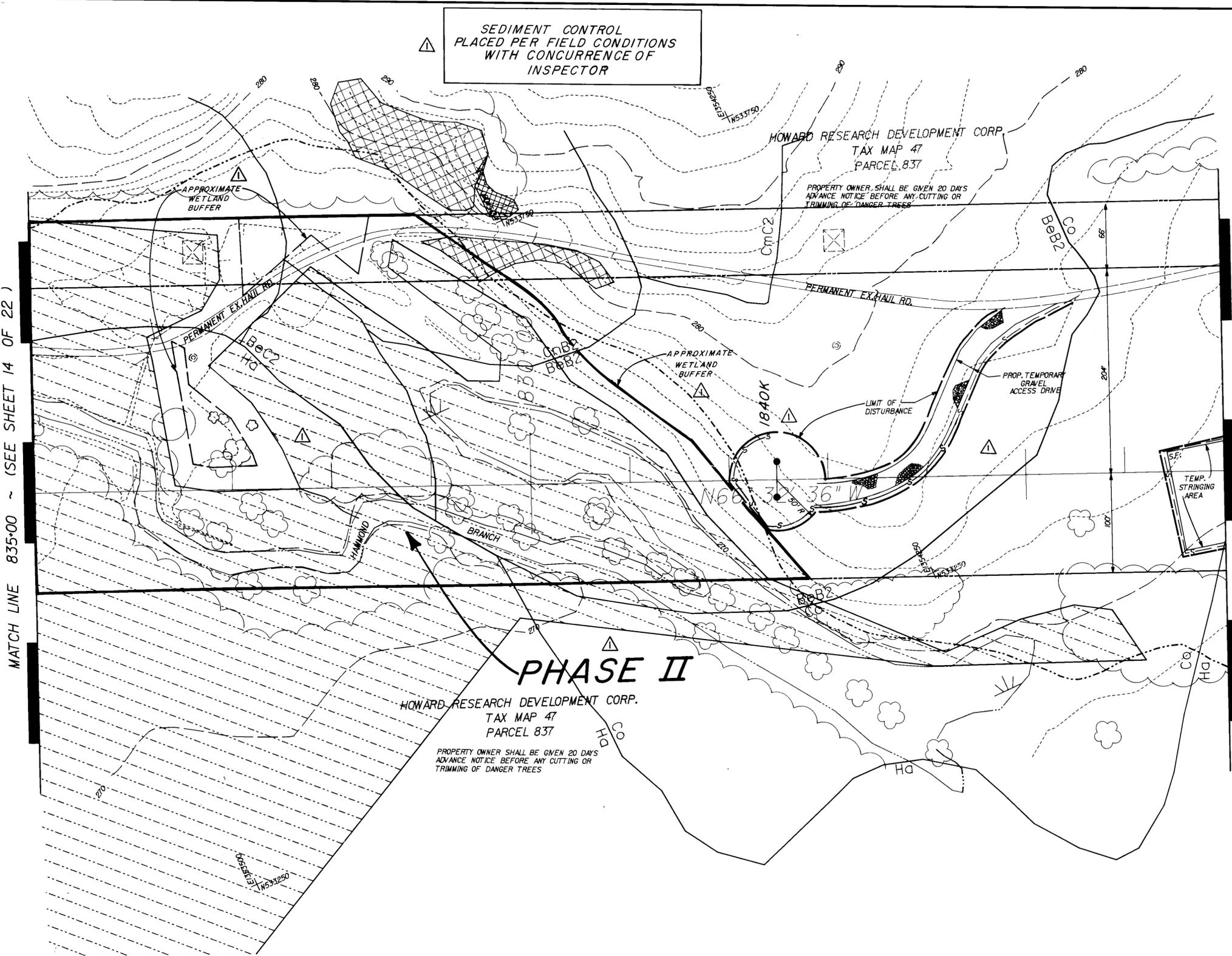
**BLACK & VEATCH**

**GREENHORNE & O'MARA, INC.**  
 113 WEST ROAD, SUITE 208  
 BALTIMORE, MD. 21204  
 (301) 238-6100 © LATEST DATE HEREON  
 ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
 ANNAPOLIS, MD • ATLANTA, GA • AURORA, CO • BALTIMORE, MD • CULPEPER, VA • DULUTH, GA • FAIRFAX, VA • GREENBELT, MD  
 LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL





SEDIMENT CONTROL  
PLACED PER FIELD CONDITIONS  
WITH CONCURRENCE OF  
INSPECTOR



MATCH LINE 835+00 ~ (SEE SHEET 14 OF 22)

MATCH LINE 823+00 ~ (SEE SHEET 12 OF 22)

## PHASE II

HOWARD RESEARCH DEVELOPMENT CORP.  
TAX MAP 47  
PARCEL 837  
PROPERTY OWNER SHALL BE GIVEN 20 DAYS  
ADVANCE NOTICE BEFORE ANY CUTTING OR  
TRIMMING OF DANGER TREES

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
*Joseph M. Zupler* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS  
*James W. Lane* 10/7/92  
DIRECTOR DATE  
*Elizabeth O. Cohen* 10/7/92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING  
*James W. Lane* 10/16/92  
PLANNING DIRECTOR DATE  
*Barbara J. Holmatt* 10/15/92  
CHIEF, BUREAU OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

SEDIMENT CONTROL

BY THE DEVELOPER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION  
WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY  
RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION  
PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A  
DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING  
PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION  
BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE  
PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL  
CONSERVATION DISTRICT.  
*Brian F. Wedcroft* 10/16/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. WEDCROFT  
Printed Name

BY THE ENGINEER:  
I certify that this plan for erosion and sediment  
control represents a practical and workable plan based  
on my personal knowledge of the site conditions and that  
it was prepared in accordance with the requirements of  
the Howard Soil Conservation District.  
*Jeffrey B. Retterer* 7-29-92  
SIGNATURE OF ENGINEER DATE  
JEFFREY B. RETTERER  
Printed Name

Reviewed for HOWARD S.C.D. and  
meets technical requirements  
*Jeffrey B. Retterer* 10/1/92  
SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND  
SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*Jeffrey B. Retterer* 10/1/92  
HOWARD S.C.D. DATE

BEFORE BEGINNING CONSTRUCTION, CONTACT  
MISS UTILITY AT 1-800-251-7777 AT LEAST  
48 HOURS PRIOR TO CONSTRUCTION

STA. 823+00 TO 835+00  
POLE #1840K, #1841K  
**WAUGH CHAPEL TO HIGH RIDGE  
500 KV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**  
ZONE: R-SC, R-20, M-1, M-2, PEC HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT 6 ZONING / TAX MAPS 46 & 47

NO.	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
1	MOVE STRUCTURE 1840K, CHANGED PHASE II SYMBOL, ADDED NOTE AND APPROXIMATE WETLAND BUFFER. DELETE STR. 1841K.							

