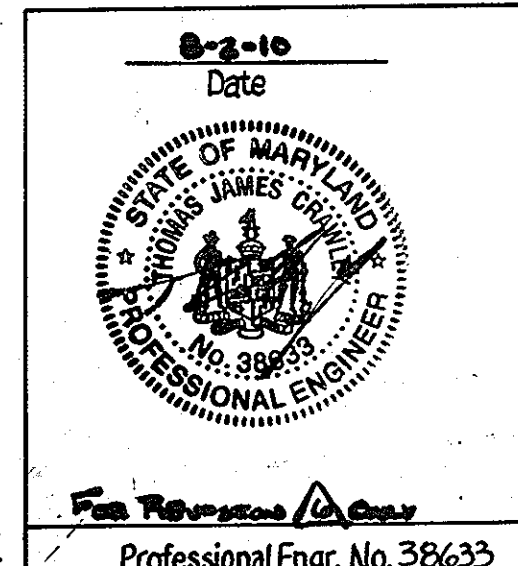


LEGEND

- EXISTING CONTOUR
- EXISTING WATER
- EXISTING STORM DRAIN
- EXISTING SEWER
- PROPOSED STANDARD CURB SECTION
- PROPOSED REVERSE CURB SECTION
- PROPOSED MOUNTABLE CURB SECTION
- PROPOSED SEWER
- PROPOSED WATER
- PROPOSED STORM DRAIN
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED STREET LIGHTS
- STREET TREES

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
 DATE Feb 8, 2007



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 38633, EXPIRATION DATE: 5/14/2012.

▲ PURPOSE STATEMENT: THIS REVISION TO THE S.D.P. WAS TO ALLOW FOR THE CONVERSION OF UNITS 6 THRU 37 FROM CONDOMINIUM TOWNHOMES TO IN-FEE TOWNHOMES.
 ▲ 8-2-2010 REVISION LOTS 27-32, 33-37. ADDED NEW HOUSE TYPE

Date	No.	Revision Description
2/10/08	2	REVISED BLDG. 3 GRADED ADDED EX-SIGN @ INT. SHOWN DAM.
3/20/08	3	REVISED BLDG. 2, 4, 5, 6, 7 GRADED ADDED DAM.
6/11/08	4	REVISED BLDG. 3 & 5
12/18/08	5	CONVERT UNITS 6-37 TO IN-FEE LOTS
8/2/2010	6	REVISED LOTS 27-32, 33-37. ADDED NEW HOUSE TYPE.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 Chief, Development Engineering Division: *W. J. Bogue* DATE: 6/2/10
 Chief, Division of Land Development: *W. J. Bogue* DATE: 6/07/10
 Director: *Thomas J. Swindle* DATE: 6/2/10

Date	No.	Revision Description
9/5/07	1	REVISED BLDG. 1 GRADED ADDED SALES & CONSTR. TRAILER DAM.

REVISED SITE DEVELOPMENT PLAN
EMERSON SECTION 2 AREA 7 PARCEL B
 UNITS 1 THRU 37
 TOWNHOMES

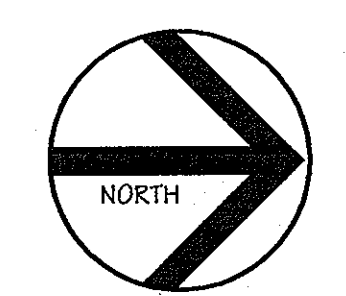
OWNER(S) / DEVELOPER:
NEWPORT HOMES LIMITED
 11401 FORT CAMPBELL
 5495 HARTERS FARMS RD.
 SUITE 200
 COLUMBIA, MD. 21044

DMW
 Dan McCune Walker, Inc.
 300 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 286-3333
 Fax: 396-4708

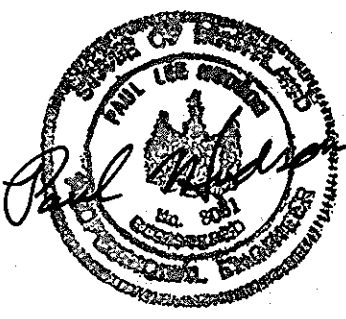
AREA: TAX MAP 47 PARCEL 837
 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: **SITE PLAN**

Des. By	MJP	Scale	1" = 30'	Proj. No.	95054R
Dm. By	SRG	Date	4/2/07	2 of 12	
Chk. By	Approved				



B-24-10
 Date



Professional Engr. No. 38633

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 38633, EXPIRATION DATE: 5-26-11



LEGEND

- EXISTING CONTOUR
- EXISTING WATER
- EXISTING STORM DRAIN
- EXISTING SEWER
- PROPOSED STANDARD CURB SECTION
- PROPOSED REVERSE CURB SECTION
- PROPOSED MOUNTABLE CURB SECTION
- PROPOSED SEWER
- PROPOSED WATER
- PROPOSED STORM DRAIN
- 283.0 PROPOSED SPOT ELEVATION
- 280 PROPOSED MAJOR CONTOUR
- 272 PROPOSED MINOR CONTOUR
- EXISTING TREELINE
- PROPOSED TREELINE

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
 PREPARED OR APPROVED BY ME AND THAT I AM
 A DULY LICENSED PROFESSIONAL ENGINEER UNDER
 THE LAWS OF THE STATE OF MARYLAND,
 LICENSE NO. 38633, EXPIRATION DATE: 5/14/2012

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE Feb 8 2007

8-2-10
 Date

Professional Engr. No. 38633

Date	No.	Revision Description
2/10/08	2	REVISED BLDG. 3 GRADED ADD EX SIGN @ ENT. SHOWN DMW.
3/31/08	3	REVISED BLDG. 2, 4, 5, 6, 7 GRADED ADD DMW.
6/10/08	4	REVISED BLDG. 3 & 5
12/18/09	5	CONVERT UNITS 6-37 TO IN-FEE LOTS
8/12/10	6	REVISED LOTS 27-32, 33-37, ADDED NEW HOUSE TYPE.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

John DeWitt 6/2/10
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Neil Sullivan 6/10/10
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Thomas J. Butler 6/2/10
 DIRECTOR DATE

REVISED SITE DEVELOPMENT PLAN
 EMERSON SECTION 2 AREA 7 PARCEL B
 UNITS 1 THRU 37
 TOWNHOMES

OWNER(S) / DEVELOPER:
 NEWPORT HOMES LIMITED
 LIABILITY COMPANY
 5485 HARPERS FARM RD.
 SUITE 200
 COLUMBIA, MD. 21044

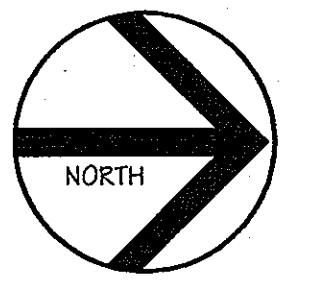
DMW
 Daft-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705

A Team of Land Planners,
 Landscape Architects,
 Engineers, Surveyors &
 Environmental Professionals

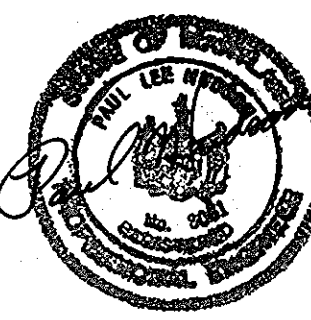
AREA: TAX MAP 47 PARCEL 837
 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: **GRADING PLAN**

Des. By	MJP	Scale	1" = 30'	Proj. No.	95054R
Dm. By	SRG	Date	4/2/07	3 of 12	
Chk. By	Approved				

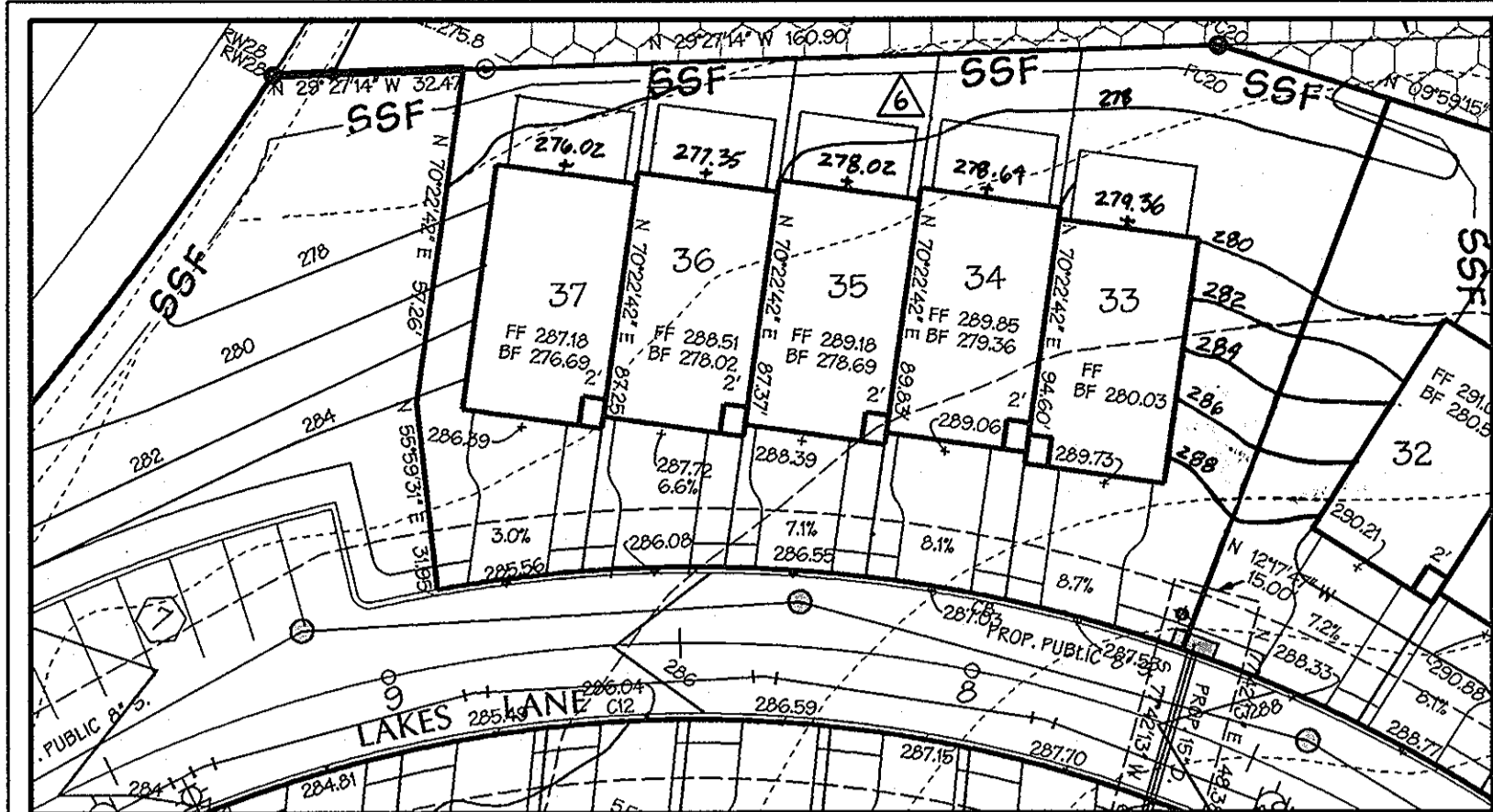


5-24-10
 Date



Professional Engr. No. 8061

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
 PREPARED OR APPROVED BY ME AND THAT I AM
 A DULY LICENSED PROFESSIONAL ENGINEER UNDER
 THE LAWS OF THE STATE OF MARYLAND,
 LICENSE NO. 8061, EXPIRATION DATE: 8-26-11



