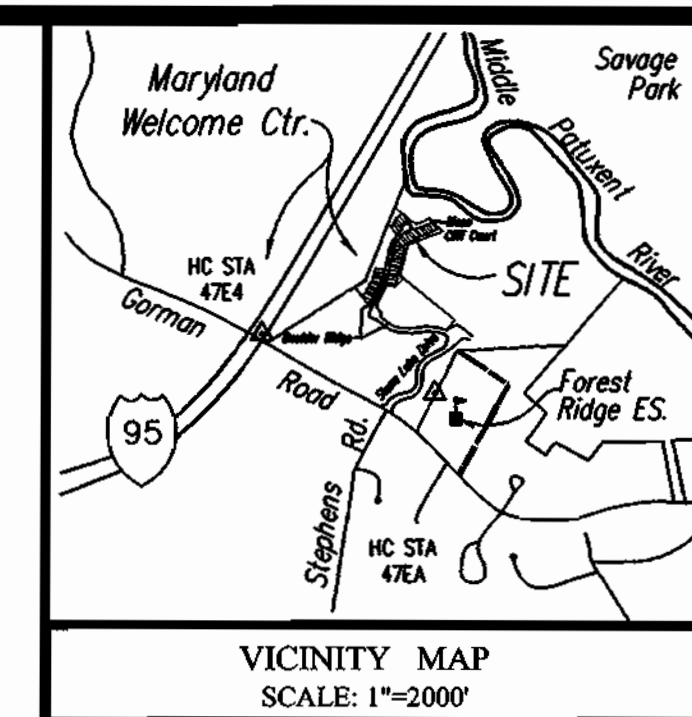


STONE LAKE

SITE DEVELOPMENT PLAN



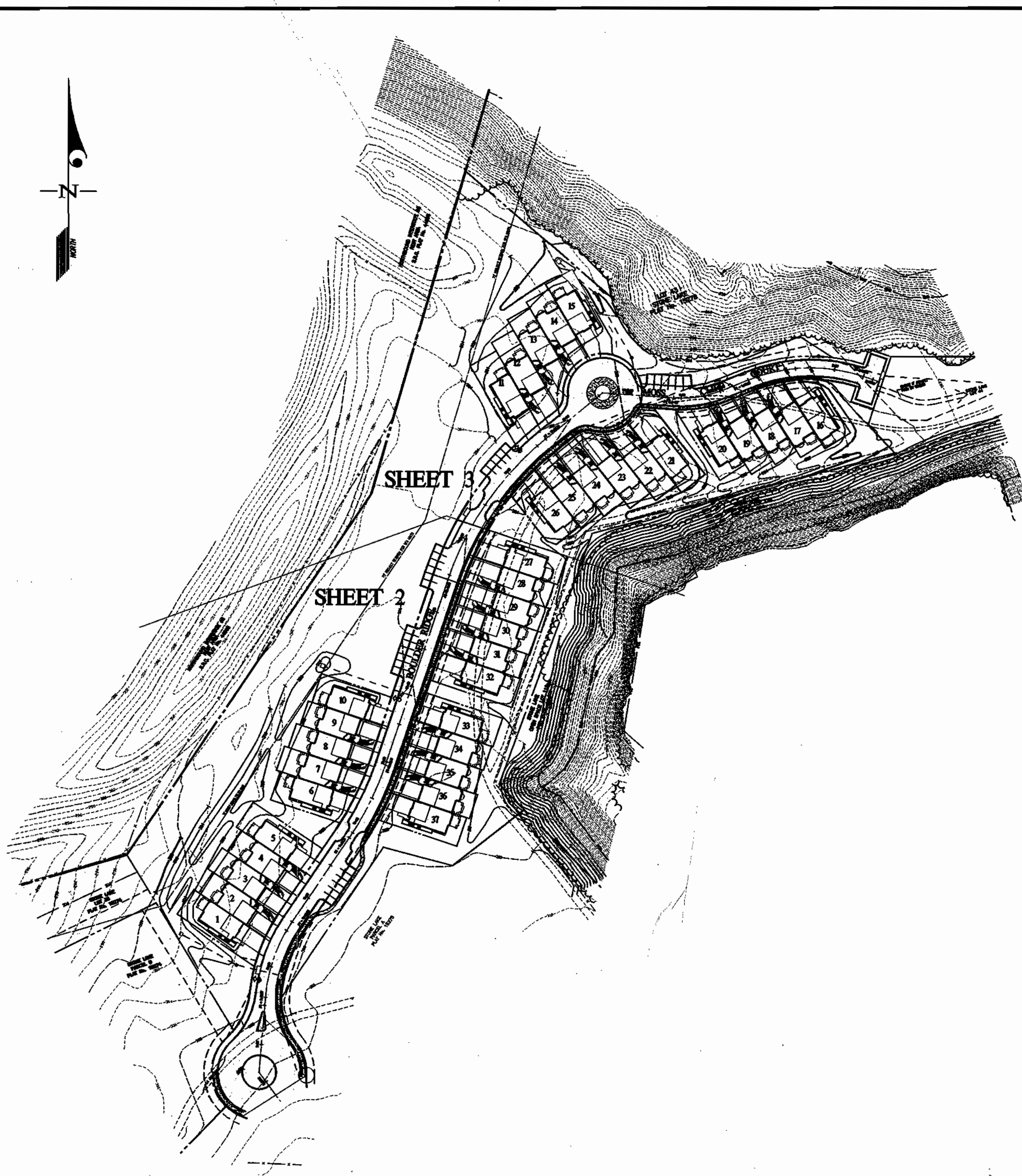
GENERAL NOTES

- 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 BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1888 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48-HOURS PRIOR TO ANY EXCAVATION WORK.
- PROJECT BACKGROUND:
LOCATION: TAX MAP #47, GRID 7
STONE LAKE
ZONING: R-ED
ELECTION DISTRICT: 67H
BUILDABLE LOT AREA: 3,002 AC. (LOTS 1-37)
OPEN SPACE AREA: 3,904 AC.
TOTAL AREA: 6,904 AC.
REC. REF.: PLAT NO. 15276 & 15277
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO THE FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULAR OR RADIIALLY BETWEEN ITEMS UNLESS OTHERWISE NOTED.
- EXISTING TOPOGRAPHY AND FEATURES WERE DERIVED FROM AERIAL PHOTOGRAPHY BY DWT, INCORPORATED & WALKER/SUMNER 1998 AND MASS GRADING INFORMATION FROM F-01-177.
- HORIZONTAL AND VERTICAL CONTROL BASED ON HOWARD COUNTY CONTROL STATIONS 47 EA & 47 EA.
- PUBLIC WATER AND SEWER IS TO BE UTILIZED (PATAPSCO DRAINAGE AREA). CONTRACT NO. 34-3947-D.
- STORMWATER MANAGEMENT IS PROVIDED BY A PRIVATE FACILITY UNDER F-01-177. THE PRIVATE STORMWATER MANAGEMENT, DRAINAGE AND UTILITY EASEMENT IS OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
- ALL STORM DRAINS SHOWN ARE PRIVATE AND ARE BUILT UNDER THE F-01-177 PLANS.
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM F-01-177 AND CONTRACT NO. 34-3947-D BUT THE CONTRACTOR MUST VERIFY THE EXACT LOCATION BY LOCATING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF CONSTRUCTION.
- BOTH THE NOISE AND TRAFFIC STUDIES WERE APPROVED AS PART OF SKETCH PLAN 5-00-13 APPROVED ON 10-10-2000.
- ANY DAMAGE TO COUNTY OWNED RIGHT-OF-WAY TO BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- OTHER HOWARD COUNTY FILES RELATED TO THIS SITE: S-00-13P-01-15PB-34S, WP-01-88, WP-00-126, WP-01-80, WP-01-94, F-01-177 AND CONTRACT # 34-3947-D.
- FOREST CONSERVATION FOR THIS SITE IS PROVIDED UNDER F-01-177. THE EASEMENT ESTABLISHED UNDER THE F-PLAN FOR THE SUBDIVISION IS OFF THE SITE AND IS A RETENTION AREA.
- FOR DRIVEWAY APRON, SEE HOWARD COUNTY STANDARD DETAIL, No R-6.03 AND R-6.05.
- LANDSCAPING AND REQUIRED STREET TREES SHALL BE IN ACCORDANCE WITH THE APPROVED ROAD CONSTRUCTION DRAWING, F-01-177. SURETY FOR THE LANDSCAPING OF THE LOTS AND PARKING AREAS IN THE AMOUNT OF \$12,000 SHALL BE PAID AT TIME OF GRADING PERMIT APPLICATION.
- BENCH MARKS/CONTROL STATIONS: MATA-H 530835LBY E 1372831889 EL=315.28 AND MATA-H 530835LBY E 1372830989 EL=338.91
- 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.
- WP-01-60
JANUARY 16, 2000, WAIVER OF SECTION 16.120(c)(2), TO PERMIT LOTS WITHOUT PUBLIC ROAD FRONTAGE, AND 16.120(c)(4), TO PERMIT THE LENGTH OF A PRIVATE ROAD TO EXCEED 200 FEET FOR 54 UNITS, WAS GRANTED.
- BOULDER RIDGE AND MOSS CLIFF COURT ARE PRIVATE ROADS AND SHALL BE MAINTAINED BY THE HOA.
- SEWER CLEANOUTS SHALL BE FLUSH WITH PROPOSED DRIVEWAY SURFACE. IF A CONCRETE DRIVEWAY IS TO BE UTILIZED, PROVIDE A 12-INCH BY 12-INCH REINFORCED CONCRETE PANEL AROUND THE CLEANOUT WITH EXPANSION JOINT MATERIAL AS APPROPRIATE. IF IN THE FUTURE, CLEANOUT IS PAVED OVER, DPW WILL NOT BE RESPONSIBLE FOR DAMAGE TO DRIVEWAY WHEN ACCESSING CLEANOUT.
- THE STRUCTURE SETBACK LINE IS A SLOPE SETBACK LINE AS DETERMINED IN A REPORT BY THE ROBERT B. BALTER CO. THIS STRUCTURE SETBACK LINE ESTABLISHES AN ADDITIONAL SETBACK FROM THE LOT LINE OF PARCEL A. NO STRUCTURES ARE TO BE CONSTRUCTED BEYOND THIS LINE DUE TO THE SLOPE STABILITY AS DEFINED BY THE BALTER COMPANY REPORT.