**BLACK & VEATCH**



ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
**GREENHORNE & O'MARA, INC.**  
118 WEST ROAD, SUITE 206  
BALTIMORE, MD. 21204  
(301) 226-6100 © LATEST DATE HEREON

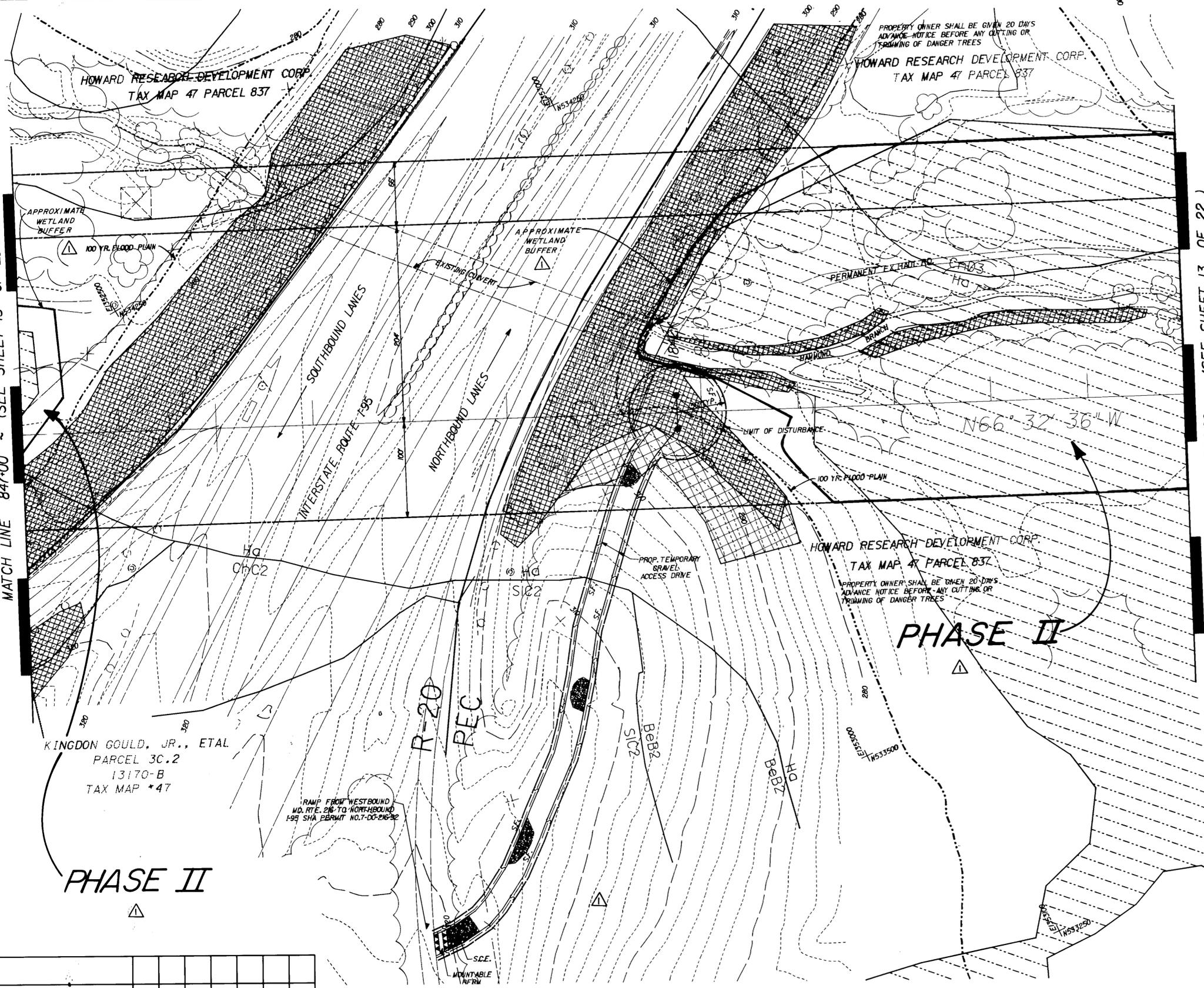


SCALE: 1"=50'	APPD	APPD	APPD	APPD	13 OF 22
DATE					
DR. BY					
CHKD. <i>Retterer</i>					
INSPECTION					
DESIGN: KM	DRAWN: KRM	CHKD: R	NOV. 91	B-1210-X	
			DATE:	FILE NO.	

28-JUL-1992 REVISIONS

MATCH LINE 847+00 ~ (SEE SHEET 15 OF 22)

MATCH LINE 835+00 ~ (SEE SHEET 13 OF 22)



APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*James B. ...* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James M. ...* 10/17/92  
DIRECTOR DATE  
*Elizabeth O. ...* 10/15/92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING

*James ...* 10/16/92  
PLANNING DIRECTOR DATE  
*Anna ...* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

SEDIMENT CONTROL  
BY THE DEVELOPER:  
\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION  
WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY  
RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION  
PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A  
DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING  
PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION  
BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE  
PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL  
CONSERVATION DISTRICT.

*Brian F. Medcroft* 7/16/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. MEDCROFT  
Printed Name

BY THE ENGINEER:  
\* I certify that this plan for erosion and sediment  
control represents a practical and workable plan based  
on my personal knowledge of the site conditions and that  
it was prepared in accordance with the requirements of  
the Howard Soil Conservation District.

*Jeffrey D. Retterer* 7-29-92  
SIGNATURE OF ENGINEER DATE  
JEFFREY D. RETTERER  
Printed Name

Reviewed for HOWARD S.C.D. and  
meets technical requirements  
*James ...* 10/1/92  
DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND  
SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*Jeffrey D. Retterer* 10/1/92  
HOWARD S.C.D. DATE

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

STA. 835+00 TO 847+00  
POLE #1842K  
**WAUGH CHAPEL TO HIGH RIDGE  
500 KV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**  
ZONE: R-SC, R-20, M-1, M-2, PEC  
ELECTION DISTRICT 6  
HOWARD COUNTY, MARYLAND  
ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC  
SCALE: 1"=50'  
DATE: 10/1/92  
DR. BY: *Retterer*  
CHKD. *Retterer*  
INSP. *Retterer*  
DESIGN: KM DRAWN: KRM CHKD: JZ  
NOV. 91 B-1210-X  
FILE NO.

28-JUL-1992

HOW12	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
Δ	CHANGED PHASE II SYMBOL ADDED APPROXIMATE WETLAND BUFFER. REMOVED NOTE.							

