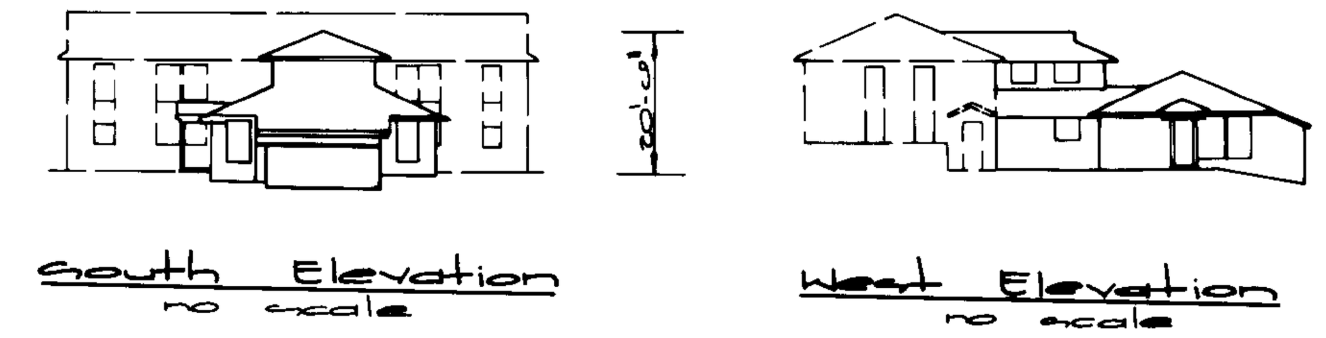
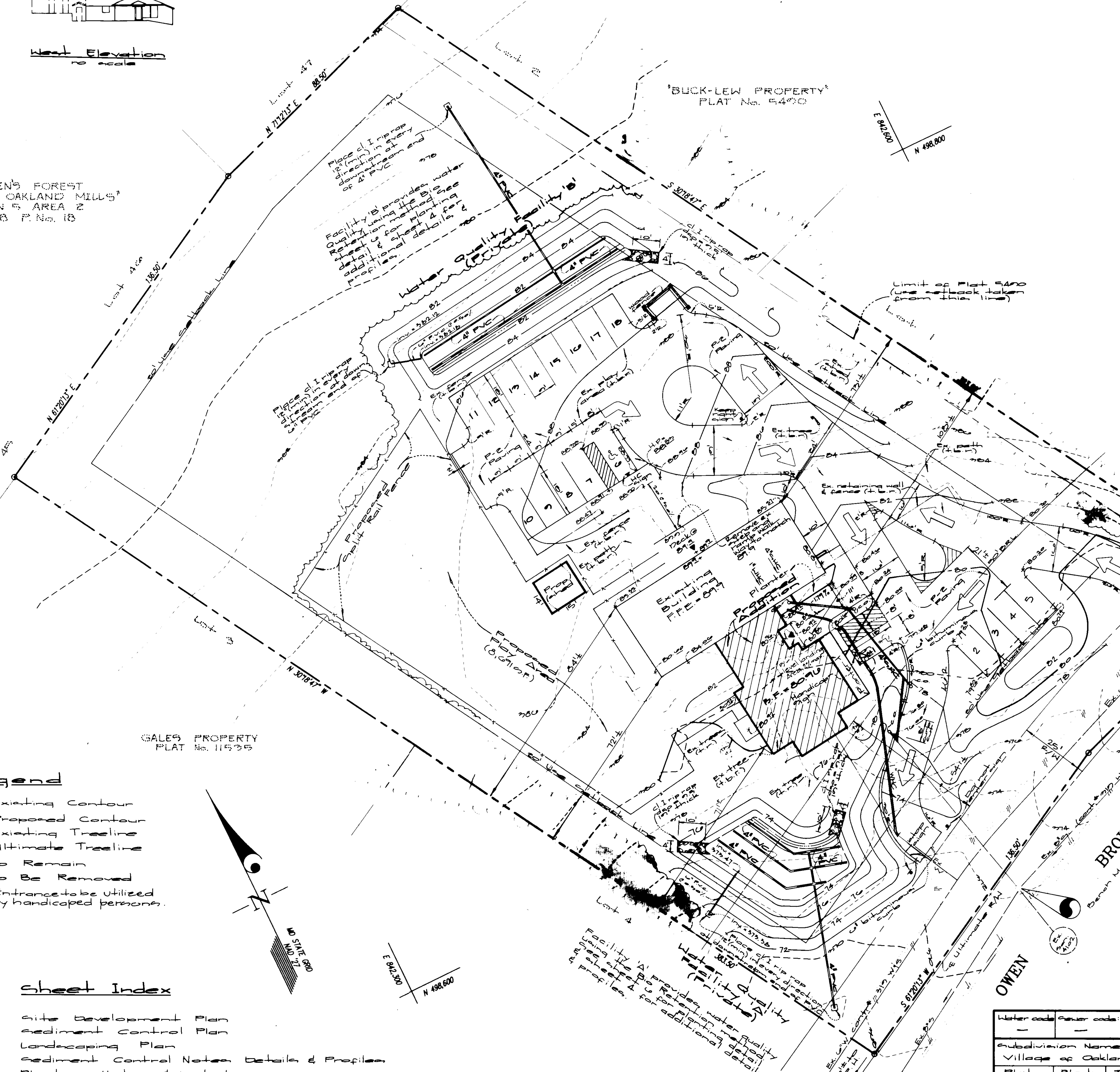
GENERAL NOTES

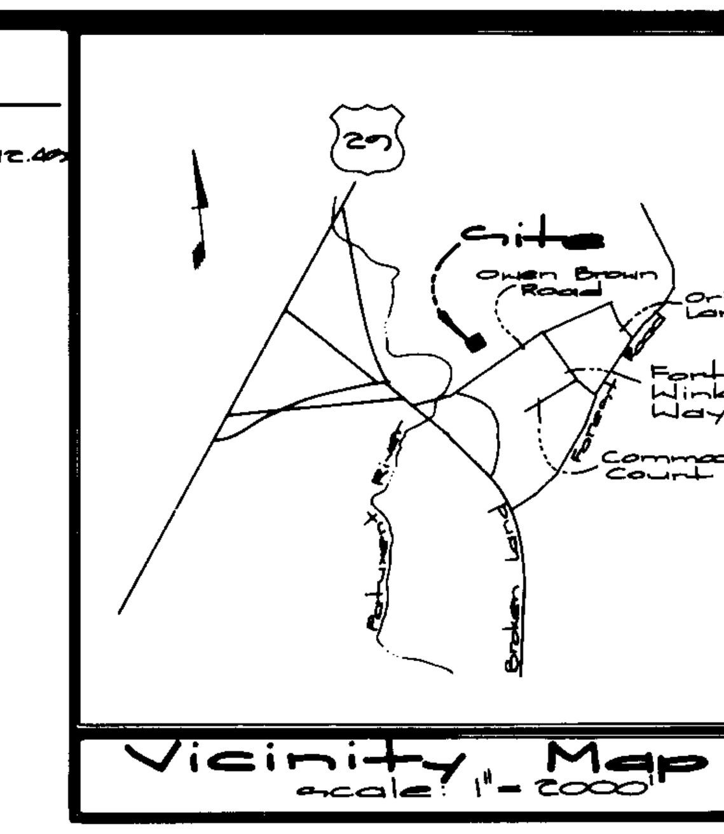
1. All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standard and specifications if applicable.
2. The contractor shall notify the Department of Public Works/Construction Inspection Division at (410) 313-1855 at least five (5) working days prior to the start of work.
3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
4. The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five working days prior to starting any excavation work.
5. Site area: 1.96 acres.
6. 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.
7. Existing contours shown hereon were taken from a field run topography survey performed by Gutschick, Little & Weber, P.A. in March, 1997. Ex. Sanitary MH 4102 was used as the benchmark.
8. Coordinates and bearings are based upon the MD State plan system (NAD '27).
9. Water and sewer shown is public.
10. Stormwater management (quantity and quality) is being provided on site.
11. All existing water and sewer is per Contract 319-W&S.
12. All existing public storm drain is per field survey by Gutschick, Little, and Weber, P.A.
13. Utility information taken from approved final construction plans for development and field run topography.
14. Contractor shall utilize PVC pipe for all sewer house connections. Contractor shall utilize D.I.P. (CL. 51) for 6" water house connection.
15. Paved areas indicated are private except as noted.
16. Project background: See Dept. of Planning & Zoning File Numbers: BA Case 96-49E: Allowed expansion of existing special exception use.
17. All proposed ramps shall be in accordance with current A.D.A. standards. Maximum sidewalk cross slope shall be two percent. Provide a five-foot by five-foot level (2 percent max.) landing at the top and bottom of all ramps and building entrances and exits.
18. Water meter shall be located inside building.
19. The limits of public maintenance for waterhouse connections shall be 7' from the back of curb.
20. All proposed site utilities are to terminate 5' from the building. The building plumber shall connect to and extend these utilities to the inside of the building.
21. For Gas, Telephone and Electric routing, see plans by others.
22. There is no floodplain on this site.
23. There are no observed wetlands on this site.
24. Building shall be fully sprinkled.