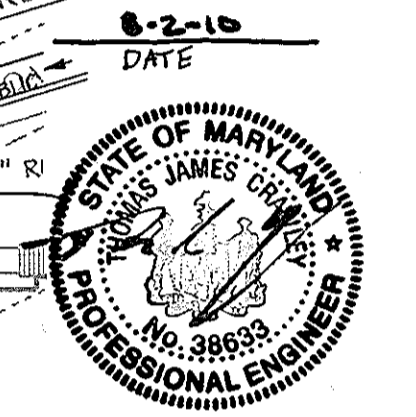
REMOVED TRAP FINAL GRADING UNITS 33-37



TRAP TABLE		
TRAP NUMBER	1	
TRAP TYPE	ST-II	
EXISTING DRAINAGE AREA: ACRES	4.00	
INTERIM DRAINAGE AREA: ACRES	N/A	
PROPOSED DRAINAGE AREA: ACRES	4.00	
STORAGE REQUIRED: CUBIC FEET	WET	7,200
	DRY	7,200
	TOTAL	14,400
STORAGE PROVIDED: CUBIC FEET	WET	8,464
	DRY	10,488
	TOTAL	18,952
EXISTING GROUND ELEVATION	277.00	
TOP EMBANKMENT ELEVATION	278.00	
WEIR CREST ELEVATION	277.00	
WET STORAGE / OUTLET ELEVATION	276.00	
CLEANOUT ELEVATION	275.00	
BOTTOM ELEVATION	274.00	
DEPTH OF CHANNEL (a)	N/A	
OUTLET WIDTH (b)	20'	
BOTTOM DIMENSION	30' X 120'	
TRAP SIDESLOPES	2:1	
TRAP DEPTH	WET	2.0'
	DRY	2.0'
	TOTAL	4.0'
BARREL DIAMETER	N/A	
RISER DIAMETER	N/A	
WET STORAGE ZONE ELEVATION	274.00-276.00	
DRY STORAGE ZONE ELEVATION	276.00-278.00	

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE: 5/8/2007

NOTE: SEE SDP 06-112
FOR SEC MEASURES SHOWN



Professional Engr. No. 38633

LEGEND

- EXISTING CONTOUR
- 8" W EXISTING WATER
- 18" D EXISTING STORM DRAIN
- 8" S EXISTING SEWER
- 8" S PROPOSED SEWER
- 8" W PROPOSED WATER
- 18" D PROPOSED STORM DRAIN
- ☒ RPS REMOVABLE PUMPING STATION
- NON-WOODY VEGETATION ZONE
- LIMIT OF DISTURBANCE (L.O.D.)
- BASE OF EMBANKMENT
- Mo AgC2 SOIL TYPE DELINEATION LINE
- E.D. (A-2) EARTH DIKE (E.D.)
- STABILIZED CONSTRUCTION ENTRANCE (SCE)
- T.S. (A-2) TEMPORARY SWALE (T.S.)
- SSF SUPER SILT FENCE
- SF SILT FENCE
- GM GABION MATTRESS
- INFLOW PROTECTION
- ROCK OUTLET PROTECTION TYPE III
- MOUNTABLE BERM

REVISIONS

Date	No.	Revision Description
2/10/08	2	REVISED BLDG. 3 GRADED ADDED DMWK.
3/3/08	3	REVISED BLDG. 2,4,5,6,7 GRADED ADDED DMWK.
3/10/08	4	REVISED BLDG. 3 & 5
12/8/09	5	CONVERT UNITS 6-37 TO IN-FEE LOTS
8/10/10	6	REVISED LOTS 27-32, 33-37. ADDED NEW HOUSE TYPE.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 CHIEF, ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR

REVISIONS

Date	No.	Revision Description
9/18/07	1	REVISED BLDG. 1 GRADED ADDED DMWK, SALES & CONSTR. TRAILER

REVISED SITE DEVELOPMENT PLAN

EMERSON SECTION 2 AREA 7 PARCEL B
 UNITS 1 THRU 37
 TOWNHOMES

OWNER(S) / DEVELOPER:
 NEWPORT HOMES, L. LIMITED
 5485 HARBOR FARMS RD.
 SUITE 200
 COLUMBIA, MD 21044

DMW
 Draft/McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705

AREA: TAX MAP 47 PARCEL 837
 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

SEDIMENT & EROSION CONTROL PLAN

Des. By	Scale 1" = 30'	Proj. No. 95054R
Dm. By	Date 4/21/07	4 of 12
Chk. By	Approved	

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 8261, EXPIRATION DATE: 5-14-12

5-24-10
 Date
 Professional Engr. No. 8261

DEVELOPERS CERTIFICATE:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE OBTAINED ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ALSO AUTHORIZE FREQUENT ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

PLANNING BOARD
 HOWARD COUNTY
 Lauree L. Bean
 SIGNATURE OF DEVELOPER
 LAUREE L. BEAN
 DATE: 5-24-10

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

Paul Hudson
 SIGNATURE OF ENGINEER
 PAUL HUDSON
 DATE: 5-24-10

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 8261, EXPIRATION DATE: 5-26-11

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

John K. Robertson
 SIGNATURE OF ENGINEER
 JOHN K. ROBERTSON
 DATE: 5-24-10

UTILITY NOTE: CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWN SLOPE) THE TRENCH

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS

A. SITE PREPARATION

- I. Install erosion and sediment control structures...
II. Perform all grading operations at right angles to the slope...
III. Schedule required soil test to determine soil amendment composition...

B. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

- I. Soil test must be performed to determine the exact ratios and application rates...
II. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application...
III. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted)...

C. SEEDING PREPARATION

- I. TEMPORARY SEEDING
A. Seeded preparation shall consist of loosening soil to a depth of 3 inches to 5 inches...
B. Apply fertilizer and lime as prescribed on the plans.

II. PERMANENT SEEDING

- A. Minimum soil conditions required for permanent vegetative establishment:
1. Soil pH shall be between 6.0 and 7.0.
2. Soluble salts shall be less than 500 parts per million (PPM).
3. The soil shall contain less than 40% clay but enough fine grained material...

D. SEED SPECIFICATIONS

- I. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory...
II. Inoculant - The inoculants for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species...

E. METHODS OF SEEDING

- I. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer)...
A. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following:
Nitrogen: maximum of 100 pounds per acre total of soluble Nitrogen P205 (phosphorus): 200 pounds per acre K2O (potassium): 200 pounds per acre.

F. MULCH SPECIFICATIONS (IN ORDER OF PREFERENCE)

- I. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and shall not be moldy, mildy, caked, decayed, or excessively dusty...
II. Wood cellulose fiber mulch (WCFM)

B. WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.

C. WCFM, including dye shall contain no germination or growth inhibiting factors.

D. WCFM materials shall be manufactured and processed in a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry.

E. WCFM material shall contain no elements or compounds at concentration levels that will be phytotoxic.

F. WCFM must conform to the following physical requirements: Fiber length to approximately 10 mm, diameter approximately 1mm, pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum.

G. MULCHING SEEDED AREAS - Mulch shall be applied to all seeded areas where one species of grass is desired.

- I. If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
II. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons per acre.

H. SECURING STRAW MULCH

- I. A mulch anchoring tool is a tractor drawn implement design to punch and anchor mulch into the soil surface a minimum of two (2) inches.
II. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds per acre.

SECTION II - TEMPORARY SEEDING

VEGETATION - Annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, permanent seeding is required.

Table with columns: No., Species, Application Rate (Lb./Ac.), Seeding Dates, Seeding Depth, Fertilizer Rate (10-10-10), Lime Rate. Includes rows for Annual Ryegrass and Weeping Lovegrass.

SECTION III - PERMANENT SEEDING

Seeding grass and legumes to establish ground cover for a minimum of one year on disturbed areas generally receiving low maintenance.

Table with columns: Seed Mixture No. 3 (Hardiness Zone 6B), % Species, Application Rate (Lb./Ac.), Seeding Dates, Seeding Depth, Fertilizer Rate (10-20-20), Lime Rate. Includes rows for Rebel II Tall Fescue and Pennine Perennial Ryegrass.

* For 5-16 through 8-14 add two (2) pounds of Weeping Lovegrass per acre or ten (10) pounds of Millet per acre to seed mixture (i.e. Mix #3 shown).
** At time of fine grading, fertilizer and lime rates will be based on soil test results; (see section 1.B.1). Copy of recommended rates to be supplied to the Sediment Control Inspector.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE G - 20 - 1A MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Vegetative Stabilization

- I. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
A. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the temporary or permanent seeding summaries or tables 25 or 26.
B. Where practical, seed should be applied in two directions perpendicular to each other.

F. MULCH SPECIFICATIONS (IN ORDER OF PREFERENCE)

- I. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and shall not be moldy, mildy, caked, decayed, or excessively dusty...
II. Wood cellulose fiber mulch (WCFM)

SECTION IV - SOD

To provide quick cover on disturbed areas (2:1 grade or flatter)

A. GENERAL SPECIFICATIONS

- I. Class of turfgrass sod shall be Maryland or Virginia State certified or approved. Sod labels shall be made available to the job foreman and inspector.
II. Sod shall be machine cut at a uniform soil thickness of 1/4", plus or minus 1/8", at the time of cutting.

B. SOD INSTALLATION

- I. During periods of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to laying the sod.
II. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other.

C. SOD MAINTENANCE

- I. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4 inches.
II. After the first week, sod watering is required as necessary to maintain adequate moisture content.

SECTION V - TURFGRASS ESTABLISHMENT

Areas where turfgrass may be desired may include lawns, parks, playgrounds, and commercial sites which will receive a medium high level of maintenance.

Note: Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.

A. TURFGRASS MIXTURES

- I. Kentucky Bluegrass - Full sun mixture - For use in areas that receive intensive management.
II. Kentucky Bluegrass/Perennial Rye - Full sun mixture - For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management.
III. Tall Fescue/Kentucky Bluegrass - Full sun mixture - For use in drought prone areas and/or for areas receiving low to medium management.

Note: Turfgrass varieties should be selected from those listed in the most current University of Maryland publication, agronomy mimeo number 77, "Turfgrass Cultivar Recommendations for Maryland".

B. IDEAL TIMES OF SEEDING

- Western Maryland: March 15 - June 1, August 1 - October 1 (hardiness zones - 5B, 6A).
Central Maryland: March 1 - May 15, August 15 - October 15 (hardiness zone - 6B).
Southern Maryland, Eastern Shore: March 1 - May 15, August 15 - October 15 (hardiness zones - 7A, 7B).

