



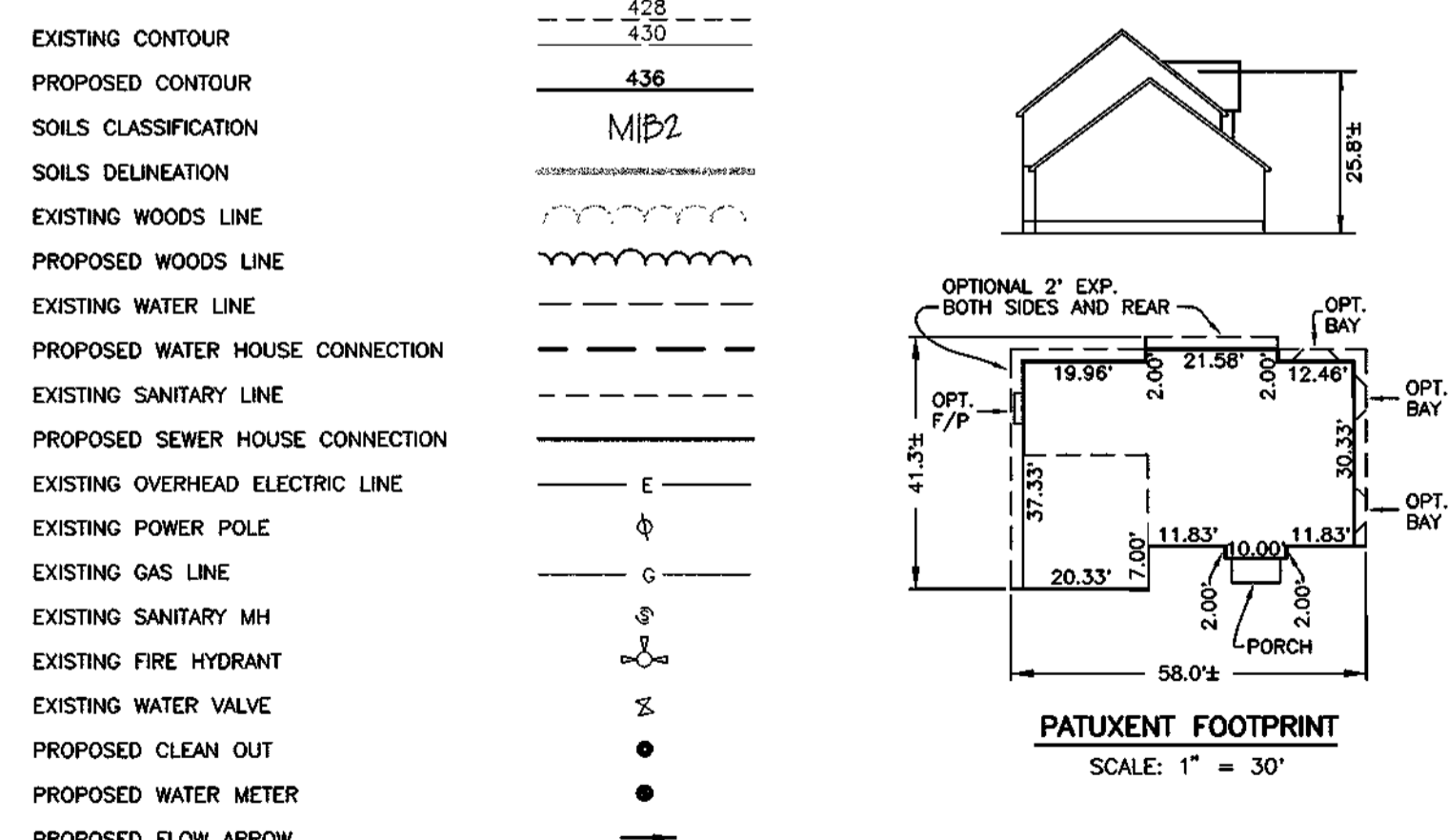
GENERAL NOTES

1. THE SUBJECT PROPERTY IS ZONED R-20 PER THE OCTOBER 1993 ZONING PLAN.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
3. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE(5) WORKING DAYS PRIOR TO THE START OF WORK.
4. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
5. TOPOGRAPHY SHOWN HEREON HAS BEEN TAKEN FROM HOWARD COUNTY "GIS" INFORMATION.
6. HORIZONTAL DATUM FOR THIS PLAN IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM NAD-27 AS PROJECTED FROM HOWARD COUNTY CONTROL POINTS #2639002 AND #2639003.
7. PUBLIC WATER AND PUBLIC SEWER SYSTEMS ARE PROVIDED FOR THIS SITE.
8. STORMWATER MANAGEMENT REQUIREMENTS FOR THIS SUBDIVISION ARE BEING ADDRESSED THROUGH THE USE OF ROOFTOP DISCONNECTION, NON-ROOFTOP DISCONNECTION AND A RAIN GARDEN.
9. THERE ARE NO WETLANDS, STREAMS, BUFFERS OR STEEP SLOPES 25% OR GREATER ON-SITE.
10. EXISTING UTILITIES SHOWN WERE LOCATED FROM RECORD DRAWINGS.
11. THIS SUBDIVISION IS LOCATED IN THE METROPOLITAN DISTRICT.
12. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO BURIAL GROUNDS OR CEMETERIES EXISTING ON-SITE.
13. SECTION 128 OF THE ZONING REGULATIONS ALLOWS PORCHES OR DECKS, OPEN OR ENCLOSED, TO PROJECT NOT MORE THAN 10' FEET INTO THE REQUIRED FRONT OR REAR YARD SETBACKS; BAY WINDOWS, BALCONIES, CHIMNEYS AND EXTERIOR STAIRWAYS, NOT MORE THAN 16' FEET IN WIDTH, MAY PROJECT NOT MORE THAN 4' FEET INTO ANY REQUIRED SETBACK.
14. THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
15. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE BUILDERS EXPENSE.
16. BRL INDICATES BUILDING RESTRICTION LINE.
17. FOR LOT AREAS, EASEMENTS, OBLIGATIONS AND OTHER RELATED INFORMATION REFER TO PLAT No. 8061 AND ANY REVISION OR RESUBDIVISION PLATS OF THIS LOT.
18. PREVIOUS HOWARD COUNTY FILE NUMBERS: F-88-60, WP-88-43.
19. THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE LOT IS UNDER 40,000 S.F. IN AREA.
20. USE-IN-COMMON DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - A.) WIDTH - 12 FEET (14 FT. SERVING MORE THAN ONE RESIDENCE)
 - B.) SURFACE - 6 INCHES COMPACTED CRUSHER RUN BASE W/TAR & CHIP COATING
 - C.) GEOMETRY - 15% GRADE; MAX. 10% MAX. GRADE CHANGE; 45 FOOT MIN. TURNING RADIUS
 - D.) STRUCTURES (BRIDGES/CULVERTS) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOAD)
 - E.) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
 - F.) STRUCTURE CLEARANCE - MINIMUM 12 FEET
 - G.) MAINTENANCE - SUFFICIENT TO ENSURE ALL-WEATHER USE
21. THIS PROJECT IS EXEMPT FROM THE LANDSCAPING REQUIREMENTS OF THE HOWARD COUNTY LANDSCAPING MANUAL BECAUSE THE RE-SUBDIVISION PLAT WAS APPROVED AND RECORDED PRIOR TO 1993.
22. THIS PLAN CONFORMS WITH THE 5th EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
23. INGRESS, EGRESS AND MAINTENANCE OF THE PRIVATE USE-IN-COMMON IS PURSUANT TO THE DECLARATION OF RIGHT OF ACCESS AND MAINTENANCE OBLIGATIONS RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MD AS LIBER 1851, FOLIO 217.
24. DRIVEWAYS SHALL BE INSTALLED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL R-6.60.
25. WATER PETITION, WP-88-43, GRANTED A REDUCTION IN THE REQUIRED MINIMUM ROAD FRONTAGE FROM 20 FEET TO 17.01 FEET FOR LOTS 22 AND 23.
26. LOT 23, BLOCK 'B', IS TO CONTAIN A RAIN GARDEN TO ADDRESS SOME WATER QUALITY FOR THE LOT. THE OWNER OF LOT 23 IS TO MAINTAIN THIS FACILITY AND KEEP IT FUNCTIONING.