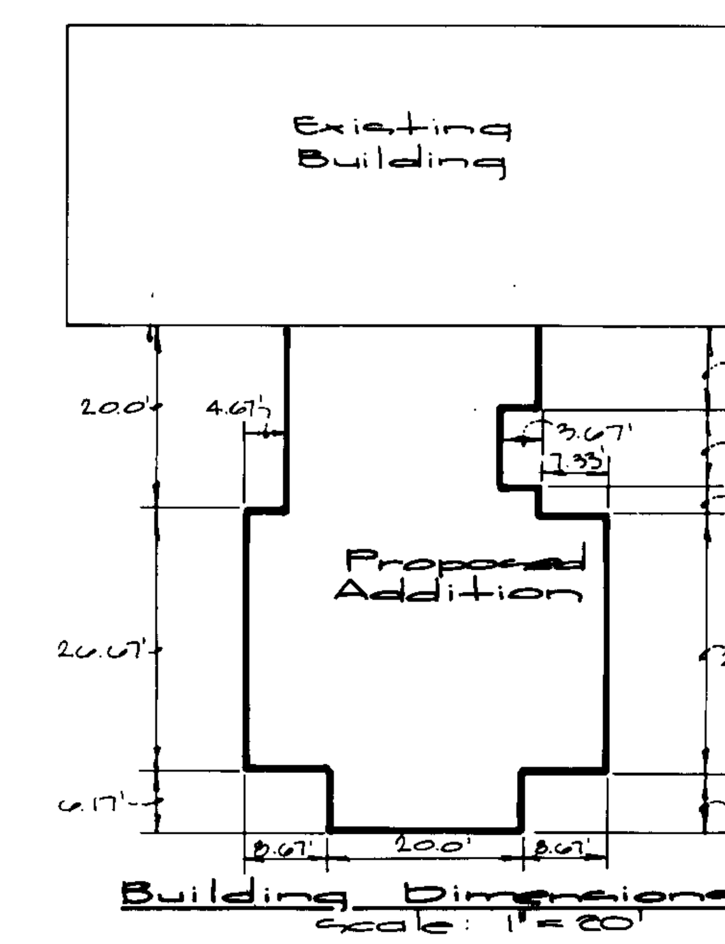


SITE ANALYSIS

Project Area:	1.96 Ac.
Limit of Disturbed Area:	1.21 Ac.±
Present Zoning:	R-20
Proposed Use:	Montessori School
Total Floor Space:	6418 sf (Gross)
No. of Parking Spaces Required:	Day Care: 4824 sf @ 3/1000 sf = 15; School: 18 students @ 1/6 = 3; Total = 18
Provided:	18, 1 HC
Building Coverage of Site:	3826 sf
Area of Landscaped Islands:	0.02 Ac.
Area of Parking Lot:	0.17 Ac.±







Legend

---- 366 ----	Existing Contour
—— 62 ——	Proposed Contour
	Existing Treeline
	Ultimate Treeline
t.r.	To Remain
t.b.r.	To Be Removed
▼	Entrance to be utilized by handicaped persons.

Sheet Index

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 2/25/98
Chief, Division of Land Development	Date 2/11/98
Chief, Development Engineering Division	Date 2/4/98

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186

DES.	DRN. KTZ	CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR:
JULIA BROWN MONTESSORI SCHOOL
9760 OWEN BROWN ROAD
COLUMBIA, MD 21043
(410) 730-5056

Address Chart			
Water code	Sewer code	Parcel Number	Street Address
—	—	38	9760 Owen Brown Road

Subdivision Name:	Section/Area	Parcel
Village of Oakland Mills	5/2	38

Plat	Block	Zone	Tax Map	Elec. Dist.	Census Tract
—	9	R-20	36	6	606602

Site Development Plan

The Julia Brown Montessori School

Village of Oakland Mills
Section 5 Area 2

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=20'	R-20	97037
DATE	**TAX MAP No.**	**SHEET**
Sept. '97	36	1 of 6

SDP-97-133

Sequence of Construction

1. Obtain grading permit. 1 day
2. Arrange on-site pre-construction meeting w/sediment control inspector. 1 day
3. Install stone construction entrance, silt fence, & sediment traps 'A' & 'B' as shown on these plans. 2 Weeks.
4. Fine grade site. 2 Weeks.
5. Construct utilities to the building. 2 Weeks.
6. Construct building. 4 Months.
7. Install base paving. Stabilize remaining areas w/ grass, seed & mulch. 2 Weeks.
8. When areas draining to sediment control measures have been stabilized & permission is granted from the sediment control inspector, the conversion from sediment traps to bio-retension facilities can begin. 1 Week
9. Install surface paving. 1 Week
10. Install landscaping. 1 Week
11. Remove all remaining sediment control devices. 1 Week

Note
After placing permanent seeding on bio-retention facilities, contractor must place erosion control matting (Enkamat or equivalent)

Trap Data (ST-II, Detail 9)

Sediment Trap 'A'
- Before Dev. D.A. = 0.66 Ac.±
- After Dev. D.A. = 0.44 Ac.±
- Storage Required = 2370 c.f.
- Storage Provided = 2722 c.f.
- Limit of Wet Storage = 374.10
- Weir Crest Elev. = 375.00
- Channel Depth = 1.0'
- Top of Dam Elev. = 376.00
- Bottom Elev. = 375.00
- Cleanout Elev. = 374.00
- Weir Length = 4'
- Outlet Elev. = 374.10

Sediment Trap 'B'
- Before Dev. D.A. = 0.25 Ac±
- After Dev. D.A. = 0.25 Ac.±
- Storage Required = 900 c.f.
- Storage Provided = 1213 c.f.
- Limit of Wet Storage = 382.74
- Weir Crest Elev. = 383.00
- Channel Depth = 1.0'
- Top of Dam Elev. = 384.00
- Bottom Elev. = 382.00
- Cleanout Elev. = 382.50
- Weir Length = 4'
- Outlet Elev. = 382.74

Sediment Control Legend
- L.O.D. — Limit of Disturbance
- SPF—SSF — Silt Fence
- SCE — Stabilized Construction Entrance
- Drainage Divide
- E.D. — Earth Dike
- xx—TPF—xx Tree protection Fence

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."

4/15/97
Date

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

Natural Resources Conservation Service — Date 2/2/98

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."

Signature of Developer/Builder — 4.16.97 Date

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

Howard S.C.D. — 2/2/98 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director — 2/25/98 Date

Chief, Division of Land Development — TC 2/11/98 Date

Chief, Development Engineering Division — 2/4/98 Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
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TEL: (301) 421-4024 NO. VA.: (703) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 | DES. | DRN. mcp | CHK.

DATE	REVISION	BY	APP.

PREPARED FOR:
JULIA BROWN MONTESSORI SCHOOL
9760 OWEN BROWN ROAD
COLUMBIA, MD 21045
(410) 730-5456

Sediment Control Plan
The Julia Brown Montessori School
Village of Oakland Mills
Section 5 Area 2

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=20'	R-20	97037
DATE	TAX MAP No.	SHEET
Sept. '97	36	2 of 6

SDP-97-133

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap and transplant all of the plant materials called for on drawings and/or listed in the Plant Schedule.

1. Plant Names

Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.

2. 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.

3. 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'), maximum eight feet (8').

c. Minimum size for planting shade trees shall be 3-3½" caliper, 14'-16' in height.

d. Minimum size for planting minor or intermediate focus trees (pines, crabapples, etc.) shall be 3"-3½" 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" - 3½"	14'-16'	6'-8'	32" diameter
3½"- 4"	14'-16'	8'-10'	36" diameter
4" - 4½"	16'-18'	8'-10'	40" diameter
4½"- 5"	16'-17'	10'-12'	44" diameter
5" - 5½"	16'-20'	10'-12'	48" diameter
5½"- 6"	18'-20'	12'-14'	52" diameter

All plant material shall generally average 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, size 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:

1. 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.

2. Digging

All plant material shall be dug, balled and burlapped (B+B) in accordance with the "AAN Standards".

3. 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:

a. 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.

b. 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.

c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.

d. Diameter and depth of tree pits shall generally be as follows:

PLANT SIZE	ROOT BALL	PIT DIAMETER	PIT DEPTH
3" - 3½" cal.	32"	64"	28"
3½"- 4" cal.	36"	72"	32"
4" - 4½" cal.	40"	80"	36"
4½"- 5" cal.	44"	88"	40"
5" - 5½" cal.	48"	96"	44"
5½"- 6" cal.	52"	104"	48"

A 20% compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra topsoil. The tabulated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

4. Staking, Guying and Wrapping

All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:

a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7'-0" for major trees and 5'-0" minimum for minor trees.

b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" take-up. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.

c. Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3" in caliper.

d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail". All trees over 3" in caliper are to be planted and guyed in accordance with the attached "Typical Tree Guying Detail".

5. Plant Pruning, Edging and Mulching

a. Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in diameter shall be painted with an approved antiseptic tree wound dressing.

b. All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.

c. After cultivation, all plant materials shall be mulched with a 2" layer of fine, shredded pine bark, peat moss, or another approved material over the entire area of the bed or saucer.