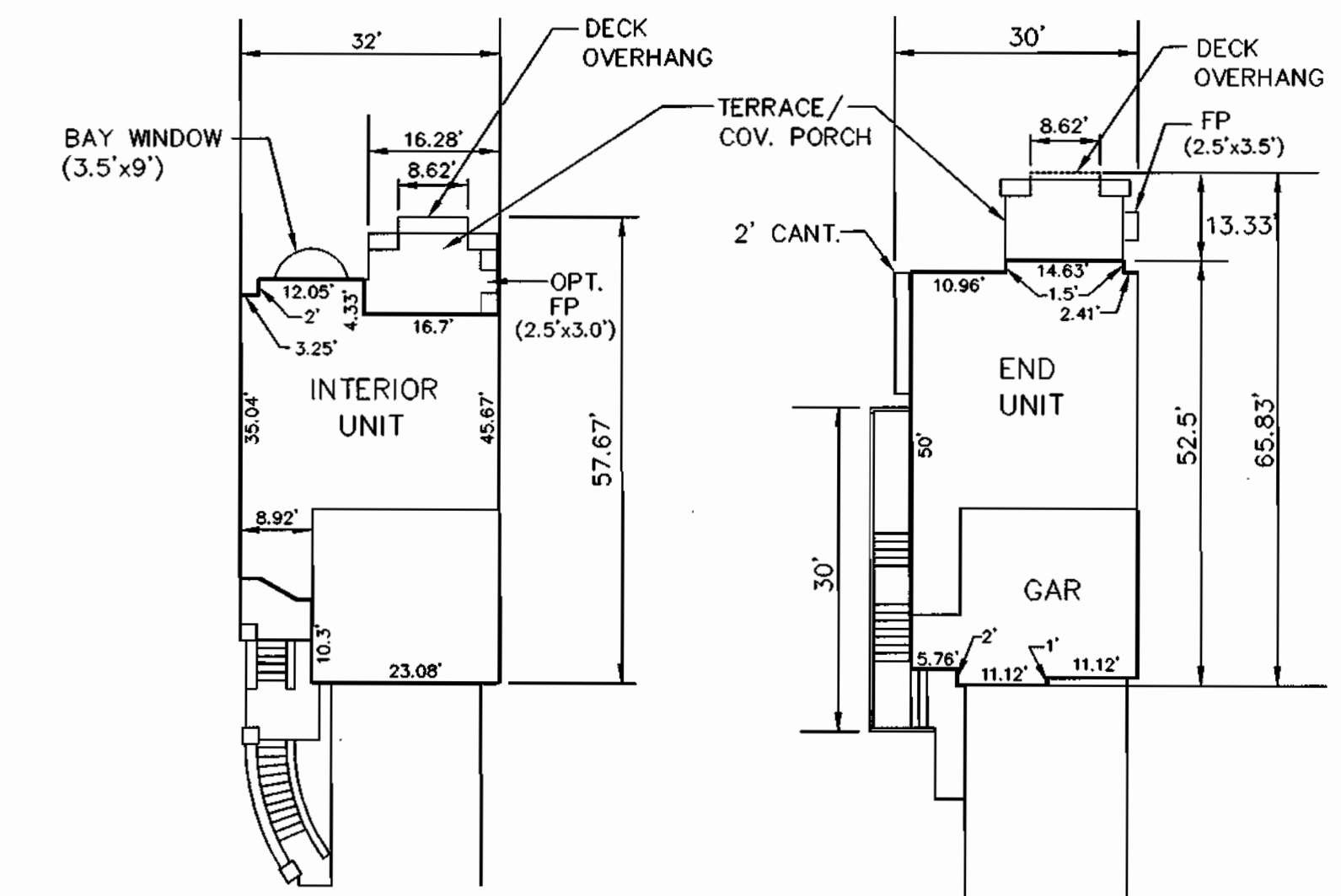
SITE ANALYSIS

- GENERAL SITE DATA
A. PRESENT ZONING: R-ED
B. PROPOSED USE FOR SITE AND STRUCTURE: SINGLE FAMILY ATTACHED
- AREA TABULATION
A. SITE AREA: 3,004 FOR 37 BUILDABLE LOTS
3,904 FOR 1 OPEN SPACE AREA
B. AREA OF PLAN SUBMISSION: 6,904 AC.
C. LIMIT OF DISTURBANCE: 5,054 AC.
- PARKING TABULATION:
A. PARKING REQUIRED: 74 (2 SPACES PER UNIT)
B. PARKING PROVIDED: 37 GARAGE SPACES
37 DRIVEWAY SPACES
30 (9' X 18' COMMON SURFACE SPACES)
104 TOTAL SPACES (2.8 SF/UNIT)

ADDRESS CHART	
LOT #	STREET ADDRESS
1	8749 BOULDER RIDGE
2	8751 BOULDER RIDGE
3	8753 BOULDER RIDGE
4	8755 BOULDER RIDGE
5	8757 BOULDER RIDGE
6	8761 BOULDER RIDGE
7	8763 BOULDER RIDGE
8	8765 BOULDER RIDGE
9	8767 BOULDER RIDGE
10	8769 BOULDER RIDGE
11	8791 BOULDER RIDGE
12	8793 BOULDER RIDGE
13	8795 BOULDER RIDGE
14	8797 BOULDER RIDGE
15	8799 BOULDER RIDGE
16	9010 MOSS CLIFF COURT
17	9008 MOSS CLIFF COURT
18	9006 MOSS CLIFF COURT
19	9004 MOSS CLIFF COURT
20	9002 MOSS CLIFF COURT
21	9000 MOSS CLIFF COURT/ 8798 BOULDER RIDGE
22	8796 BOULDER RIDGE
23	8794 BOULDER RIDGE
24	8792 BOULDER RIDGE
25	8790 BOULDER RIDGE
26	8788 BOULDER RIDGE
27	8784 BOULDER RIDGE
28	8782 BOULDER RIDGE
29	8780 BOULDER RIDGE
30	8778 BOULDER RIDGE
31	8776 BOULDER RIDGE
32	8774 BOULDER RIDGE
33	8770 BOULDER RIDGE
34	8768 BOULDER RIDGE
35	8766 BOULDER RIDGE
36	8764 BOULDER RIDGE
37	8762 BOULDER RIDGE



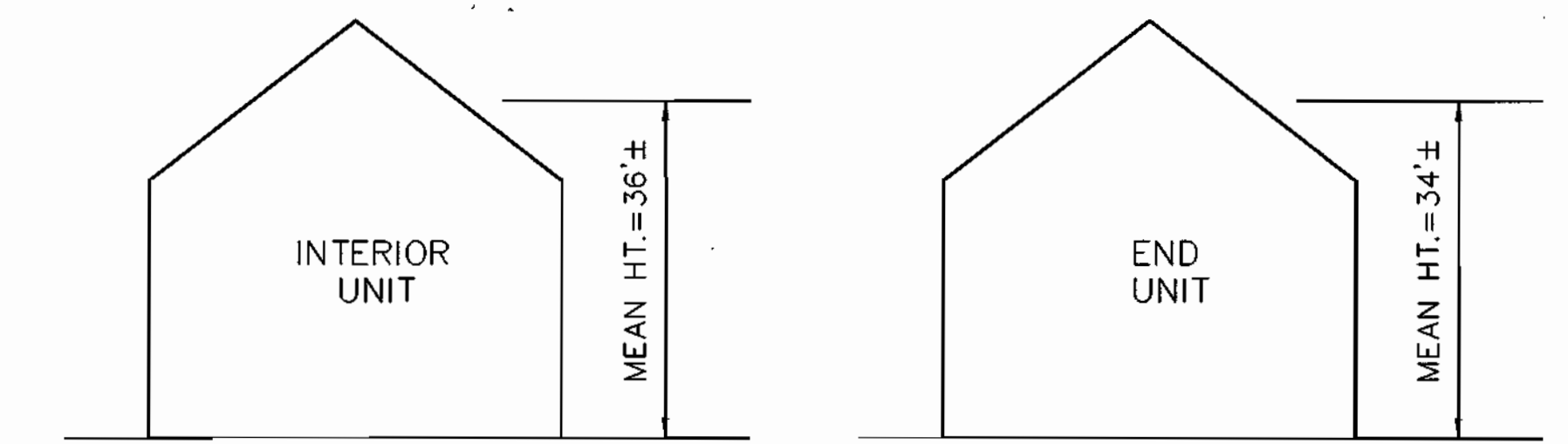
KEY MAP
SCALE: 1"=100'



TYPICAL HOUSE TYPES
SCALE: 1/8"=1'-0"

INTERIOR UNIT:
LOT COVERAGE= 1,846 SF
MIN. LOT SIZE= 3,076 SF
(REQ'D. FOR 60% MAX. LOT COVG.)
SMALLEST LOT SIZE: 3,077 SF

END UNIT:
LOT COVERAGE= 1,836 SF
MIN. LOT SIZE= 3,060 SF
(REQ'D. FOR 60% MAX. LOT COVG.)
SMALLEST LOT SIZE: 3,448 SF



SHEET INDEX

SHEET NO.	TITLE
1	COVER SHEET & HOUSE MODEL DETAILS
2	SITE DEVELOPMENT PLAN
3	SITE DEVELOPMENT PLAN
4	SEDIMENT AND EROSION PLAN
5	SEDIMENT AND EROSION PLAN/NOTES AND DETAILS
6	SEDIMENT AND EROSION NOTES AND DETAILS
7	LANDSCAPE PLAN
8	LANDSCAPE PLAN
9	LANDSCAPE NOTES AND DETAILS



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] Date: 5/17/02
 [Signature] Date: 5/14/02
 Chief, Division of Planning and Development
 [Signature] Date: 5/16/02
 Chief, Development Engineering Division

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR:
 OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATRIENT PKWY.
 COLUMBIA, MD 21044-3455
 CONTRACT PURCHASER:
 MILLER AND SMITH
 1568 SPRING HILL ROAD #200
 McLEAN, VA 22102

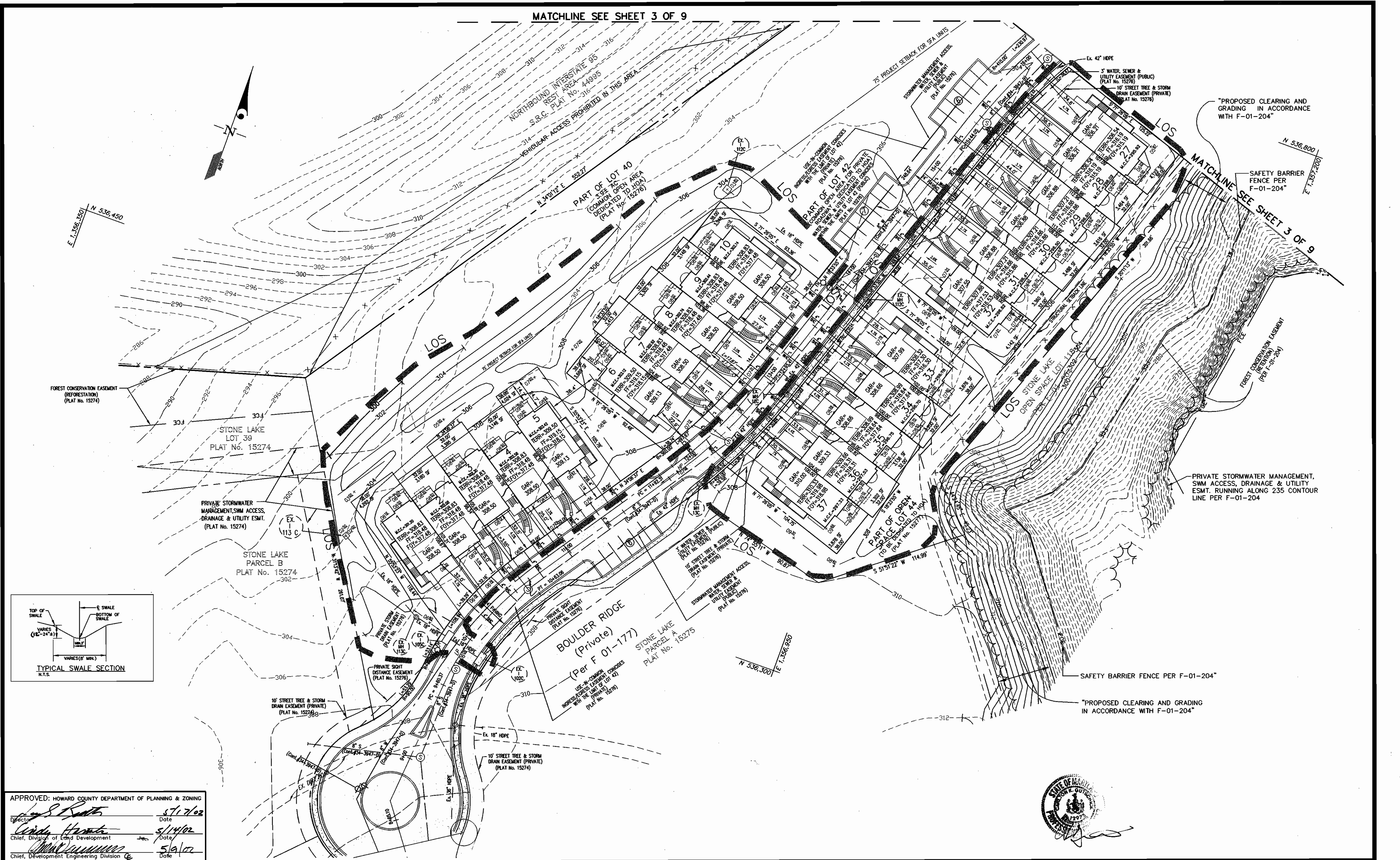
COVER SHEET
STONE LAKE
 LOTS 1 THRU 37 AND OPEN AREA LOT 40
 PLAT No. 15276 & 15277

PLAT #	BLK	ZONING	TAX MAP	REC. DIST.	ORDER IN
15276	9 & 10	R-ED	47	6	6069.02

SCALE	ZONING	G. L. W. FILE No.
1"=100'	R-ED	01-029
DATE	TAX MAP - GRID	SHEET
24/APRIL/02	47 7	1 of 9

ELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: *[Signature]* Date: 5/17/02
 Chief, Division of Land Development: *[Signature]* Date: 5/14/02
 Chief, Development Engineering Division: *[Signature]* Date: 5/9/02

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3009 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
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 TEL: 301-421-4024 BAL: 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186

