

SITE DEVELOPMENT PLAN

BOCK PROPERTY

LOTS 5 THRU 8

SECOND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

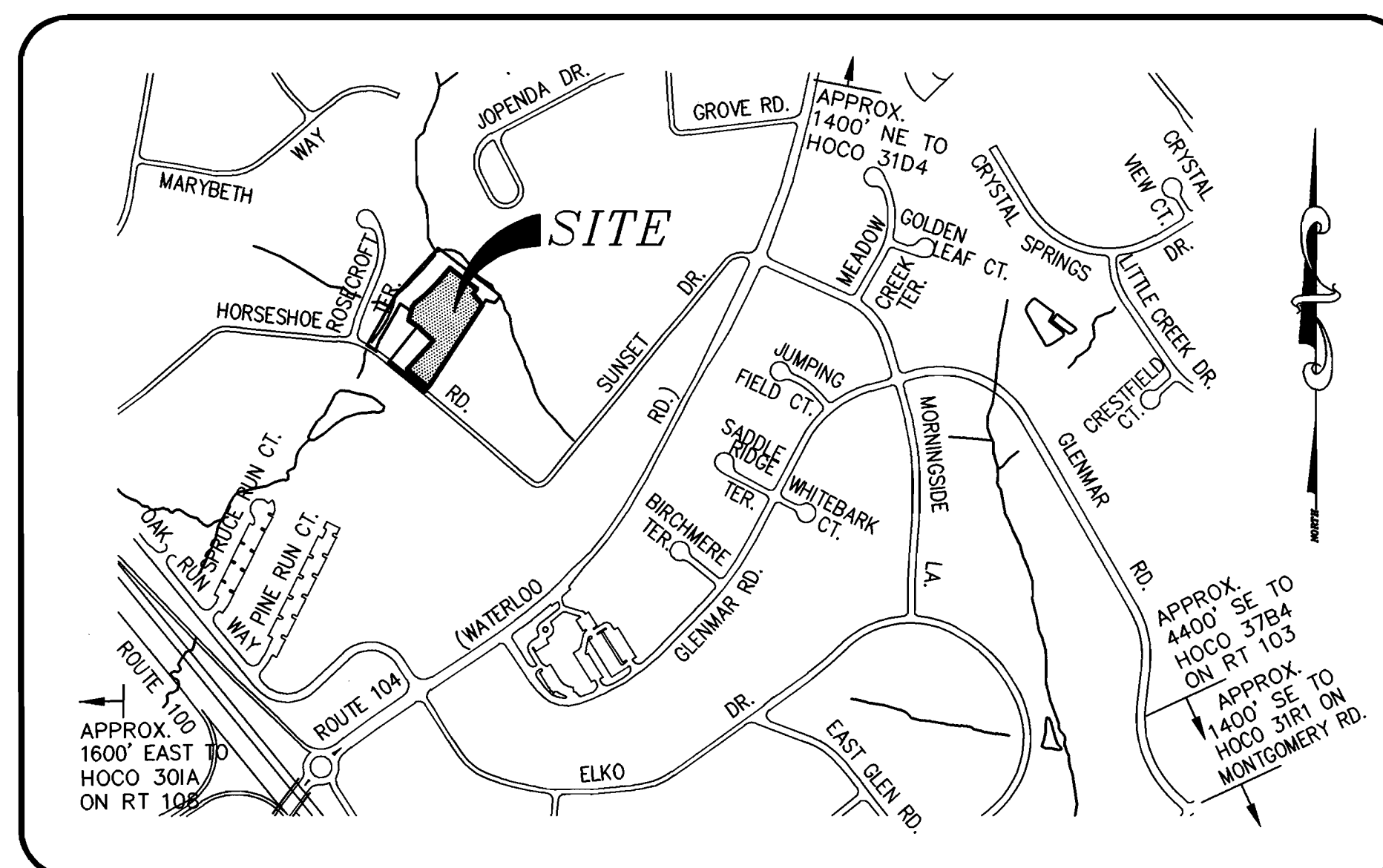
SHEET INDEX	
SHEET NO.	PLAN DESCRIPTION
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	HOUSE MODELS & SWM DETAILS
4	SEDIMENT CONTROL NOTES & DETAILS

GENERAL NOTES:

1. THE SUBJECT PROPERTY IS ZONED R-20 PER THE 10/18/93 COMPREHENSIVE ZONING PLAN.
2. **PROJECT BACKGROUND:**
TAX MAP : 31 P/O PARCEL : 297 . BLOCK : 13 . LOTS : 5 THRU 8.
ELECTION DISTRICT : SECOND.
ZONING : R-20
DEED REFERENCE : 5264/0397
DPZ FILES : F-00-158, F-01-53.
TOTAL TRACT AREA : 1,441 AC.±
NUMBER OF PROPOSED BUILDABLE LOTS : 4.
PROPOSED USE : SINGLE FAMILY DETACHED.
3. TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL TOPOGRAPHIC SURVEY CONDUCTED BY WINGS AERIAL MAPPING CO. ON OR ABOUT JANUARY 2000, AND SUPPLEMENTED BY A FIELD RUN SURVEY IN THE VICINITY OF THE STREAM BY MILDENBERG, BOENDER & ASSOC. INC. IN APRIL 2000.
4. BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN & MONUMENTED SURVEY BY MILDENBERG, BOENDER & ASSOCIATES, INC. ON OR ABOUT APRIL 2000.
5. COORDINATES BASED ON NAD '83 (HORIZONTAL) AND NVD '29 (VERTICAL) MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 31R1, 31D4, 37B4, & 301A.