SITE DATA TABULATION THIS SUBMISSION

- 1) GENERAL SITE DATA
 - a. PRESENT ZONING: R-20
 - b. APPLICABLE DPZ FILE REFERENCES: F-88-60, WP-88-43, PLAT 8061
 - c. DEED REF. LIBER 4157 FOLIO 518
 - d. PROPOSED USE OF SITE: SFD HOUSE
 - e. PROPOSED WATER AND SEWER SYSTEMS: PUBLIC WATER, PUBLIC SEWER
- 2) AREA TABULATION
 - a. TOTAL AREA OF SITE: 23,394 S.F.±
 - b. AREA OF 100 YEAR FLOODPLAIN (APPROX.): 0.00 AC.
 - c. AREA OF STEEP SLOPES (25% OR GREATER): 0.00 AC.
 - d. NET AREA OF SITE: 23,394 S.F.±
 - e. AREA OF THIS PLAN SUBMISSION: 23,394 S.F.±
 - f. AREA OF PROPOSED BUILDABLE LOTS: 23,394 S.F.±
 - g. AREA OF PROPOSED PRESERVATION PARCELS: 0.00 AC.
 - h. AREA OF PROPOSED PUBLIC ROAD R/W: 0.00 AC.

LEGEND:



ADDRESS CHART

LOT NO.	STREET ADDRESS
LOT 23	10847 HILLTOP LANE

MINIMUM LOT SIZE CHART

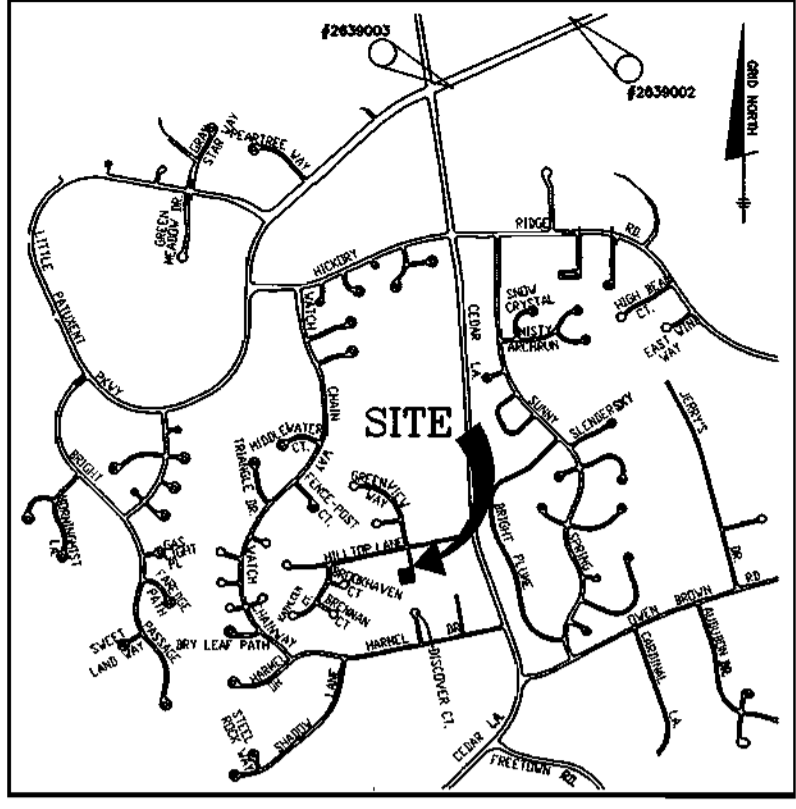
LOT	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
23	23,394 S.F.	2,736 S.F.	20,658 S.F.

SHEET INDEX

1	SITE DEVELOPMENT PLAN
2	SEDIMENT AND EROSION CONTROL PLAN, NOTES & DETAILS
3	STORMWATER MANAGEMENT PLAN, NOTES AND DETAILS

BENCHMARKS
NAD'27 HORIZONTAL

HO. CO. #2839002	3/4" REBAR 0.5' BELOW SURFACE 174' N. OF CL ROUTE 108, 35' W. OF CL MANOR LANE ELEV. = 434.787
HO. CO. #2839003	CONC. MONI. 0.2' ABOVE SURFACE S. OF CL ROUTE 108 & 250' E. OF CL OF CEDAR LANE ELEV. = 488.168



VICINITY MAP
SCALE: 1" = 2000'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DATE: 4/28/03

DATE: 4/28/03

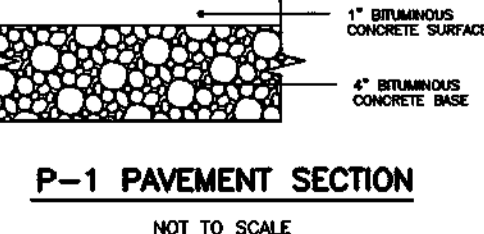
DATE: 4/29/03

DATE:

SOILS LEGEND

MAP SYMBOL	SOIL GROUP	SOIL TYPE
MgB2	B	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MgC2	B	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
MIB2	B	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MID2	B	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED
MnD	B	MANOR VERY STONEY LOAM, 3 TO 25 PERCENT SLOPES

* INDICATES HYDRIC SOILS
TAKEN FROM SOILS SURVEY, ISSUED JULY 1988, MAP No. 24



PERMIT INFORMATION CHART

SUBDIVISION NAME: CEDAR ACRES	SECTION/AREA BLOCK 'B'	LOT/PARCEL No. LOT 23, PARCEL No. 92
PLAT# or L/F GRID # ZONING 8061 11 R-20	TAX MAP No. 35	ELECT. DISTR. 5th
WATER CODE: E28		SEWER CODE: 5327300

NO.	DATE	REVISION
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BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS

ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644
E-MAIL: benchmark@comcast.com

Donald Mason

OWNER/BUILDER:	C. KNUDSEN DEVELOPMENT, LLC 8455 BALTIMORE NATIONAL PIKE ELLCOTT CITY, MD 21043 PHONE: 410-465-2222
PROJECT:	CEDAR ACRES LOT 23, BLOCK 'B' SINGLE FAMILY DETACHED DWELLING
LOCATION:	TAX MAP No. 35, GRID No. 11 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE:	SITE DEVELOPMENT PLAN
DATE:	FEBRUARY, 2003
PROJECT NO.	1575
DESIGN: RPS/JMC/MCR	DRAFT: RPS/MCR
SCALE:	AS SHOWN
DRAWING	1 OF 3

SEDIMENT CONTROL NOTES

- 1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections and Permits... 2. 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...

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

- Definition: Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation. Purpose: To provide a suitable medium for vegetative growth... Construction and Material Specifications: Topsoil salvaged from the existing site may be used provided that it meets the standards...

PERMANENT SEEDING NOTES

- Apply to graded or cleared area 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... Soil Amendments: In lieu of soil test recommendations, use on the following schedules...

SEQUENCE OF CONSTRUCTION

- DAY 1 OBTAIN GRADING PERMIT. DAY 2 THE CONTRACTOR(S) IS TO IDENTIFY AND MARK ANY HAZARDOUS CONDITIONS THAT MAY EXIST ON-SITE, SUCH AS OVERHEAD POWERLINES, OLD WELLS, GAS LINES, ETC. DAY 3-4 INSTALL STABILIZED CONSTRUCTION ENTRANCE, EROSION CONTROL MATTING, SILT FENCE AND SUPER SILT FENCE.