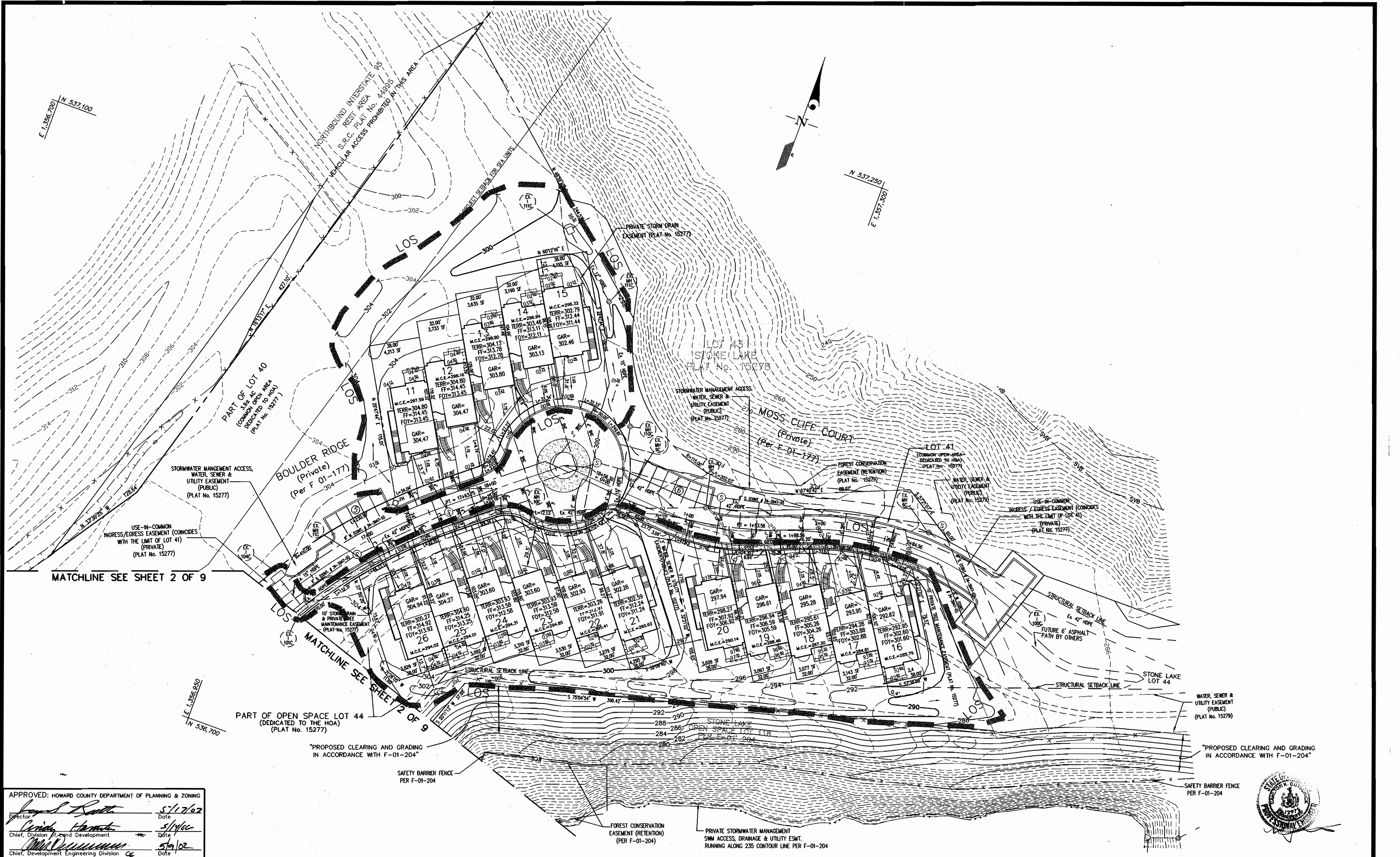
NO.	DATE	REVISION	BY	APPR.

PREPARED FOR:
 OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATENT PIKE, COLUMBIA, MD 21044-3456
 CONTRACT PURCHASER: MILLER AND SMITH
 1568 SPRING HILL ROAD #200, WAKEHAVEN, VA 22102

SITE DEVELOPMENT PLAN
STONE LAKE
LOTS 1 THRU 37 AND OPEN AREA LOT 40
 PLAT No. 15274 & 15277
 ELECTION DISTRICT No. 6
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 30'	R-ED	01-029
DATE	TAX MAP - GRID	SHEET
24/APRIL/02	47 7	2 of 9





APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 5/17/02

Chief, Division of Land Development: *[Signature]* Date: 5/17/02

Chief, Development Engineering Division: *[Signature]* Date: 5/9/02

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20886
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DRRAWINGS\01029\DESIGN\010295F3 DES. HKJ DRN. HKJ CHK. HKJ DATE REVISION BY APPR.

DATE	REVISION	BY	APPR.

OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATENTMENT PIWAY, COLUMBIA, MD 21044-3436

PREPARED FOR: MILLER AND SMITH
 1568 SPRING HILL ROAD #200
 McLEAN, VA 22102

SITE DEVELOPMENT PLAN
STONE LAKE
LOTS 1 THRU 37 AND OPEN AREA LOT 40
PLAT NO. 15276 & 15277

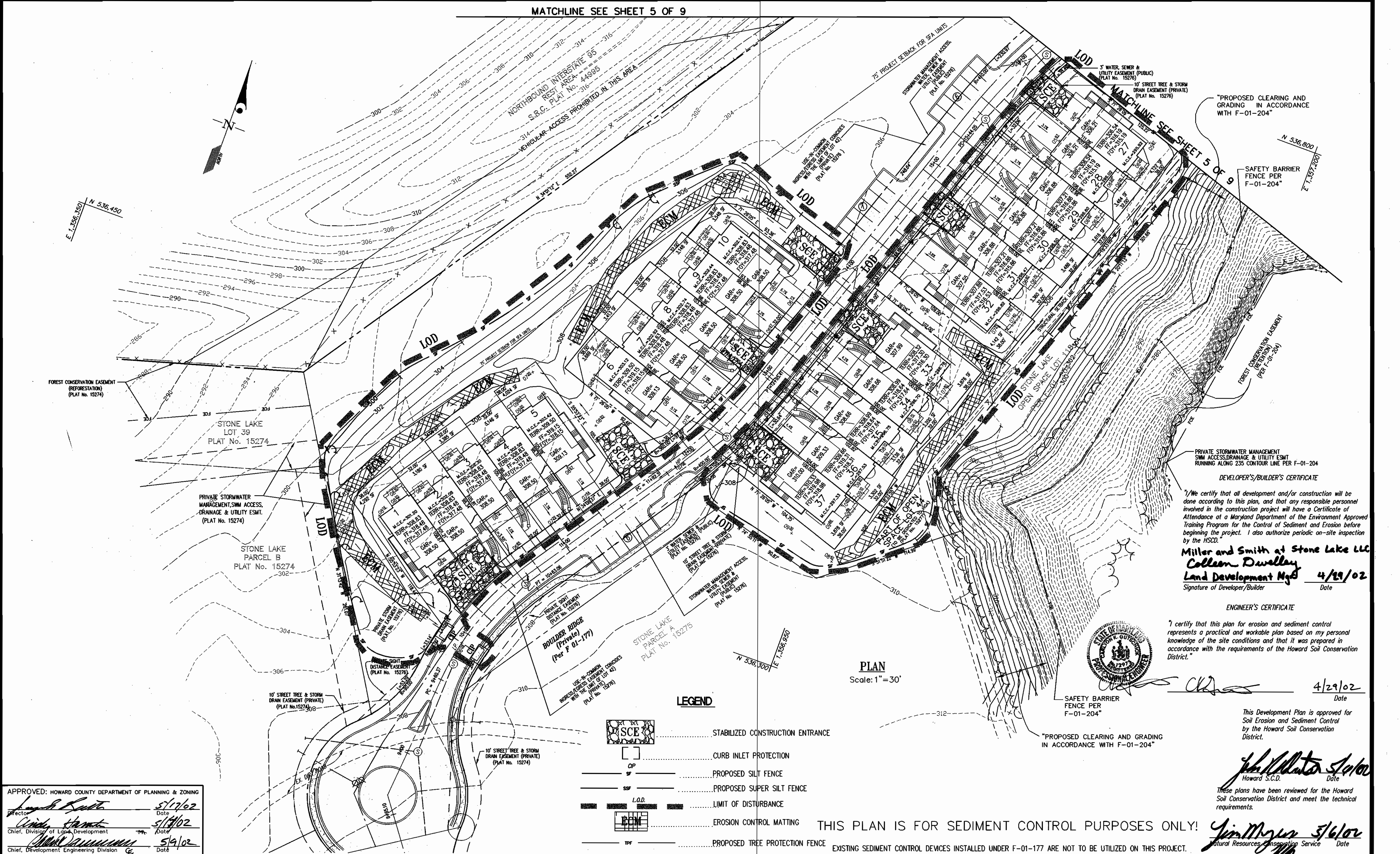
ELECTION DISTRICT No. 6

SCALE	ZONING	G. L. W. FILE No.
1"=30'	R-ED	01-029
DATE	TAX MAP - GRID	SHEET
24/APRIL/02	47 7	3 of 9

HOWARD COUNTY, MARYLAND



MATCHLINE SEE SHEET 5 OF 9



"PROPOSED CLEARING AND GRADING IN ACCORDANCE WITH F-01-204"

SAFETY BARRIER FENCE PER F-01-204"

PRIVATE STORMWATER MANAGEMENT SWM ACCESS, DRAINAGE & UTILITY ESMT. RUNNING ALONG 235 CONTOUR LINE PER F-01-204

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or 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 Maryland 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 HSCD."

Miller and Smith at Stone Lake LLC
Coleen Dwevelly
Land Development Mgr
Signature of Developer/Builder
4/29/02
Date

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 Howard Soil Conservation District."



Signature of Engineer
4/29/02
Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

Signature of Approving Authority
Howard S.C.D.
Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Signature of Approving Authority
Natural Resources Conservation Service
Date

PLAN
Scale: 1"=30'

LEGEND

- STABILIZED CONSTRUCTION ENTRANCE
- CURB INLET PROTECTION
- PROPOSED SILT FENCE
- PROPOSED SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- EROSION CONTROL MATTING
- PROPOSED TREE PROTECTION FENCE

THIS PLAN IS FOR SEDIMENT CONTROL PURPOSES ONLY!

EXISTING SEDIMENT CONTROL DEVICES INSTALLED UNDER F-01-177 ARE NOT TO BE UTILIZED ON THIS PROJECT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* 5/19/02
Date

Chief, Division of Land Development: *[Signature]* 5/19/02
Date

Chief, Development Engineering Division: *[Signature]* 5/19/02
Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:

OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATRIOT PKWY.
COLUMBIA, MD 21044-3436

CONTRACT PURCHASER: MILLER AND SMITH
1568 SPRING HILL ROAD #200
MCLEAN, VA 22102

SEDIMENT AND EROSION PLAN

STONE LAKE
LOTS 1 THRU 37 AND OPEN AREA LOT 40
PLAT No. 15276 & 15277

ELECTION DISTRICT No. 6

SCALE	ZONING	G. L. W. FILE No.
1"=30'	R-ED	01-029
DATE	TAX MAP - GRID	SHEET
24/APRIL/02	47 7	4 of 9

DEVELOPER'S/BUILDER'S CERTIFICATE

"I certify that all development and/or 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 Maryland 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 HSCD."

Miller and Smith at Stone Lake LLC
 Colleen Duvellay
 Land Development Mgr. 4/29/02
 Signature of Developer/Builder Date

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 Howard Soil Conservation District."