STA. No. 31R1	N 565,303.465	ELEV. 401.678
STA. No. 31D4	E 1,372,517.678	ELEV. 495.181
STA. No. 37B4	N 571,700.681	E 1,369,606.396
STA. No. 301A	E 563,928.548	ELEV. 402.111
	N 1,373,109.059	E 567,750.955
	E 1,364,842.701	ELEV. 499.821
6. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED. LOTS 5 THRU 8 WILL BE SERVICED UNDER CONTRACT # 64W, 302-S, & 24-3954-D.
7. DENOTES AN EXISTING USE-IN-COMMON DRIVEWAY EASEMENT FOR LOTS 4 THRU 7.
8. NO WETLANDS, FLOODPLAIN, OR STEEP SLOPES GREATER THAN 25% EXIST ON-SITE PER F-00-158, BOOK PROPERTY, LOTS 1 THRU 3.
9. THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY PLACEMENT OF 0.46 ACRES OF REFORESTATION IN FOREST CONSERVATION EASEMENT A ON OPEN SPACE LOT 3 UNDER F-00-158, BOOK PROPERTY, LOTS 1 THRU 3.
10. STORMWATER MANAGEMENT REQUIREMENTS HAVE BEEN SATISFIED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL.
11. DENOTES AN EXISTING PUBLIC WATER, SEWER, & UTILITY EASEMENT.
12. DENOTES AN EXISTING FOREST CONSERVATION EASEMENT (AFFORESTATION).
13. SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED JULY 1968, SHEET 20.
14. NO HISTORIC STRUCTURES, CEMETRIES, OR GRAVE SITES EXIST ON-SITE. SITE IS NOT ADJACENT TO A DESIGNATED SCENIC ROAD.
15. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.
16. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
17. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY EXCAVATION WORK:

MISS UTILITY	1-800-257-7777
CAP TELEPHONE COMPANY	(410) 725-9976
HOWARD COUNTY BUREAU OF UTILITIES	(410) 313-4900
AT&T CABLE LOCATION DIVISION	(410) 393-3533
BALTIMORE GAS & ELECTRIC	(410) 685-0123
STATE HIGHWAY ADMINISTRATION	(410) 531-5533
HOWARD COUNTY DEPT. OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS DIVISION	(410) 313-1880
18. PARCEL 2 AND LOT 1 ARE COMMONLY OWNED. PERMISSION FOR OFF-SITE GRADING IS NOT REQUIRED.
19. SITE LANDSCAPING HAS BEEN PROVIDED UNDER F-00-158 IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN ON FILE WITH F-00-158 IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE EIGHT (8) REQUIRED SHADE TREES AND ONE (1) REQUIRED EVERGREEN TREE FOR LOTS 7 & 8 IS TO BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$2,550.00.
20. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
21. DRIVEWAY ENTRANCE SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARD R-6.06.
22. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE PIPESTEM LOT DRIVEWAY.



VICINITY MAP
SCALE 1" = 600'

DEVELOPERS CERTIFICATE	
I 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 NATURAL RESOURCE CONSERVATION SERVICE.	
<i>John Lewis</i>	2/16/02
_____ SIGNATURE OF DEVELOPER	DATE
JOHN LEWIS RYAN HOMES	
_____ PRINTED NAME OF DEVELOPER	
ENGINEER'S CERTIFICATE	
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 NATURAL RESOURCE CONSERVATION SERVICE.	
<i>R. Jacob Hikmat</i>	2/15/02
_____ SIGNATURE OF ENGINEER	DATE
R. JACOB HIKMAT	
_____ PRINTED NAME OF ENGINEER	
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.	
<i>Jim Mays</i>	2/23/02
_____ USED BY NATURAL RESOURCE CONSERVATION SERVICE	DATE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.	
<i>John K. Robinson</i>	2/23/02
_____ HOWARD SOIL CONSERVATION DISTRICT	DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Cheryl Kramlich</i>	2/15/02
_____ CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Cathy Kramlich</i>	2/25/02
_____ CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>David T. Kramlich</i>	2/26/02
_____ DIRECTOR	DATE

ADDRESS CHART		
LOT/PARCEL NO.	STREET ADDRESS	
LOT 5	8434 HORSESHOE ROAD, ELLICOTT CITY, MARYLAND 21043	
LOT 6	8432 HORSESHOE ROAD, ELLICOTT CITY, MARYLAND 21043	
LOT 7	8430 HORSESHOE ROAD, ELLICOTT CITY, MARYLAND 21043	
LOT 8	8428 HORSESHOE ROAD, ELLICOTT CITY, MARYLAND 21043	

PERMIT INFORMATION CHART					
SUBDIVISION NAME BOCK PROPERTY		SECTION/AREA N/A	LOT/PARCEL # PARCEL 297 - LOTS 5 TO 8		
PLAT # OR L/F 15180-15181	BLOCK # 13	ZONE R-20	TAX MAP 31	ELEC. DIST. SECOND	CENSUS TRACT 6023.02
WATER CODE G01		SEWER CODE 5750691			
PROPOSED IMPROVEMENTS: CONSTRUCT HOUSES, ASSOCIATED GRADING, AND SEDIMENT CONTROL					

MINIMUM LOT SIZE CHART			
LOT NO.	MINIMUM LOT AREA	PIPESTEM	TOTAL LOT AREA
5	14,000 SQ. FT.	2,942 SQ. FT.	16,942 SQ. FT.
6	14,021 SQ. FT.	1,824 SQ. FT.	15,845 SQ. FT.
7	15,097 SQ. FT.	1,063 SQ. FT.	16,160 SQ. FT.

<p style="text-align: center;">DEVELOPER</p> <p>ATTN: MIKE SHEARER RYAN HOMES, INC. 11460 CRONRIDGE DRIVE, SUITE 128 OWINGS MILLS, MARYLAND 21117 (410) 654-5720</p>	<p style="text-align: center;">OWNER</p> <p>ROBERT A. WILDMAN & ROSE E. WILDMAN C/O MILDENBERG, BOENDER & ASSOCIATES, INC. 5072 DORSEY HALL DRIVE, SUITE 202 ELLICOTT CITY, MARYLAND 21042 (410) 997-0296</p>
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project 2000-072	date JAN 2002	illustration SJD	engineering SJD	approval RJH
BOCK PROPERTY, LOTS 5 THRU 8 PLAT # 15180 - 15181 TAX MAP 31 - P/O PARCEL 279 - BLOCK 13 - LOTS 5 THRU 8 SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND COVER SHEET				
<p style="text-align: center;">MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21042 (410) 997-0296 Balt. (301) 821-5521 Wash. (410) 997-0296 Fax</p>				
1 OF 4				

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SOILS DESCRIPTION

SYMBOL	DESCRIPTION
BrC3	BRANDYWINE LOAM, 8% TO 15% SLOPES, SEVERELY ERODED --- TYPE C
BrD3	BRANDYWINE LOAM, 15% TO 25% SLOPES, SEVERELY ERODED --- TYPE C
CmB2	CHILLUM SILT LOAM, 1% TO 5% SLOPES, MODERATELY ERODED --- TYPE B
Fa	FALLSINGTON LOAM --- TYPE D
NeB2	NESHAMINY SILT LOAM, 3% TO 8% SLOPES, MODERATELY ERODED --- TYPE B