6. Plant Inspection and Acceptance

The ARC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

7. Plant Guarantee

All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

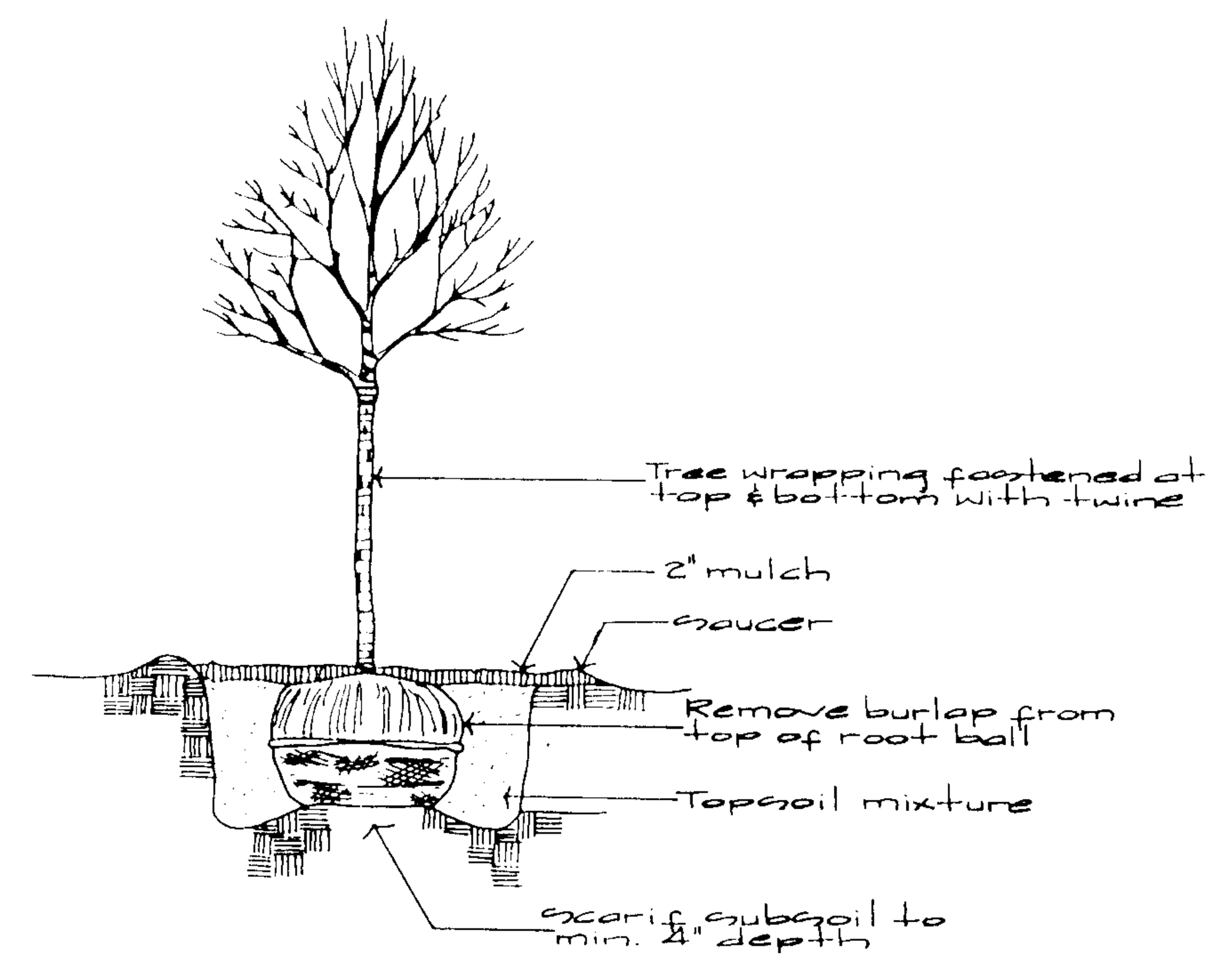
a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.

b. Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

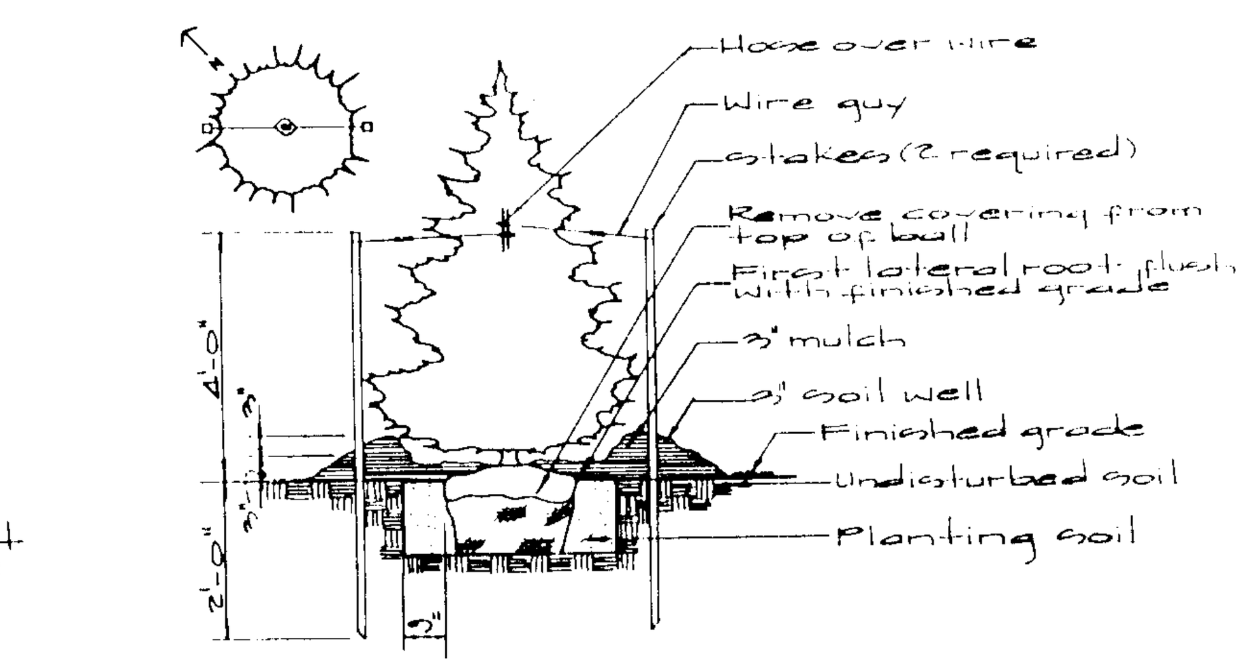
Sodding

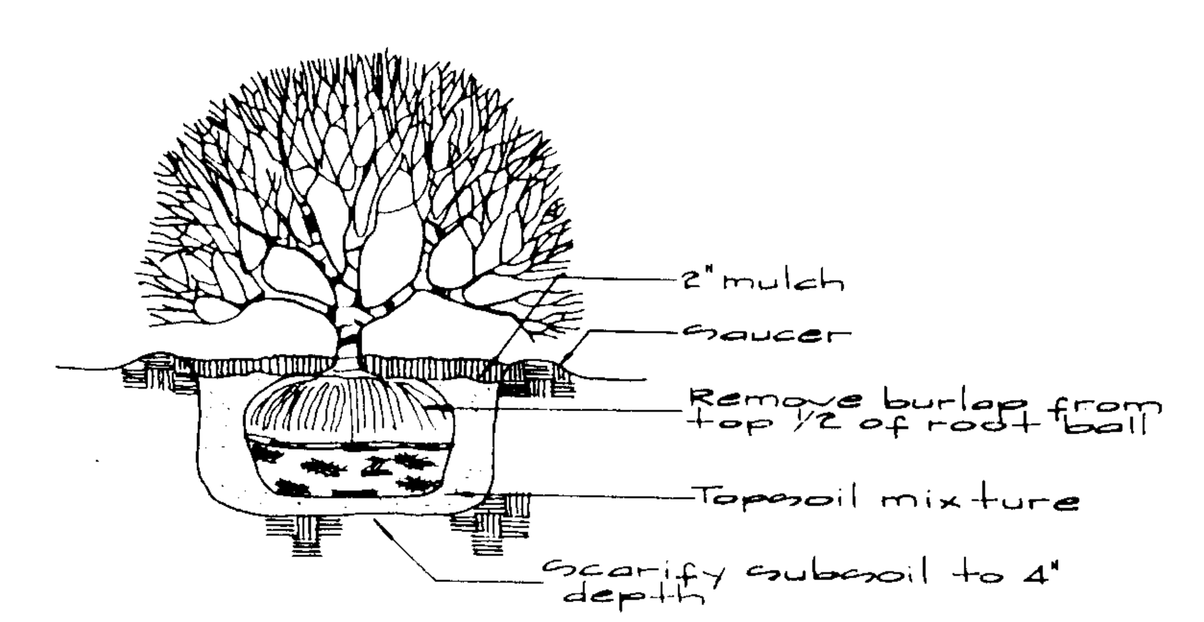
All sodding shall be in accordance to the "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas" latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects.