Jim Myers 4-29-02
 Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

John Miller 4/29/02
 Howard S.C.D. Date

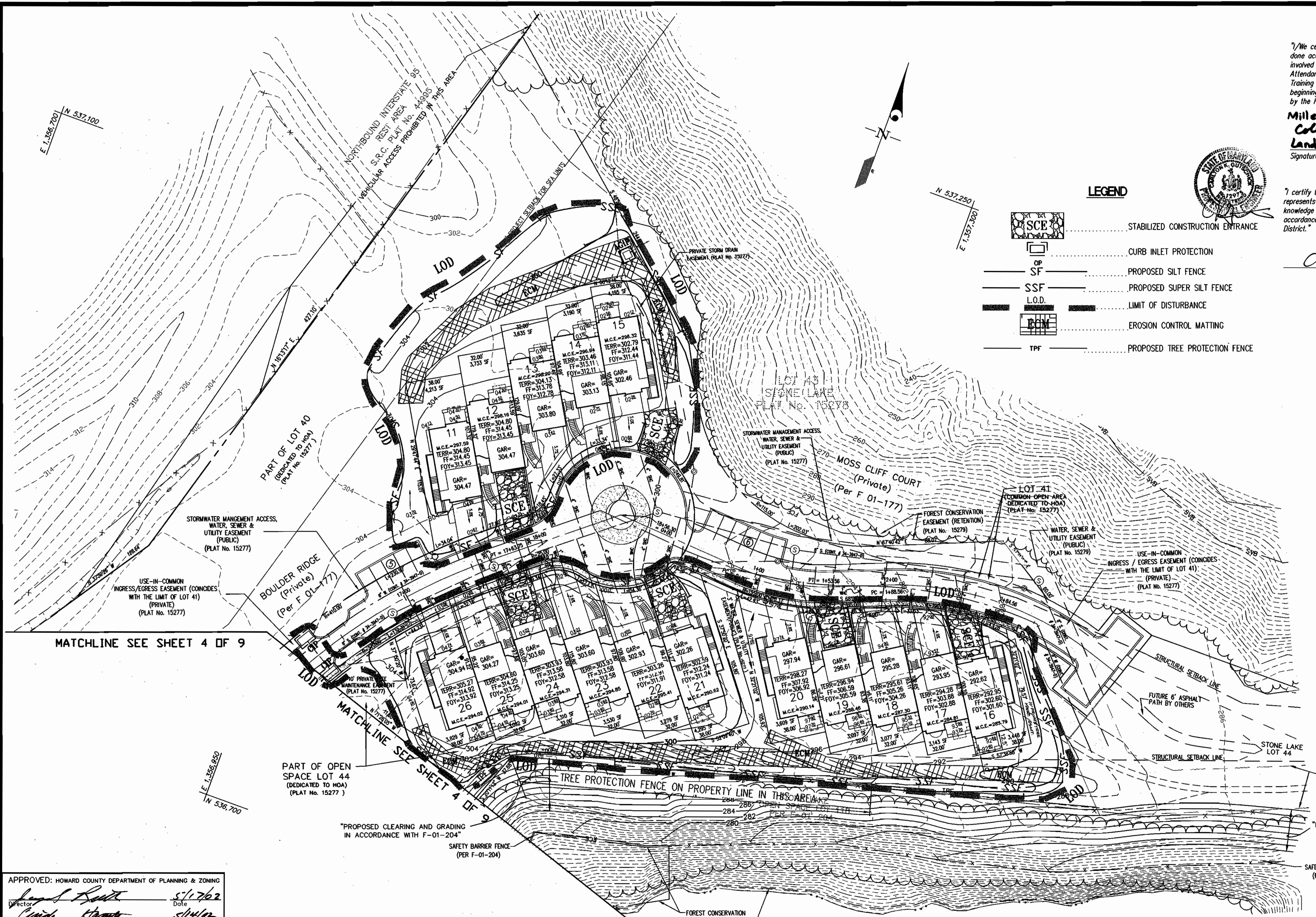
These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Jim Myers 4/29/02
 Natural Resources Conservation Service Date



LEGEND

- SCE STABILIZED CONSTRUCTION ENTRANCE
- CIP CURB INLET PROTECTION
- SF PROPOSED SILT FENCE
- SSF PROPOSED SUPER SILT FENCE
- L.O.D. LIMIT OF DISTURBANCE
- ECM EROSION CONTROL MATTING
- TPF PROPOSED TREE PROTECTION FENCE



MATCHLINE SEE SHEET 4 OF 9

"PROPOSED CLEARING AND GRADING IN ACCORDANCE WITH F-01-204"

"PROPOSED CLEARING AND GRADING IN ACCORDANCE WITH F-01-204"

THIS PLAN IS FOR SEDIMENT CONTROL PURPOSES ONLY!
 EXISTING SEDIMENT CONTROL DEVICES INSTALLED UNDER F-01-177 ARE NOT TO BE UTILIZED ON THIS PROJECT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: *Joseph Smith* 5/17/02
 Chief, Division of Land Development: *Colleen Duvellay* 5/14/02
 Chief, Development Engineering Division: *Jim Myers* 5/6/02

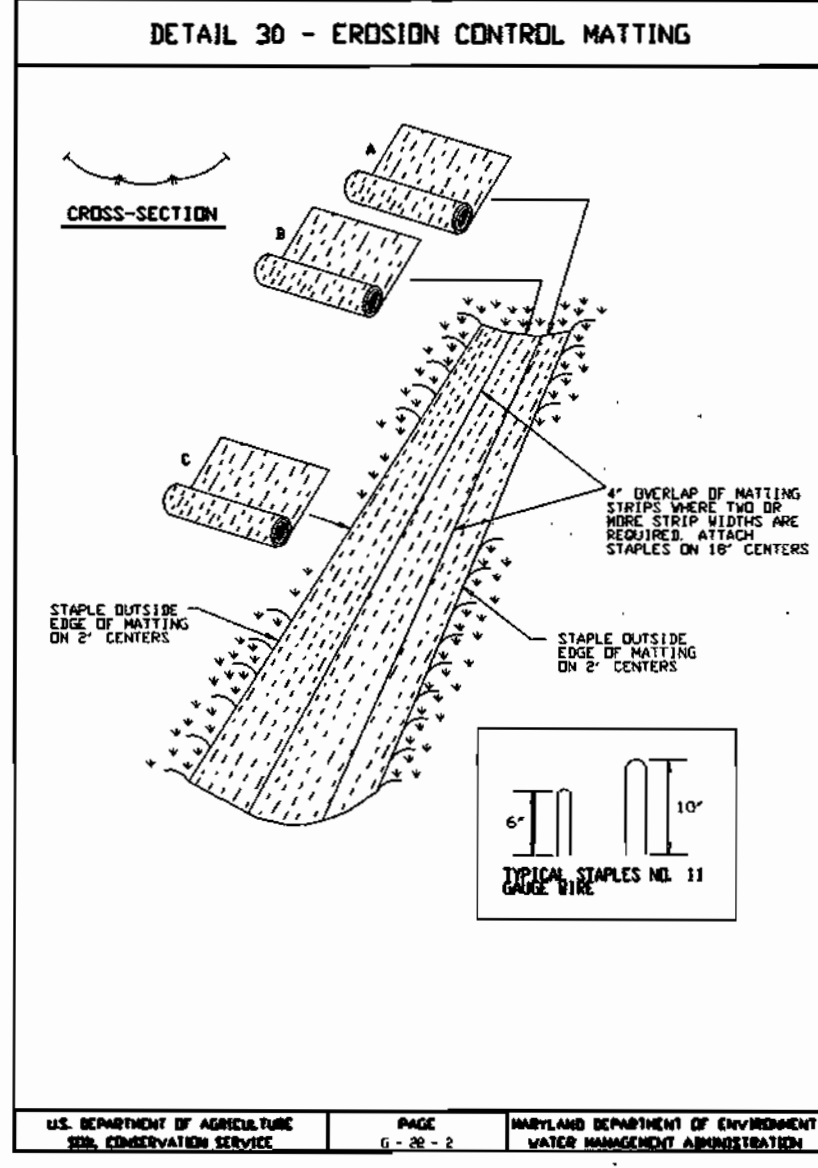
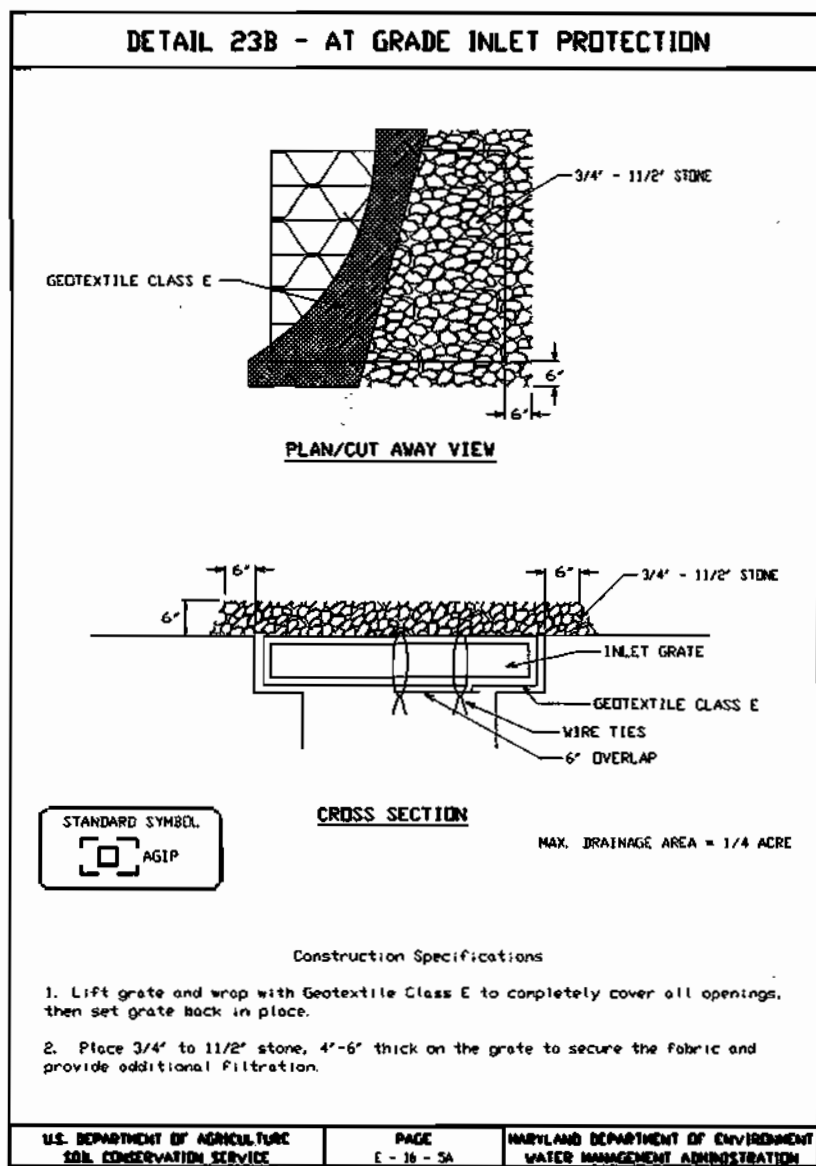
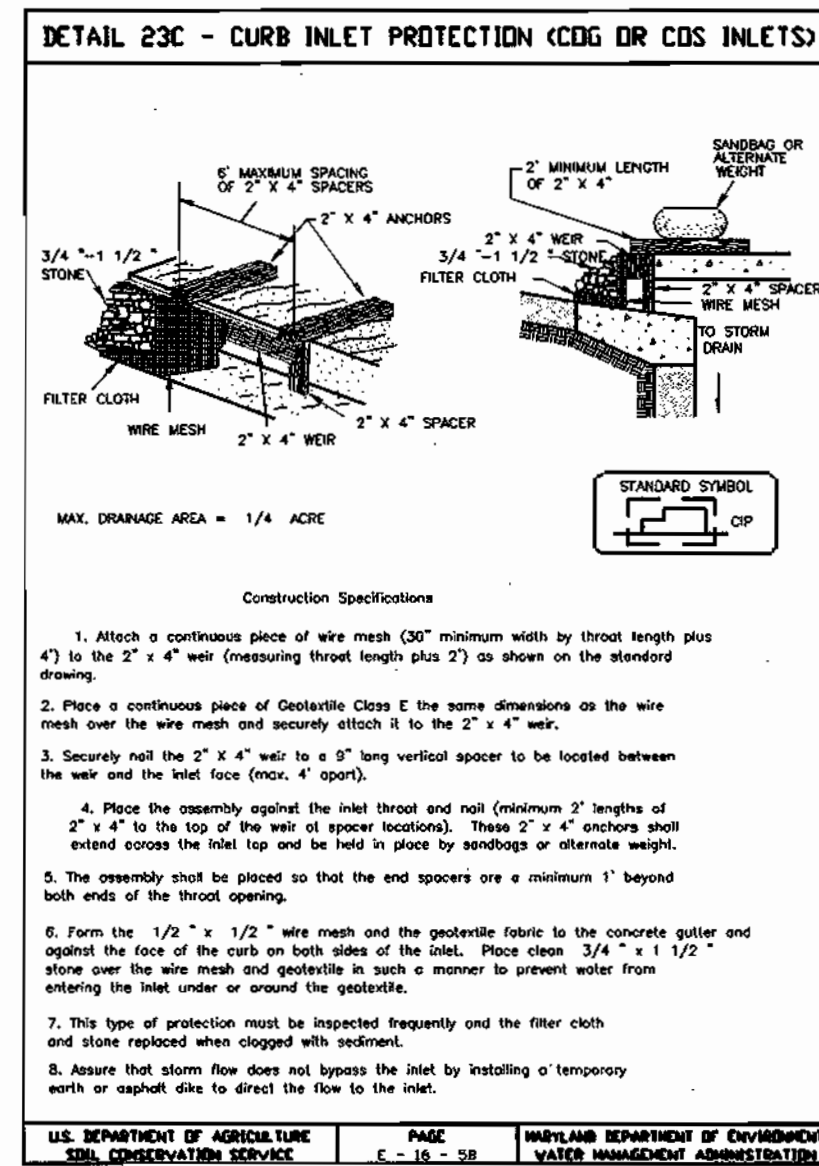
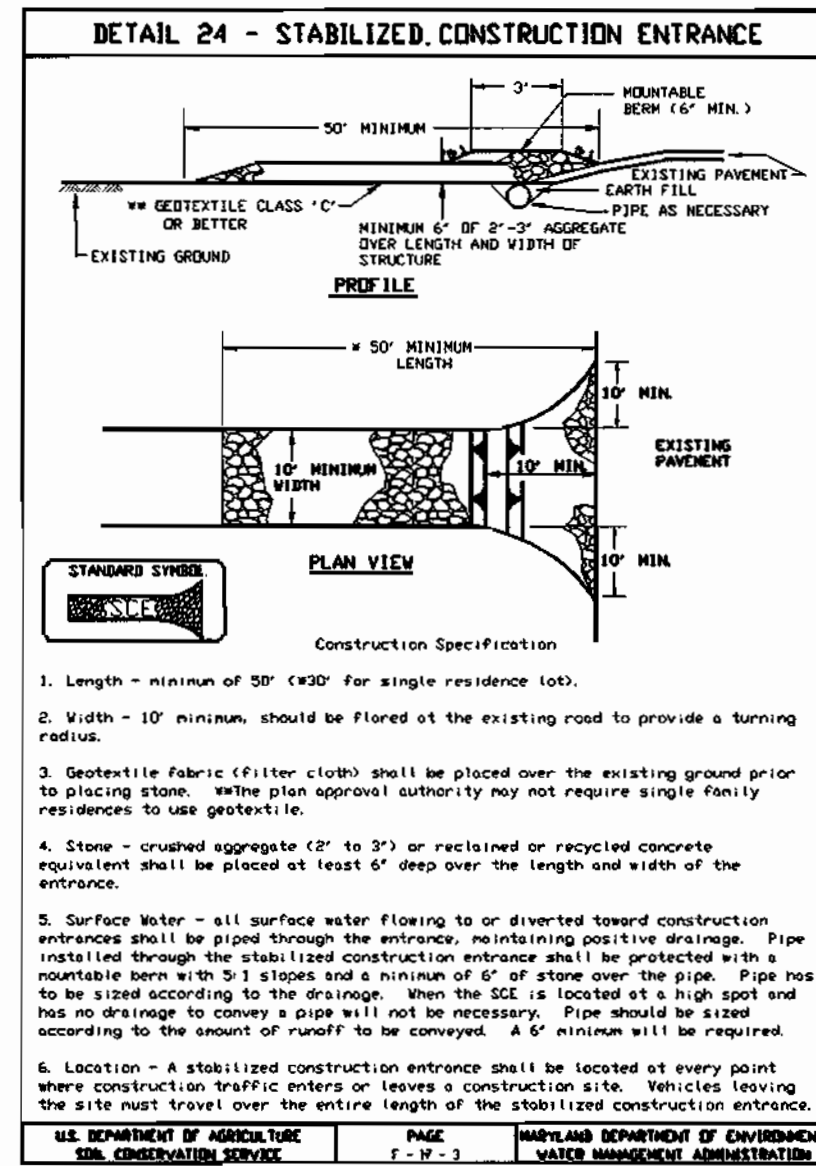
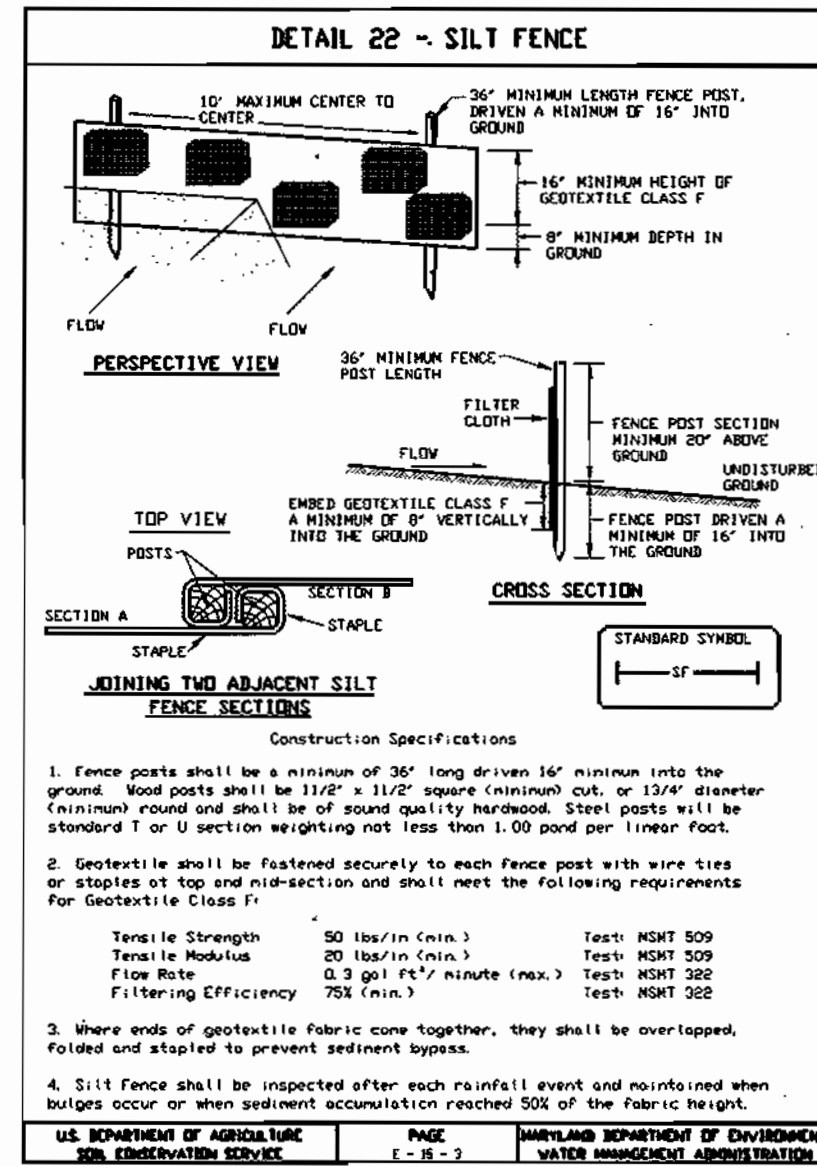
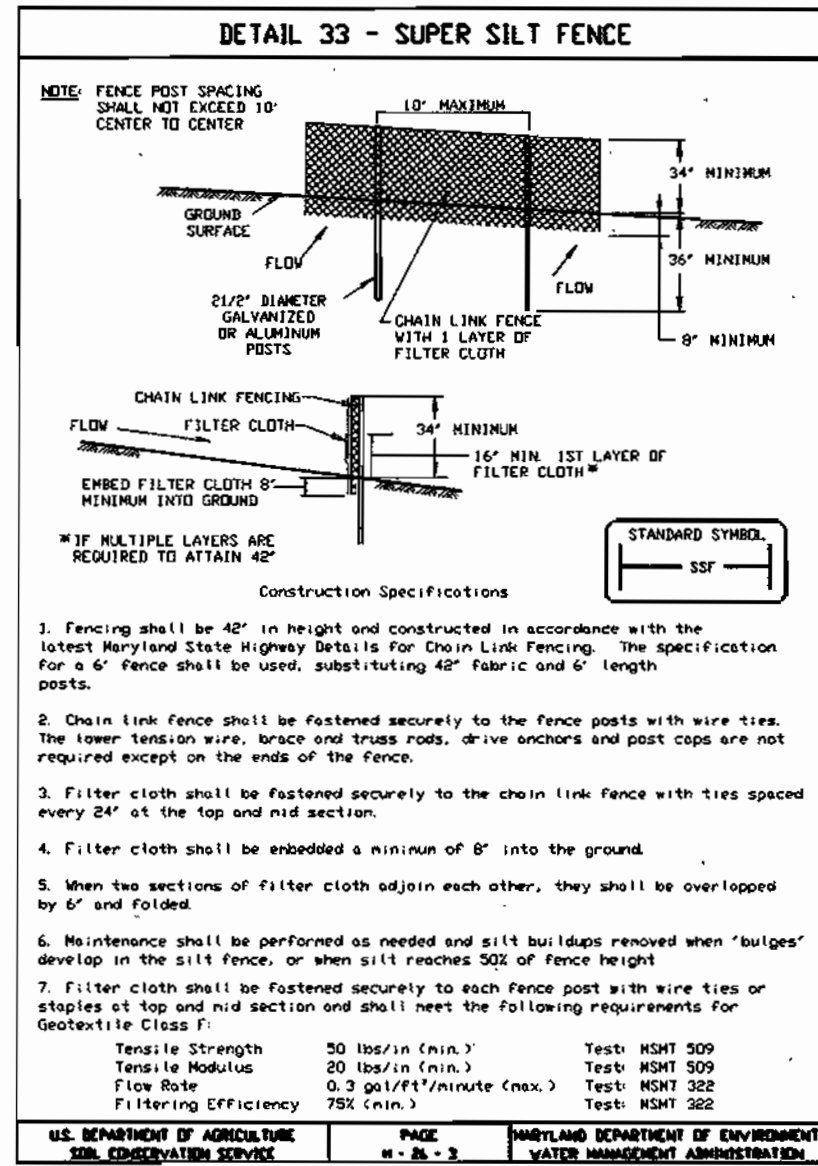
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 BURTONSVILLE, MARYLAND 20886
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR:
 OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATENT PIKE, COLUMBIA, MD 21044-3456
 CONTRACT PURCHASER: MILLER AND SMITH
 1568 SPRING HILL ROAD #200
 WASHINGTON, VA 22102