C. IRRIGATION

If soil moisture is different, supply new seedlings with adequate water for plant growth (1/2" - 1" every 3 to 4 days depending on soil texture) until they are firmly established.

D. REPAIRS AND MAINTENANCE

- I. Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season.
II. Once the vegetation is established, the site shall have 95% groundcover to be considered adequately stabilized.

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 nutrients levels, low pH, materials toxic to plants, and/or unacceptable soil textures.

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.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

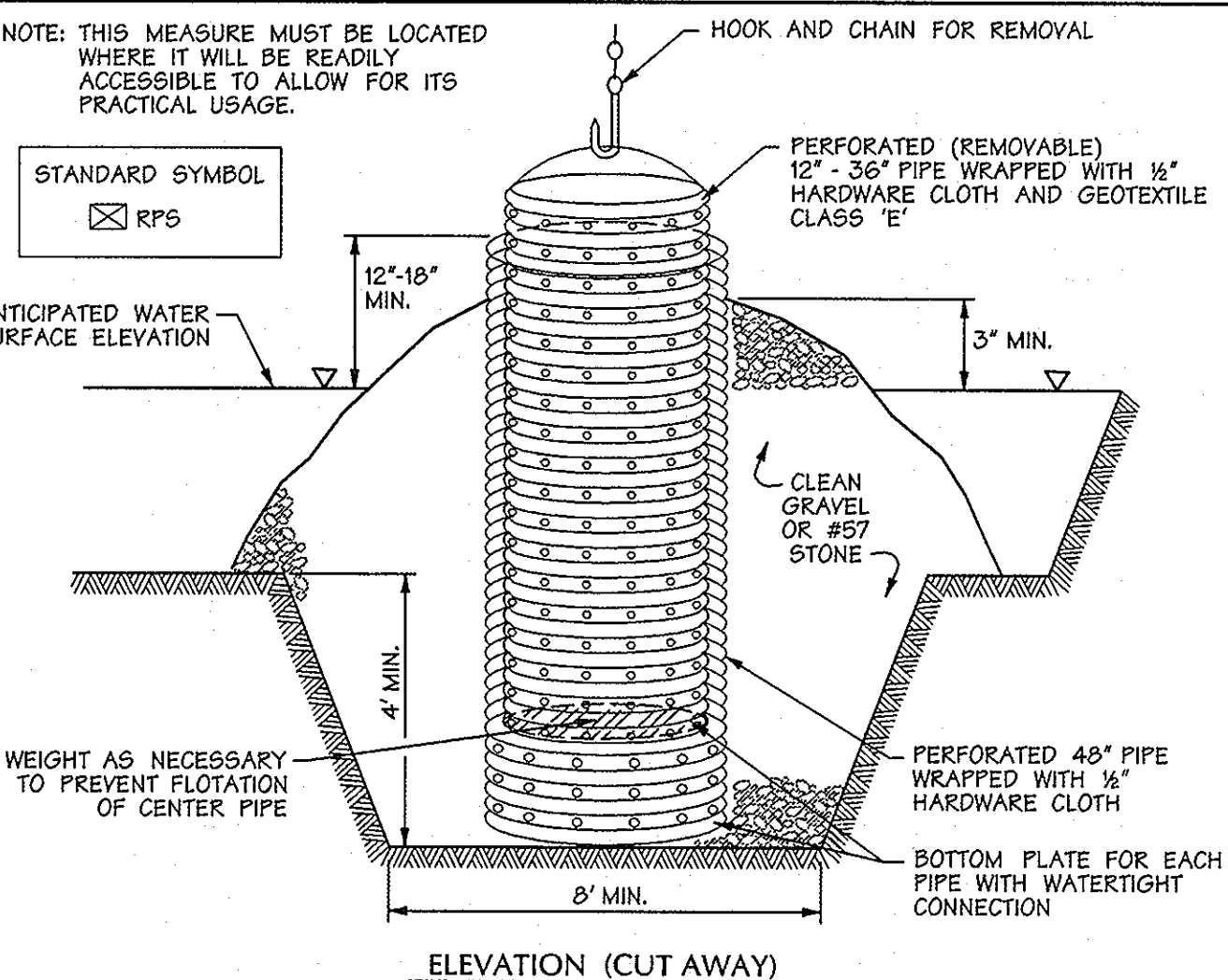
- I. Topsoil standards from the existing site may be used provided that it meets the standards as set forth in these specifications.
II. Topsoil Specifications - Soil to be used as topsoil must meet the following:
1. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate authority.

- III. For sites having disturbed areas under 5 acres:
1. 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.
b. Organic content of topsoil shall be not less than 1.5 percent by weight.

- VI. Topsoil Application
1. 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.

- IV. Maintenance fertilizer rates for permanent seedings are shown in Table 24, for lawns and other medium high maintenance turfgrass areas, refer to the University of Maryland publication "Lawn Care in Maryland" bulletin number 171.
References: Guidelines Specifications, Soil Preparation and Seeding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute, Revised 1973.

- Sequence of Construction-Parcel B
1. Obtain Grading Permit. Notify Maryland Department of Environmental and Natural Resources Inspections and Compliance sections at 410-631-3610 at least five days in advance of beginning any work in streams, 100-year floodplains, nontidal and wetland buffers. 1 Day
2. Notify HCD Department of inspections 410-313-1055 at least 48 hours prior to beginning any work. 1 Day
3. Orange high visibility fence shall be manually installed along the limit of disturbance where the limit is within 50 feet of forest conservation easement, 100-year floodplain, wetlands buffer or stream buffer. This shall be completed by an Inspector at the pre-construction meeting. 1 Day
4. With permission from the sediment Control Inspector, clear and grub for and install the Stabilized Construction Entrance, Grade Sediment Trap #2 and install Super Silt Fence, Silt Fence Diversion and Earth Dikes and temporary pipe. Notify HCD Inspector to gain a permit to proceed. 7 Days
5. With the permission of the Sediment Control Inspector clear and grade remainder of the site. 7 Days
6. Install utilities, block inlets with Inlet Protection, install mountable curbs and construct mountable berms, as roadway construction proceeds to maintain drainage to sediment trap. Connect the temporary pipe to I-9 when I-9 is built. Begin building construction. (Building #7 will be delayed until Sediment Control Inspector allows the removal of Sediment Trap #2. At that time Super Silt Fence will be placed below units #7 as shown on plan insert.) 60 Days
7. Save Road. 7 Days
8. Upon stabilization of the site with established vegetation and with the permission of the Sediment Control Inspector, flush the storm drain system. 2 Days
9. With the permission of the Sediment Control Inspector, remove sediment control measures and stabilize any areas disturbed by their removal. 2 Days
10. Construct Building #7. Stabilize remaining area. 21 Days
11. With the permission of the Sediment Control Inspector, remove super silt fence and stabilize any areas disturbed by its removal. 7 Days
Note: Road and Utility Construction for Parcels A and B will be occurring simultaneously.



- CONSTRUCTION SPECIFICATIONS
1. THE OUTER PIPE SHOULD BE 48" DIAMETER 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" SLOTS 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 D - 12 - 5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Removable Pumping Station NOT TO SCALE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 4/27/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 5/10/07
DIRECTOR DATE 5/16/07
DATE Feb 8, 2007

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 4/27/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 5/10/07
DIRECTOR DATE 5/16/07
DATE Feb 8, 2007
SITE DEVELOPMENT PLAN
EMERSON SECTION 2 AREA 7 PARCEL B
UNITS 1 THRU 37
TOWNHOMES
OWNER(S) / DEVELOPER: NEWPORT HOMES LIMITED LIABILITY COMPANY
3455 HARKERS FARMS RD SUITE 200 COLUMBIA MD 21044
DMW
Darrin C. Cline, Wallace, Inc.
200 East Pennsylvania Avenue Towson, Maryland 21286 (410) 286-3388
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
AREA
TAX MAP 47 PARCEL 837
8th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
TITLE: SEDIMENT & EROSION CONTROL DETAILS
Des. By: JLS Scale: 1" = 30' Proj. No.: 95054R
Dwn. By: GMO Date: 4/2/07
Chk. By: Approved 5 of 12

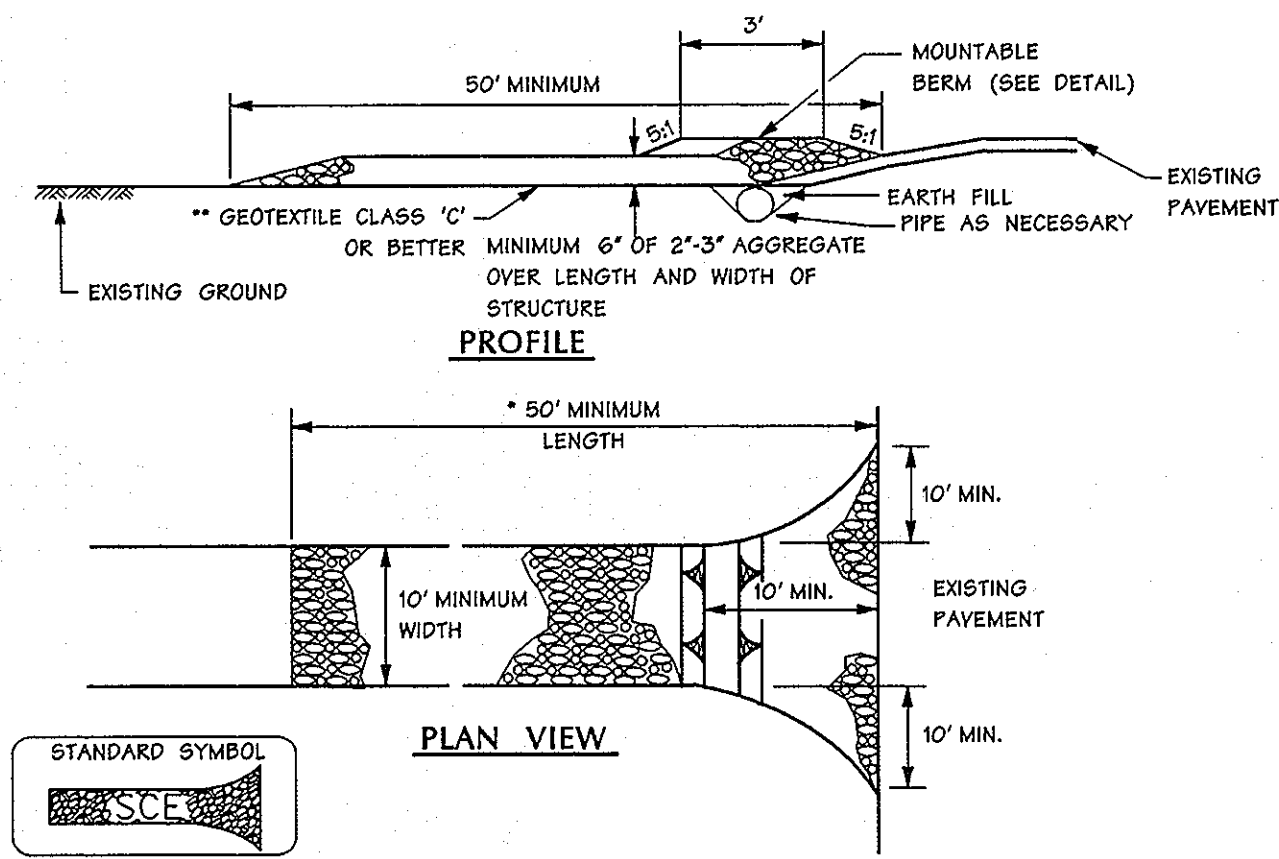
DEVELOPERS CERTIFICATE:
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF THE SITE CONDITIONS THIS PLAN HAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Signature: Cindy Huntzberry DATE: 3-28-07

ENGINEERS CERTIFICATE:
I IDENTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN HAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Signature: Charles V. Main II DATE: 3-29-07

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
Signature: John R. Robertson DATE: 4/26/07

Professional Engr. No. 20784
Date: 3-29-07

THIS PLAN IS THE PROPERTY OF DMW AND IS NOT TO BE REPRODUCED OR COPIED WITHOUT THE WRITTEN PERMISSION OF DMW.