TEMPORARY SEEDING NOTES

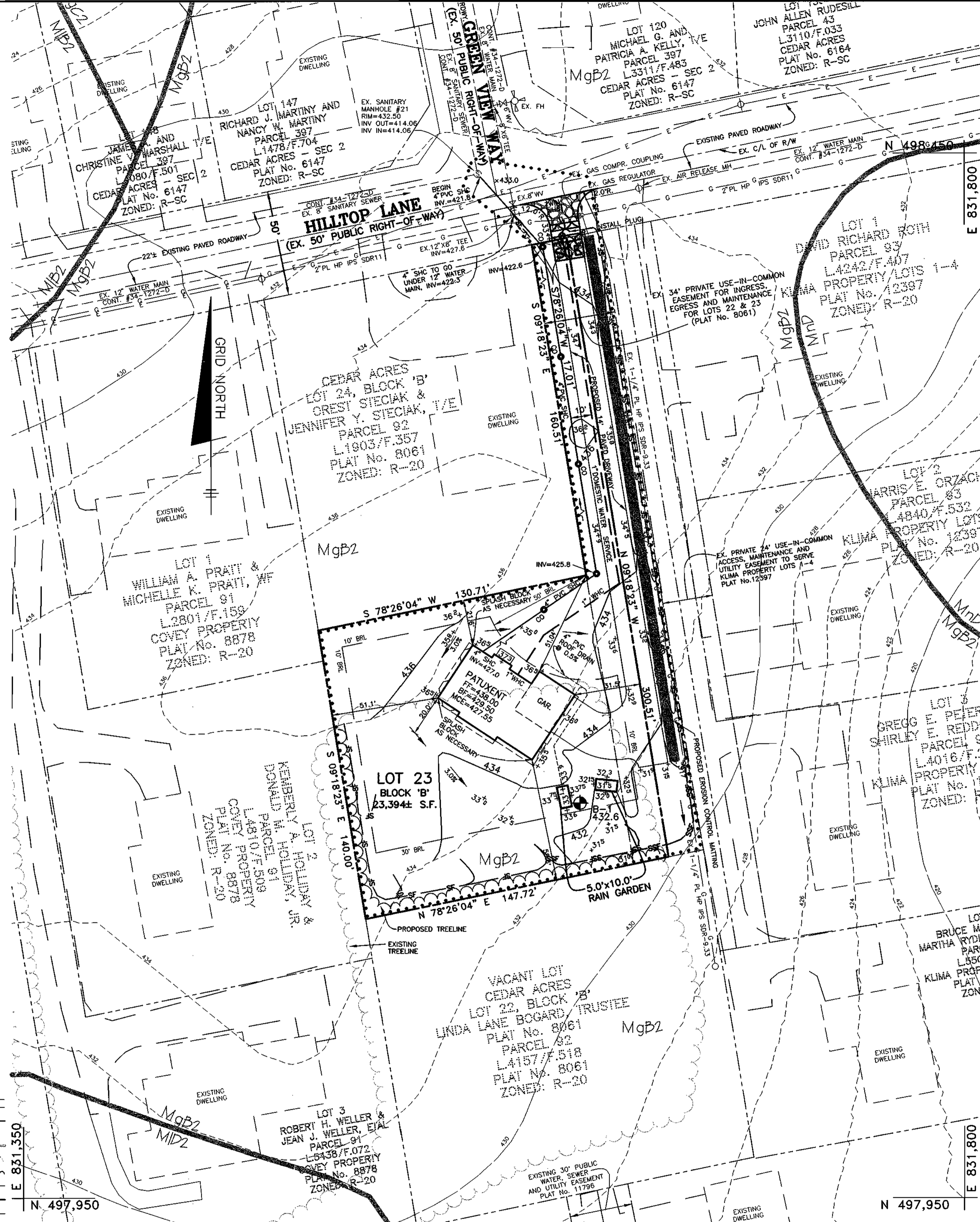
- Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed. Seeded Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding... Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf).

NON-STRUCTURAL PRACTICES SHOWN ON THIS PLAN SHALL BE COMPLIED WITH AT THE TIME OF INDIVIDUAL LOT GRADING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Approval and signature blocks for Chief of Development Engineering Division, Division of Land Development, and Director. Includes dates and signatures of Cindy Hanth, Donald Mean, and Jim Mays.

LEGEND: EXISTING CONTOUR, PROPOSED CONTOUR, SOILS CLASSIFICATION, SOILS DELINEATION, EXISTING WOODS LINE, PROPOSED WOODS LINE, EXISTING WATER LINE, PROPOSED WATER HOUSE CONNECTION, EXISTING SANITARY LINE, PROPOSED SEWER HOUSE CONNECTION, EXISTING OVERHEAD ELECTRIC LINE, EXISTING POWER POLE, EXISTING GAS LINE, EXISTING SANITARY MH, EXISTING FIRE HYDRANT, EXISTING WATER VALVE, PROPOSED CLEAN OUT, PROPOSED WATER METER, PROPOSED FLOW ARROW, PROPOSED SILT FENCE, PROPOSED SUPER SILT FENCE, PROPOSED TREE PROTECTION FENCE, PROPOSED EROSION CONTROL MATTING.



PLAN VIEW SCALE: 1" = 30'

SEDIMENT CONTROL LOCATION AND IMPLEMENTATION SHOWN ON THIS PLAN IS SUBJECT TO REVISIONS IN THE FIELD AT THE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR.

ALL SEDIMENT CONTROL FEATURES SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS SHOWN IN THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

SOILS LEGEND table with columns for MAP SYMBOL, SOIL GROUP, SOIL TYPE, and SOIL DESCRIPTION. Includes entries for MgB2, MgC2, MIB2, MID2, and MND.

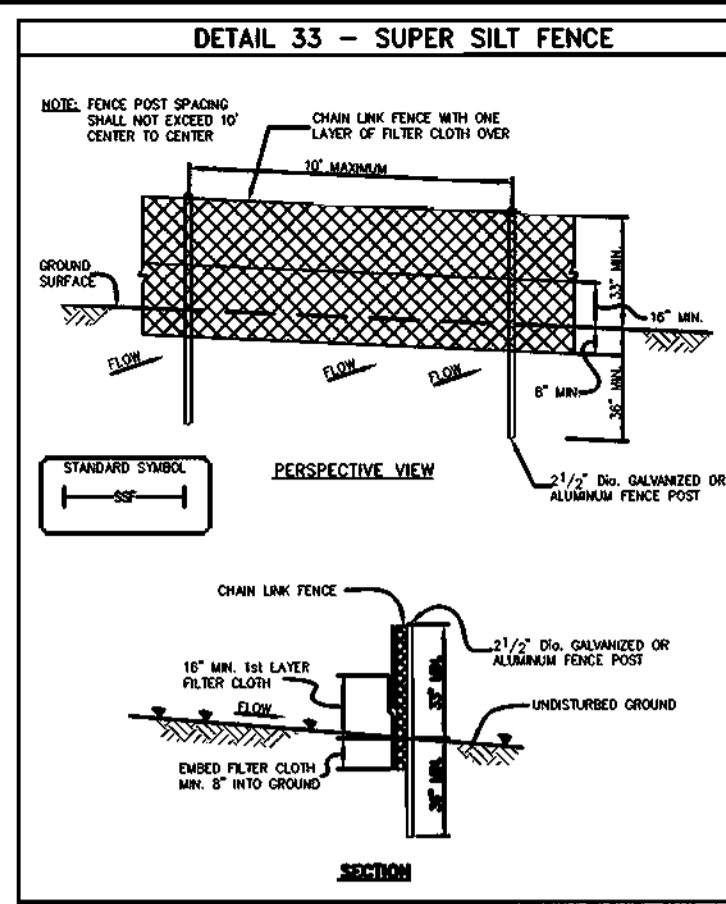


Table for SUPER SILT FENCE construction specifications and design criteria, including slope, length, and material requirements.

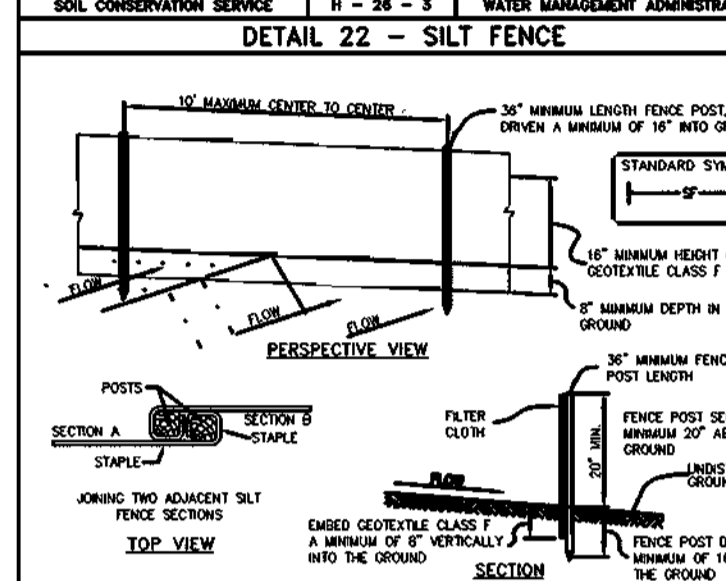


Table for SILT FENCE design criteria, including slope, length, and material requirements.