SEDIMENT AND EROSION PLAN
STONE LAKE
 LOTS 1 THRU 37 AND OPEN AREA LOT 40
 PLAT No. 15276 & 15277
 ELECTION DISTRICT No. 6
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 30'	R-ED	01-029
DATE	TAX MAP - GRID	SHEET
24/APRIL/02	47 7	5 of 9



SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT AND ARRANGE FOR PRE-CONSTRUCTION MEETING WITH SEDIMENT CONTROL INSPECTOR. (1 DAY)
2. INSTALL STABILIZED CONSTRUCTION ENTRANCES, SILT FENCE/SUPER SILT FENCE AND CURB INLET PROTECTION. (2 WEEKS)
3. FINE GRADE SITE. (1 MONTH)
4. BEGIN CONSTRUCTION OF TOWNHOUSE UNITS. (8 MONTHS)
5. STABILIZE ANY AREAS NO LONGER BEING DISTURBED, INSTALL SIDEWALKS AND DRIVEWAYS. (1 MONTH)
6. INSTALL LANDSCAPING AND STABILIZE REMAINING AREAS WITH SOD OR GRASS SEED AND MULCH. (2 WEEKS)
7. WHEN AREA DRAINING TO SEDIMENT CONTROLS HAVE BEEN STABILIZED AND PERMISSION HAS BEEN GRANTED BY THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES. (2 WEEKS)
8. END CONSTRUCTION

Dust Control

Definition
Controlling dust blowing and movement on construction sites and roads.

Purpose
To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

Conditions Where Practice Applies
This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Specifications

Temporary Methods

1. Mulches - See standards for vegetative stabilization with mulches only. mulch should be crimped or tacked to prevent blowing.
2. Vegetative Cover - See standards for temporary vegetative cover.
3. 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 spaced about 12' apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
4. 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.
5. Barriers - Solid board fences, silt fences, snow fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angle to prevailing currents at intervals at about ten times their height are effective in controlling soil blowing.
6. Calcium Chloride - Apply at rates that will keep surface moist. May need treatment.

Permanent Methods

1. Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.
2. Topsoiling - Covering with less erosive soil material. See standards for top soil.
3. Stone - Cover surface with crushed stone or gravel.

References

1. Agriculture Handbook 346. Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss.
2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA, ARS.

PERMANENT SEEDING NOTES

Apply to graded or cleared area 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, discing or other acceptable means before seeding (unless previously loosened).

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (82 lbs/1000 square feet) and 800 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc 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 (82 lbs/1000 square feet) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc 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 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 unrattled 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 seeded areas and make needed repairs, replacements and reseedings.

SEDIMENT CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (410) 313-1855.
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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes and perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4. 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.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1993 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec. 6). Temporary stabilization, with mulch alone, can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. 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	6.90 Acres±
Area Disturbed	5.05 Acres±
Area to be roofed or paved	2.13 Acres±
Area to be vegetatively stabilized	2.92 Acres±
Total Cut	3,000 Cu. Yds.±
Total Fill	3,000 Cu. Yds.±
Off-site waste/borrow area location:	N/A
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
10. 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.
11. Trenches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized within one working day, whichever is shorter.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless 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 ryegrass (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 unrattled, weed-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 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

STANDARD AND SPECIFICATIONS FOR TOPSOIL DEFINITION

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

PURPOSE

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

CONDITIONS WHERE PRACTICE APPLIES

- I. This practice is limited to areas having 2:1 or flatter slopes where:
 - a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - c. The original soil to be vegetated contains material toxic to plant growth.
 - d. The soil is so acidic that treatment with limestone is not feasible.
- II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- i. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the respective soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
- ii. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
- iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- iv. For sites having disturbed areas under 5 acres:
 - i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- v. For sites having disturbed areas over 5 acres:
 - i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - b. Organic content of topsoil shall be not less than 1.5 percent by weight.
 - c. Topsoil having soluble salt greater than 500 parts per mill shall not be used.
 - d. No sod or seed shall be placed on soil which has been with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of photo-toxic materials.
 - ii. Place topsoil (if required) and apply soil amendments as specified in 2.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- vi. Topsoil Application
 - i. When topsoiling, maintain needed erosion and sediment control practices such as diversion, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.

- ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4'-8" higher in elevation.
- iii. Topsoil shall be uniformly distributed in a 4'-8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that 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.
- iv. Topsoil shall not be placed while the topsoil or subsoil is frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.
- v. 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:
 - i. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - b. 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.
 - c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - d. Composted sludge shall be amended with a potassium fertilizer applied at a rate of 4lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding, MD-VA Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
SOIL CONSERVATION DISTRICT

CKG 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 Howard Soil Conservation District."

CKG 4/23/02
Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or 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 Maryland 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 HSCD."

Miller and Smith at Stone Lake LLC
Colleen Dwelley
Land Development Mgt. 4/19/02
Signature of Developer/Builder Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Jim Meyer 5/16/02
Natural Resources Conservationist Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

John Hunter 5/16/02
Howard S.C.D. Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Carolyn Hantz 5/17/02 Date
Chief, Division of Land Development

John Hunter 5/16/02 Date
Chief, Development Engineering Division

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 FAX: 410-980-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR:

OWNER
HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATENTMENT PKWY.
COLUMBIA, MD 21044-3456

CONTRACT PURCHASER
MILLER AND SMITH
1568 SPRING HILL ROAD #200
MCLEAN, VA 22102

SEDIMENT AND EROSION NOTES AND DETAILS

STONE LAKE
LOTS 1 THRU 37 AND OPEN AREA LOT 40
PLAT No. 15276 & 15277

ELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
NO SCALE	R-ED	01-029
DATE	TAX MAP - GRID	SHEET
04/APRIL/02	47 7	6 of 9

MATCHLINE SEE SHEET 8 OF 9

STORMWATER MANAGEMENT ACCESS, WATER, SEWER & UTILITY EASEMENT (PRIVATE) (PLAT No. 15276)
 USE IN COMMON INGRESS/ EGRESS EASEMENT (COINCIDES WITH THE LIMIT OF LOT 42) (PRIVATE) (PLAT No. 15276)
 3' WATER, SEWER & UTILITY EASEMENT (PUBLIC) (PLAT No. 15276)
 10' STREET TREE & STORM DRAIN EASEMENT (PRIVATE) (PLAT No. 15276)

MATCHLINE SEE SHEET 8 OF 9

"PROPOSED CLEARING AND GRADING IN ACCORDANCE WITH F-01-204"

FOREST CONSERVATION EASEMENT (RETENTION) (PLAT No. 15278)

"PROPOSED CLEARING AND GRADING IN ACCORDANCE WITH F-01-204"

STREET TREES PROVIDED UNDER F-01-177

NOTE: DISTURBANCE OF ANY SHRUBS IN THE W&S EASEMENT AREA BY DPW - BUREAU OF UTILITIES MAINTENANCE OPERATIONS WILL BE THE RESPONSIBILITY OF THE HOA, NOT DPW.

THIS SHEET FOR LANDSCAPE PURPOSES ONLY
 SEE SHEET 9 OF 9 FOR LANDSCAPE DETAILS



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: *Mark DeAngelis* 7/21/03
 Chief, Development Engineering Division: *Cindy Hammett* 7/21/03
 Date: 7/10/03

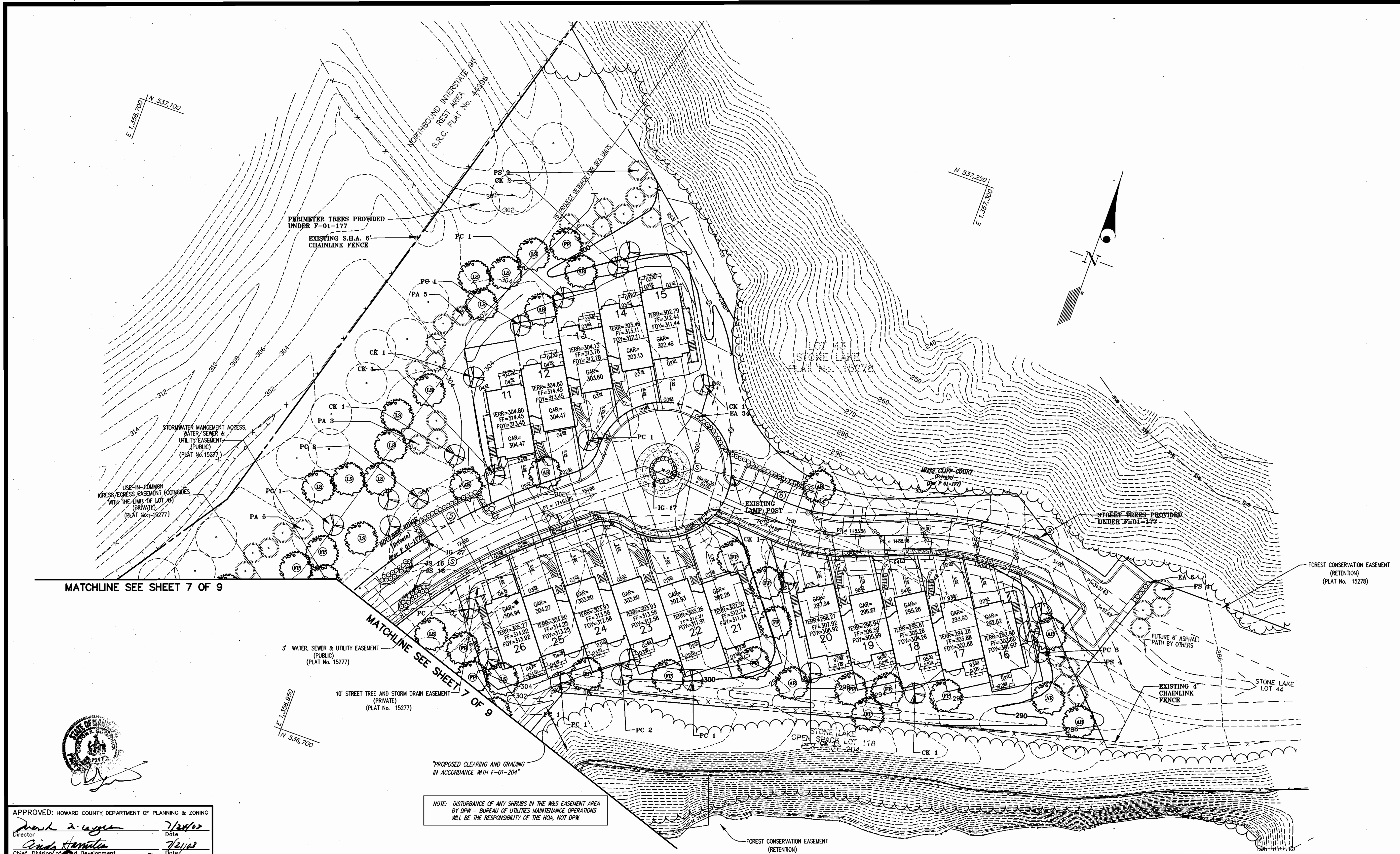
GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3009 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT. 410-680-1820 DC/VA 301-989-2524 FAX: 301-421-4188

DATE	REVISION	BY	APP'R.
6/13/03	REPLACEMENT OF ORIGINALS: PLAN REVISED PER HRD COMMENTS	LHM	
4/10/03	PLAN REVISED PER HRD COMMENTS	LHM	

OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PKWY. COLUMBIA, MD 21044-3456
 CONTRACT PURCHASER: MILLER AND SMITH
 1568 SPRING HILL ROAD #200 MCGLEAN, VA. 22102

REV. LANDSCAPE PLAN
STONE LAKE
 LOTS 1 THRU 37 AND OPEN AREA LOT 40
 PLAT No. 15276 & 15277
 ELECTION DISTRICT No. 6

SCALE	ZONING	G. L. W. FILE No.
1"=30'	R-ED	01029
DATE: 06/13/03 24/APRIL/02	TAX MAP - GRID: 47 7	SHEET: 7 OF 9



MATCHLINE SEE SHEET 7 OF 9

MATCHLINE SEE SHEET 7 OF 9

NOTE: DISTURBANCE OF ANY SHRUBS IN THE W&S EASEMENT AREA BY DPW - BUREAU OF UTILITIES MAINTENANCE OPERATIONS WILL BE THE RESPONSIBILITY OF THE HOA, NOT DPW.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: *Frank A. Luger* Date: 7/24/02
 Chief, Division of Land Development: *Crista Hamstra* Date: 7/21/02
 Chief, Development Engineering Division: *Paul D. ...* Date: 7/10/02

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT. 410-880-1829 DC/VA 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
6/11/01	REVISED ORIGINALS - PLAN REVISED PER HRD COMMENTS.	LHM	
4/10/03	PLAN REVISED PER HRD COMMENTS.	LHM	

OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PKWY. COLUMBIA, MD 21044-3456
 CONTRACT PURCHASER: MILLER AND SMITH 1568 SPRING HILL ROAD #200 MCLEAN, VA. 22102

REV. LANDSCAPE PLAN
STONE LAKE
 LOTS 1 THRU 37 AND OPEN AREA LOT 40
 PLAT No. 15276 & 15277
 ELECTION DISTRICT No. 6
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	R-ED	01-029
DATE: 06/13/03 24/APRIL/02	TAX MAP - GRID 47 7	SHEET 8 OF 9

THIS SHEET FOR LANDSCAPE PURPOSES ONLY.
 FOR PLANT LIST AND DETAILS, SEE SHEET 9 OF 9

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
Number of Parking Spaces = 30 Spaces	
Number of Trees Required = 3 Trees @ 1 per 10 spaces	
Number of Trees Provided	
Shade Trees: 4	
Other Trees: 0 (2:1 substitution)	
NOTE:	

Schedule 'B' Number of required trees for bonding: 3 x \$300 = \$ 900.00

SCHEDULE C RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING	
Number of Dwelling Units = 37 townhouses	
Number of Trees Required = 37 Trees (1:DU SFA)	
Number of Trees Provided	
Shade Trees: 84	
Other Trees: 58 (2:1 substitution)	
Schedule 'C' Number of required trees for bonding: 37 x \$300 = \$ 11,100.00	

SURETY CALCULATION FOR THE REQUIRED HOWARD COUNTY LANDSCAPING
 Schedule 'B' Number of shade trees for bonding: 3 x \$300 = \$900.00
 Schedule 'C' Number of shade trees for bonding: 37 x \$300 = \$11,100.00

TOTAL LANDSCAPE SURETY REQUIRED WITH THE GRADING PERMIT APPLICATION: = \$12,000.00

Financial surety for the required landscaping shall be paid at the time of grading permit application in the amount of \$12,000.00.

END UNIT LANDSCAPE TREATMENT

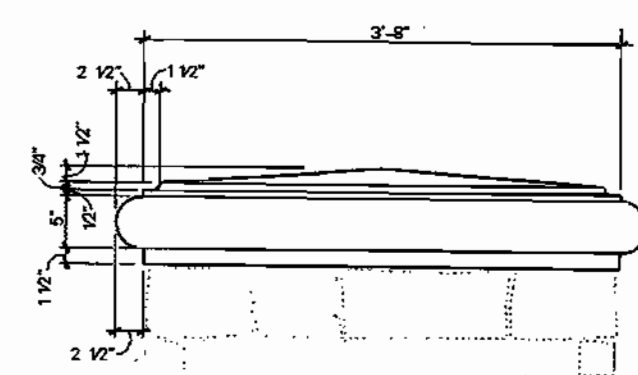
- EVERGREEN TREE, 5-6'
- 3 FLOWERING SHRUBS, 30-36"
- MULTI-STEMMED TREE, 8-10'
- 3 FOUNDATION SHRUBS, 24"
- 5 ORNAMENTAL ACCENT PLANTS, 3-GAL.
- 3 FOUNDATION SHRUBS, 24"
- 7 PERENNIALS, 1-GAL.

* NOTE: EACH METER TO BE SCREENED WITH 1 UPRIGHT EVERGREEN, 3'-4'.