REVISIONS

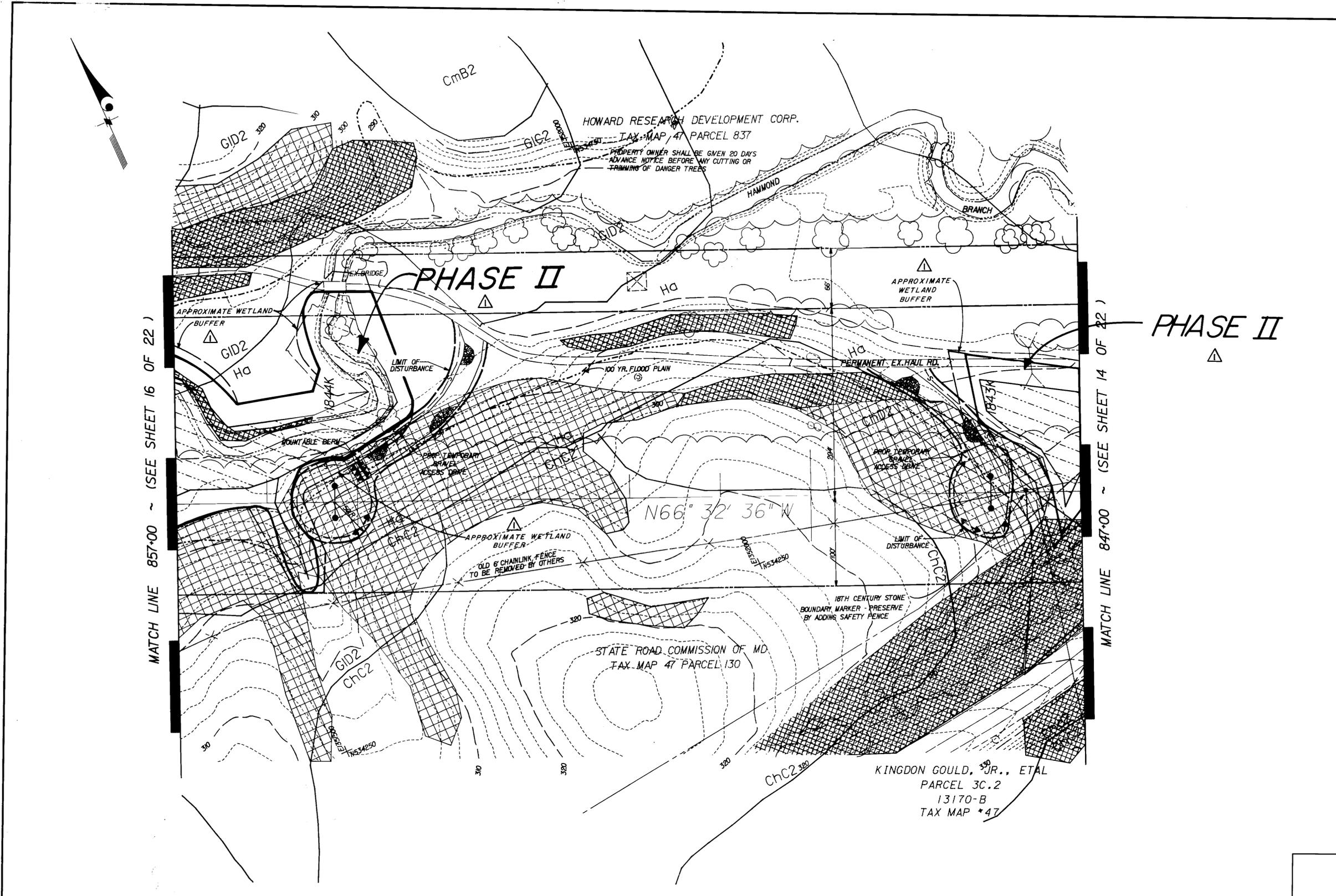
**BLACK & VEATCH**



ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
**GREENHORNE & O'MARA, INC.**  
115 WEST ROAD, SUITE 200  
BALTIMORE, MD. 21204  
(301) 298-4100  
© LATEST DATE HEREON  
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LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL



SDP-92-71



MATCH LINE 857+00 ~ (SEE SHEET 16 OF 22)

MATCH LINE 847+00 ~ (SEE SHEET 14 OF 22)

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*John B. ...* 10-12-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS & PUBLIC WORKS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James M. ...* 10-7-92  
DIRECTOR DATE  
*Robert A. ...* 10/7/92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*James ...* 10/16/92  
PLANNING DIRECTOR DATE  
*Summa ...* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

SEDIMENT CONTROL

BY THE DEVELOPER:  
\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.\*

*Brian F. ...* 8/11/92  
SIGNATURE OF DEVELOPER DATE

BRIAN F. WEDCROFT  
Printed Name

BY THE ENGINEER:

\* I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.\*

*Jeffrey B. ...* 7-29-92  
SIGNATURE OF ENGINEER DATE

JEFFREY B. RETTERER  
Printed Name

Reviewed for HOWARD S.C.D., and meets technical requirements

*Jeffrey B. ...* 10/16/92  
U.S. SOIL CONSERVATION SERVICE DATE

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

*Jeffrey B. ...* 10/16/92  
HOWARD S.C.D. DATE

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

STA. 847+00 TO 857+00  
POLE \*1843K, \*1844K

**WAUGH CHAPEL TO HIGH RIDGE  
500 kV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**

ZONE: R-SC, R-20, M-1, M-2, PEC  
ELECTION DISTRICT 6 HOWARD COUNTY, MARYLAND  
ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE 1"=50'	APPD	APPD	APPD	APPD	15 OF 22
DATE					
DR. BY					
CHKD. <i>Retterer</i>					
INSP.					

DESIGN: KM DRAWN: KRM CHK: R DATE: NOV. 91 FILE NO. B-1210-X

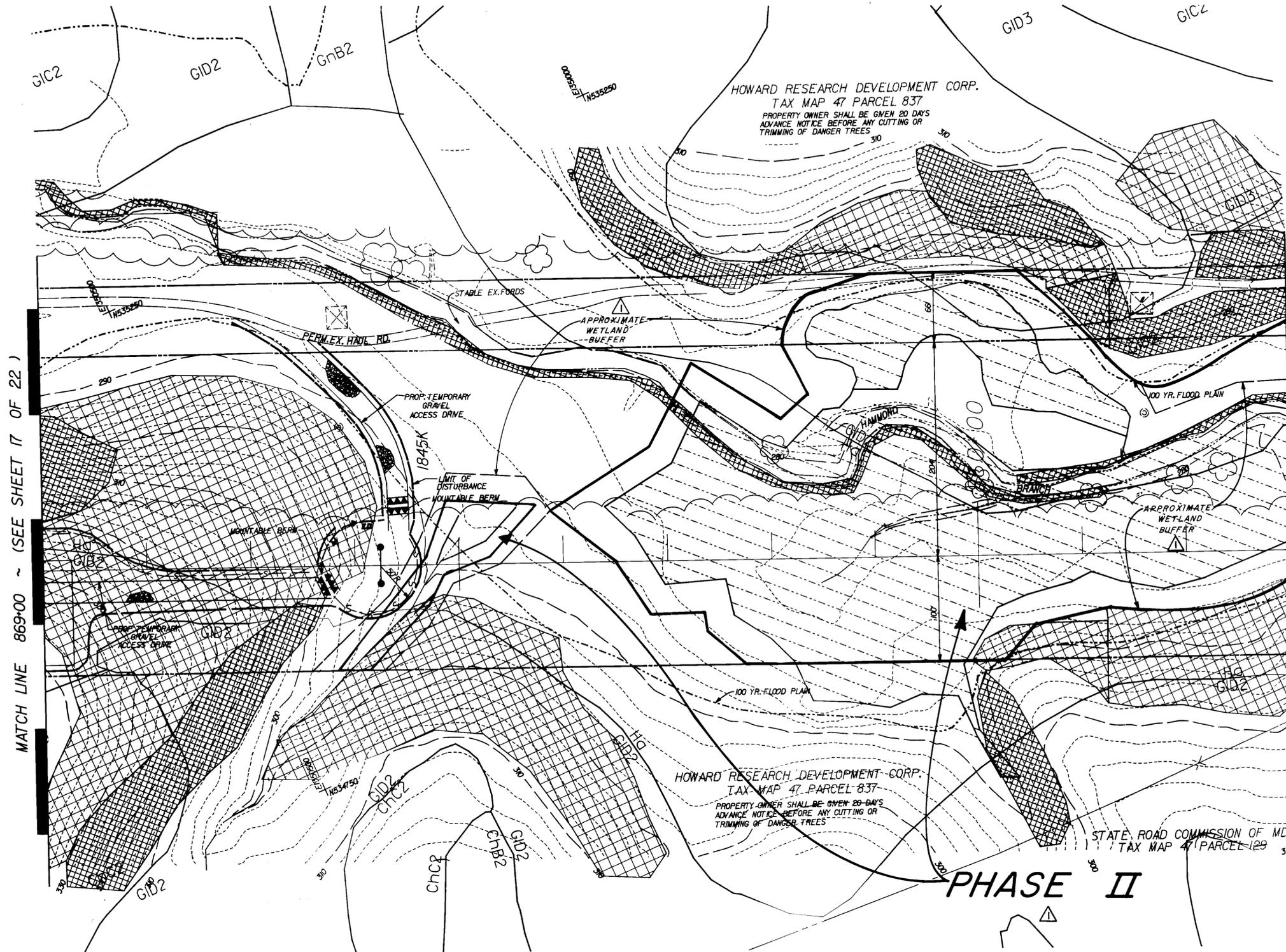
HOWIS	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
28-JUL-1992	CHANGED PHASE II SYMBOL, ADDED APPROXIMATE WETLAND BUFFER.							

**BLACK & VEATCH**

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BALTIMORE, MD. 21204  
(301) 228-6100  
© LATEST DATE HEREON



7-29-92  
DATE: NOV. 91 FILE NO. B-1210-X  
SDP-92-71



MATCH LINE 857+00 ~ (SEE SHEET 15 OF 22)

MATCH LINE 869+00 ~ (SEE SHEET 17 OF 22)

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
*[Signature]* 10-15-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS  
*[Signature]* 10-7-92  
DIRECTOR DATE  
*[Signature]* 10/15/92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING  
*[Signature]* 10/16/92  
PLANNING DIRECTOR DATE  
*[Signature]* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

SEDIMENT CONTROL  
BY THE DEVELOPER:  
\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*[Signature]* 8/1/92  
SIGNATURE OF DEVELOPER DATE  
BRIAN F. WEDCROFT  
Printed Name

BY THE ENGINEER:  
\* I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
*[Signature]* 7-29-92  
SIGNATURE OF ENGINEER DATE  
JEFFREY B. RETTERER  
Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements  
*[Signature]* 10/1/92  
DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*[Signature]* 10/1/92  
DATE  
HOWARD S.C.D.