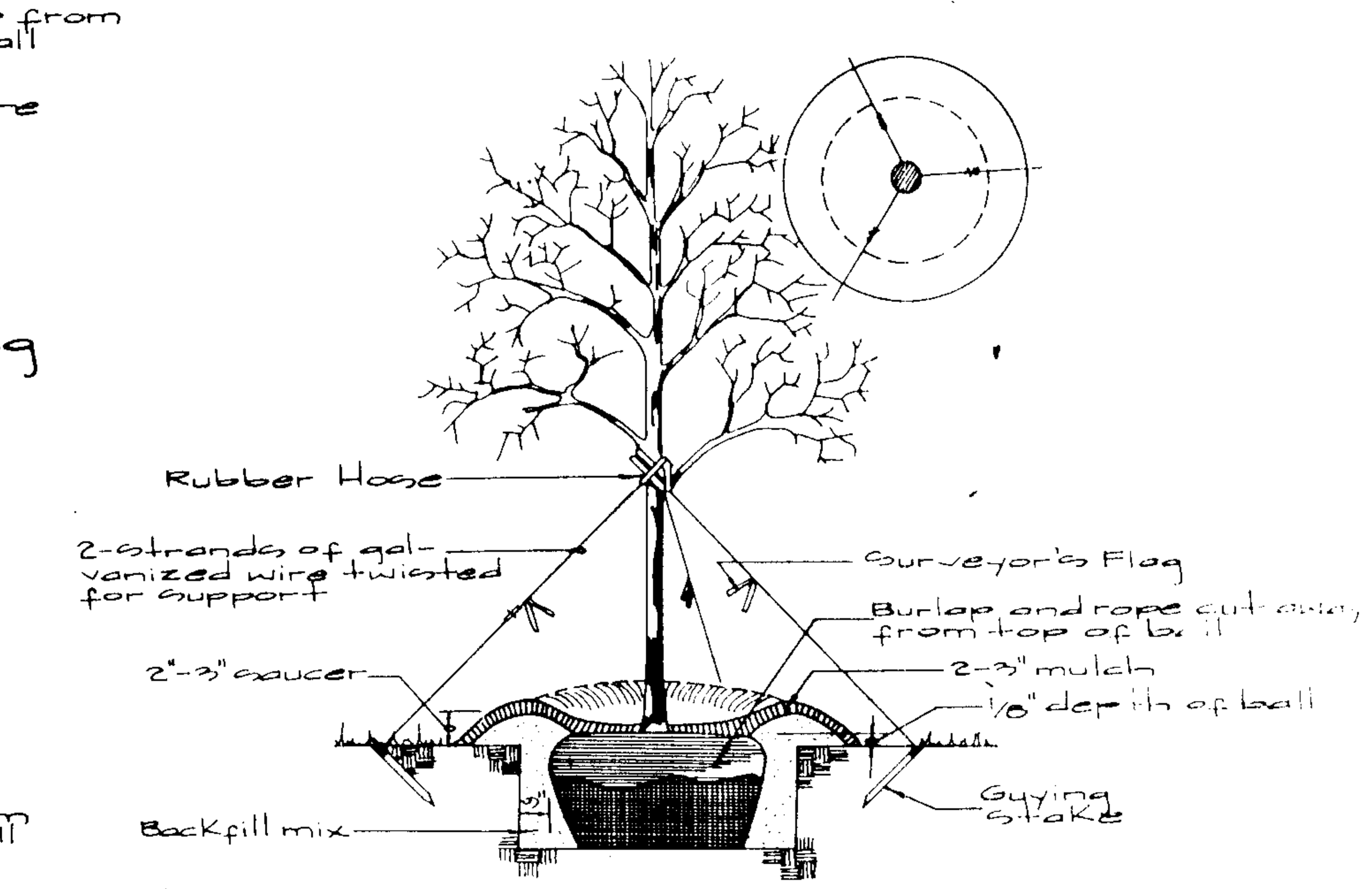
All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4' long. Provide sod composed principally of improved strain Kentucky bluegrass, such as, Columbia, Victa, or Escort.



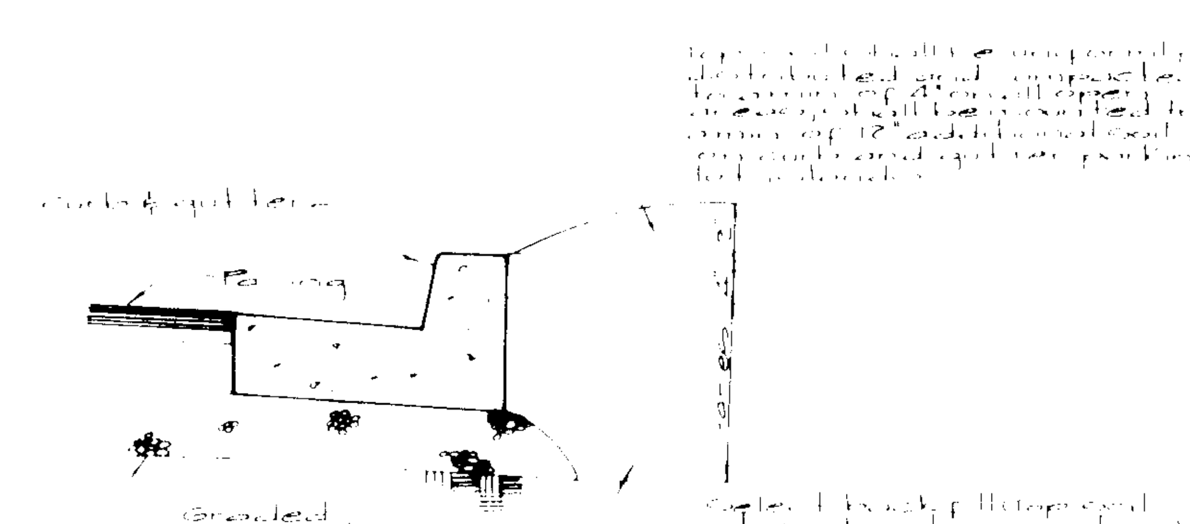
Typical Deciduous Tree Planting







Typical Tree Guying Detail



Topsoiling Detail

Materials:

Plant List

Key	Quantity	Name (Botanical / Common)	Size	Comments
ZS	10	Zelkova Serrata 'Village Green' / Village Green Japanese Zelkova	2½"-3" cal.	B&B
PY	3	Prunus Yedoensis / Yoshimo Cherry	1½"-2" cal.	B&B
PS	22	Pinus Strobus / Eastern White Pine	6'-8' Ht.	B&B
TM	38	Taxus Media 'Hicksii' / Hicks Yew	30"-36" spr.	#5 container min
VC	14	Viburnum carlesii / Korean Spice Viburnum	30"-36" spr.	#5 container min.
AR	5	Acer Rubrum 'October Glory' / October Glory Red Maple	2½"-3" cal.	B&B

Approved Howard County Department of Planning & Zoning

Director — 2/25/98 — Date

Chief, Div. of Land Development — 2/18/98 — Date

Chief, Development Engineering Division — 2/4/98 — Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD 20866
TELEPHONE (301)421-4024 NO.VA (301)989-2524 BALTO (301)880-1820 FAX (301)421-4186

DATE	REVISION	BY	APP'R.

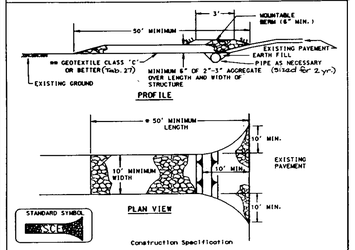
PREPARED FOR
Julia Brown Montessori School
9760 Owen Brown Road
Columbia, Md 21043
(410) 730-5056

Planting Notes & Details
The Julia Brown Montessori School
Village of Oakland Mills
Section 5 Area 2
Guilford Election District No. 6 — Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE No.
DRN.:	As Shown	R-20	97037
CHK.:	DATE	TAX MAP No.	SHEET
	Sept. '97	36	5 of 6

SDP-97-133

DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE

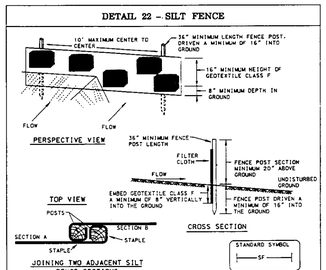


Construction Specification

1. Length – minimum of 50' (*50' for single residence lot*).
2. Width – 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. *All the plan approval authority may not require single family residences to use geotextile.*
4. Stone – crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. 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 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE 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.
6. 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F.-17.-3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 – SILT FENCE



Construction Specifications

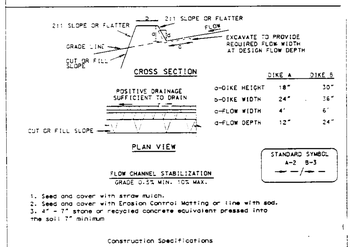
1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum cut) or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. 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: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F.-18.-3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 – EARTH DIKE



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

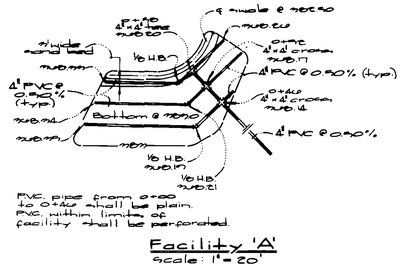
FLOW CHANNEL STABILIZATION
GRADE 0-5% MIN. 10% MAX.