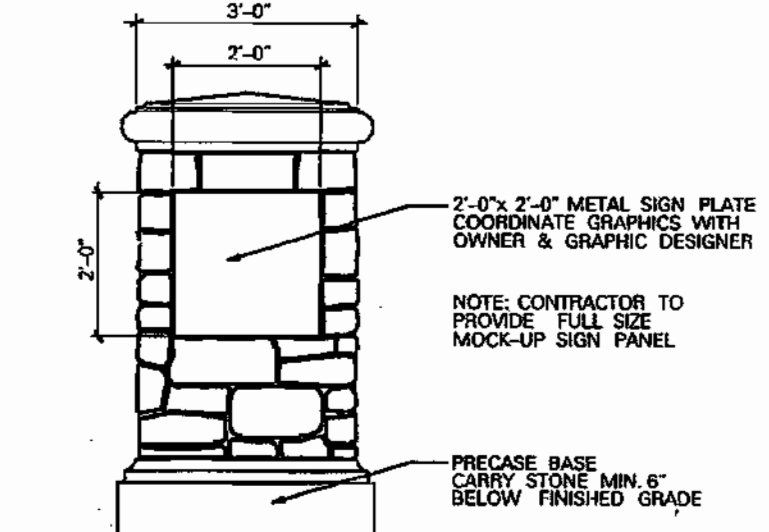
INTERIOR UNIT LANDSCAPE TREATMENT

- 1 FLOWERING SHRUB, 30-36"
- 5 MEDIUM EVERGREEN SHRUBS, 18"
- 7 PERENNIALS, 1-GAL.
- 1 FLOWERING SHRUB, 30-36"
- 5 ORNAMENTAL ACCENT PLANTS, 3 GAL.
- 7 PERENNIALS, 1-GAL.

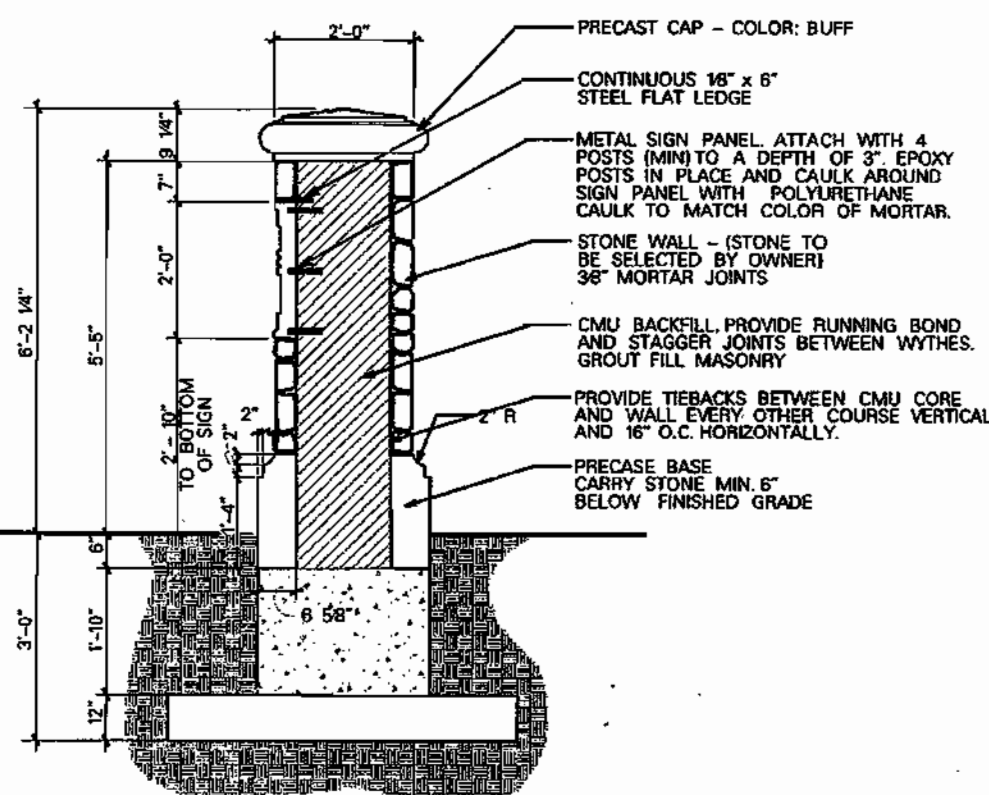
* NOTE: EACH METER TO BE SCREENED WITH 1 UPRIGHT EVERGREEN, 3'-4'.



1 Precast Cap



2 Stone Pier Elevation



3 Stone Pier Section

NOTE: DISTURBANCE OF ANY SHRUBS IN THE WALKWAY EASEMENT AREA BY DPW - BUREAU OF UTILITIES MAINTENANCE OPERATIONS WILL BE THE RESPONSIBILITY OF THE HOA, NOT DPW.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: *[Signature]* Date: 7/2/03
 Chief, Division of Land Development: *[Signature]* Date: 7/2/03
 Chief, Development Engineering Division: *[Signature]* Date: 7/2/03

LANDSCAPING NOTES

- This plan has been prepared in accordance with Section 16.124 of the Howard County Code and Chapter VI (Alternative Compliance) of the Howard County Landscape Manual.
- Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
- Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocations are required.
- Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
- All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.N. Specifications, and be installed in accordance with project specifications.
- No substitution shall be made without written consent of the owner or his representative.
- All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sodded in accordance with the project specifications.
- The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the plants.
- All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
- "Schedule B - PARKING LOT INTERNAL LANDSCAPING" and "Schedule C - RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING" are provided for landscape surety calculation purposes only. Financial surety for the required landscaping shall be posted with the grading permit in the amount of \$12,000.00.
- Planting provided:
 Shade Trees (proposed): 91
 Ornamental Trees: 60
 Evergreen Trees (proposed): 56