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

STA. 857+00 TO 869+00  
POLE #1845K  
**WAUGH CHAPEL TO HIGH RIDGE  
500 kV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT**  
ZONE: R-SC, R-20, M-1, M-2, PEC HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT 6 ZONING / TAX MAPS 46 & 47

SCALE 1"=50'				APPD	APPD	APPD	APPD
DATE							
DR. BY							
CHKD.	<i>[Signature]</i>						
INSP.							
DESIGN: KM	DRAWN: KRM	CHKD: <i>[Signature]</i>	NOV. 91	B-1210-X			
			DATE:	FILE NO.			

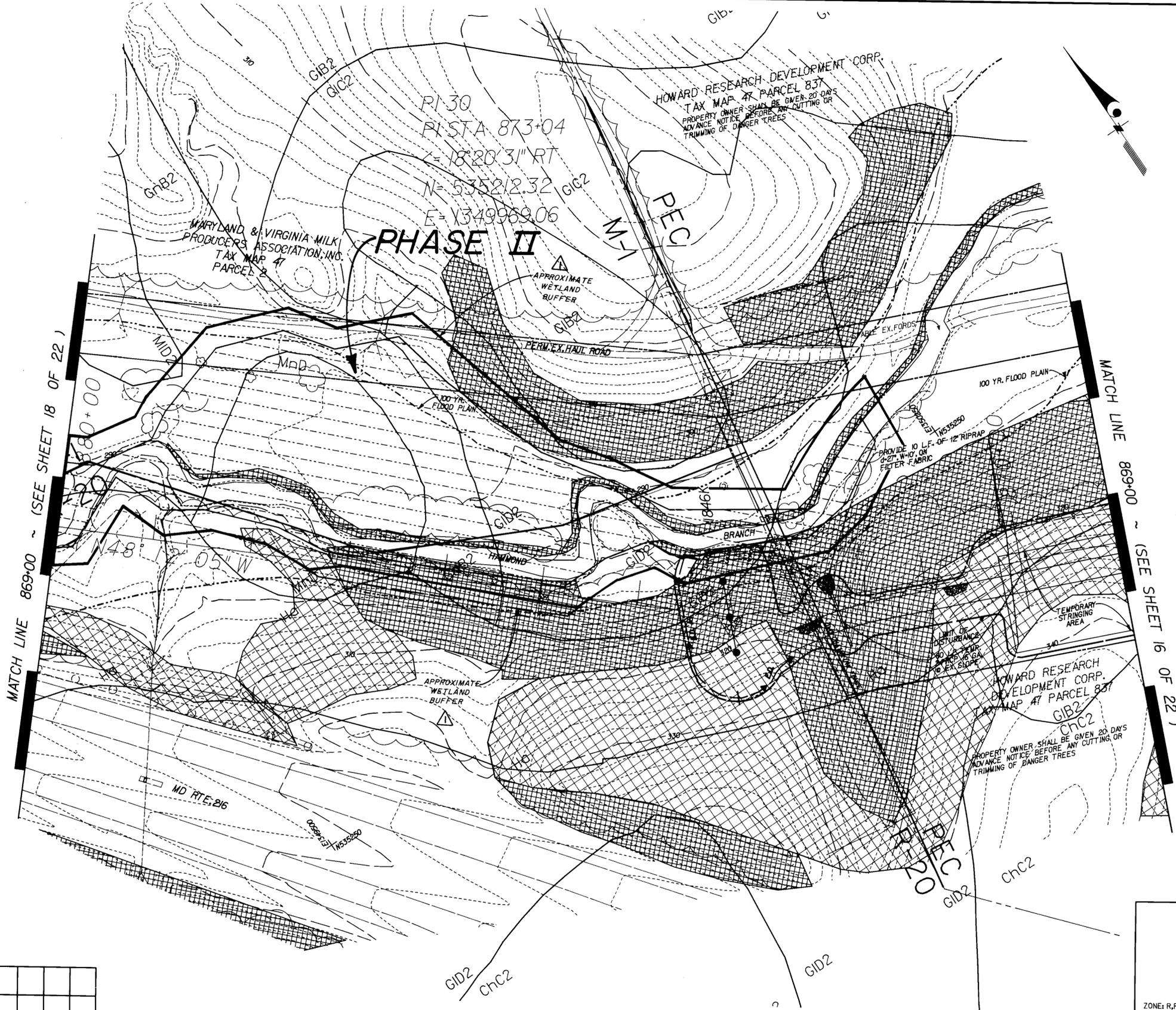
NO.	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
1	CHANGED PHASE II SYMBOL. ADDED APPROXIMATE WETLAND BUFFER.							
2								
3								
4								
5								
6								
7								
8								
9								
10								

**BLACK & VEATCH**

**GREENHORNE & O'MARA, INC.**  
118 WEST ROAD, SUITE 208  
BALTIMORE, MD. 21204  
(301) 238-4100  
© LATEST DATE HEREON



REV. 9-1-92



APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*James R. Ford* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James R. Ford* 10/7/92  
DIRECTOR DATE

*Elizabeth A. Colia* 10/7/92  
CHIEF BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING

*James R. Ford* 10/16/92  
PLANNING DIRECTOR DATE

*James R. Ford* 10/16/92  
CHIEF BUREAU COMMUNITY PLANNING & LAND DEVELOPMENT DATE

BY THE DEVELOPER:

\* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Brian F. Wedcroft* 8/11/92  
SIGNATURE OF DEVELOPER DATE

BRIAN F. WEDCROFT  
Printed Name

BY THE ENGINEER:

\* I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

*Jeffrey B. Retterer* 7-29-92  
SIGNATURE OF ENGINEER DATE

JEFFREY B. RETTERER  
Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements

*James R. Ford* 10/1/92  
U.S. SOIL CONSERVATION SERVICE DATE

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

*Jeffrey B. Retterer* 10/1/92  
HOWARD S.C.D. DATE

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

STATION 869+00 TO 880+00  
POLE 1846K

WAUGH CHAPEL TO HIGH RIDGE  
500 kV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT

ZONE: R,R-20, R-SC ELECTION DISTRICT 1 & 5 HOWARD COUNTY, MARYLAND ZONING / TAX MAPS 40,41, & 46

BALTIMORE GAS & ELECTRIC

NO.	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
1	CHANGED PHASE II SYMBOL, ADDED APPROXIMATE WETLAND BUFFER.	MCN	SA					