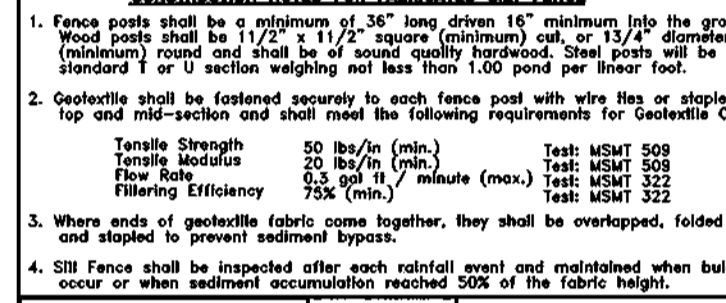


Table for STABILIZED CONSTRUCTION ENTRANCE design criteria, including slope, length, and material requirements.

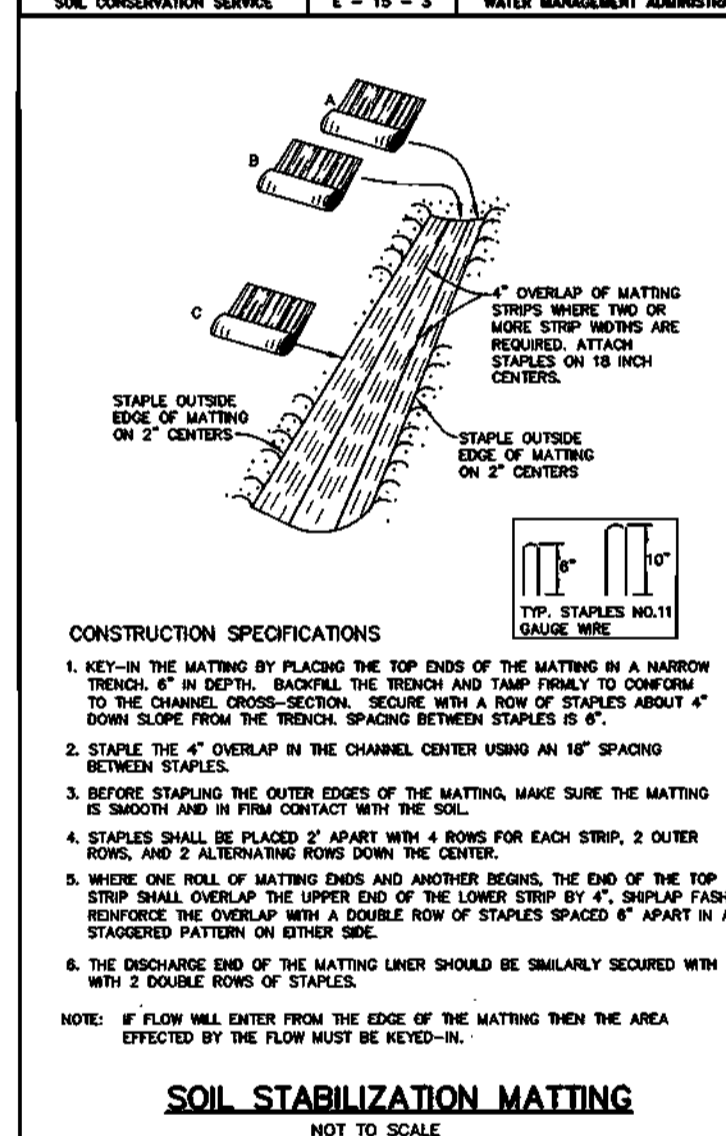
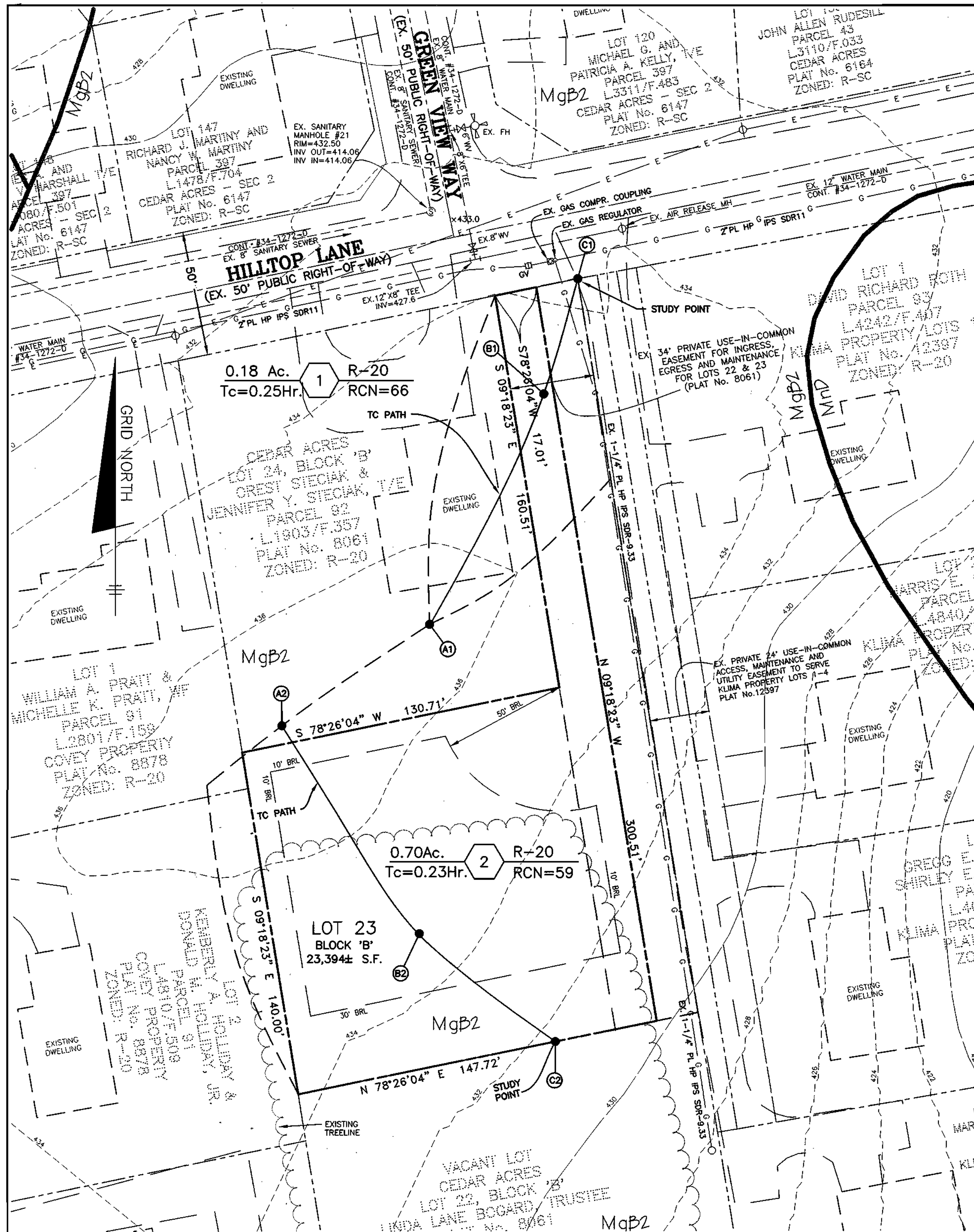