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or sine with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

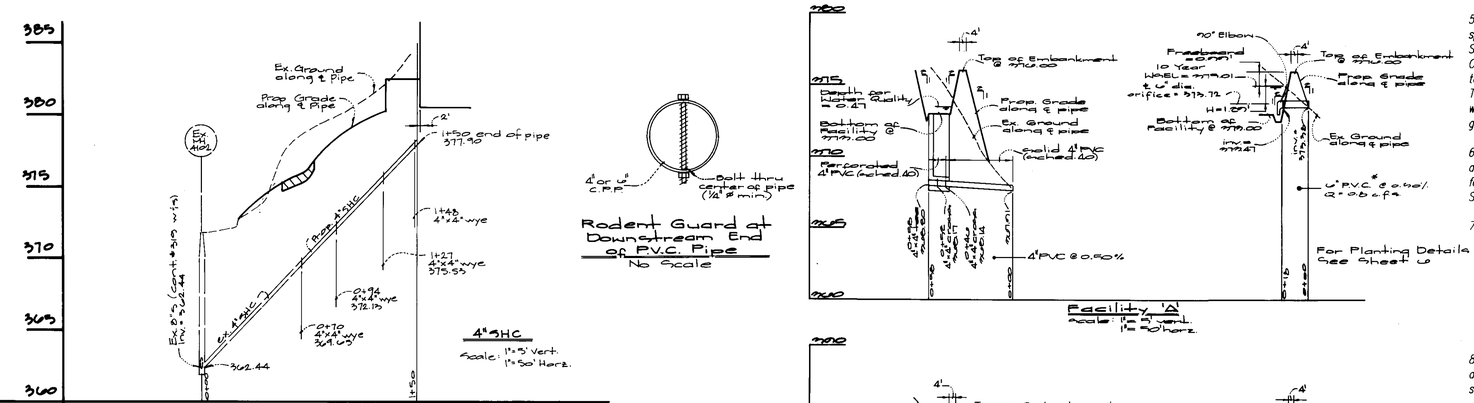
Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
6. Fill shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A.-1.-4	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

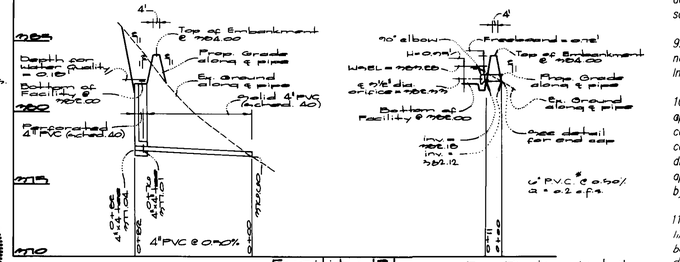


Facility 'A'
Scale: 1"=20'



Rodent Guard at Downstream End of P.V.C. Pipe
No Scale

Facility 'A'
Scale: 1"=5' vert. 1"=50'horz.



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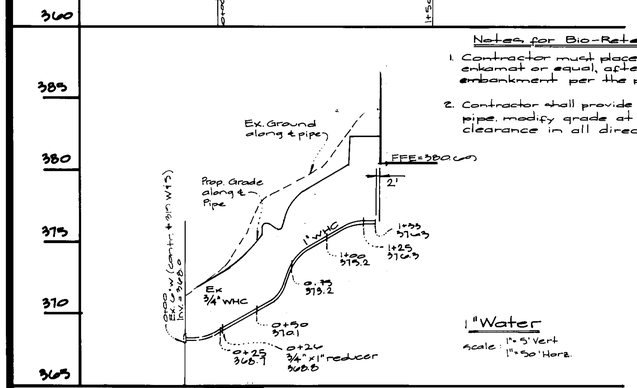


Notes for Bio-Retention Facilities

1. Contractor must place erosion matting, enkamat or equal, after placing seed on embankment per the permanent seeding notes.
2. Contractor shall provide elbow on inflow end of pipe, modify grade at elbow to insure 6" clearance in all directions.

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."

4/15/97
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."

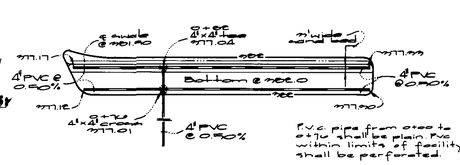
4-16-97
Signature of Developer/Builder — Date

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

Natural Resources Conservation Service — 4/23/97 Date

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

Howard S.C.D. — 4/2/97 Date



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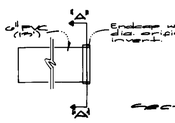
Scale: 1"=20'



Section 'A'-'A'

Pipe Schedule		
size & type	class	Appx. (L.F.)
6" P.V.C. Plain	sched. 40	27
4" P.V.C. Perforated	sched. 40	210
4" P.V.C. Plain	sched. 40	122

SEDIMENT CONTROL NOTES

1. A minimum of 48 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 and revisions there to.
3. 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 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching. (Sec G) Temporary stabilization, with mulch alone, shall 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	:	1.70	Acres
Area Disturbed	:	1.21	Acres
Area to be roofed or paved	:	0.28	Acres
Area to be vegetatively stabilized	:	0.93	Acres
Total Cut	:	0.12	Cu. Yds.
Total Fill	:	0.12	Cu. Yds.
Off-site waste/borrow area location:			

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 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 three pipe lengths or that which shall be back filled and stabilized within one working day, whichever is shorter.

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, if not 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 (92 lbs/1000 square feet) and 600 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 unreaform fertilizer (9 lbs/1000 sq ft).

2) Acceptable – Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or 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 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 seeded 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, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

Seeding: For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted, 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.

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

County Health Officer — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director — 2/25/98 Date

Chief, Division of Land Development — 2/18/98 Date

Chief, Development Engineering Division — 2/4/98 Date

GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK – BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 | DES. | DRN. | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR:
Julia Brown Montessori School
7140 Owen Brown Road
Columbia, Md 21045
(410) 730-3056

Sediment Control Notes, Details & Profiles
The Julia Brown Montessori School
Village of Oakland Mills
Section 5 Area 2
Guilford Election District No. 6 — Howard County, Maryland

SCALE	ZONING	G. L. W. FILE No.
as shown	R-20	97007
DATE	TAX MAP No.	SHEET
September 1997	20	4 of 6

SDP-97-133

Schedule A
Perimeter Landscape edge

Category	Adjacent to Roadways		Adjacent to Perimeter Properties
Landscape Type	B	E	C
Linear Feet of Roadway Frontage/Perimeter	199'	105'	965'
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	Yes- 170' ex. trees	No	Yes, - 815 L.F. of ex. woodland and ex. trees
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	No	Yes- High Berm	No
Number of Plants Required Shade Trees Evergreen Trees Shrubs	69 L.F. 1 2 (1 EST) 0	105 L.F. 3 0 0 (berm)	150 L.F 4 8 (=4 EST)* 0
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 substitution) Shrubs (10:1 substitution) (Describe plant substitution credits, below if needed.)	4 0 2 ornamental 14		4 over 8 ① 1 0

* EST = Equivalent Shade Tree

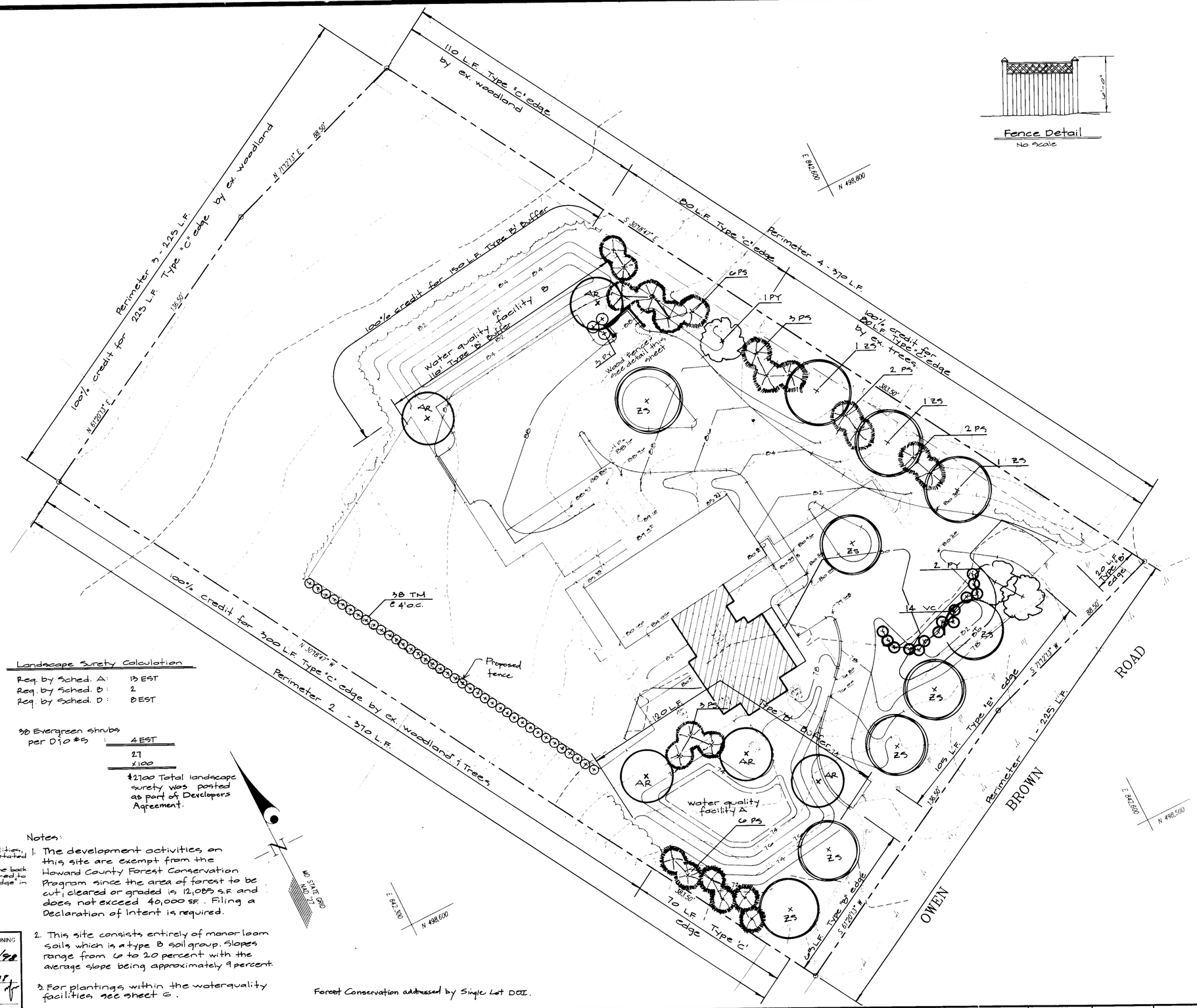
Schedule B
Residential Development Internal Landscaping

Number of parking spaces	18
Number of Trees Required (1 per 10 spaces)	2
Number of Trees Provided Shade Trees Other Trees (2:1 substitution)	2

Schedule D
Stormwater Management Area Landscaping

Linear Feet of Perimeter	250 L.F. to be planted
Number of Trees Required Shade Trees (1:50) Evergreen Trees (1:40)	5 6 (=3 EST) ①
Credit for Existing Vegetation (No, Yes and %)	Yes, 100% for 150 L.F.
Credit for Other Landscaping (No, Yes and %)	Yes, By 1st buffer edge
Number of Trees Provided Shade Trees Evergreen Trees Other Trees (2:1 substitution)	5 6 ①

① As bio-retention facilities, these ponds are vegetated therefore, three of the evergreen trees for the back facility are transferred to the 710 L.F. type C edge in the SW corner.