BLACK & VEATCH

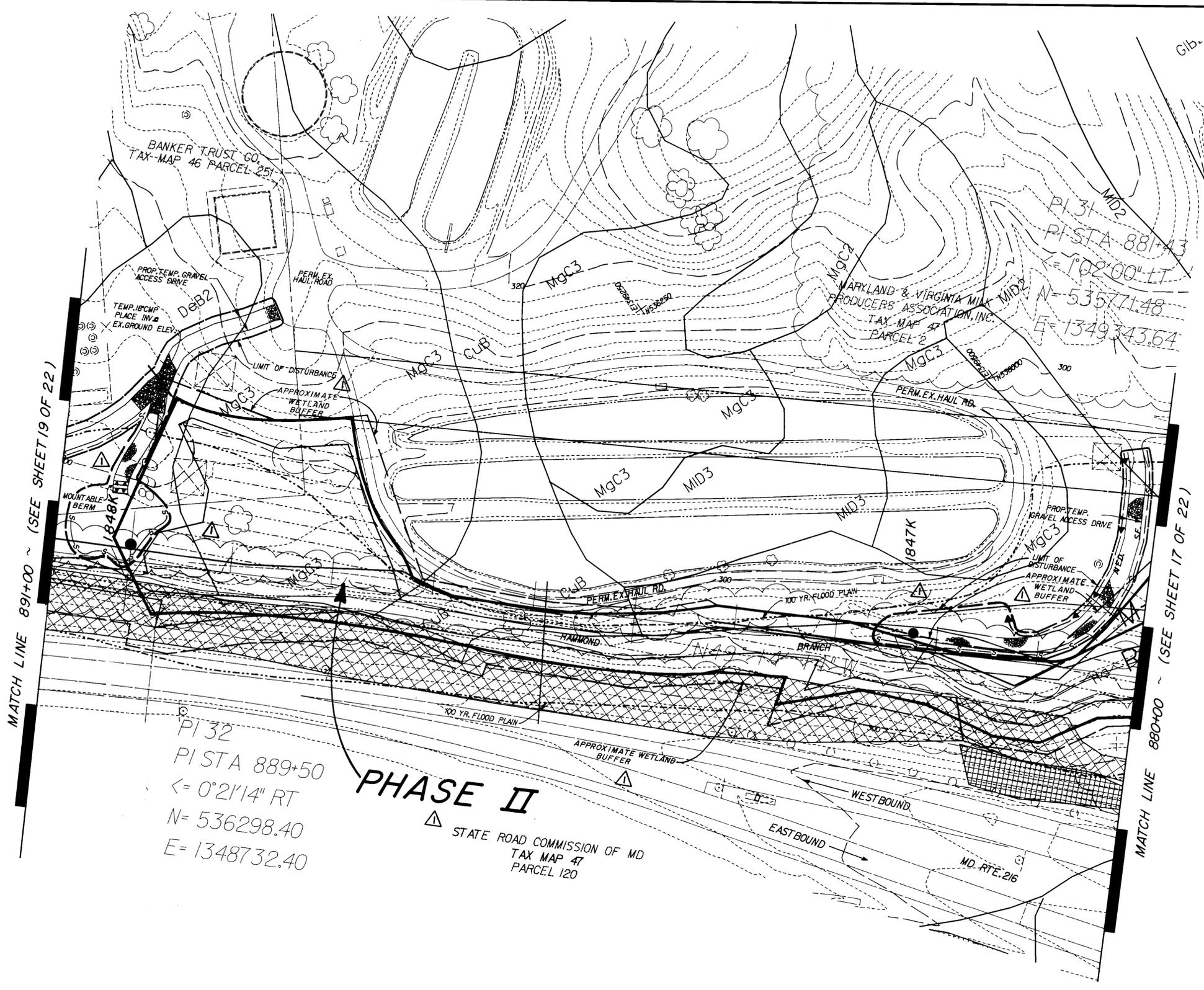
ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS

**GREENHORNE & O'MARA, INC.**  
113 WEST ROAD, SUITE 208  
BALTIMORE, MD. 21204  
(301) 226-6100

© LATEST DATE HEREON



SCALE 1"=50'	APPD	APPD	APPD	APPD	17 OF 22
DATE					
DR. BY					
CHKD. BY					
INSP.					
DESIGN: KM	DRAWN: KRM	CHKD: J	NOV. 91	B-1210-X	
			DATE:	FILE NO.	



APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
*Jocelyn Zoller* 10-13-92  
 (COUNTY HEALTH OFFICER) DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
 STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
 HOWARD CO. DEPT. OF PUBLIC WORKS  
*James M. Quinn* 10/7/92  
 DATE  
*Barth O. Coker* 10/15/92  
 CHIEF, BUREAU OF ENGINEERING DATE  
 CD 10/15/92 SH

APPROVED: HOWARD COUNTY DEPARTMENT OF  
 PLANNING & ZONING  
*James R. Smith* 10/16/92  
 PLANNING DIRECTOR DATE  
*Michael S. Smith* 10/15/92  
 CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE  
 35

SEDIMENT CONTROL  
 BY THE DEVELOPER:  
 \* I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION  
 WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY  
 RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION  
 PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A  
 DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING  
 PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION  
 BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE  
 PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL  
 CONSERVATION DISTRICT.  
*Brian F. Medcroft* 8/15/92  
 SIGNATURE OF DEVELOPER DATE  
 BRIAN F. MEDCROFT  
 Printed Name

BY THE ENGINEER:  
 \* I certify that this plan for erosion and sediment  
 control represents a practical and workable plan based  
 on my personal knowledge of the site conditions and that  
 it was prepared in accordance with the requirements of  
 the Howard Soil Conservation District.  
*Jeffrey B. Retterer* 7-29-92  
 SIGNATURE OF ENGINEER DATE  
 JEFFREY B. RETTERER  
 Printed Name

Reviewed for HOWARD S.C.D. and  
 meets technical requirements  
*Janet M. Hahn* 10/15/92  
 U.S. SOIL CONSERVATION  
 SERVICE DATE  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND  
 SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*Jeffrey B. Retterer* 10/15/92  
 HOWARD S.C.D. DATE

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

STATION 880+00 TO 891+00  
 POLE 1847K, 1848K  
 WAUGH CHAPEL TO HIGH RIDGE  
 500 KV TRANSMISSION LINE  
 HOWARD COUNTY SEGMENT

BALTIMORE GAS & ELECTRIC

DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
MOVE STRUCTURES 1847K & 1848K, CHANGED PHASE II SYMBOL, ADDED APPROXIMATE WETLAND BUFFER.							

29-JUL-1992 REVISIONS

**BLACK & VEATCH**

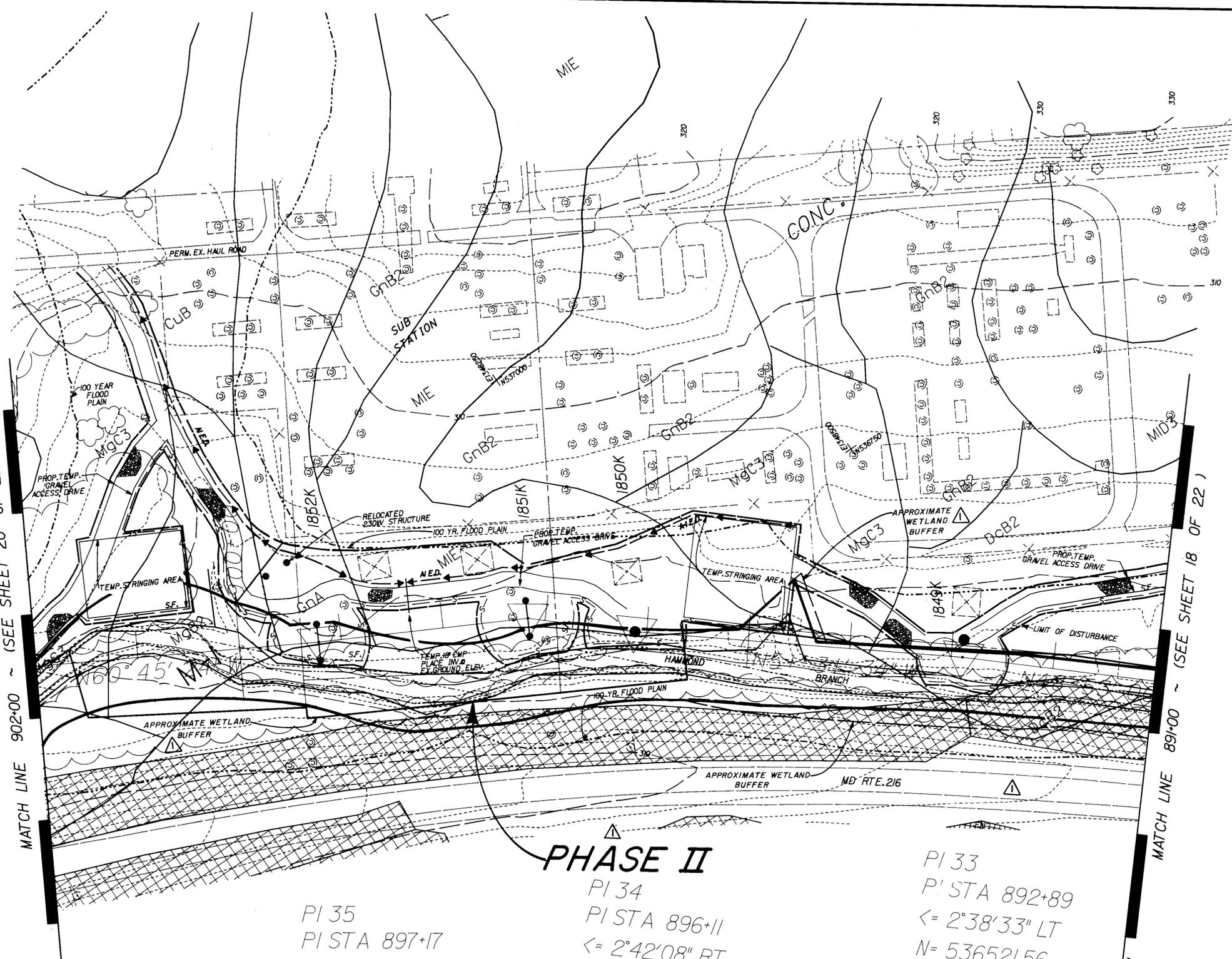
**GREENHORNE & O'MARA, INC.**  
 113 WEST ROAD, SUITE 200  
 BALTIMORE, MD. 21204  
 (301) 298-4100  
 © LATEST DATE HEREON