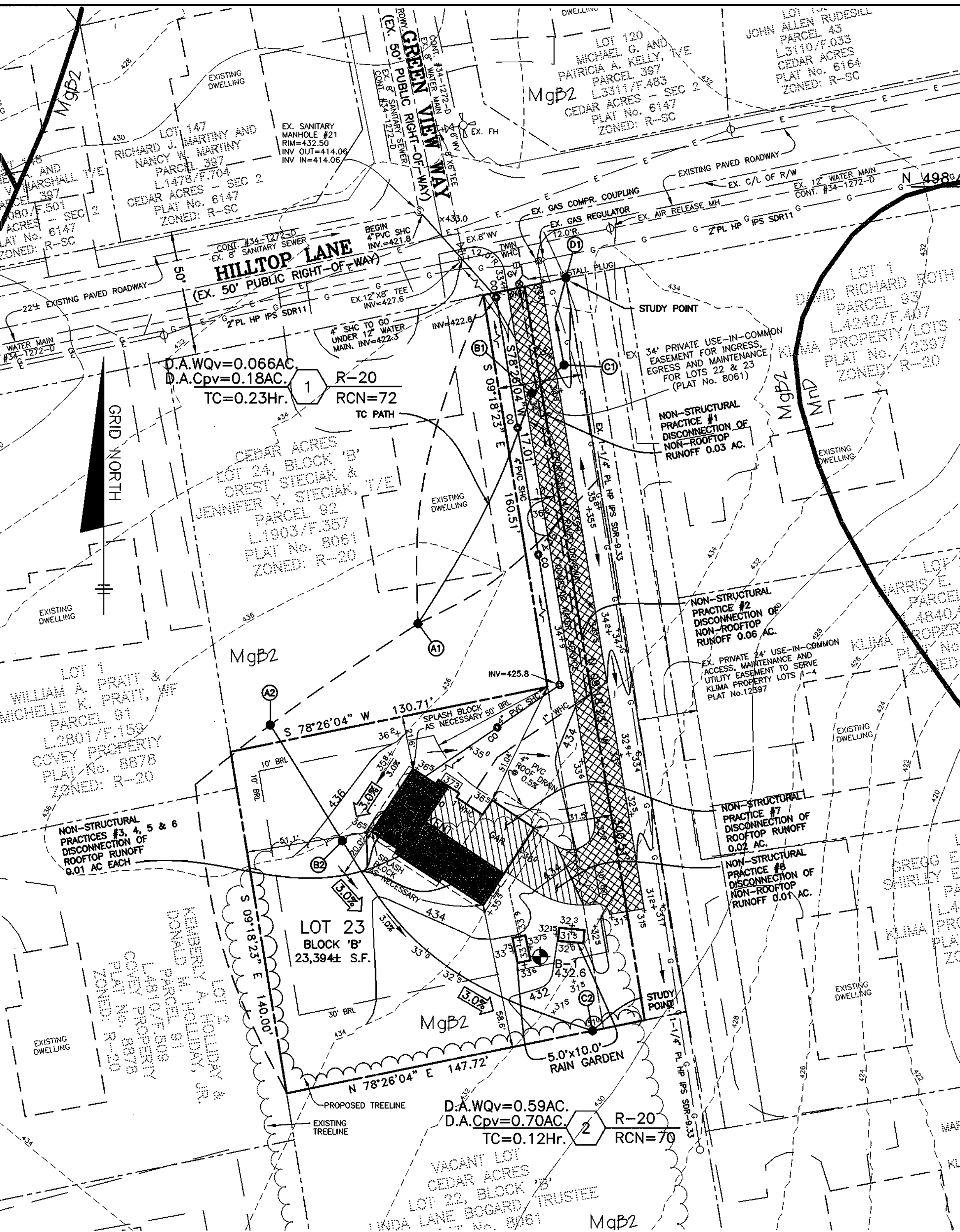
Table for SOIL STABILIZATION MATTING design criteria, including slope, length, and material requirements.

NOTE: SEDIMENT CONTROL LOCATION AND IMPLEMENTATION SHOWN ON THIS PLAN IS SUBJECT TO REVISIONS IN THE FIELD AT THE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR.

Project information block including owner/builder (C. Knudsen Development, LLC), project name (CEDAR ACRES LOT 23, BLOCK 'B'), location, title (SEDIMENT AND EROSION CONTROL PLAN, NOTES & DETAILS), date, and drawing number.



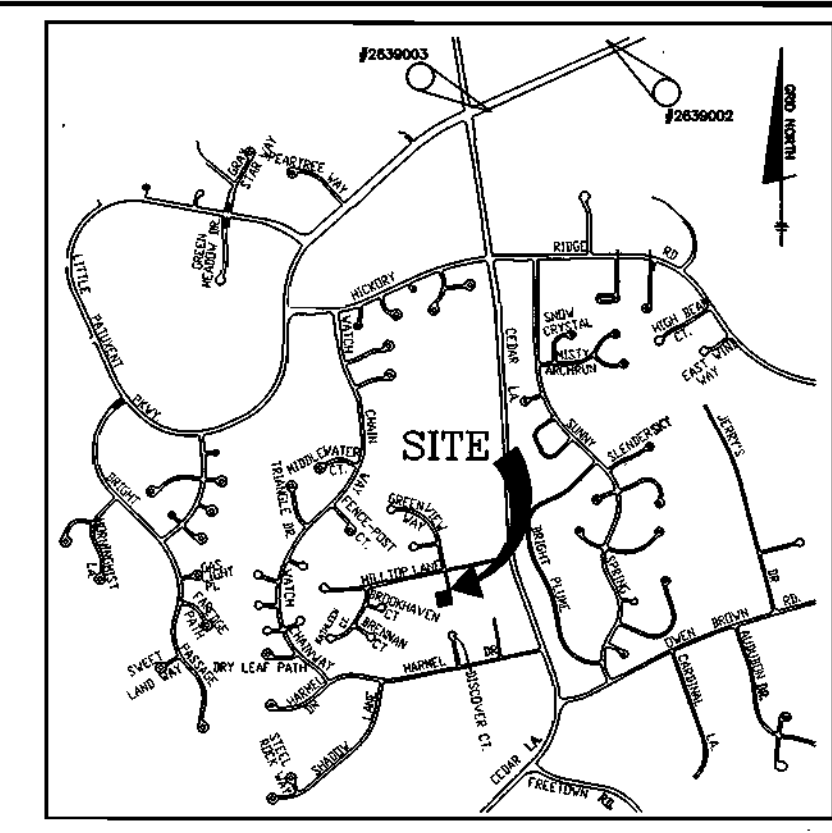
EXISTING CONDITIONS
SCALE: 1" = 30'



PROPOSED CONDITIONS
SCALE: 1" = 30'

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- EXISTING WATER LINE
- PROPOSED WATER HOUSE CONNECTION
- EXISTING SANITARY LINE
- PROPOSED SEWER HOUSE CONNECTION
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING POWER POLE
- EXISTING GAS LINE
- EXISTING SANITARY MH
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED CLEAN OUT
- PROPOSED WATER METER
- PROPOSED FLOW ARROW
- PROPOSED SILT FENCE
- PROPOSED SUPER SILT FENCE
- PROPOSED TREE PROTECTION FENCE
- PROPOSED LIMIT OF DISTURBANCE
- DRAINAGE DIVIDE
- ROOFTOP DISCONNECTION BY SWALE
- DISCONNECTION BY RAIN GARDEN
- NON-ROOFTOP DISCONNECTION BY SWALE



VICINITY MAP
SCALE: 1" = 2000'

TIME OF CONCENTRATION FLOW PATH
EXISTING CONDITION - DRAINAGE AREA #1

MAP SEGMENT	LENGTH	DESCRIPTION	SLOPE	VELOCITY	TIME
A1-B1	100'	SHEET FLOW OVER GRASS	1.8%	-	0.24
B1-C1	50'	SHALLOW CONC. UNPAVED	1.8%	2.2 fps	0.01

TIME OF CONCENTRATION FLOW PATH
EXISTING CONDITION - DRAINAGE AREA #2

MAP SEGMENT	LENGTH	DESCRIPTION	SLOPE	VELOCITY	TIME
A2-B2	100'	SHEET FLOW OVER GRASS	2.4%	-	0.22
B2-C2	70'	SHALLOW CONC. UNPAVED	4.3%	3.3 fps	0.01