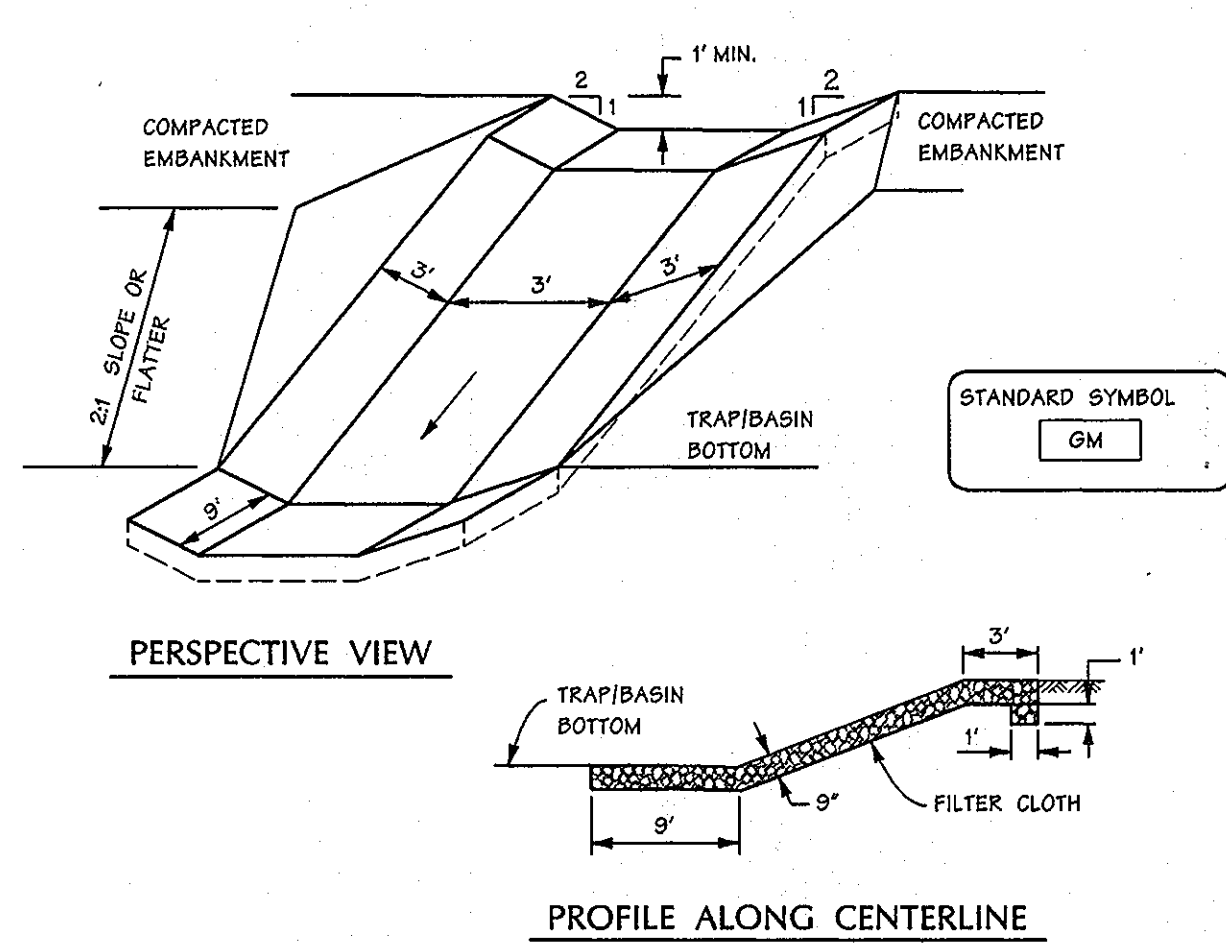
CONSTRUCTION SPECIFICATIONS

- LENGTH - MINIMUM OF 50' (30' FOR SINGLE RESIDENCE LOT).
- WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- GEOTEXTILE FABRIC CLASS C (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. **THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
- STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
- SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SIZE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.
- LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE F - 17 - 5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Stabilized Construction Entrance

Not To Scale



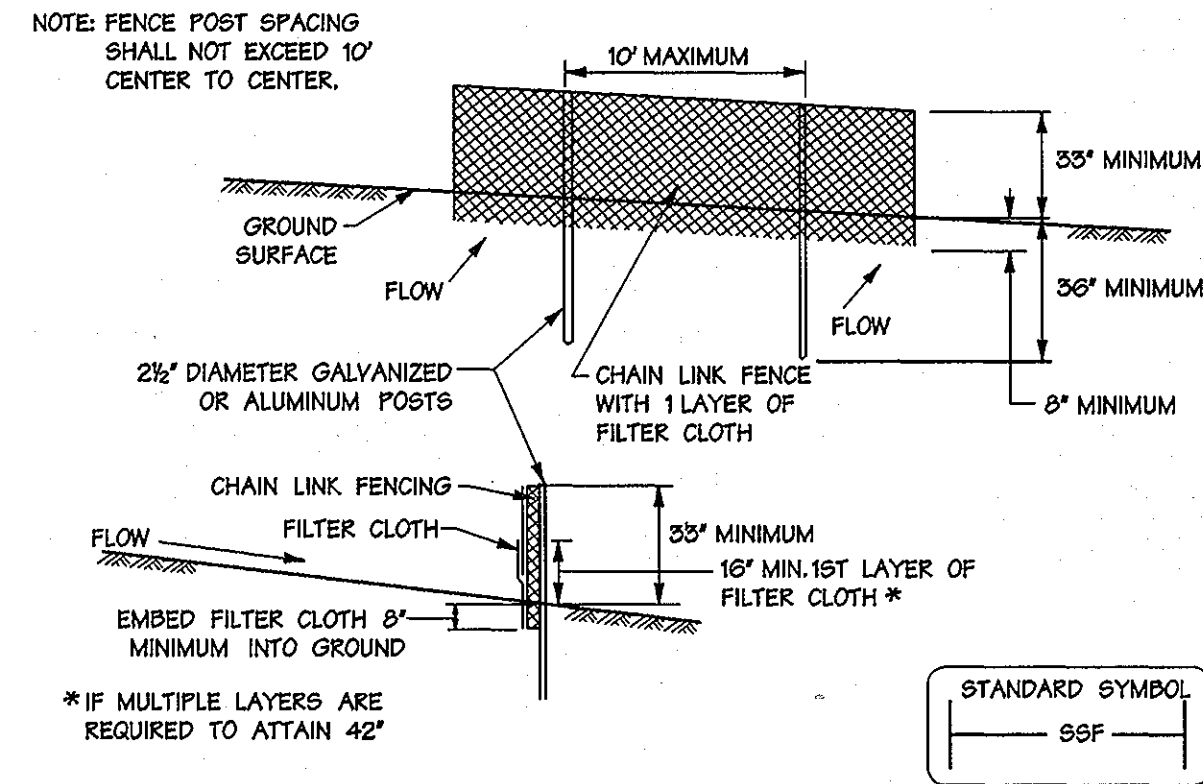
CONSTRUCTION SPECIFICATIONS

- GABION INFLOW PROTECTION SHALL BE CONSTRUCTED OF 9' x 3' x 9' GABION BASKETS FORMING A TRAPEZOIDAL CROSS SECTION 1' DEEP, WITH 2:1 SIDE SLOPES, AND A 3' BOTTOM WIDTH.
- GEOTEXTILE CLASS C SHALL BE INSTALLED UNDER ALL GABION BASKETS.
- THE STONE USED TO FILL THE GABION BASKETS SHALL BE 4" - 7".
- GABIONS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- GABION INFLOW PROTECTION SHALL BE USED WHERE CONCENTRATED FLOW IS PRESENT ON SLOPES STEEPER THAN 4:1.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE B - 7 - 2 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Gabion Inflow Protection