LINE TABLE

LINE	BEARING & DISTANCE
ES1	S47°28'13"E 90.56'
ES2	N42°31'47"E 10.00'
ES3	S47°28'13"E 6.08'
ES4	N87°43'42"W 3.02'
ES5	S42°38'36"W 182.88'
ES6	S47°21'24"E 13.00'
ES7	N47°21'24"W 13.00'
ES8	S42°38'36"W 26.84'
ES9	N29°52'09"E 20.50'
ES10	S60°07'51"E 30.00'
ES11	S29°52'09"W 52.35'
ES12	S42°38'36"W 224.67'

LEGEND

- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- EROSION CONTROL MATTING
- WETLANDS
- 15% TO 25% SLOPES
- EXISTING TREES PER F-00-158

DEVELOPER'S CERTIFICATE

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John Lewis 2/6/02
 SIGNATURE OF DEVELOPER DATE
JOHN LEWIS, RYAN HOMES
 PRINTED NAME OF DEVELOPER

ENGINEER'S CERTIFICATE

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R. Jacob Hikmat 2/5/02
 SIGNATURE OF ENGINEER DATE
R. JACOB HIKMAT
 PRINTED NAME OF ENGINEER

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Jim Meyer 2/25/02
 USFS - NATURAL RESOURCE CONSERVATION SERVICE DATE

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

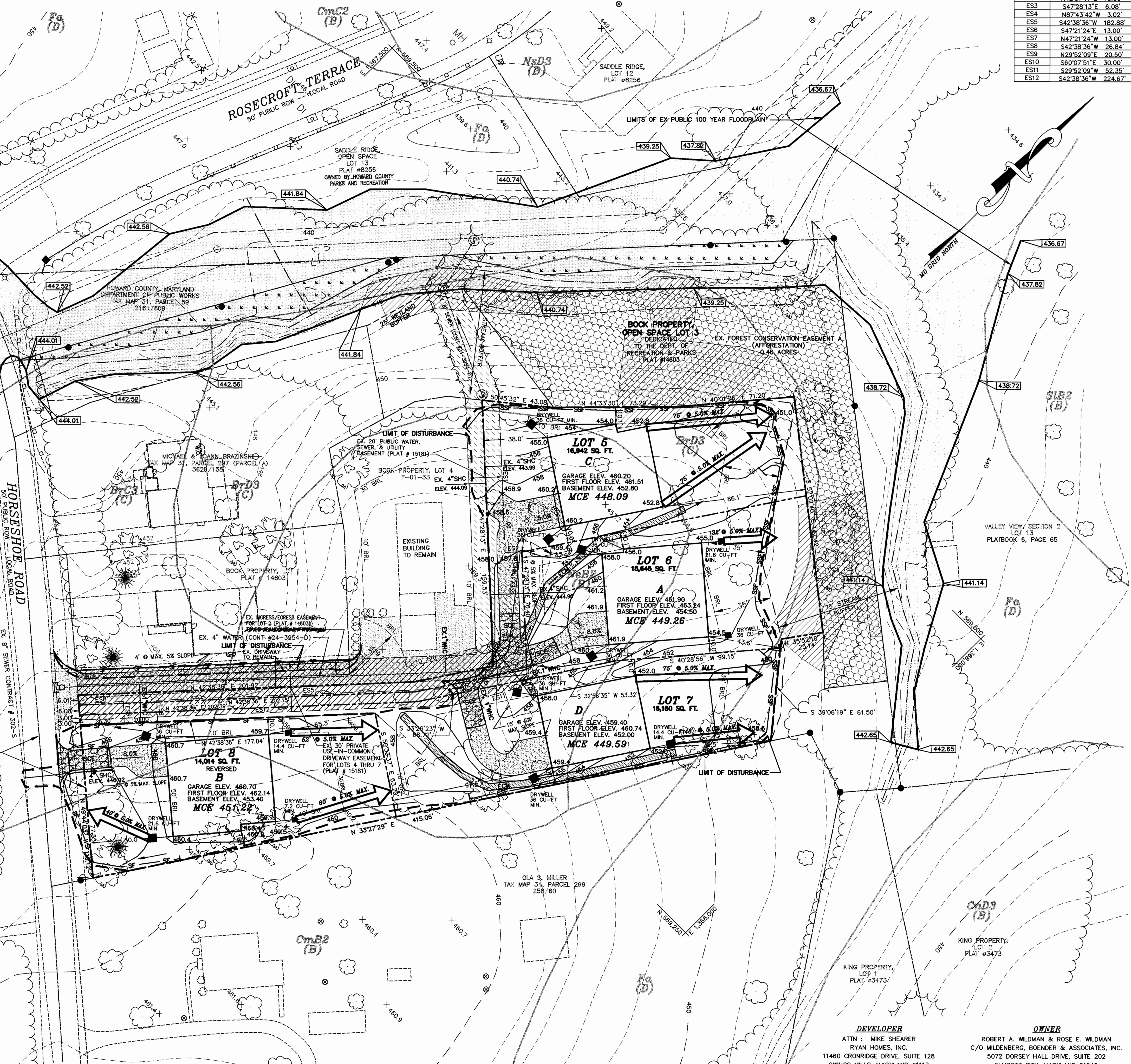
John R. Rutherford 2/25/02
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cheryl Harrison 2/15/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Hamilton 2/25/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

James S. Smith 2/26/02
 DIRECTOR DATE



project	date	description	approval	scale	revision
2000-072	JAN 2002	illustration	SID	1"=30'	