TIME OF CONCENTRATION FLOW PATH
DEVELOPED CONDITION - DRAINAGE AREA #1

MAP SEGMENT	LENGTH	DESCRIPTION	SLOPE	VELOCITY	TIME
A1-B1	92'	SHEET FLOW OVER GRASS	1.8%	-	0.23
B1-C1	28'	SHALLOW CONC. UNPAVED	3.8%	2.8 fps	0.00
C1-D1	35'	CHANNEL FLOW	3.0%	5.0 fps	0.00

TIME OF CONCENTRATION FLOW PATH
DEVELOPED CONDITION - DRAINAGE AREA #2

MAP SEGMENT	LENGTH	DESCRIPTION	SLOPE	VELOCITY	TIME
A2-B2	82'	SHEET FLOW OVER GRASS	4.0%	-	0.11
B2-C2	135'	SHALLOW CONC. UNPAVED	3.0%	2.8 fps	0.01

SUMMARY OF GENERAL STORAGE REQUIREMENTS - D.A. #1

STEP	REQUIREMENT	VOLUME REQUIRED (AC.-FT.)	NOTES
1	WATER QUALITY VOLUME (WQv)	0.002	ELIMINATED BY THE USE OF NON-STRUCTURAL PRACTICES
2	RECHARGE VOLUME (Rv)	0.006	ELIMINATED BY THE USE OF NON-STRUCTURAL PRACTICES
3	CHANNEL PROTECTION VOLUME (Cp)	N/A	NOT REQUIRED, POST DEVELOPED PEAK DISCHARGE LESS THAN 2.0cfs
4	OVERBANK FLOOD PROTECTION VOLUME (Ov)	N/A	NOT REQUIRED
5	EXTREME FLOOD VOLUME (E)	N/A	NOT REQUIRED

SUMMARY OF GENERAL STORAGE REQUIREMENTS - D.A. #2

STEP	REQUIREMENT	VOLUME REQUIRED (AC.-FT.)	NOTES
1	WATER QUALITY VOLUME (WQv)	0.014	ELIMINATED BY THE USE OF NON-STRUCTURAL PRACTICES
2	RECHARGE VOLUME (Rv)	0.038	ELIMINATED BY THE USE OF NON-STRUCTURAL PRACTICES
3	CHANNEL PROTECTION VOLUME (Cp)	N/A	NOT REQUIRED, POST DEVELOPED PEAK DISCHARGE LESS THAN 2.0cfs
4	OVERBANK FLOOD PROTECTION VOLUME (Ov)	N/A	NOT REQUIRED
5	EXTREME FLOOD VOLUME (E)	N/A	NOT REQUIRED

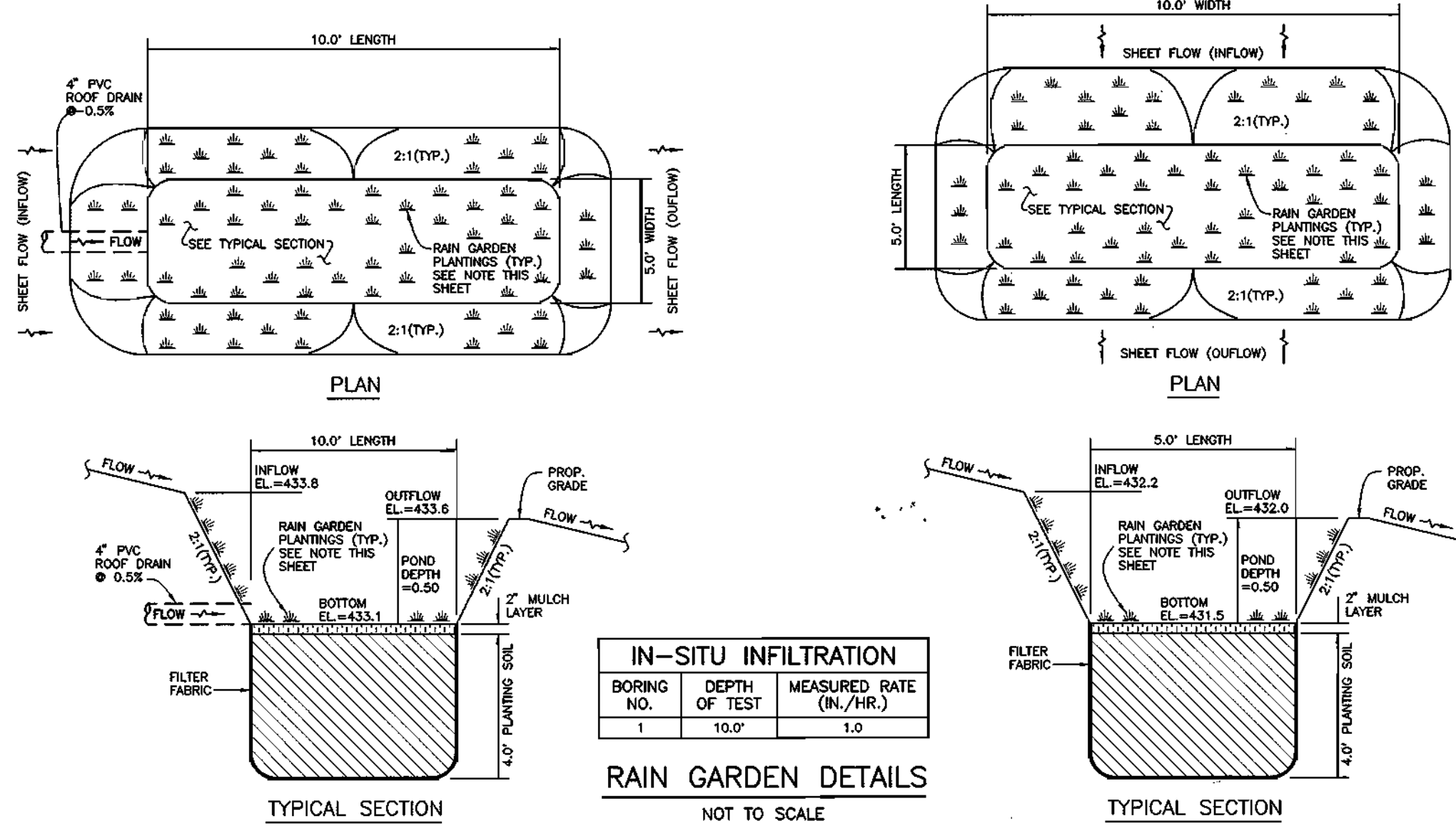
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
Andy Hamrick
DATE: 4/18/20

CHIEF, DIVISION OF LAND DEVELOPMENT
Donna D. Leggett
DATE: 4/18/20

OPERATION & MAINTENANCE SCHEDULE FOR RAIN GARDENS

- ANNUAL MAINTENANCE OF PLANT MATERIAL AND MULCH LAYER IS REQUIRED. MAINTENANCE OF MULCH IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH-OUT. ANY REPLACEMENT OF MULCH SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE & INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL & PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN THE SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD & DISEASED VEGETATION CONSIDERED BEYOND TREATMENT; TREATMENT OF ALL DISEASED TREES & SHRUBS; AND REPLACEMENT OF ALL DEPONENT STAKES & WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE THE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS-NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



RAIN GARDEN - LANDSCAPE DATA

HYDROLOGIC ZONE 3 - REGULARLY INUNDATED (HIGH MARSH)
HYDROLOGIC CONDITION - C1 TO C7 DEEP HARDNESS - TEMPERATE ZONE 6b (-5 TO 0°)
SEE SHEET 2 FOR SCHEDULE OF CONSTRUCTION

RAIN GARDEN - PLANTING DATA

- PLANTINGS WITHIN THE PONDING AREA OF THE RAIN GARDEN ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE
- PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE RAIN GARDEN ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE

SOILS LEGEND

MAP SYMBOL	SOIL GROUP	SOIL TYPE
MgB2	B	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MgC2	B	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
MIB2	B	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MID2	B	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED
MnD	B	MANOR VERY STONEY LOAM, 3 TO 25 PERCENT SLOPES

* INDICATES HYDRIC SOILS
TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 24