Landscape Surety Calculation

Req. by Sched. A: 13 EST
Req. by Sched. B: 2
Req. by Sched. D: 8 EST

30 Evergreen shrubs per D10 #5 : 4 EST
27
x100

$2700 Total landscape surety was posted as part of Developers Agreement.

Notes:

1. The development activities on this site are exempt from the Howard County Forest Conservation Program since the area of forest to be cut, cleared or graded is 12,085 S.F. and does not exceed 40,000 S.F. Filing a Declaration of Intent is required.
2. This site consists entirely of manor loam soils which is a type B soil group. Slopes range from 6 to 20 percent with the average slope being approximately 9 percent.
3. For plantings within the waterquality facilities, see sheet 6.

Forest Conservation addressed by Single Lot DCII.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director — Date 2/25/98
Chief, Division of Land Development — Date 2/18/98
Chief, Development Engineering Division — Date 2/4/98

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
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TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 DES. | DRN. mcf | CHK.

DATE	REVISION	BY

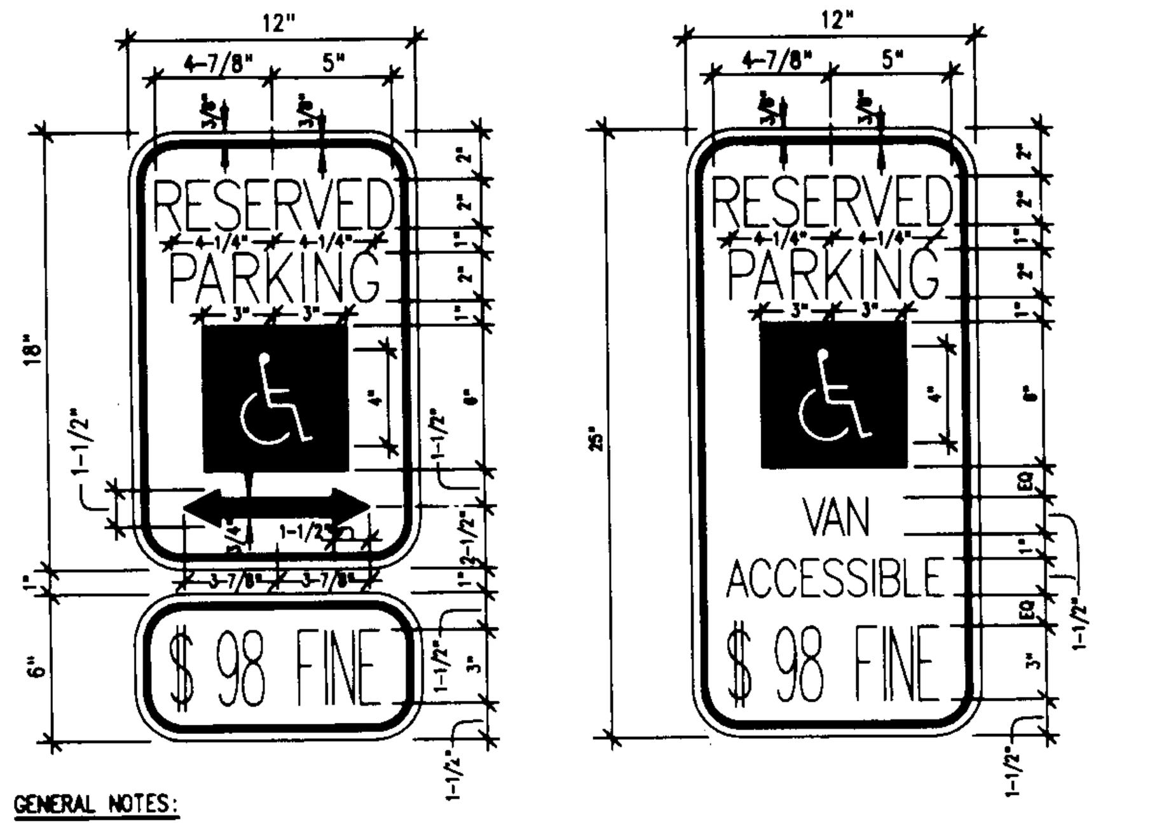
PREPARED FOR:
JULIA BROWN MONTESSORI SCHOOL
9760 OWEN BROWN ROAD
COLUMBIA, MD 21045
(410) 730-5056

Landscaping Plan
The Julia Brown Montessori School
Village of Oakland Mills
Section 5 Area 2

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=20'	R-20	97037
DATE	TAX MAP No.	SHEET
Sept., '97	36	3 of 6

SDP-97-133

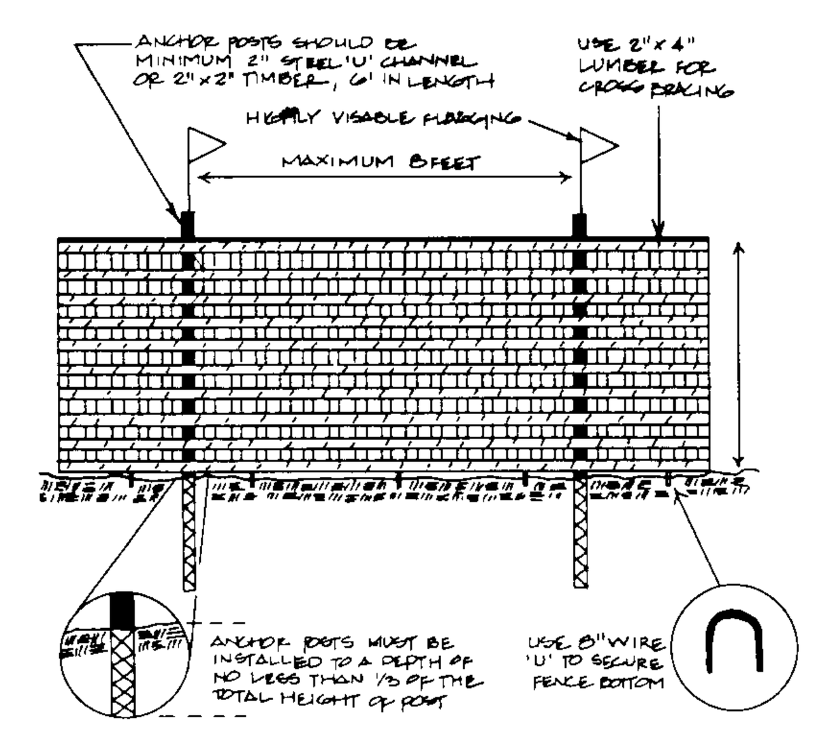


GENERAL NOTES:

1. SIGNS SHALL MEET DESIGN STANDARDS OF THE FEDERAL HIGHWAY ADMINISTRATION AND CONFORM TO THE STATE OF MARYLAND STANDARD HIGHWAY SIGN BOOKLET DETAIL R7-8.
2. ONE SIGN IS REQUIRED PER SPACE PLACED AS SHOWN ON SITE PLAN.
3. SPACES INDICATED ON SITE PLAN AS "VAN" ACCESSIBLE SHALL BE SIGNED ACCORDINGLY.
4. SIGNS SHALL BE POLE MOUNTED WITH HOT DIPPED GALVANIZED COUNTY APPROVED PERFORATED CHANNEL POSTS W/TOP OF SIGNS 9'-1" ABOVE FINISHED GRADE OR AS INDICATED ON SITE DRAWINGS.
5. SIGN SHALL BE ATTACHED TO FLANGED SIDE OF POST. POST SHALL EXTEND INTO GROUND 2'-6" MIN.
6. COLORS: LEGEND AND BORDER-GREEN
   SYMBOL-WHITE ON BLUE BACKGROUND
   BACKGROUND-WHITE