NOT TO SCALE



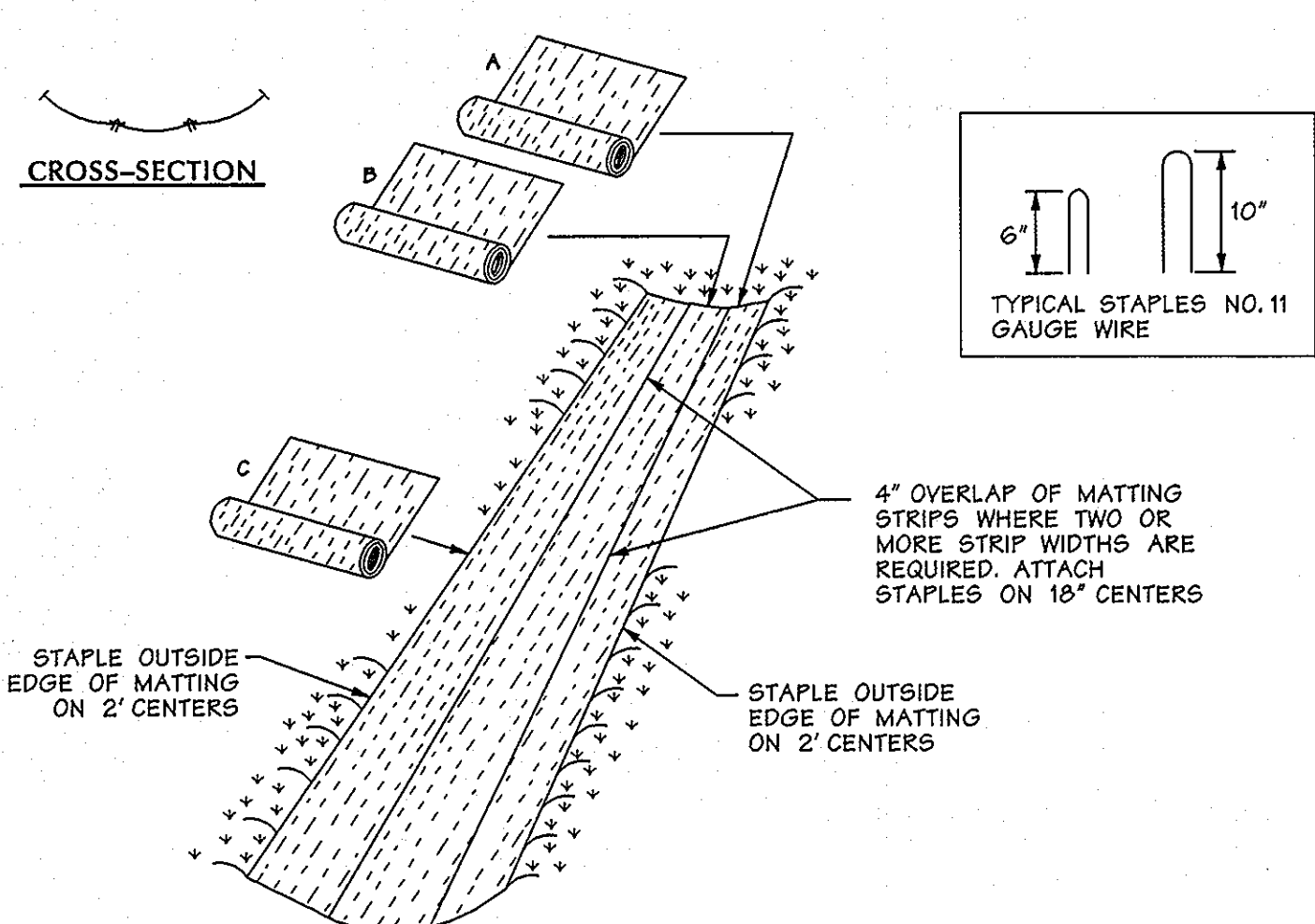
CONSTRUCTION SPECIFICATIONS

- FENCING SHALL BE 42 INCHES IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY (SHA) DETAILS FOR CHAIN LINK FENCING. THE SPECIFICATION FOR A 6' FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6' LENGTH POSTS.
- THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
- CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE. THE CHAIN LINK FENCING SHALL BE 6X (6) GAUGE OR HEAVIER.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
- FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BUILDS/UP REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE H - 26 - 5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Super Silt Fence

Not To Scale



CONSTRUCTION SPECIFICATIONS

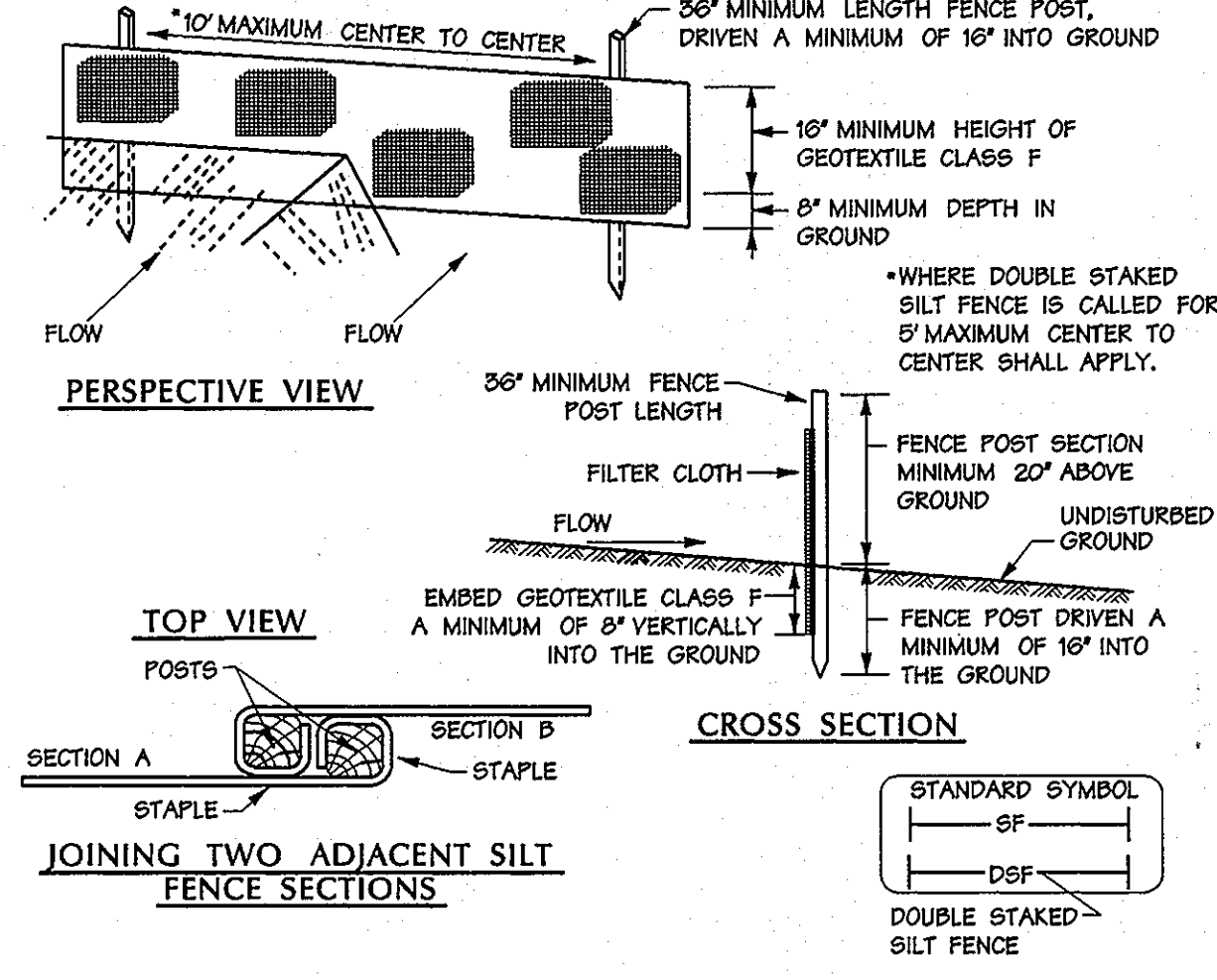
- KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH, 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IN 6".
- STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
- BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
- STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP, 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
- WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4", SHIPLAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
- THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.

NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEPT OPEN.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE G-22-2 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Erosion Control Matting

Not To Scale



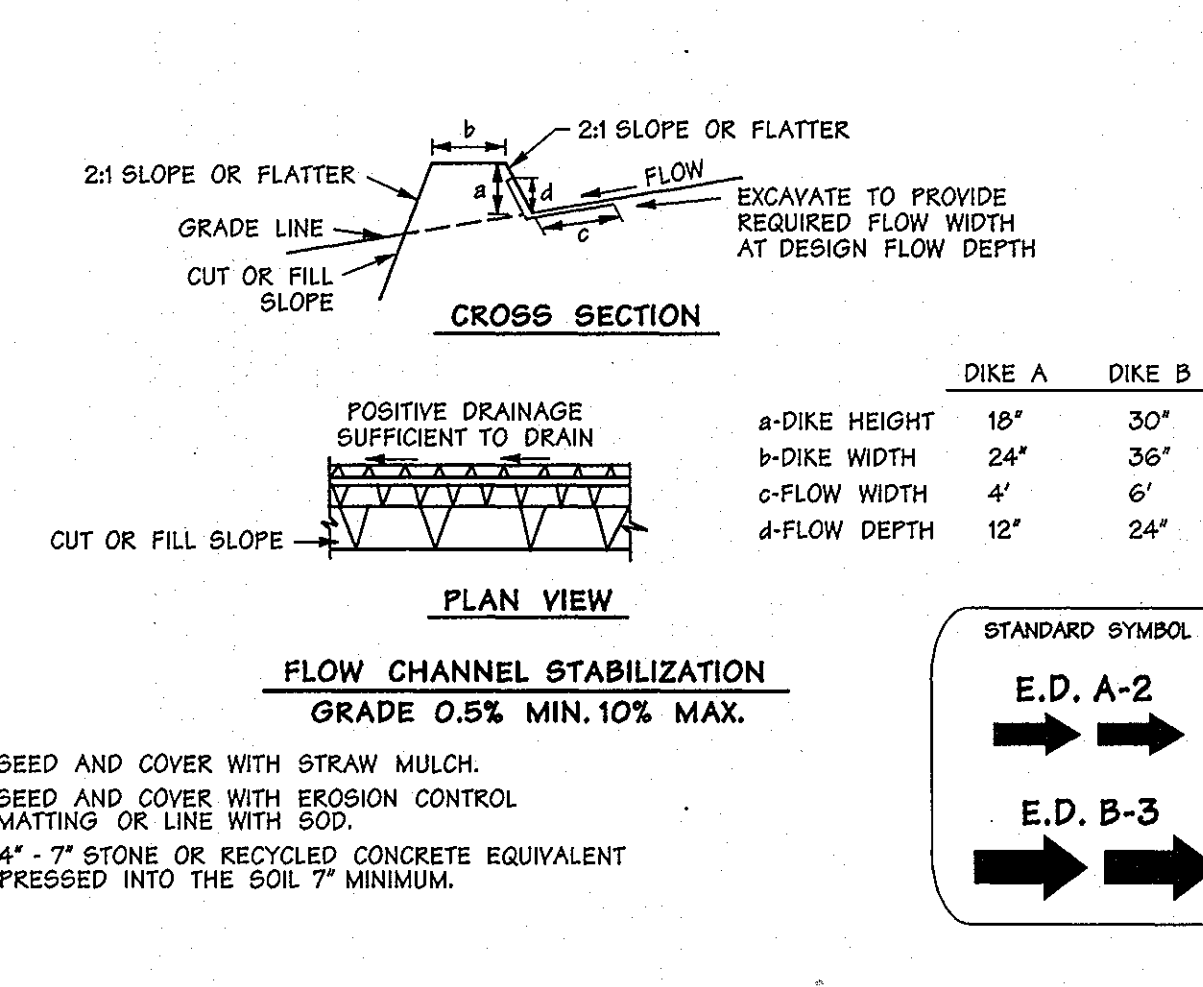
CONSTRUCTION SPECIFICATIONS

- FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 18" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1 1/2" x 1 1/2" SQUARE (MINIMUM) CUT, OR 1 1/2" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 100 POUND PER LINEAR FOOT.
- GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:
 TENSILE STRENGTH 50 LBS/IN (MIN.) TEST: MSMT 509
 TENSILE MODULUS 20 LBS/IN (MIN.) TEST: MSMT 509
 FLOW RATE 0.3 GAL FT/MIN (MAX) TEST: MSMT 322
 FILTERING EFFICIENCY 75% (MIN.) TEST: MSMT 322
- WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
- SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E - 10 - 3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Silt Fence

Not To Scale



CONSTRUCTION SPECIFICATIONS

- SEED AND COVER WITH STRAW MULCH.
- SEED AND COVER WITH EROSION CONTROL MATTING OR LINE WITH SOD.
- 4" - 7" STONE OR RECYCLED CONCRETE EQUIVALENT PRESSED INTO THE SOIL 7" MINIMUM.