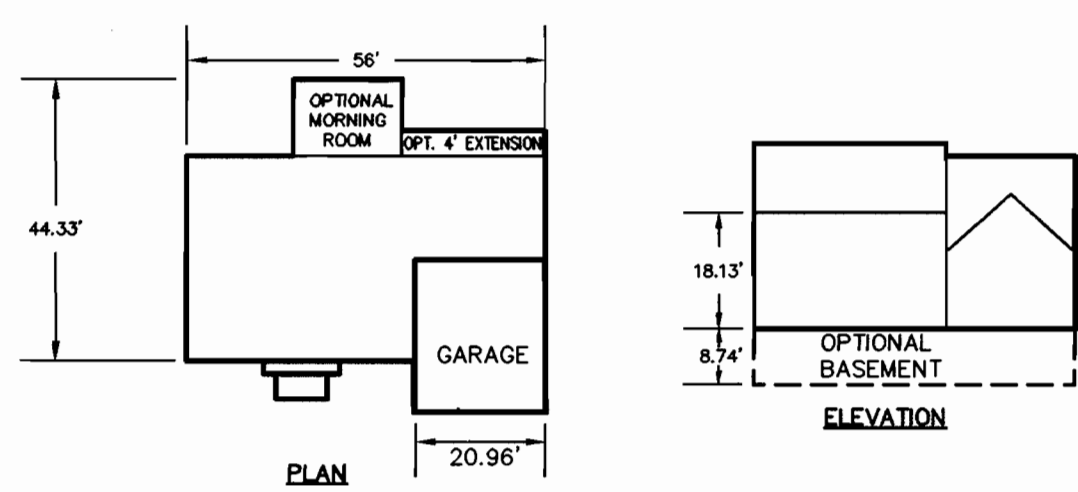
no.	date	description	revisions

BOCK PROPERTY, LOTS 5 THRU 8
 PLAT # 15181
 TAX MAP 31 - P/O PARCEL 279 - BLOCK 13 - LOTS 5 THRU 8
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
SITE DEVELOPMENT PLAN

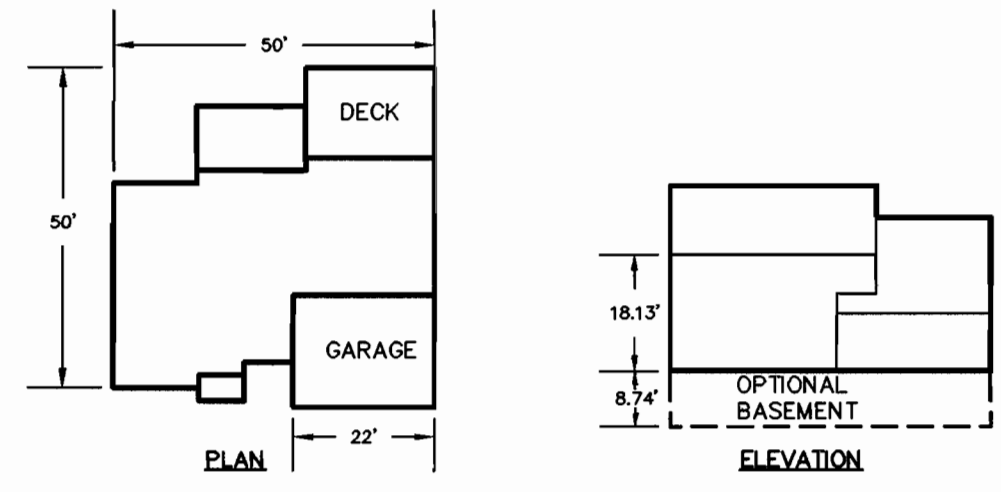
MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 987-0286 Fax: (801) 621-5521 Wash. (410) 987-0288 Fax.

DEVELOPER
 ATTN: MIKE SHEARER
 RYAN HOMES, INC.
 11460 CRONRIDGE DRIVE, SUITE 128
 OWINGS MILLS, MARYLAND 21117
 (410) 654-5720

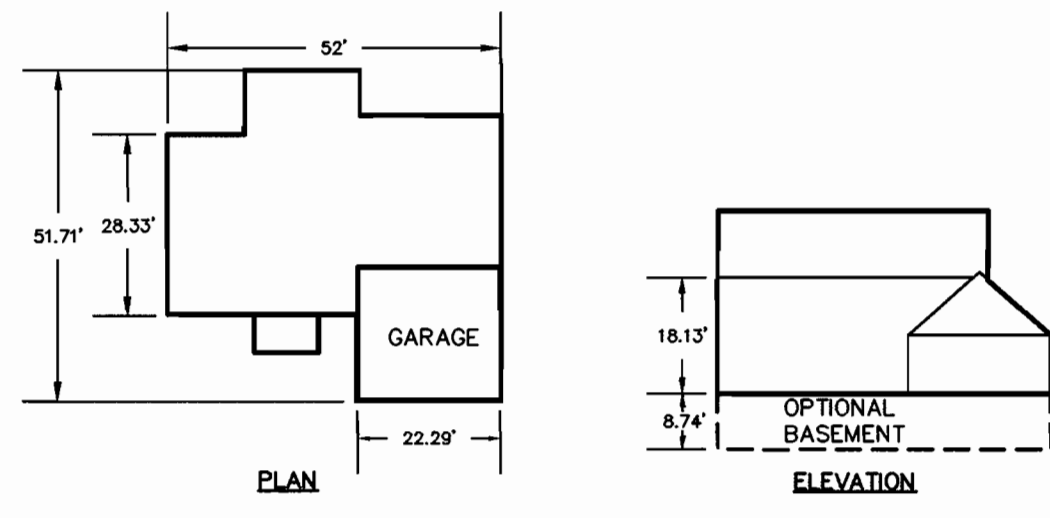
OWNER
 ROBERT A. MILDMAN & ROSE E. MILDMAN
 C/O MILDENBERG, BOENDER & ASSOCIATES, INC.
 5072 DORSEY HALL DRIVE, SUITE 202
 ELICOTT CITY, MARYLAND 21042
 (410) 997-0296