MATERIALS AND SPECIFICATIONS FOR RAIN GARDEN

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS (IF REQUIRED)	SEE APPENDIX A, TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.5' TO 4.0' DEEP)	SAND: 35-60% SILT: 30-50% CLAY: 10-25%	N/A	USDA SOIL TYPES: LOAMY SAND, SANDY LOAM OR LOAM
MULCH	SHREDDED HARDWOOD	AGED 6 MONTHS, MINIMUM	
GEOTEXTILE (CLASS "C")	APPROPRIATE DRAINING SIZE (ASTM D-4751) DRAIN TENSILE STRENGTH (ASTM D-4632) PUNCTURE RESISTANCE (ASTM D-4633)	N/A	FOR USE AS NECESSARY BENEATH UNDERDRAINS ONLY

NO. DATE REVISION

BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS

8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644
E-MAIL: benchmrk@comcast.com

OWNER/BUILDER: C. KNUDSEN DEVELOPMENT, LLC
8455 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MD 21043
PHONE: 410-465-2222

PROJECT: CEDAR ACRES
LOT 23, BLOCK 'B'
SINGLE FAMILY DETACHED DWELLING

LOCATION: TAX MAP NO. 35, GRID NO. 11
PARCEL, No. 92
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: EXISTING AND DEVELOPED CONDITIONS SWM DRAINAGE AREA MAP

DATE: FEBRUARY, 2003 PROJECT NO. 1575
DESIGN: RPS/JMC/MCR DRAFT: RPS/MCR SCALE: AS SHOWN DRAWING 3 OF 3

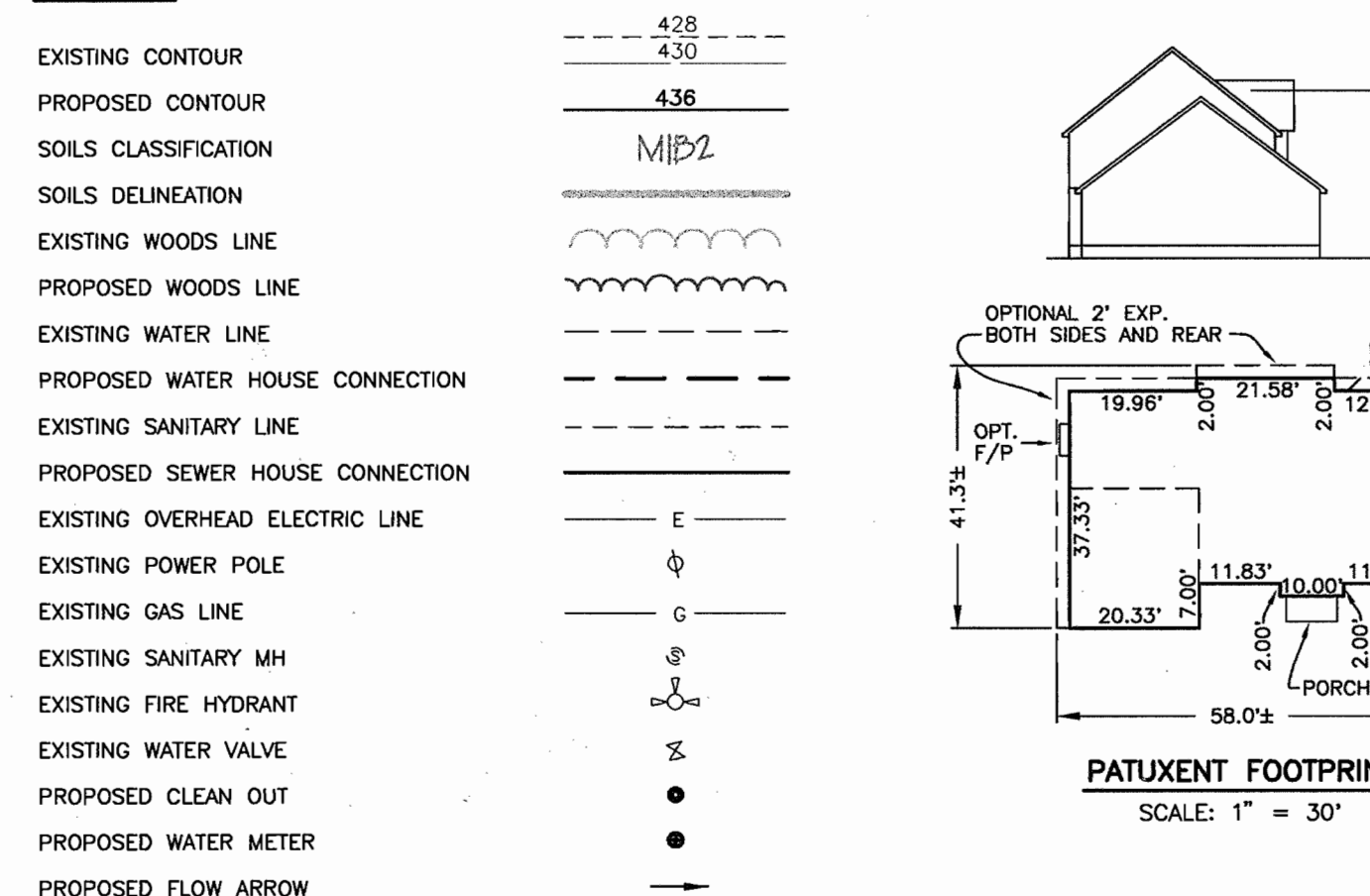


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 - THERE ARE NO WETLANDS, STREAMS, BUFFERS OR STEEP SLOPES 25% OR GREATER ON-SITE.
 - EXISTING UTILITIES SHOWN WERE LOCATED FROM RECORD DRAWINGS.
 - THIS SUBDIVISION IS LOCATED IN THE METROPOLITAN DISTRICT.
 - TO THE BEST OF OUR KNOWLEDGE THERE ARE NO BURIAL GROUNDS OR CEMETERIES EXISTING ON-SITE.
 - SECTION 12B OF THE ZONING REGULATIONS ALLOWS PORCHES OR DECKS, OPEN OR ENCLOSED, TO PROJECT NOT MORE THAN 10' FEET INTO THE REQUIRED FRONT OR REAR YARD SETBACKS; BAY WINDOWS, BALCONIES, CHIMNEYS AND EXTERIOR STAIRWAYS, NOT MORE THAN 16' FEET IN WIDTH, MAY PROJECT NOT MORE THAN 4' FEET INTO ANY REQUIRED SETBACK.
 - THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
 - ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE BUILDERS EXPENSE.
 - FOR LOT AREAS, EASEMENTS, OBLIGATIONS AND OTHER RELATED INFORMATION REFER TO PLAT No. 8061 AND ANY REVISION OR RESUBDIVISION PLATS OF THIS LOT.
 - PREVIOUS HOWARD COUNTY FILE NUMBERS: F-88-60, WP 88-43.
 - THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE LOT IS UNDER 40,000 S.F. IN AREA.
 - USE-IN-COMMON DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12 FEET (14 FT. SERVING MORE THAN ONE RESIDENCE)
 - SURFACE - 6 INCHES COMPACTED CRUSHER RUN BASE W/TAR & CHIP COATING
 - GEOMETRY - 15% GRADE MAX.; 10% MAX. GRADE CHANGE; 45 FOOT MIN. TURNING RADIUS
 - STRUCTURES (BRIDGES/CULVERTS) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOAD)
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
 - STRUCTURE CLEARANCE - MINIMUM 12 FEET
 - MAINTENANCE - SUFFICIENT TO ENSURE ALL-WEATHER USE
 - THIS PROJECT IS EXEMPT FROM THE LANDSCAPING REQUIREMENTS OF THE HOWARD COUNTY LANDSCAPING MANUAL BECAUSE THE RESUBDIVISION PLAT WAS APPROVED AND RECORDED PRIOR TO 1993.
 - THIS PLAN CONFORMS WITH THE 5th EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
 - INGRESS, EGRESS AND MAINTENANCE OF THE PRIVATE USE-IN-COMMON IS PURSUANT TO THE DECLARATION OF RIGHT OF ACCESS AND MAINTENANCE OBLIGATIONS RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MD AS LIBER 1851, FOLIO 217.
 - DRIVEWAYS SHALL BE INSTALLED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL R-6.60.
 - WATER PETITION, WP-88-43, GRANTED A REDUCTION IN THE REQUIRED MINIMUM ROAD FRONTAGE FROM 23 FEET TO 17.01 FEET FOR LOTS 22 AND 23.
 - LOT 23, BLOCK "B", IS TO CONTAIN A RAIN GARDEN TO ADDRESS SOME WATER QUALITY FOR THE LOT. THE OWNER OF LOT 23 IS TO MAINTAIN THIS FACILITY AND KEEP IT FUNCTIONING.