CONSTRUCTION SPECIFICATIONS

- ALL TEMPORARY EARTH DIKES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%.
- RUNOFF DIVERTED FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- RUNOFF DIVERTED FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED, STABILIZED AREA AT A NON-EROSIVE VELOCITY.
- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONAL MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIKE.
- 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 IMPED EROSION.
- FILL SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
- ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIKE.
- INSPECTION AND MAINTENANCE MUST BE PROVIDED PERIODICALLY AND AFTER EACH RAIN EVENT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE A - 1 - 6 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Earth Dike

Not To Scale

1. DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON THE EROSION AND SEDIMENT CONTROL MEASURE SHOWN HEREON.

2. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; (B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

3. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (315-1855).

4. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.

5. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

- SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1.
- FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

6. 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.

7. 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 SEEDINGS (SEC. 51), SODS (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

8. 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.

9. SITE ANALYSIS:

TOTAL AREA OR SITE	4.2 ACRES
AREA DISTURBED	4.2 ACRES
AREA TO BE ROOFED OR PAVED	2.0 ACRES
AREA TO BE VEGETATIVELY STABILIZED	2.2 ACRES
TOTAL CUT	11,000 CUBIC YARDS
TOTAL FILL	21,000 CUBIC YARDS*

* OFF-SITE WASTE/BORROW AREA LOCATION *
 * TO BE DETERMINED BY CONTRACTOR WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT EXCESS FROM PARCEL A WILL BE USED ON PARCEL B PERT AN AGREEMENT BETWEEN THE OWNERS

10. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

11. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

12. 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.

13. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO WORKING PITE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN THREE DAY, WHICHEVER IS SHORTER.

Sediment Control General Notes

Sedat/cel/HOGENN

TEMPORARY METHODS:

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

PERMANENT METHODS:

- 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.
- TOPSOILING - COVERING WITH LESS ERODIBLE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
- STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

Dust Control Specifications

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING


Chief, Development Engineering Division *John J. ...* 4/27/07

Chief, Division of Land Development *...* 5/16/07

Director *...* 5/16/07

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: Feb 9, 2007

Date	No.	Revision Description
SITE DEVELOPMENT PLAN		
EMERSON SECTION 2 AREA 7 PARCEL B		
UNITS 1 THRU 37		
TOWNHOMES		
OWNER(S) / DEVELOPER:		
NEWPORT HOMES LIMITED LIABILITY COMPANY 5085 HARBOR FARMS RD SUITE 200 COLUMBIA, MD 21044		
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals		
AREA: TAX MAP 47 PARCEL 837		
8th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND		
SEDIMENT & EROSION CONTROL DETAILS		
Des. By	JL5	Scale 1" = 30'
Drn. By	GMO	Date 4/21/07
Proj. No.	95054R	6 of 12
Chk. By	Approved	

DEVELOPERS CERTIFICATE:

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

Cindy Huntberry 3-28-07

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

ENGINEERS CERTIFICATE:

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

Charles V. Main II 3-29-07

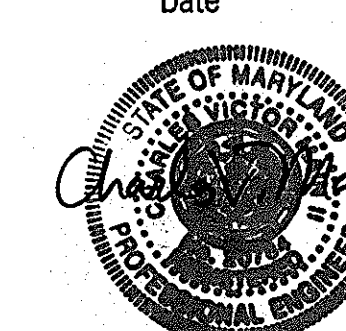
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

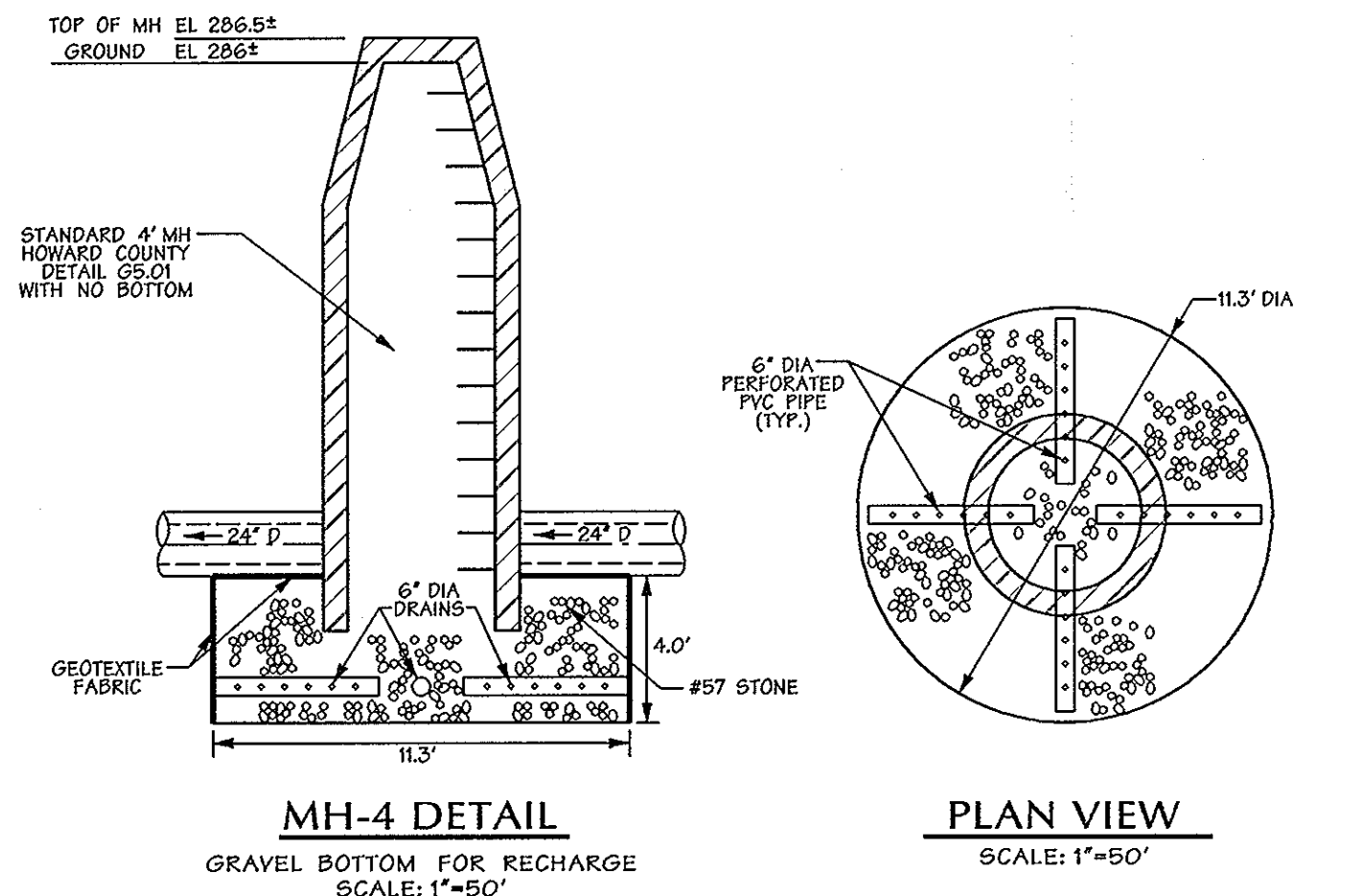
John R. ... 4/26/07

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

3-29-07
Date



20784
Professional Engr. No.



0.50 Ac.±	A	ZONING= R-SC-MXD-3	77 % IMP.
0.90 Ac.±	B	ZONING= R-SC-MXD-3	53 % IMP.
0.65 Ac.±	C	ZONING= R-SC-MXD-3	82 % IMP.
0.90 Ac.±	D	ZONING= R-SC-MXD-3	86 % IMP.
0.27 Ac.±	E	ZONING= R-SC-MXD-3	84 % IMP.
0.60 Ac.±	F	ZONING= R-SC-MXD-3	83 % IMP.
1.50 Ac.±	G	ZONING= R-SC-MXD-3	29 % IMP.
0.54 Ac.±	H	ZONING= R-SC-MXD-3	65 % IMP.
0.63 Ac.±	I	ZONING= R-SC-MXD-3	52 % IMP.

	HEAD OF STREAM
	75' STREAM BUFFER
	WETLAND
	25' WETLAND BUFFER
	EX. TREELINE
	EX. 5' CONTOUR
	EX. 25' CONTOUR
	EX. STRUCTURE
	PROP. TREELINE
	PROPERTY BOUNDARY
	RIGHT OF WAY LINE
	ROADWAY CENTERLINE
	PROP. LOT NUMBER
	ADJACENT LOT LINE
	PROP. LOT LINE
	BUILDING SETBACK LINE
	DRAINAGE AREA LIMITS
	STRUCTURE NUMBER
	DRAINAGE AREA

2/10/08	2	REVISED BLDG. 3 GRADED EX. SIGN @ ENT. SHOWN D.M.W.
3/3/08	3	REVISED BLDG. 2,4,5,6,7 GRADED ADDED D.M.W.
6/11/08	4	REVISED BLDG. 3 & 5
12/18/08	5	CONVERT UNITS 6-37 TO INF-FEE LOTS
8/12/09	6	REVISED LOTS 27-32, 35-37. ADDED NEW HOUSE TYPE.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

John Deussen CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 6/3/10

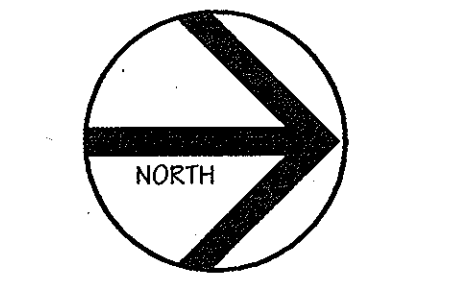
Veit Schwalbe CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 6/3/10

Thomas J. Suttler DIRECTOR DATE: 6/3/10

8-2-10 DATE

STATE OF MARYLAND
JAMES H. CHASE, JR.
PROFESSIONAL ENGINEER
No. 38633

FOR REVIEW ONLY
Professional Engr. No. 38633



5-24-10 DATE

PROFESSIONAL ENGINEER
Professional Engr. No. 8061

9/15/07	1	REVISED BLDG. 1 GRADING ADDED D.M.W. SALES & CONSTR. TRAILER
---------	---	--

REVISED SITE DEVELOPMENT PLAN
EMERSON SECTION 2 AREA 7 PARCEL B
UNITS 1 THRU 37
TOWNHOMES

OWNER(S) / DEVELOPER:
NEWPORT HOMES LIMITED
LINDSAY COMPANY
5485 HARBERS FARMS RD.
SUITE 200
COLUMBIA, MD 21044

DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4706

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

AREA	TAX MAP 47	PARCEL 837
	6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND	
TITLE	STORM DRAIN DRAINAGE AREA MAP AND SOILS MAP	
Des. By	CVS	Scale 1" = 50'
Dm. By	GWO	Date 4/2/07
Chk. By	Approved	Proj. No. 95054R
		7 of 12

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE: Feb 8 2007

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 22623, EXPIRATION DATE: 6-14-12.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 8061, EXPIRATION DATE: 8-26-11.