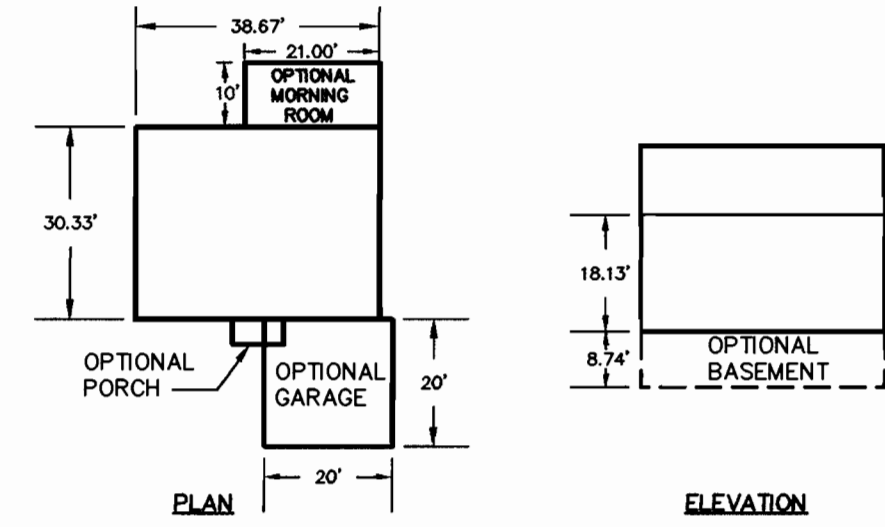
COURTLAND



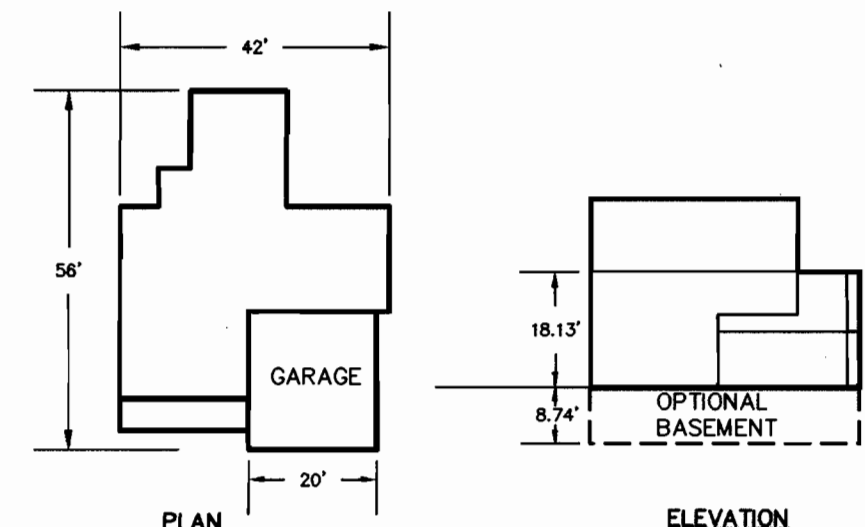
ZACHARY



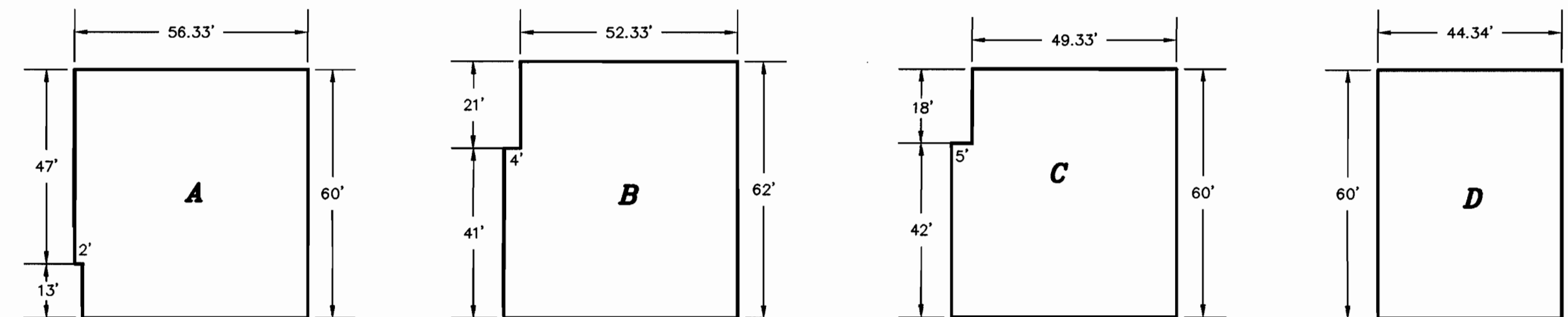
VICTORIA



BAINBRIDGE



CHANDLER



GENERIC BOXES

GENERIC TYPE	COURTLAND	ZACHARY	VICTORIA	BAINBRIDGE	CHANDLER
A	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS
B	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS
C	DOES NOT FIT	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS
D	DOES NOT FIT	DOES NOT FIT	DOES NOT FIT	ALL OPTIONS	ALL OPTIONS

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John Lewis 2/16/02
SIGNATURE OF DEVELOPER DATE
JOHN LEWIS, RYAN HOMES
PRINTED NAME OF DEVELOPER

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R. Jacob Hikmat 1/10/02
SIGNATURE OF ENGINEER DATE
R. JACOB HIKMAT
PRINTED NAME OF ENGINEER

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Jim Meyer 2/23/02
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE

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

John R. Roberts 2/23/02
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Alex Danmuth 2/15/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Chris Kinnaman 2/23/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Paul Swartz 2/26/02
DIRECTOR DATE