SITE DATA TABULATION THIS SUBMISSION

- GENERAL SITE DATA
 - PRESENT ZONING: R-20
 - APPLICABLE DPZ FILE REFERENCES: F-88-60, WP-88-43, PLAT 8061
 - DEED REF. LIBER 4157 FOLIO 518
 - PROPOSED USE OF SITE: SFD HOUSE
 - PROPOSED WATER AND SEWER SYSTEMS: PUBLIC WATER, PUBLIC SEWER
- AREA TABULATION
 - TOTAL AREA OF SITE: 23,394 S.F.±
 - AREA OF 100 YEAR FLOODPLAIN (APPROX.): 0.00 AC.
 - AREA OF STEEP SLOPES (25% OR GREATER): 0.00 AC.
 - NET AREA OF SITE: 23,394 S.F.±
 - AREA OF THIS PLAN SUBMISSION: 23,394 S.F.±
 - AREA OF PROPOSED BUILDABLE LOTS: 23,394 S.F.±
 - AREA OF PROPOSED PRESERVATION PARCELS: 0.00 AC.
 - AREA OF PROPOSED PUBLIC ROAD R/W: 0.00 AC.

LEGEND:



ADDRESS CHART

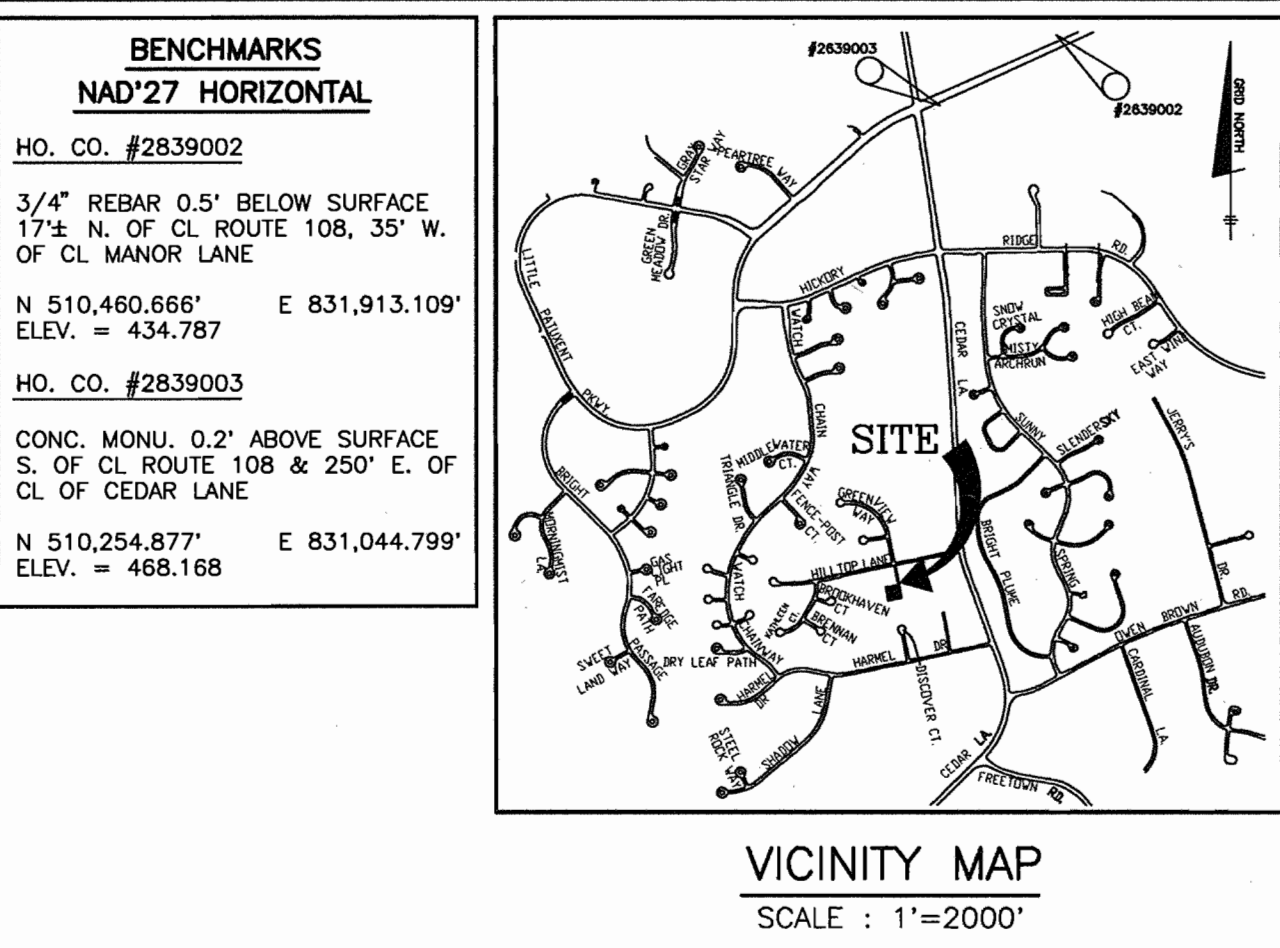
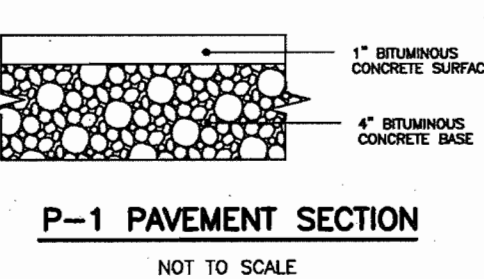
LOT NO.	STREET ADDRESS
LOT 23	10847 HILLTOP LANE

MINIMUM LOT SIZE CHART

LOT	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
23	23,394 S.F.	2,736 S.F.	20,658 S.F.

SHEET INDEX

1	SITE DEVELOPMENT PLAN
2	SEDIMENT AND EROSION CONTROL PLAN, NOTES & DETAILS
3	STORMWATER MANAGEMENT PLAN, NOTES AND DETAILS



PERMIT INFORMATION CHART

SUBDIVISION NAME: CEDAR ACRES		SECTION/AREA BLOCK "B"		LOT/PARCEL No. LOT 23, PARCEL No. 92	
PLAT# or L/F	GRID #	ZONING	TAX MAP No.	ELECT. DISTR.	CENSUS TRACT
8061	11	R-20	35	5th	6056.00
WATER CODE: E28			SEWER CODE: 5327300		

7/9/04 REVISE GRADING PER AS-BUILT CONDITIONS

BENCHMARK

ENGINEERS • LAND SURVEYORS • PLANNERS

ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-6644
 E-MAIL: benchmrk@cois.com

OWNER/BUILDER:	PROJECT:
C. KNUDSEN DEVELOPMENT, LLC 8455 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21043 PHONE: 410-465-2222	CEDAR ACRES LOT 23, BLOCK "B" SINGLE FAMILY DETACHED DWELLING
DESIGN: RPS/JMC/MCR	DRAFT: RPS/MCR
DATE: FEBRUARY, 2003	PROJECT NO. 1575
SCALE: AS SHOWN	DRAWING 1 OF 3

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

4/28/03
 DATE: 4/28/03
 DATE: 4/28/03
 DATE: 4/28/03

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR

SOILS LEGEND

MAP SYMBOL	SOIL GROUP	SOIL TYPE
MgB2	B	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MgC2	B	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
MIB2	B	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MID2	B	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED
MnD	B	MANOR VERY STONEY LOAM, 3 TO 25 PERCENT SLOPES

* INDICATES HYDRIC SOILS
 TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP No. 24