INLET SCHEDULE (TOTAL)				
NO.	TYPE	SD	INV. OUT	TOP ELEV. (TC)
4	'A-10' W=2'-6"	SD-4.41	284.00	287.70
5	'A-10' W=3'-0"	SD-4.41	281.90	287.50
6	'A-10' W=2'-6"	SD-4.41	285.00	290.52
7	'D' W=3'-3"	SD-4.11	278.98	283.50
8	'A-10' W=2'-6"	SD-4.41	275.04	283.64
9	'A-10' W=3'-6"	SD-4.41	274.34	283.73

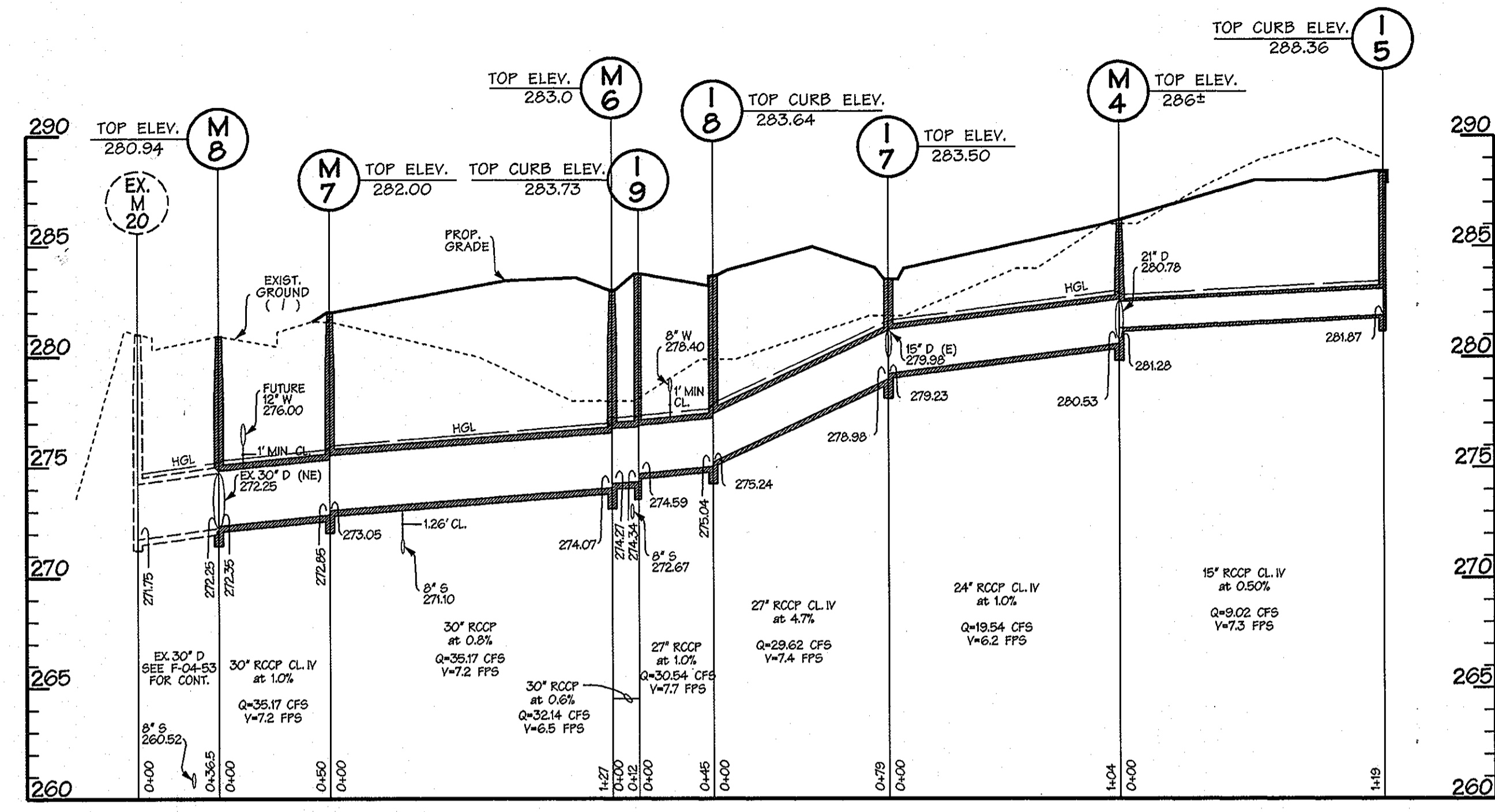
NOTE: TOP ELEV. FOR "D" YARD INLETS IS THROAT OPENING ELEVATION

MANHOLE SCHEDULE (TOTAL)				
NO.	TYPE	SIZE	INV. OUT	TOP ELEV.
4	STD. G5.12"	48"	280.53	296.00
5	STD. G5.12"	48"	283.07	289.00
6	STD. G5.12"	48"	280.58	286.00
7	STD. G5.13	60"	272.85	282.00
8	STD. G5.13	60"	272.25	280.94

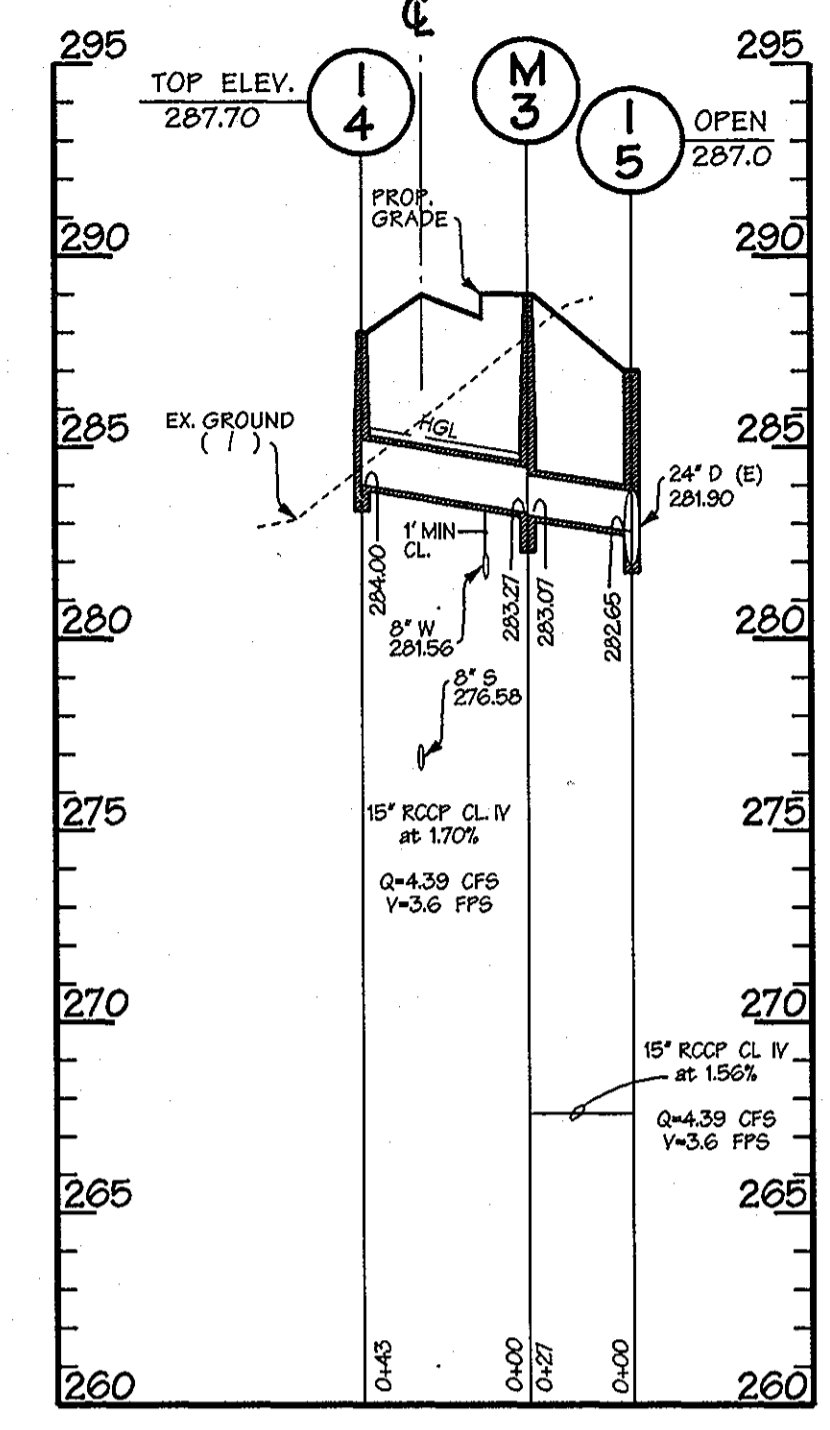
*SEE DETAIL SHEET 7

PIPE SCHEDULE (TOTAL)		
NO.	TYPE & CLASS	LENGTH
15'	RCCP CL.IV	296'
24'	RCCP CL.IV	104'
27'	RCCP CL.IV	124'
30'	RCCP CL.IV	189'