FIGURE 5.1 SCHEMATIC OF DRY WELL

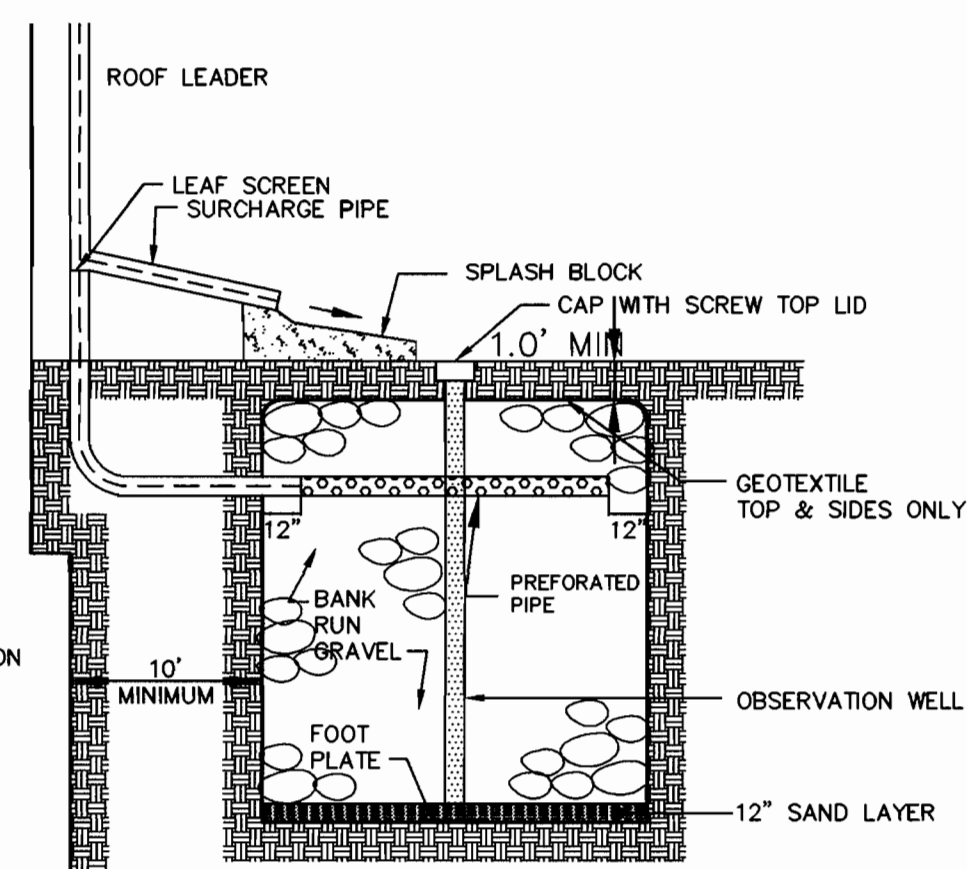


TABLE 5.2 ROOFTOP DISCONNECTION COMPENSATION STORAGE VOLUME REQUIREMENTS (PER DISCONNECTION USING DRYWELLS, RAINGARDENS, ETC.)

DISCONNECTION LENGTH PROVIDED	0 - 14 FT.	15 - 29 FT.	30 - 44 FT.	45 - 59 FT.	60 - 74 FT.	≥ 75 FT.
% WQV TREATED BY DISCONNECT	0%	20%	40%	60%	80%	100%
% WQV TREATED BY STORAGE	100%	80%	60%	40%	20%	0%
MAX. STORAGE VOLUME* (EASTERN RAINFALL ZONE)	40 CU-FT.	30 CU-FT.	24 CU-FT.	16 CU-FT.	8 CU-FT.	0 CU-FT.
MAX. STORAGE VOLUME* (WESTERN RAINFALL ZONE)	36 CU-FT.	28.8 CU-FT.	21.6 CU-FT.	14.4 CU-FT.	7.2 CU-FT.	0 CU-FT.
	(5'x5'x4')	(4.5'x4.5'x4')	(4'x4'x4')	(3.5'x3.5'x4')	(3'x3'x4')	

* ASSUMING 500 SQUARE FEET ROOF AREA TO EACH DOWNSPOUT. CONSTRUCTION DIMENSIONS.

STORMWATER MANAGEMENT NOTES:

- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL.
- CREDITS ARE GIVEN FOR DISCONNECTION OF IMPERVIOUS COVERS.
- MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWN SPOUT SHALL BE LESS THAN 500 S.F.
- THE GRADING OF THE SITE SHALL PROVIDE FOR A MINIMUM OF 75' FROM EACH HOUSE TO THE PROPERTY LINE AT AN AVERAGE SLOPE OF LESS THAN 5%. DRY WELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5%. THE SIZE AND CONSTRUCTION OF THE DRY WELL SHALL BE IN ACCORDANCE WITH FIGURE 5.2 OF THE MANUAL.
- DISCONNECTION OF NON ROOFTOP IMPERVIOUS AREAS IS PROPOSED FOR THE DRIVEWAYS. THE LENGTH OF DISCONNECTION SHALL BE A MINIMUM OF 15' (LONGER THAN THE 14' DRIVEWAY WIDTH) AT 5%.
- THE GRADING PROVIDED IS CONCEPTUAL. FINAL GRADING TO BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE. GRADING TO CONFORM THE CRITERIA PROVIDED IN NOTES 3-5 ABOVE.

DEVELOPER
ATTN: MIKE SHEARER
RYAN HOMES, INC.
11460 CRONRIDGE DRIVE, SUITE 128
OWINGS MILLS, MARYLAND 21117
(410) 654-5720

OWNER
ROBERT A. WILDMAN & ROSE E. WILDMAN
C/O MILDENBERG, BOENDER & ASSOCIATES, INC.
5072 DORSEY HALL DRIVE, SUITE 202
ELLCOTT CITY, MARYLAND 21042
(410) 997-0296

project	2000-072	date	JAN 2002
illustration	SID	engineering	SID
scale	N.T.S.	approval	RJH

no.	description	revisions
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BOCK PROPERTY, LOTS 5 THRU 8
PLAT # 15180 - 15181
TAX MAP 31 - P/O PARCEL 279 - BLOCK 13 - LOTS 5 THRU 8
SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
HOUSE MODELS & SWM DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax: (301) 821-5521 Wash. (410) 997-0296 Fax.

HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED 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 SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRES 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.)
- 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 (.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 SOIL. 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 UNROTTED 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.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, FOR 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 NOVEMBER 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 SOIL.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEE FREE 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 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL./1000 SQ.FT.) FOR ANCHORING.

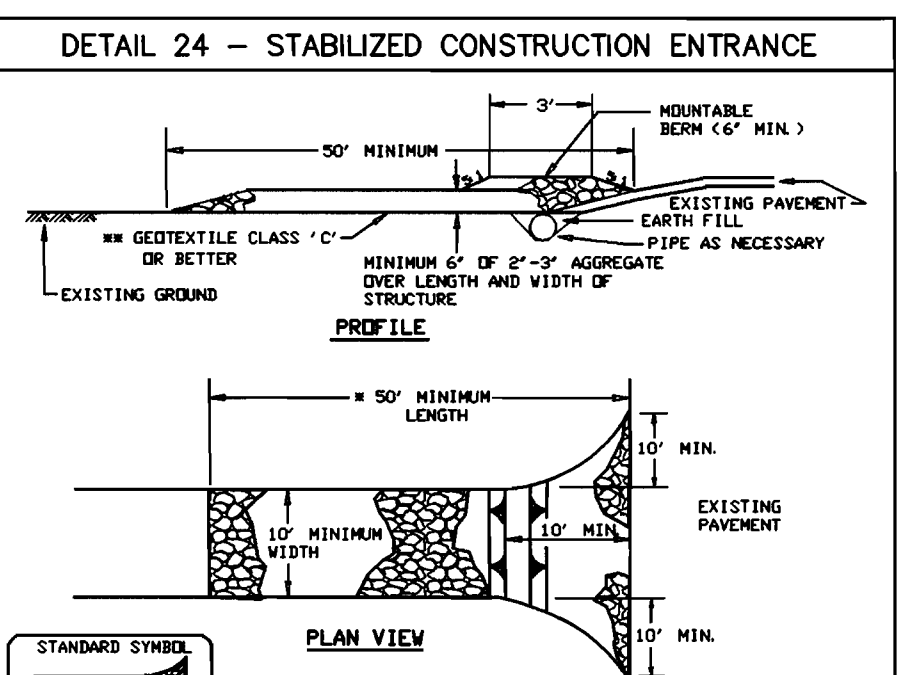
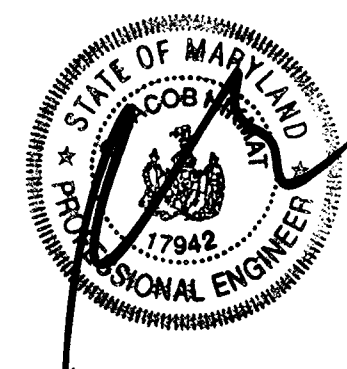
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

STANDARD SEDIMENT 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, (313-1855).
- 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 OR REDISTURBANCE, 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, B) 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC.51), SOIL (SEC. 54), TEMPORARY SEEDING (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.