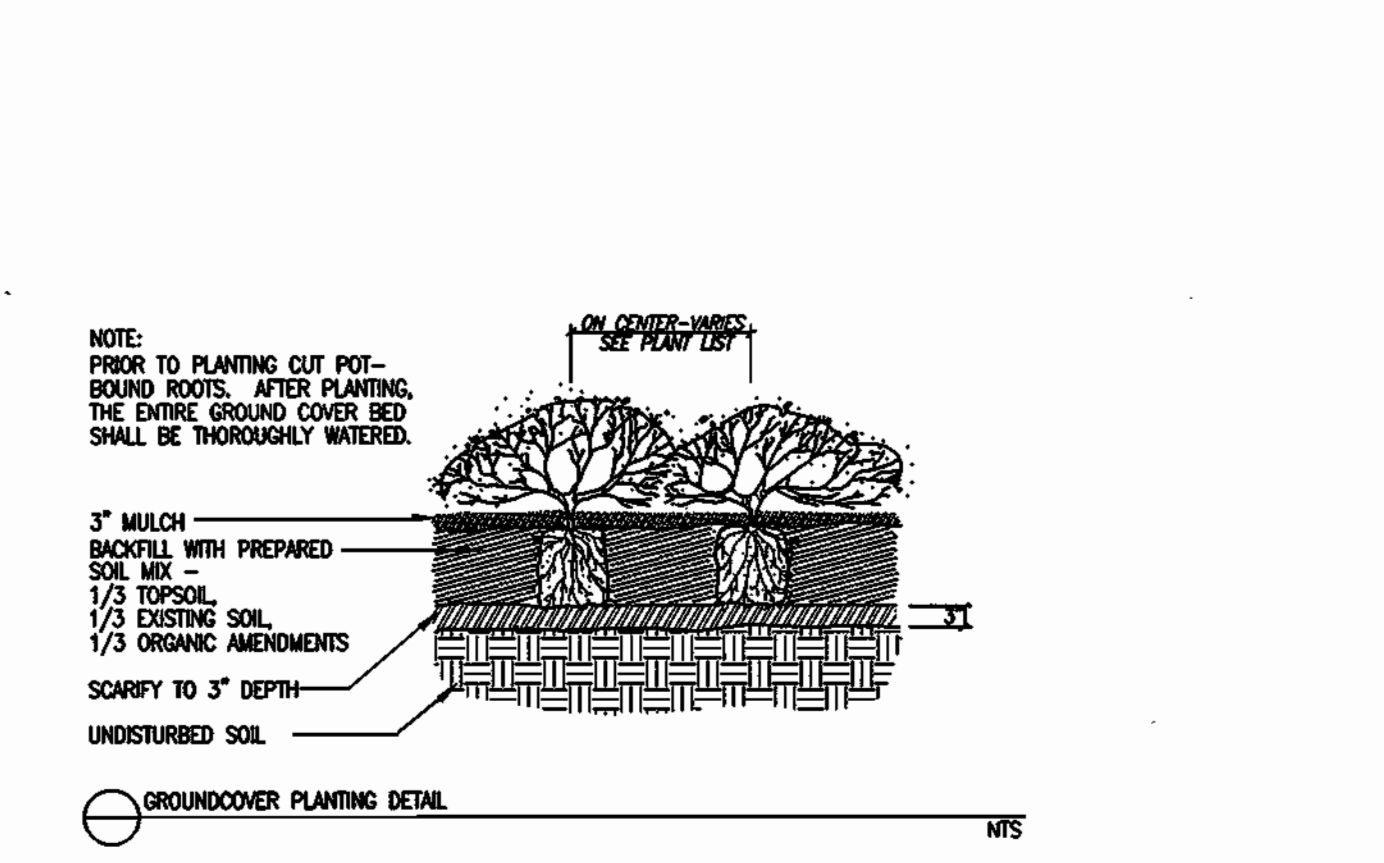
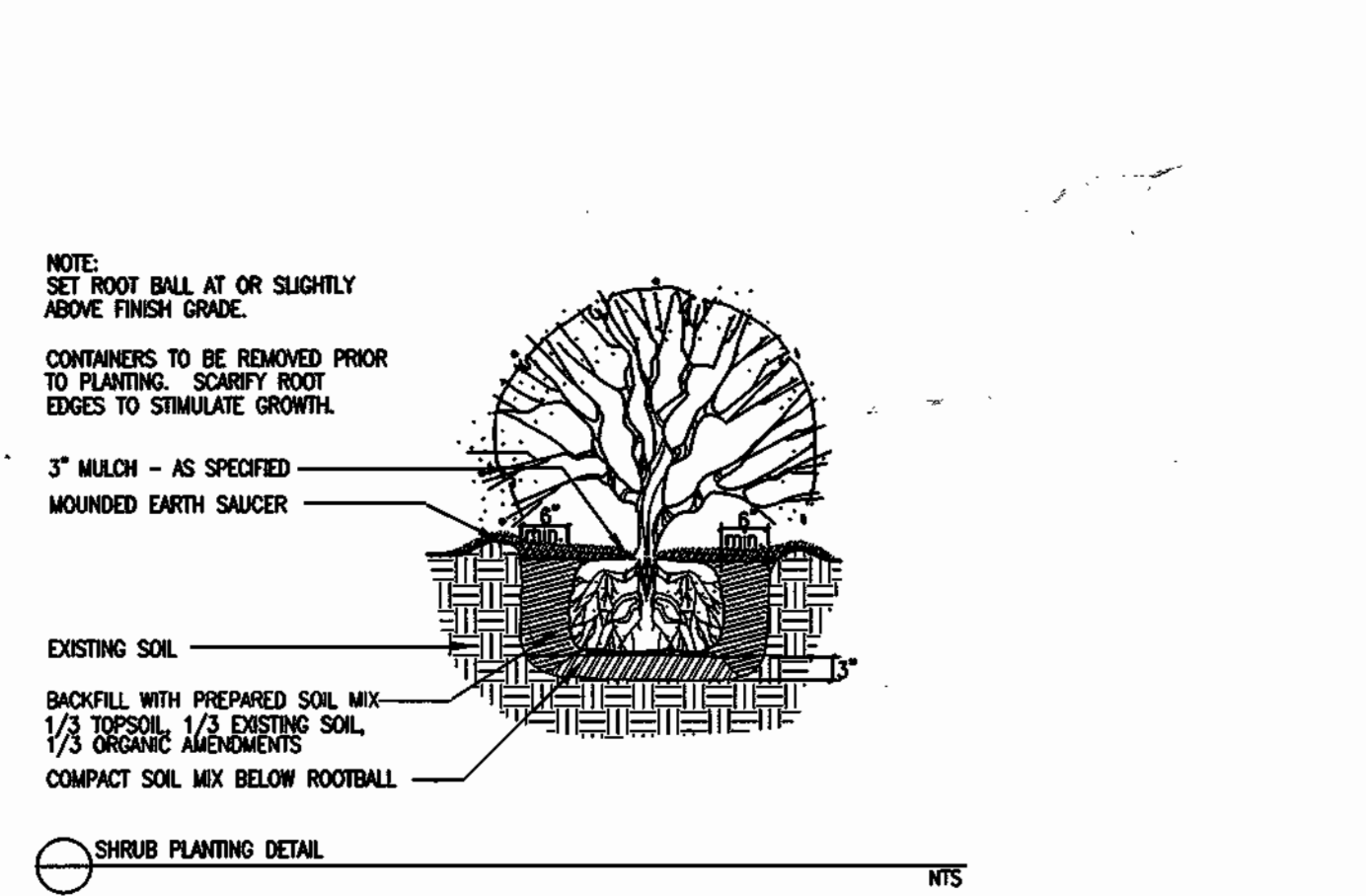
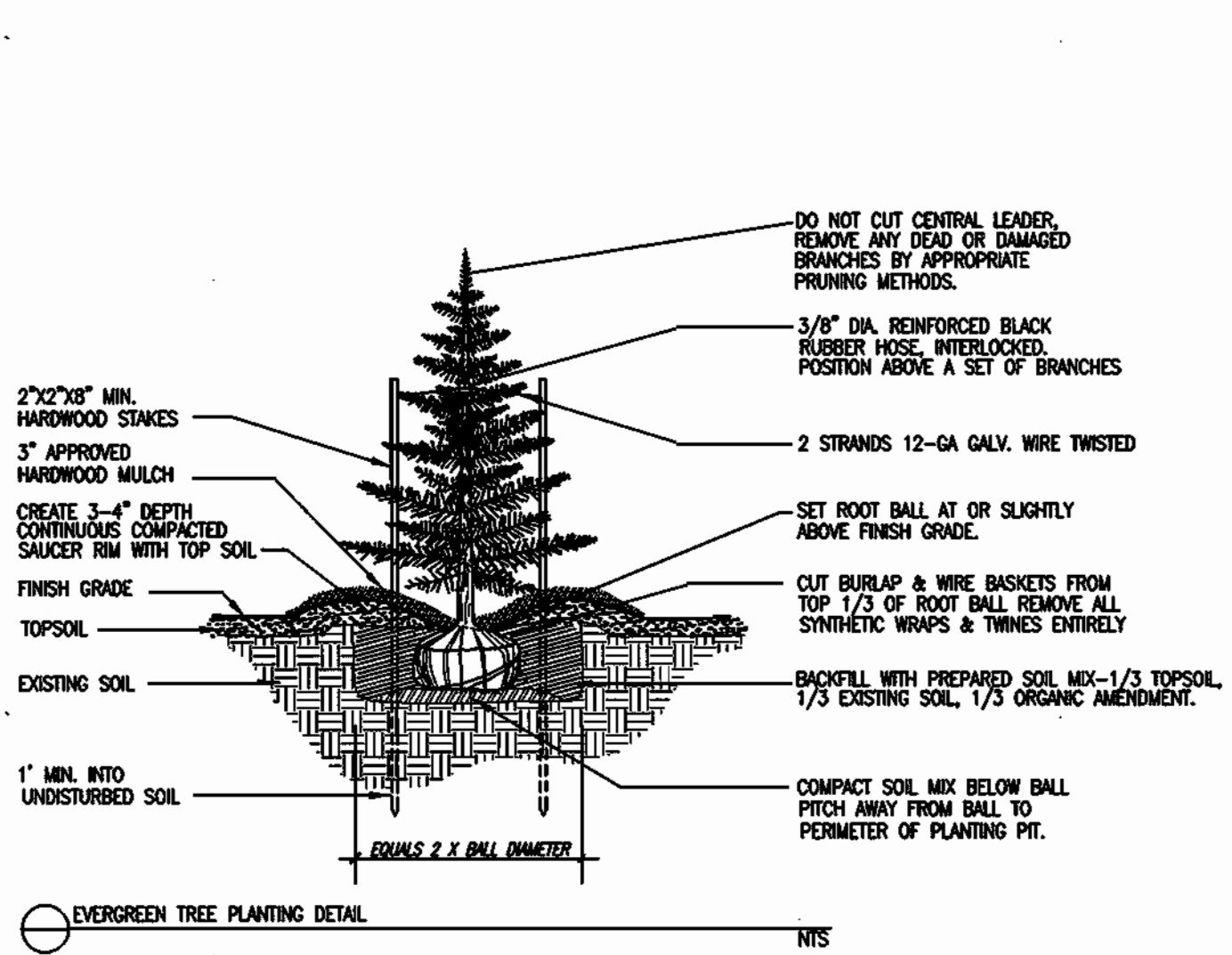
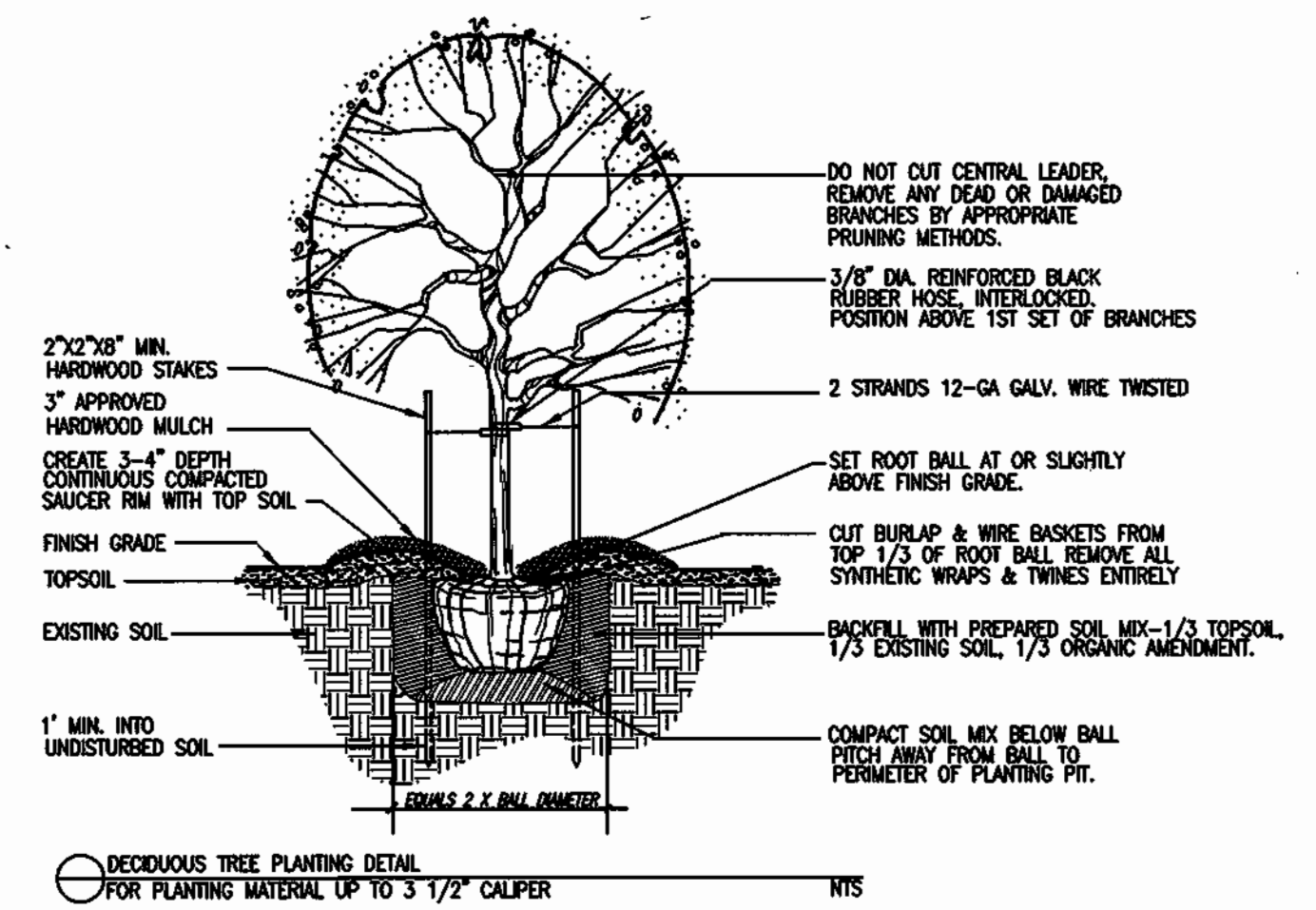
PLANT LIST

SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE	ROOT	COMMENTS
SHADE TREES					
AR	29	Acer rubrum 'Autumn Flame'	2-2 1/2' Cal.	B&B	
FP	38	Fraxinus pennsylvanicum 'Summit'	2 1/2-3' Cal.	B&B	
LS	21	Liquidambar styraciflua Sweet Gum	2 1/2-3' Cal.	B&B	
EVERGREEN TREES					
NS	14	Ilex 'Nellie Stevens'	8'-10' Ht.	B&B	
PA	44	Picea abies Norway Spruce	8'-10' Ht.	B&B	
PS	17	Pinus strobus White Pine	8'-10' Ht.	B&B	
ORNAMENTAL TREES					
CK	29	Cornus Kousa 'National'	2-2 1/2' Cal.	B&B	
PC	33	Prunus cerasifera 'Thundercloud'	2-2 1/2' Cal.	B&B	
SHRUBS					
EA	57	Euonymus alata 'Compacta'	30-36" in Ht.	B&B	
IG	133	Ilex glabra Inkberry	24-30" in Ht.	B&B	
SP	9	Syringa meyeri 'Palbin'	24-30" in Ht.	B&B	
JB	15	Juniperus squamata 'Blue Star'	18"-24" Spread.	Cont.	
JS	64	Juniperus sargentii Sargent Juniper	18"-24" Spread.	Cont.	

PLANT MATERIALS AND PLANTING METHODS

- A. Plant Materials
- The landscape contractor shall furnish and install and/or dig, ball, burlap and transport all of the plant materials called for on drawings and/or listed in the Plant Schedule.
- Plant Names
Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.
 - Plant Standards
All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock" latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth and shall be first quality, sound, vigorous, well-branched and with healthy, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.
All plants shall be nursery grown and shall have been grown under the same climate conditions as the location of this project for at least two years before planting. Neither heeled-in plants nor plants from cold storage will be accepted.
 - Plant Measurements
All plants shall conform to the measurements specified in the Plant Schedule as approved by the ARC.
a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve (12") above grade for trees four inches (4") in caliper and over.
b. Minimum branching height for all trees shall be six feet (6').
c. Minimum size for planting shade trees shall be 3-3" caliper, 14'-16" in height.
d. Minimum size for planting minor or intermediate focus trees (pines, cypripies, etc.) shall be 3-3" caliper, 10'-12" in height.
e. Minimum size for planting shrubs shall be 18" - 24" spread unless noted otherwise.
f. Caliper, height, spread and size of ball shall be generally as follows:

CALIPER	HEIGHT	SPREAD	SIZE OF BALL
3" - 3.5"	14'-16'	6'-8'	32" diameter
3.5" - 4"	14'-16'	8'-10'	36" diameter
4" - 4.5"	16'-18'	8'-10'	40" diameter
4.5" - 5"	16'-17'	10'-12'	44" diameter
5" - 5.5"	16'-20'	10'-12'	48" diameter
5.5" - 6"	18'-20'	12'-14'	52" diameter
- All plant material shall generally overage the median for the size ranges indicated above as indicated in the "AAN Standards".
4. Plant Identification
Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.
5. Plant Inspection
The ARC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.
- B. Planting Methods
- All proposed plant materials that meet the specifications in Section A are to be planted in accordance with the following methods during the proper planting seasons as described in the following:
- Planting Seasons
The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.
The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.
 - Digging
All plant material shall be dug, balled and burlapped (B&B) in accordance with the "AAN Standards".
 - Excavation of Plant Pits
The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following schedule:
 - Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.
 - All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.
 - Sodding
All sodding shall be in accordance to the "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area" latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects.
All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4' long. Provide sod composed principally of improved strain Kentucky bluegrass, such as, Columbia, Victo, or Escort.



GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 FAX: 410-880-1820 DC/VA: 301-988-2524 FAX: 301-421-4188

DATE	REVISION	BY	APPR.
6/13/03	REPLACEMENT ORIGINALS: PLAN REVISED PER HRD COMMENTS	LHW	
4/10/03	PLAN REVISED PER HRD COMMENTS	LHW	

OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATENT RD. COLLEGE PARK, MD 20746-3458

CONTRACT PURCHASER: MILLER AND SMITH
 1508 SPRING HILL ROAD #200 MGA/MDA 22102

REV. LANDSCAPE NOTES AND DETAILS

STONE LAKE
 LOTS 1 THRU 37 AND OPEN AREA LOT 40
 PLAT No. 15276 & 15277

HOWARD COUNTY, MARYLAND

SCALE: NTS	ZONING: R-ED	G. L. W. FILE No.: 01-029
DATE: 06/13/03	TAX MAP - GRID: 47 7	SHEET: 9 of 9