*Jeffrey B. Retterer*  
 7-29-92

SCALE 1" = 50'	APPD	APPD	APPD	APPD	
DATE					18 OF 22
DR. BY					
CHKD.					
INSP.					
DESIGN: LJM	DRAWN: KRM	CHK: J	DATE:	FILE NO.	

MATCH LINE 902+00 ~ (SEE SHEET 20 OF 22)

MATCH LINE 891+00 ~ (SEE SHEET 18 OF 22)



PI 35  
 PI STA 897+17  
 <= 13°36'24" LT  
 N= 536791.44  
 E= 1348145.14

**PHASE II**  
 PI 34  
 PI STA 896+11  
 <= 2°42'08" RT  
 N= 536721.89  
 E= 1348224.64

PI 33  
 PI STA 892+89  
 <= 2°38'33" LT  
 N= 536521.56  
 E= 1348476.73

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 COUNTY HEALTH OFFICER: *[Signature]* 10-13-92  
 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
 HOWARD CO. DEPT. OF PUBLIC WORKS  
 DIRECTOR: *[Signature]* 10/15/92  
 CHIEF, BUREAU OF ENGINEERING: *[Signature]* 10/15/92  
 DATE: 10/15/92

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 PLANNING DIRECTOR: *[Signature]* 10/16/92  
 CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT: *[Signature]* 10/15/92  
 DATE: 10/15/92

BY THE DEVELOPER:  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 SIGNATURE OF DEVELOPER: *[Signature]* 8/1/92  
 DATE: 8/1/92  
 BRIAN F. MEDCROFT  
 Printed Name

BY THE ENGINEER:  
 I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 SIGNATURE OF ENGINEER: *[Signature]* 7-29-92  
 DATE: 7-29-92  
 JEFFREY B. RETTERER  
 Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements  
 U.S. SOIL CONSERVATION SERVICE  
*[Signature]* 10/1/92  
 DATE: 10/1/92

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
 HOWARD S.C.D.  
*[Signature]* 10/1/92  
 DATE: 10/1/92

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

STATION 891+00 TO 902+00  
 POLES 1849K, 1850K, 1851K, 1852K  
**WAUGH CHAPEL TO HIGH RIDGE  
 500 KV TRANSMISSION LINE  
 HOWARD COUNTY SEGMENT**  
 ZONE: R-SC, R-20, M-1, M-2, PEC  
 ELECTION DISTRICT 6  
 HOWARD COUNTY, MARYLAND  
 ZONING / TAX MAPS 46 & 47

HOWITB	DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD	APPD
△	REMOVED "WEST BOUND, EAST BOUND" MCN CHANGED PHASE II SYMBOL, ADDED APPROXIMATE WETLAND BUFFER.							

**BLACK & VEATCH**

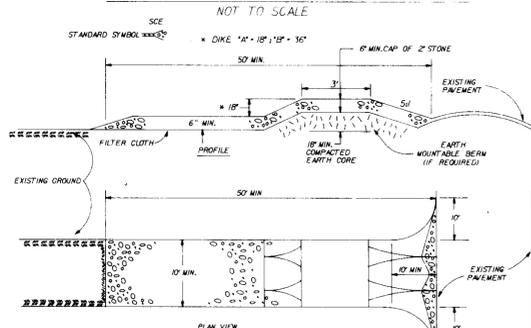
**GREENHORNE & O'MARA, INC.**  
 ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
 113 WEST ROAD, SUITE 206  
 BALTIMORE, MD. 21204  
 (301) 286-4100  
 © LATEST DATE HEREON

*[Signature]*  
 7-29-92

SCALE 1"=50'	APPD	APPD	APPD	APPD
DATE				
DR. BY				
CHKD.				
INSP.				
DESIGN: <i>[Signature]</i>	KRM	CHK: <i>[Signature]</i>	DATE: NOV. 91	B-1210-X
				FILE NO.



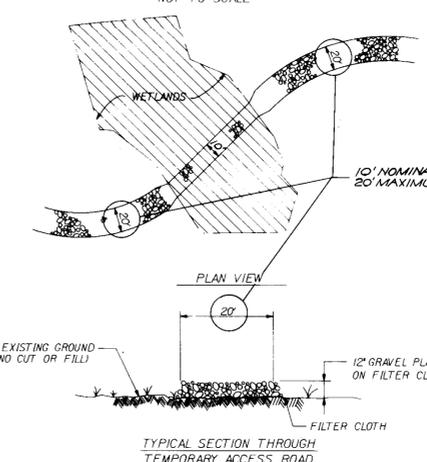
**STABILIZED CONSTRUCTION ENTRANCE**



- CONSTRUCTION SPECIFICATIONS**
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  - LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
  - THICKNESS NOT LESS THAN SIX (6) INCHES.
  - WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  - FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
  - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH A SIX (6) SLOPES WILL BE PERMITTED.
  - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE, AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
  - WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**TEMPORARY ACCESS ROAD DETAIL**

(NO STREAM CROSSING)  
(NO DRAINAGE CROSSING)



- TYPICAL SECTION THROUGH TEMPORARY ACCESS ROAD**
- 12" GRAVEL PLACED ON FILTER CLOTH
  - 10' NOMINAL WIDTH
  - 20' MAXIMUM WIDTH

**SEEDING CONTROL NOTES**

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction, 1880-34501.
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance by project disturbance, permanent or temporary stabilization shall be completed within a 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1. Within 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter. In accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above. In accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained. In operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:  
Total Area of Site: 101.00 Acres  
Area Disturbed: 10.00 Acres  
Area to be roofed or paved: N/A Acres  
Area to be vegetatively stabilized: 10.00 Acres  
Total Cut: N/A Cu. Yds.  
Total Fill: N/A Cu. Yds.  
Off-site waste/borrow area location
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the Inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the Inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.

**WETLAND SEED MIX**

SCIENTIFIC / COMMON NAME	APPLICATION RATE	MINIMUM % PURITY	MINIMUM % GERMINATION	MINIMUM PURE LIVE SEED
Agrostis alba / Red Top	5 lbs/acre	95	85	80.75
Echinochloa Crus-galli / Barnyard grass	5 lbs/acre	95	85	80.75
Lolium multiflorum / Annual Ryegrass	5 lbs/acre	95	85	80.75
Lolium perenne / Perennial Ryegrass	5 lbs/acre	95	85	80.75
Panicum virgatum / Switch grass	5 lbs/acre	95	85	80.75
Phalaris arundinacea / Red canary grass	5 lbs/acre	95	85	80.75
Viburnum dentatum / Arrow-wood viburnum	5 lbs/acre	95	85	80.75

**PERMANENT SEEDING NOTES**

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
- Soil Amendments:** In lieu of soil test recommendations, use one of the following soil amendments:  
1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq. ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq. ft.)  
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq. ft.) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.
- Seeding:** For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (1.05 lbs/1000 sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - Use sod. Option (3) - Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- Mulching:** Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of uniform small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq. ft.) for anchoring.
- Maintenance:** Inspect all seeding areas and make needed repairs, replacements and reseedings.