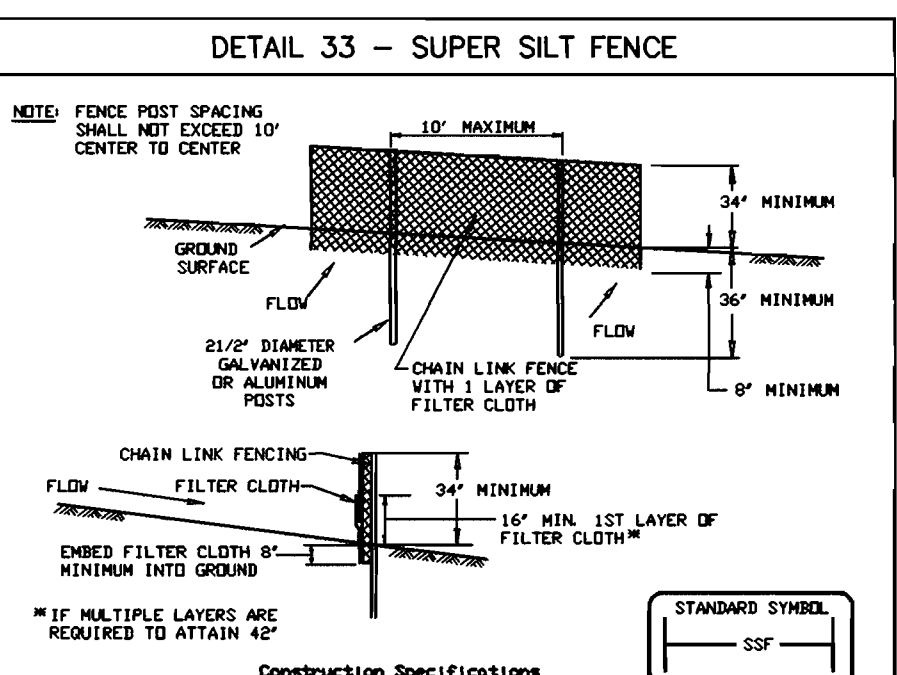
7) SITE ANALYSIS:		
TOTAL AREA OF SITE:	1.44	ACRES
AREA DISTURBED:	1.29	ACRES
AREA TO BE ROOFED OR PAVED:	0.34	ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.95	ACRES
TOTAL CUT:	800	CU. YDS.
TOTAL FILL:	800	CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	N/A	

THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITY MEASUREMENTS.



- Construction Specifications**
- Length - minimum of 50' x 30' for single residence lots.
 - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
 - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.
 - Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalents shall be placed at least 6" deep over the length and width of the entrance.
 - Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5' slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SEE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
 - Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

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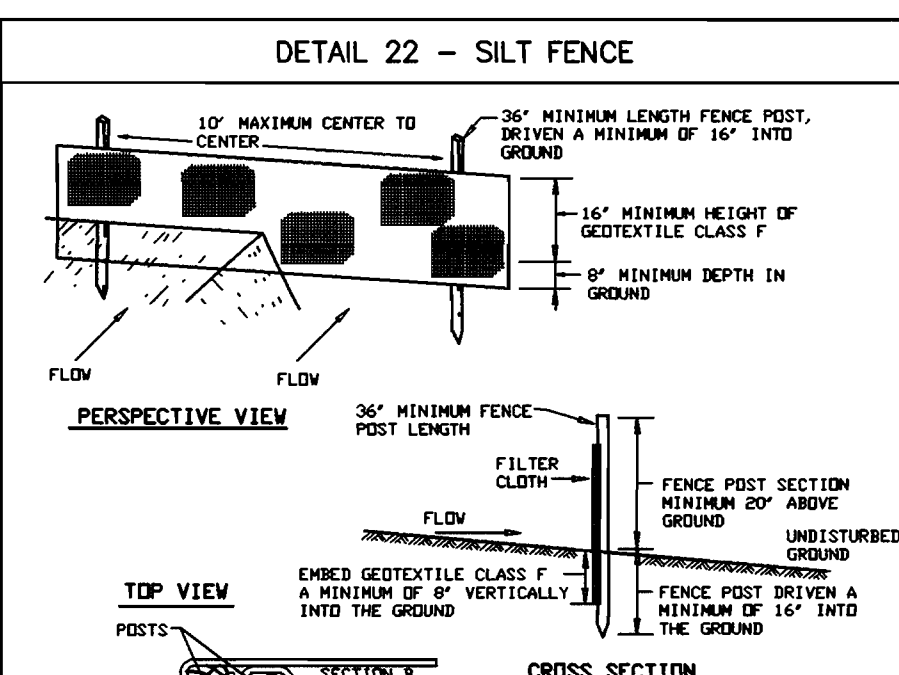
- Construction Specifications**
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
 - Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and cross rods, drive anchors and post caps are not required except on the ends of the fence.
 - Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
 - Filter cloth shall be embedded a minimum of 6" into the ground.
 - When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
 - Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
 - Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:
- | | | |
|----------------------|--|---------------|
| Tensile Strength | 50 lbs/in (min.) | Test: MHT 509 |
| Tensile Modulus | 20 lbs/in (min.) | Test: MHT 509 |
| Flow Rate | 0.3 gal/ft ² /minute (max.) | Test: MHT 382 |
| Filtering Efficiency | 75% (min.) | Test: MHT 382 |

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Design Criteria

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 1:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

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- Construction Specifications**
- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pound per linear foot.
 - Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:
- | | | |
|----------------------|--|---------------|
| Tensile Strength | 50 lbs/in (min.) | Test: MHT 509 |
| Tensile Modulus | 20 lbs/in (min.) | Test: MHT 509 |
| Flow Rate | 0.3 gal/ft ² /minute (max.) | Test: MHT 382 |
| Filtering Efficiency | 75% (min.) | Test: MHT 382 |
- When ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
 - Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