HANDICAP PARKING SIGNS DETAIL

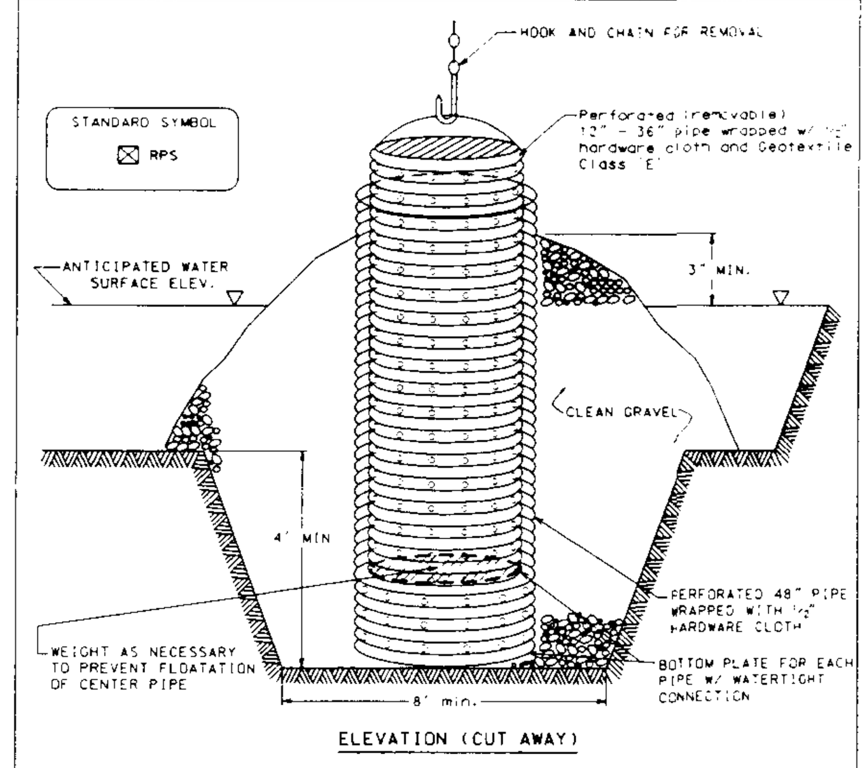
Figure J-4 **Blaze Orange Plastic Mesh**



Notes
1. Forest protection device only.
2. Retention Area will be set as part of the review process.
3. Boundaries of Retention Area should be staked and flagged prior to installing device.
4. Root damage should be avoided.
5. Protective signage may also be used.
6. Device should be maintained throughout construction.

Source: Prince George's County, Maryland: Woodland Conservation Manual

DETAIL 20A - REMOVABLE PUMPING STATION

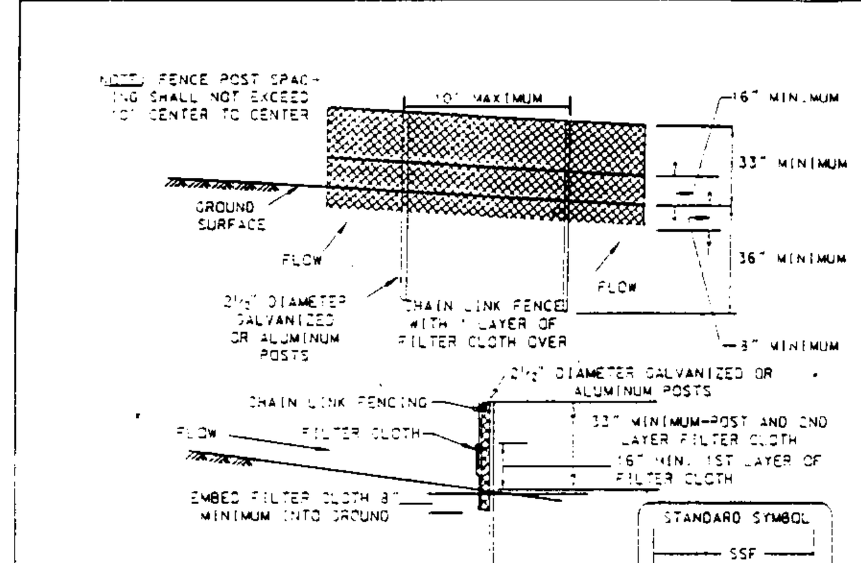


Construction Specifications

1. The outer pipe should be 48" dia. or shall, in any case, be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2" hardware cloth to prevent backfill material from entering the perforations.
2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.
3. The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be 1/2" X 6" slits or 1" diameter holes 6" on center. The center pipe shall be wrapped with 1/2" hardware cloth first, then wrapped again with Geotextile Class E.
4. The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE D - 12 - 6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



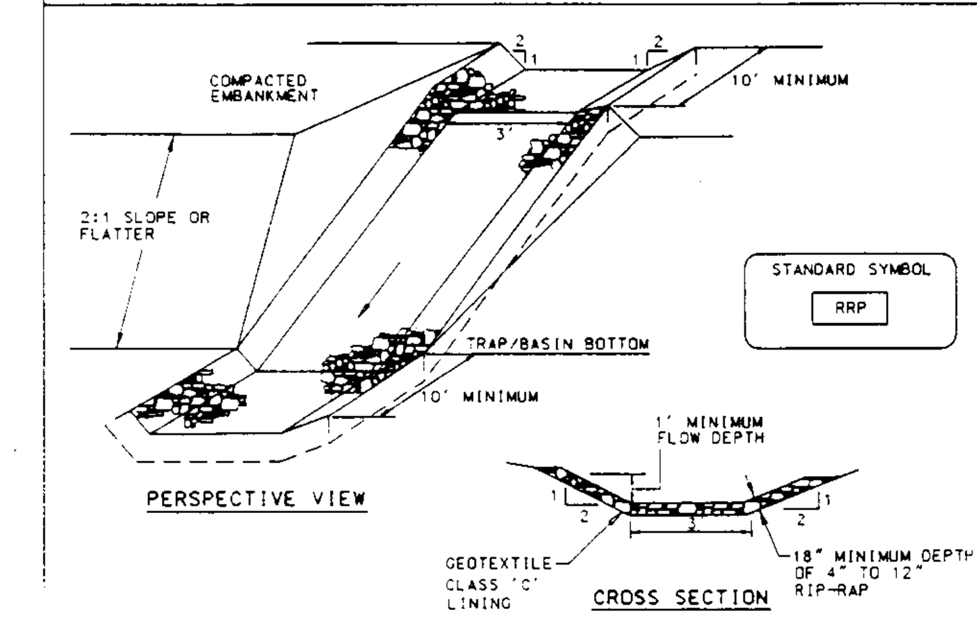
Construction Specifications

Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6 foot fence shall be used substituting 42 inch fabric and 6 foot length posts.

1. The poles do not need to set in concrete.
2. Chain link fence shall be fastened securely to the fence posts with wire ties or staples.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H - 26 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 5 - RIP-RAP INFLOW PROTECTION

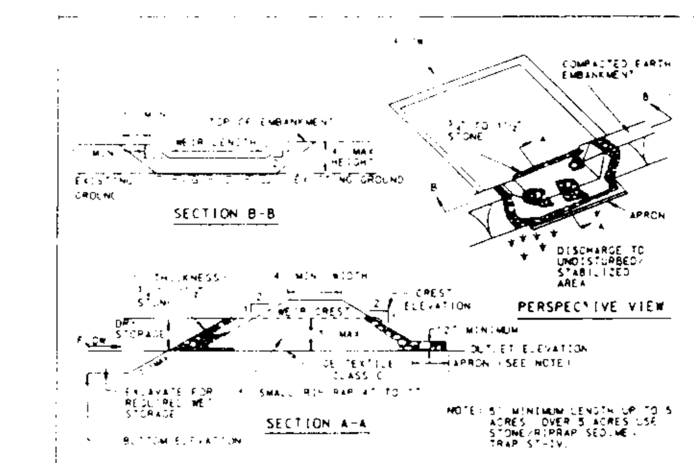


Construction Specifications

1. Rip-rap lined inflow channels shall be 1' in depth, have a trapezoidal cross section with 2:1 or flatter side slopes and 3' (min.) bottom width. The channel shall be lined with 4" to 12" rip-rap to a depth of 18".
2. Filter cloth shall be installed under all rip-rap. Filter cloth shall be Geotextile Class C.
3. Entrance and exit sections shall be installed as shown on the detail section.
4. Rip-rap used for the lining may be recycled for permanent outlet protection if the basin is to be converted to a stormwater management facility.
5. Gabion Inflow Protection may be used in lieu of Rip-rap Inflow Protection.
6. Rip-rap should blend into existing ground.
7. Rip-rap Inflow Protection shall be used where the slope is between 4:1 and 10:1. for slopes flatter than 10:1 use Earth Dike or Temporary Swale lining criteria.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 6 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 9 - STONE OUTLET SEDIMENT TRAP - ST II



Construction Specifications

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip-rap 4" to 7" in size with a 1' thick layer of 3/4" to 1 1/2" washed aggregate placed on the upstream face of the outlet. Stone facing shall be as necessary to prevent clogging. Geotextile Class C may be substituted for the stone facing by placing it on the inside face of the stone outlet.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to one half of the wet storage depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 8 - 10	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

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 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 representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:

i. 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 1½" in diameter.

ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

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.