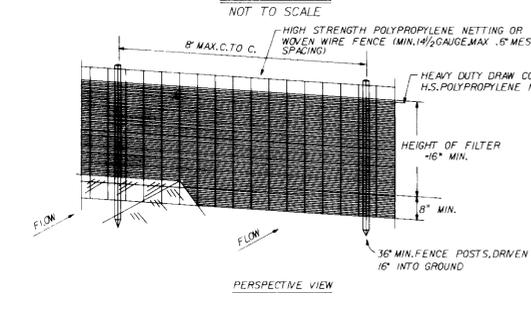
**TEMPORARY SEEDING NOTES**

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seeded Preparation:** Loosed upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
- Soil Amendments:** Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.)
- Seeding:** For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
- Mulching:** Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of uniform small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 ft. or higher, use 348 gal per acre (8 gal/1000 sq. ft.) for anchoring.
- Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

**BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS**

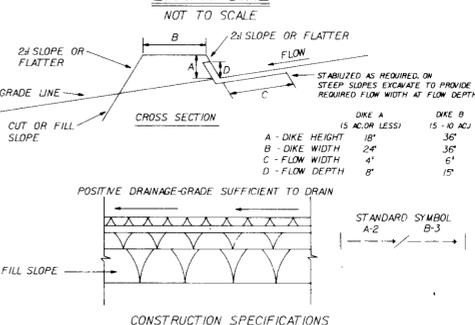
- NO EXCESS FILL, CONSTRUCTION MATERIAL OR DEBRIS ARE TO BE STOCKPILED OR STORED IN THE WETLANDS OR BUFFER.
- PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF THE NONTIDAL WETLAND.
- STRIP, STOCKPILE AND MAINTAIN SEPARATELY THE TOP 6" OF SOIL MATERIAL, TO BE REPLACED AS THE TOP LAYER OF THE BACKFILLED MATERIAL IN AREAS OF TEMPORARY IMPACT.
- DO NOT USE EXCAVATED MATERIAL AS BACK FILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL OR ANY OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO THE NONTIDAL WETLANDS AND BUFFER.
- REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLAND OR BUFFER LOST UNDER THE ORIGINAL STRUCTURE OR FILL.
- RECTIFY ANY NONTIDAL WETLANDS OR BUFFERS TEMPORARILY IMPACTED TO THEIR ORIGINAL GRADES AND ELEVATIONS.
- ALL STABILIZATION IN THE WETLANDS AND BUFFERS SHALL BE OF THE FOLLOWING RECOMMENDED SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (UNIOIA SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN THE BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- ALL REQUIRED SEDIMENT AND EROSION CONTROL MEASURES IN, OR ADJACENT TO, THE NONTIDAL WETLANDS AND BUFFERS MUST BE STRICTLY MONITORED AND MAINTAINED THROUGHOUT THE DURATION OF THE DISTURBANCE.
- ANY TEMPORARY OR PERMANENT CROSSINGS, INCLUDING CULVERT PIPES AND INSTREAM RIPRAP SHOULD NOT RESULT IN THE BLOCKAGE OF PASSAGE FOR AQUATIC LIFE. AT LEAST ONE CULVERT AT ANY CROSSING SHOULD BE DEEPER AT LEAST ONE FOOT BELOW STREAM INVERT, AND A LOW FLOW CHANNEL SHOULD BE PROVIDED THROUGH ANY RIPRAP STRUCTURES.
- IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION TO THE STREAM. CLASS I WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING ANY PERIOD MARCH 1 THROUGH JUNE 15 INCLUSIVE DURING ANY YEAR.
- TEMPORARY STREAM ACCESS CROSSINGS SHALL BE REMOVED AND THE DISTURBANCE STABILIZED PRIOR TO THE COMPLETION OF THE AUTHORIZED ACTIVITIES.
- THE APPLICANT MUST MITIGATE FOR WETLAND IMPACTS ACCORDING TO WA APPROVED PHASE II MITIGATION PLANS.

**SILT FENCE**



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

**EARTH DIKE**

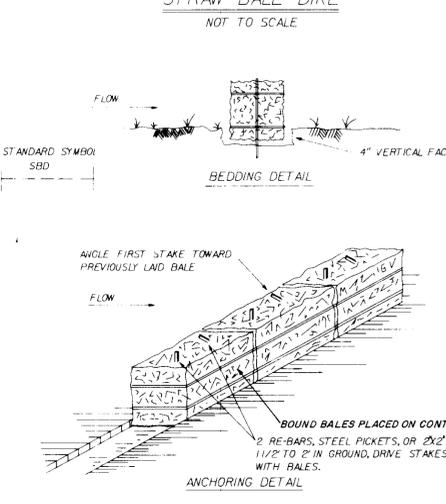


**FLOW CHANNEL STABILIZATION**

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	S-30X	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	SJ-50X	SEED AND STRAW MULCH	SEED USING JUTE OR 2" STONE
3	SJ-80X	SEED WITH JUTE OR 2" STONE	LINED RIP-RAP 4-8"
4	8J-20X	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.  
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.  
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.  
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

**STRAW BALE DIKE**



APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

Jorge M. Boyle  
COUNTY HEALTH OFFICER  
10-13-92  
DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE,  
STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

James M. Smith  
DIRECTOR  
10/13/92  
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PLANNING & ZONING

James M. Smith  
PLANNING DIRECTOR  
10/16/92  
DATE

Thomas J. Holmatt  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT  
10/15/92  
DATE

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Developer  
BRIAN F. MEDCROFT  
Printed Name  
10/16/92  
DATE

BY THE ENGINEER:

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Jeffrey B. Retzer  
SIGNATURE OF ENGINEER  
7-29-92  
DATE

JEFFREY B. RETZER  
Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements  
James M. Smith  
U.S. SOIL CONSERVATION SERVICE  
10/11/92  
DATE

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

Signature of Howard S.C.D.  
HOWARD S.C.D.  
10/16/92  
DATE

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

**DETAILS FOR SEDIMENT CONTROL**

WAUGH CHAPEL - TO VICINITY OF HIGH RIDGE  
300 KV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT

ZONE: R-SC, R-20, M-1, M-2, PEC  
ELECTION DISTRICT 6  
HOWARD COUNTY, MARYLAND  
ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE	AS SHOWN	APPD	APPD	APPD	APPD
DATE					
DR. BY					
CHKD.					
INSP.					