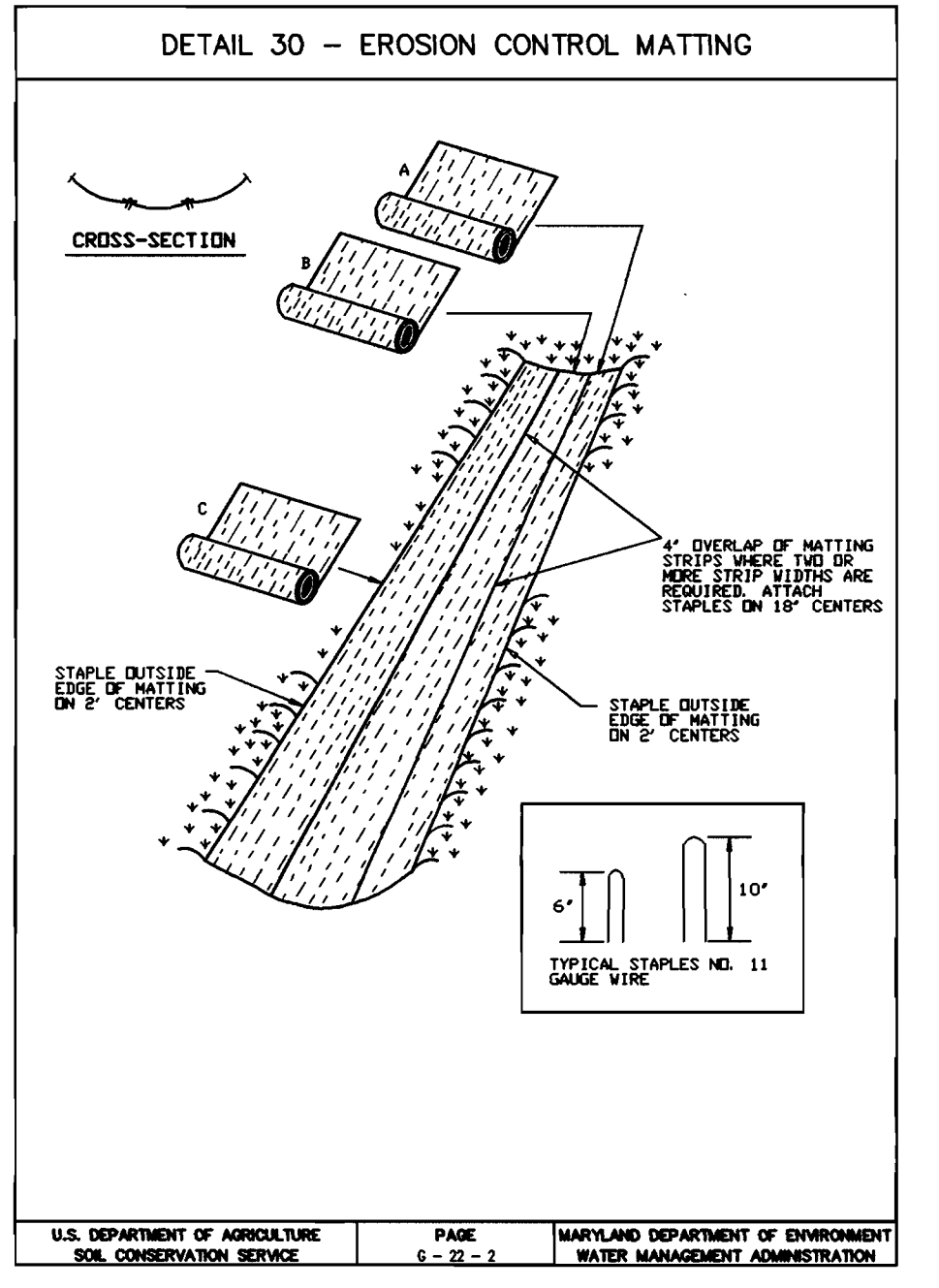
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Silt Fence Design Criteria

Slope Steepness	Slope Length (Maximum)	Silt Fence Length (Maximum)
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2:1 slope and sandy soils (USDA general classification system, soil class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

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- Construction Specifications**
- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4' down slope from the trench. Spacing between staples is 6'.
 - Staple the 4' overlap in the channel center using an 18" spacing between staples.
 - Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
 - Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
 - Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4', single flap. Reinforce the overlap with a double row of staples spaced 6' apart in a staggered pattern on either side.
 - The discharge end of the matting liner should be similarly secured with 2 double rows of staples.
- Note: If flow will enter from the edge of the matting then the area affected by the flow must be keyed-in.

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- TOPSOIL APPLICATION
 - WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
 - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.
 - TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" TO 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.
- ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
 - COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
 - COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.
 - COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
 - COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING, MD-VIA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES, REVISED 1973.

TEMPORARY DUST CONTROL MEASURES

- MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
- TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS APCED ABOUT 12" APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.
- BARRIERS - SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
- CALCIUM CHLORIDE - APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN.
- CONSTRUCT SILT FENCE.
- COMPLETE CONSTRUCTION AS SHOWN.
- COMPLETE FINE GRADING OF SITE TO GRADES INDICATED.
- SEED AND MULCH ALL REMAINING DISTURBED AREAS.
- UPON STABILIZATION OF THE SITE AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS.

date	JAN 2002	approval	RJH
project	2000-072	scale	N.T.S.
illustration	engineering	revision	
	SID		
	SID		

date		description	revisions
no.			

BOCK PROPERTY, LOTS 5 THRU 8
 PLAT # 151e0 - 151e1
 TAX MAP 31 - P/O PARCEL 279 - BLOCK 13 - LOTS 5 THRU 8
 SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
SEDIMENT CONTROL NOTES & DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Fax: (301) 621-5521 Wash. (410) 997-0298 Fax.

DEVELOPER
 ATTN: MIKE SHEARER
 RYAN HOMES, INC.
 11460 CROMBRIDGE DRIVE, SUITE 128
 OWINGS MILLS, MARYLAND 21117
 (410) 654-5720

OWNER
 ROBERT A. WILDMAN & ROSE E. WILDMAN
 C/O MILDENBERG, BOENDER & ASSOCIATES, INC.
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 ELICOTT CITY, MARYLAND 21042
 (410) 997-0296

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