II. 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 I - Vegetative Stabilization Methods and Materials.**

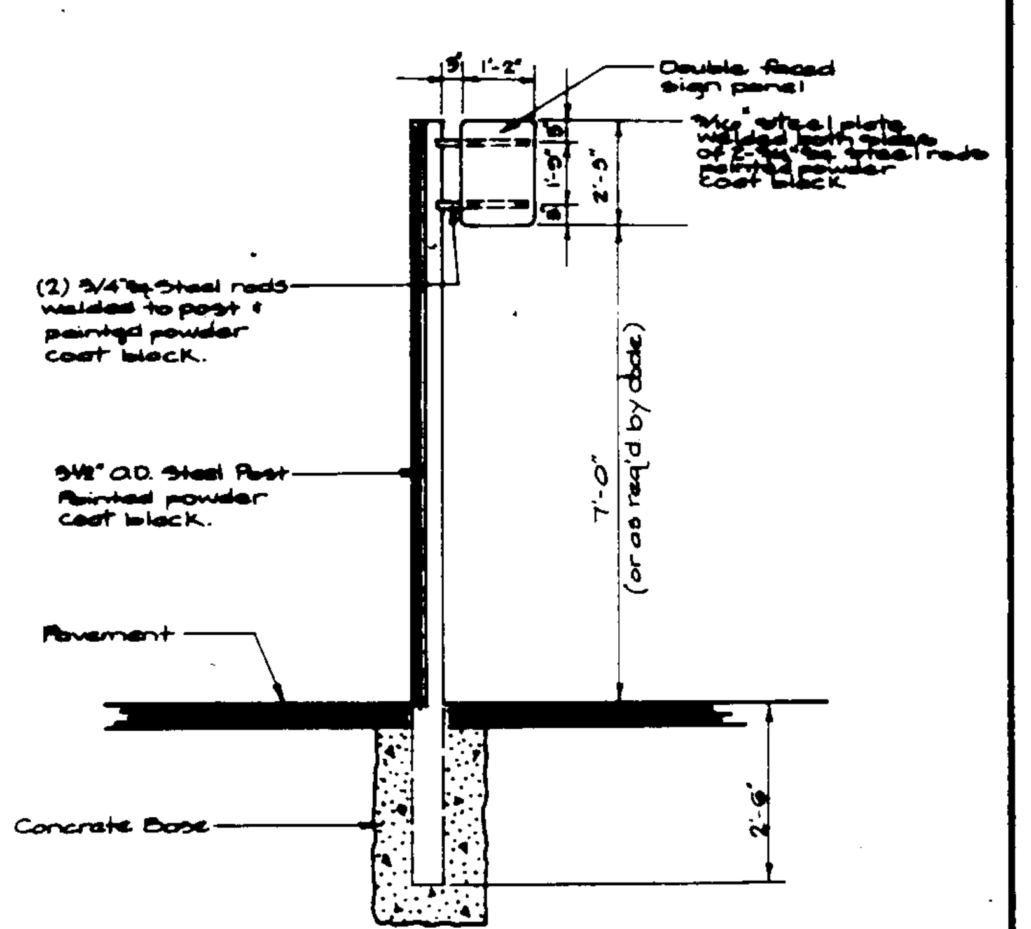
V. Topsoil Application

i. 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.

ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.

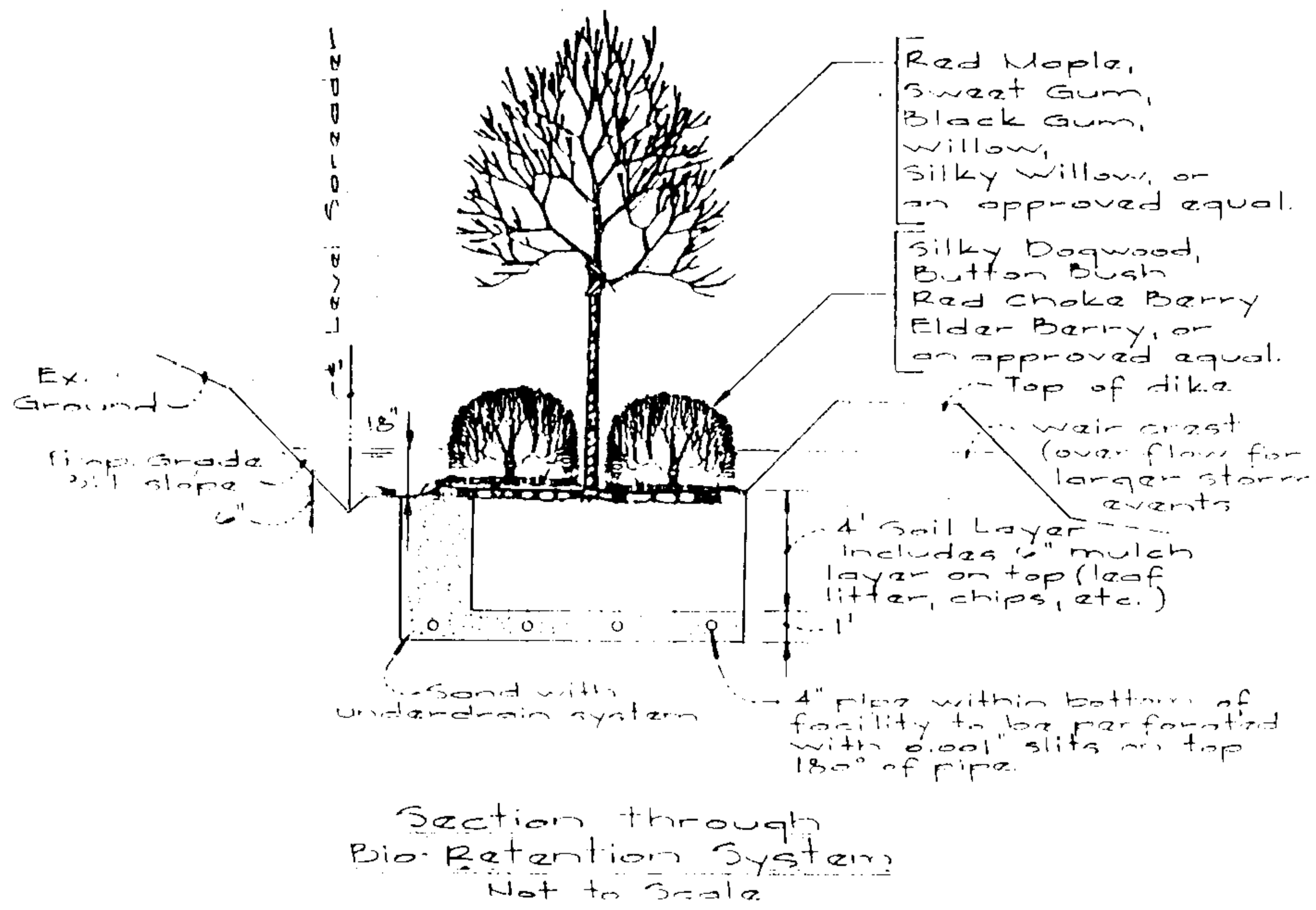
iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

iv. 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.



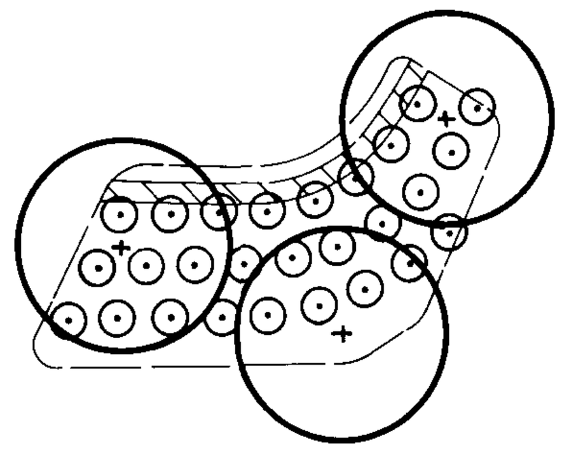
Post & Sign Panel Detail For Parking Restriction Sign

No Scale

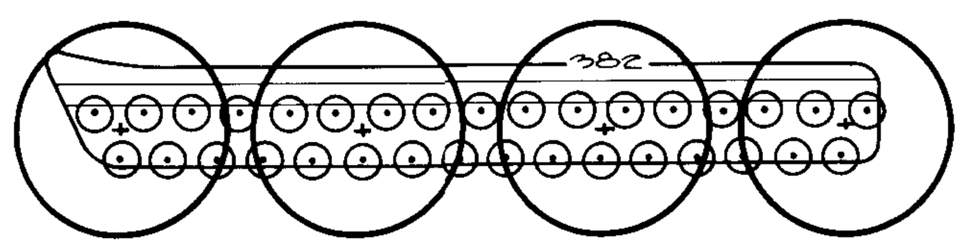


Section through Bio-Retention System

Not to Scale



Facility 'A'



Facility 'B'

Planting Details

scale: 1" = 20'

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."

Signature of Developer/Builder — Date 4.16.97

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

Howard S.C.D. — Date 2/2/98

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

Natural Resources Conservation Service — Date 2/2/98

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."

Date 1-22-98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 2/25/98
Chief, Division of Land Development	Date 2/18/98
Chief, Development Engineering Division	Date 2/4/98

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS

3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD. 20866

TELEPHONE: (301)421-4024 NO.VA. (301)989-2524 BALTO. (301)880-1820 FAX (301)421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR:

JULIA BROWN MONTESSORI SCHOOL
9760 OWEN BROWN ROAD
COLUMBIA, MD 21043
(410) 730-5056

Notes and Details

The Julia Brown Montessori School

Village of Oakland Mills
Section 5 Area 2

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

DES.:	SCALE	ZONING	G.L.W. FILE No.
DRN.:	As Shown	R-20	97037
CHK.:	DATE	TAX MAP No.	SHEET
	September 1997	36	6 of 6

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