DESIGN: KM  
DRAWING: KRM  
CHK: CHK  
DATE: NOV. 91  
FILE NO.: B-1210-X  
SDP-92-71

ADDED BEST MANAGEMENT PRACTICES PER DNR REQUIREMENT

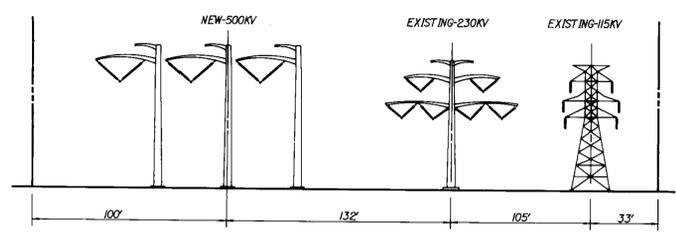
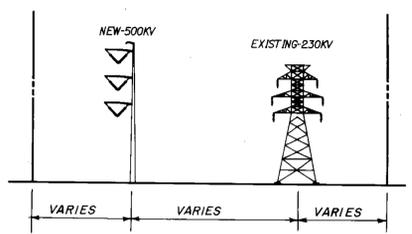
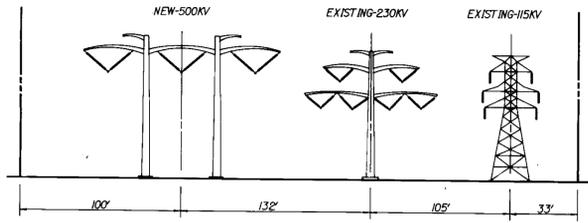
DESCRIPTION	CORR	CHKD	APPD	APPD	APPD	APPD

REVISIONS

BLACK & VEATCH

ENGINEERS ARCHITECTS PLANNERS SCIENTISTS SURVEYORS PHOTOGRAMMETRISTS  
GREENHORNE & O'MARA, INC.  
113 WEST ROAD, SUITE 208  
BALTIMORE, MD. 21204  
(301) 236-4100  
© LATEST DATE HERON

ANNAPOLIS, MD • ATLANTA, GA • AURORA, CO • CULPEPER, VA • DULUTH, GA • EXPORT, PA • FAIRFAX, VA • GREENBELT, MD  
LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL



**TYPICAL R.O.W. CROSS SECTIONS**  
NOT TO SCALE

**MISCELLANEOUS NOTES**

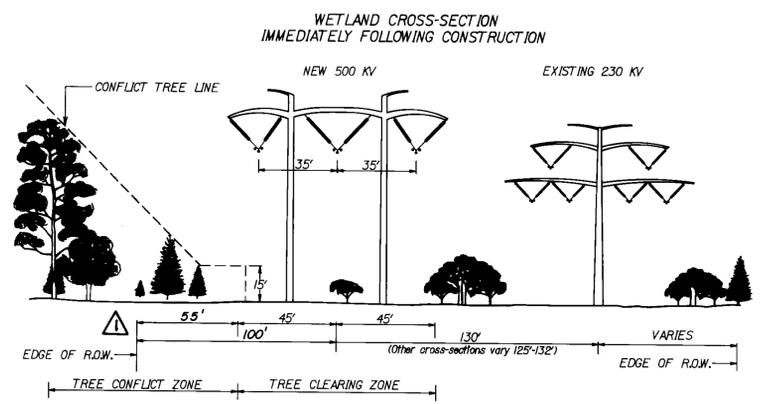
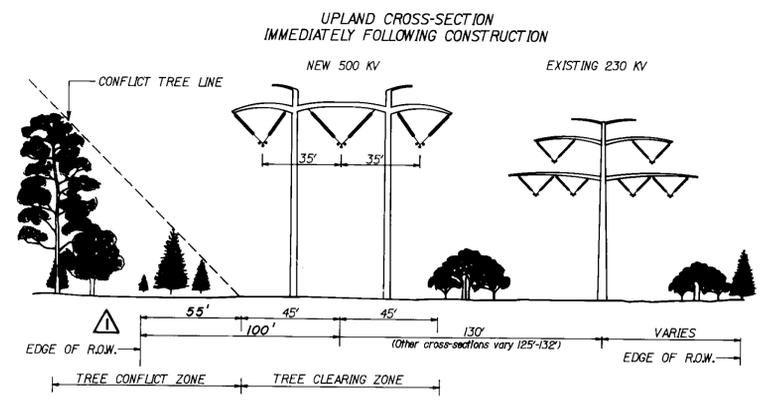
- Access road will be staked in field by Registered Land Surveyor prior to beginning of construction. Access road shall be located as shown on drawings and shall not deviate from location shown.
- No earth cuts or fills shall take place in order to construct access road. Road profile shall be at existing grade.
- Access road shall be removed when no longer required for construction access. The area shall be reseeded and allowed to revert to natural vegetation.
- Twelve (12) inches additional gravel shall be added over existing underground utility lines. Contact appropriate agency prior to crossing underground utilities to be advised on any additional precautionary measures required to protect utility lines from heavy traffic loads.
- Spill material may not be distributed over wetlands.
- Foundation excavation will be distributed in vicinity of foundation except within wetland areas.
- Staging and spoil must remain within the 50' radius of erosion and sediment controls.
- Per Sections 16.116(c)(4) and 16.116(c)(6) of the Subdivision and Land Development Regulations, unless a waiver is granted, no grading, structures or removal of vegetative cover is permitted in wetlands, a 25 foot wetland buffer, a 75 foot stream buffer or on steep slopes of 25% or greater when adjacent to a floodplain or wetlands. Grading and removal of vegetative cover within the required wetlands and stream buffers have been determined essential by the Department of Planning and Zoning for the utility line installation.
- Upon receipt the developer shall submit copies of the Section 401 Water Quality Certification from the Maryland Department of the Environment and the Section 404 Wetland permit from the U.S. Army Corps of Engineers to the Department of Planning & Zoning.

**GENERAL SEQUENCE OF OPERATIONS**

- Right-of-Way Preparation - Equipment access limited to cleared area of right-of-way. Reseeding, diversion berms, interceptor dikes and stream crossings as required to prevent erosion due to clearing operations.
- Temporary Access Roads - Installation of temporary erosion control structures and reseeded for slope stabilization. Temporary access roads and temporary stream crossings to be completely removed and stabilized after completion of all construction activities.
- Foundation Construction - Excavated soil to be spread at structure site and reseeded.
- Structure Erection - Areas disturbed by crane set-up and structure assembly operations to be mulched and reseeded.
- Wire Stringing - Areas disturbed by equipment operations to be mulched and reseeded.
- Clean-Up Operations - Right-of-Way will be cleared of any debris from construction as the various operations are completed. Permanent seeding as required will be done.

**TYPICAL SEQUENCE OF OPERATIONS FOR TOWER/POLE SITE**  
(After Receipt of Grading/Building Permit)

- Contact Howard County SCD Inspector at least 48 hours prior to commencement of work.
- Install sediment control devices.
- Excavate for foundation construction. Stockpile spoil material within disturbed area limits.
- Construct foundation.
- Distribute spoil material within disturbed area and stabilize. Do not place in wetlands.
- Install tower/pole.
- With approval of sediment control Inspector, remove sediment control devices.



**TYPICAL RIGHT OF WAY CLEARING**

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

*Jaym Boudles* 10-13-92  
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
HOWARD CO. DEPT. OF PUBLIC WORKS

*James M. Smith* 10/21/92  
DIRECTOR DATE  
*Charles E. Pavia* 10/21/92  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*David Smith* 10/16/92  
PLANNING DIRECTOR DATE  
*Shirley H. Homan* 10/15/92  
CHIEF, DIV. OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

SEDIMENT CONTROL

BY THE DEVELOPER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Brian F. Medcroft* 8/16/92  
SIGNATURE OF DEVELOPER DATE

BRIAN F. MEDCROFT  
Printed Name

BY THE ENGINEER:

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

*Jeffrey B. Retterer* 7-29-92  
SIGNATURE OF ENGINEER DATE

JEFFREY B. RETTERER  
Printed Name

Reviewed for HOWARD S.C.D. and meets technical requirements

*James M. Smith* 10/16/92  
DATE, SOIL CONSERVATION SERVICE DATE

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

*Stephen E. Shy* 10/16/92  
HOWARD S.C.D. DATE

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

**DETAILS FOR SEDIMENT CONTROL**

WAUGH CHAPEL TO HIGH RIDGE  
500 KV TRANSMISSION LINE  
HOWARD COUNTY SEGMENT

ZONE: R-SG, R-20, M-1, M-2, PEC HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT 6 ZONING / TAX MAPS 46 & 47

BALTIMORE GAS & ELECTRIC

SCALE AS SHOWN	APPD	APPD	APPD	APPD
DATE				
DR. BY				
CHKD. <i>Retter</i>				
INSP.				

22 OF 22

DESIGN: KM DRAWN: KRM CHKD: J NOV. 91 B-1210-X  
DATE: FILE NO.

REVISIONS									
DESCRIPTION	CORR	CHKD	APPD						
REVISI 29-JUL-1992									



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