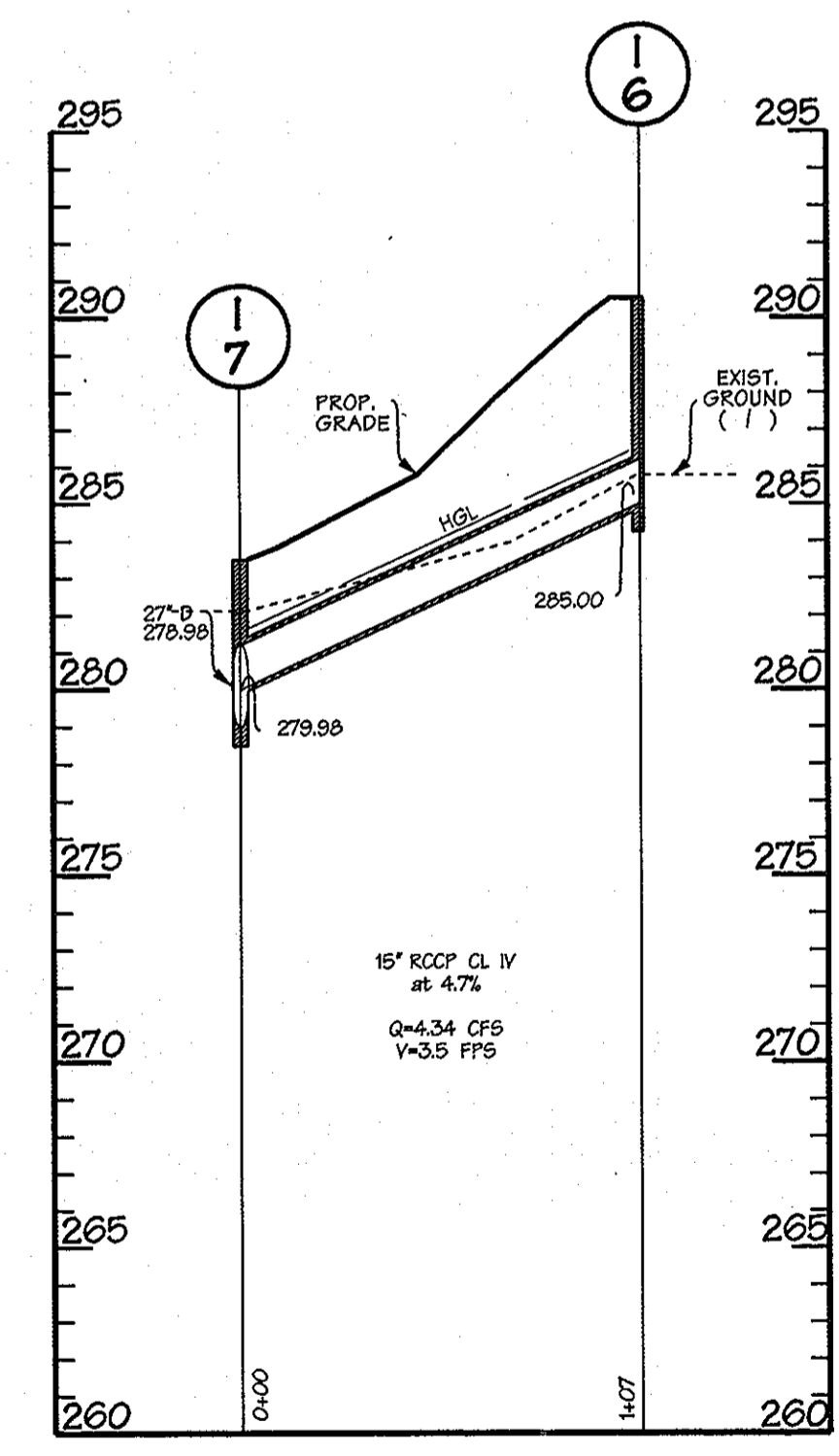
*ALL PIPE AT ROAD CROSSINGS OR WITHIN PUBLIC RIGHT OF WAYS TO BE CLASS IV



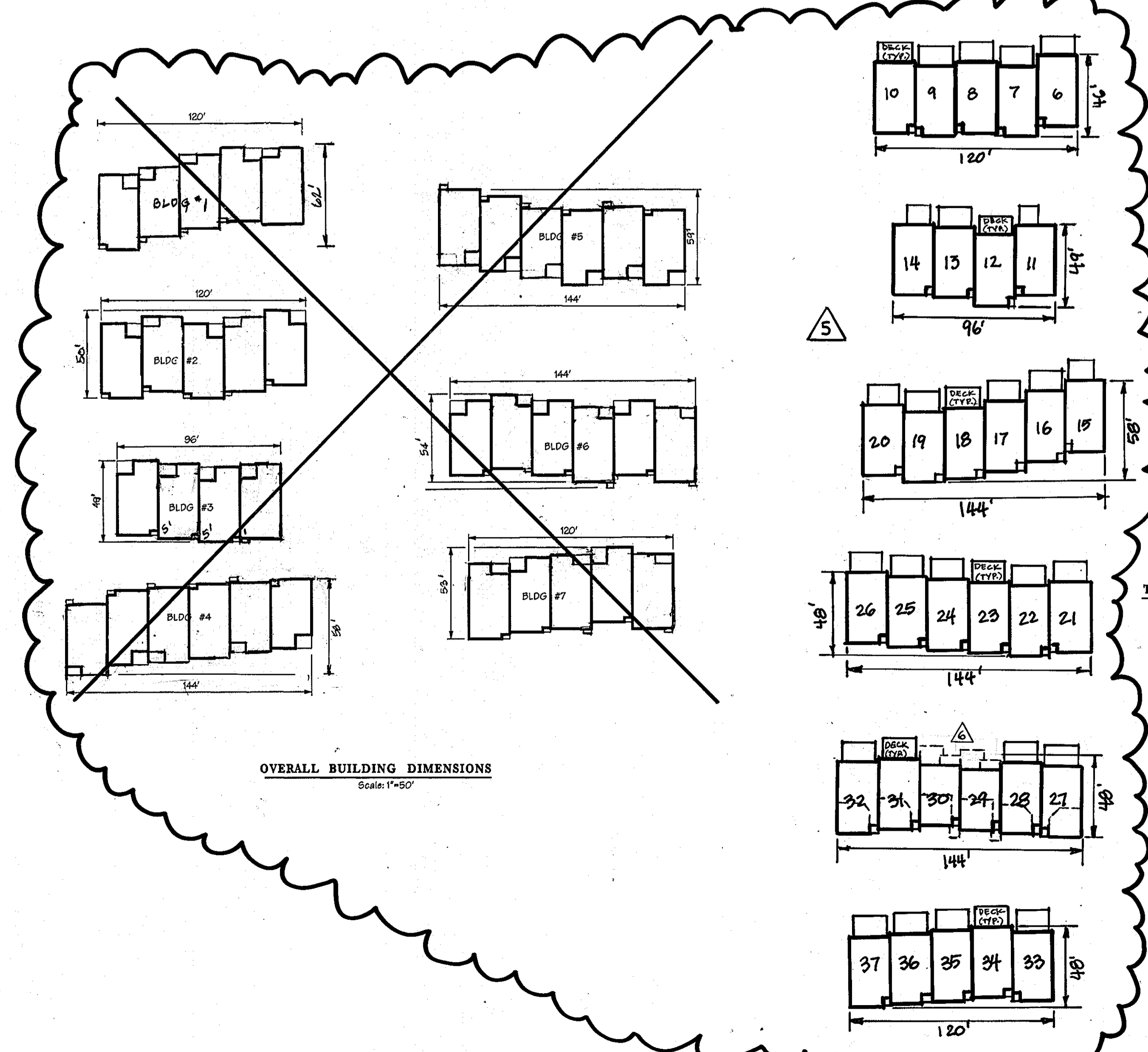
PROFILE
Scale: 1"=50' Horiz.
1"=5' Vert.



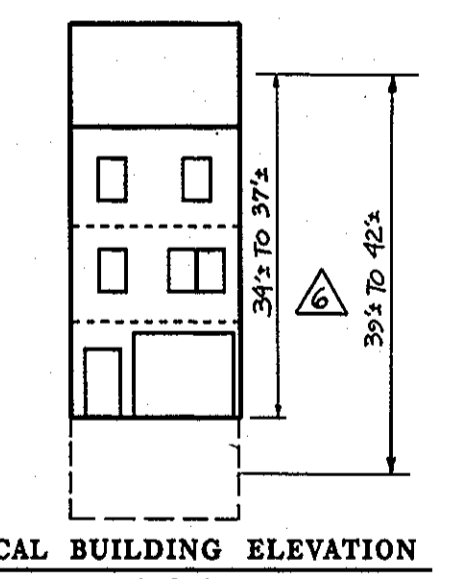
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1"=5' Vert.



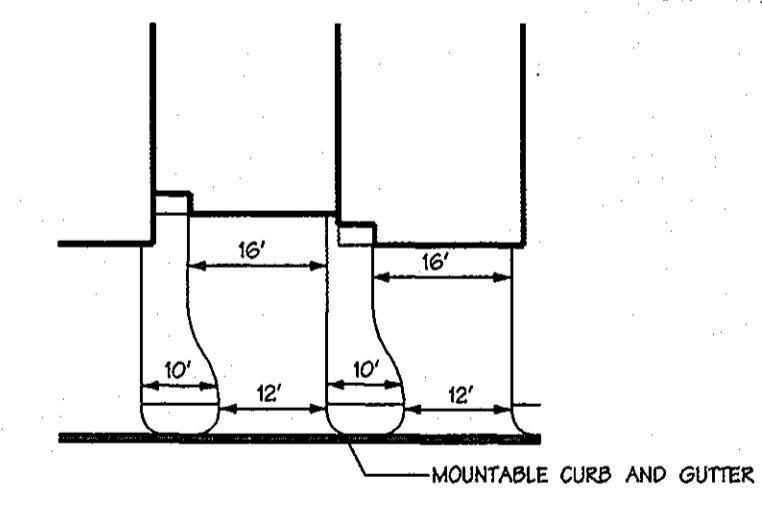
PROFILE
Scale: 1"=50' Horiz.
1"=5' Vert.



OVERALL BUILDING DIMENSIONS
Scale: 1"=50'



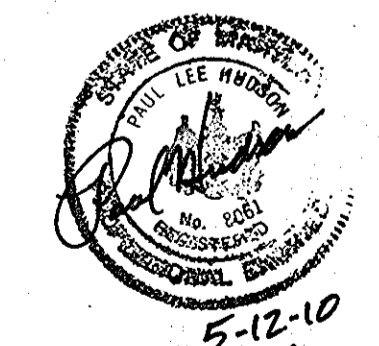
TYPICAL BUILDING ELEVATION
No Scale



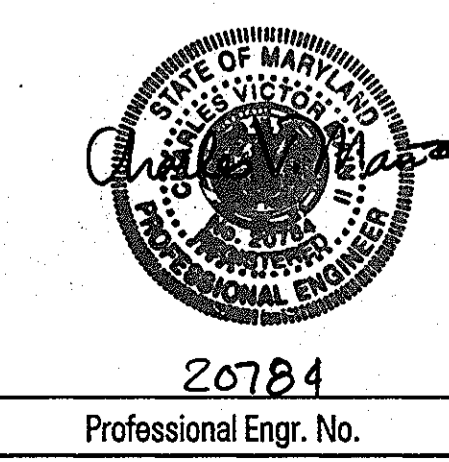
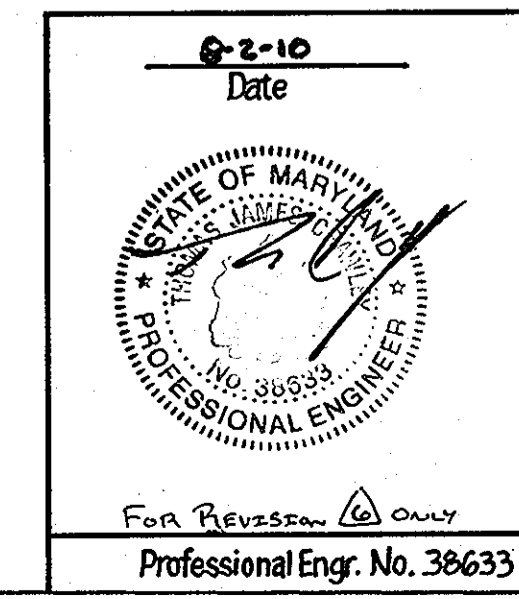
TYPICAL DRIVEWAY DETAIL
No Scale

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38633, EXPIRATION DATE 8/26/2011.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38633, EXPIRATION DATE: 5/11/2012.



FOR REVISION 3 ONLY
Date: 3-29-07



APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE Feb 8, 2007

DATE	NO.	REVISION	DESCRIPTION
2/1/07	2	REVISED Bldg. 3	D.H.W.
4/1/07	4	REVISED Bldg. 2 & 5	
12/18/07	5	CONVERT UNITS 6-37 TO IN-FEE LOTS	
02/28/10	6	REVISED LOTS 27-32, 33-37. ADDED NEW HOUSE TYPE	

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 4/27/07

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 5/1/07

DIRECTOR: *[Signature]* DATE: 5/1/07

Date	No.	Revision Description	By
9/3/07	1	REVISED Bldg. 1	P.M.W.
9/3/08	3	REVISED Bldg. 1, 4, 5, 6, 7	

EMERSON SECTION 2 AREA 7 PARCEL B
UNITS 1 THRU 37
TOWNHOMES

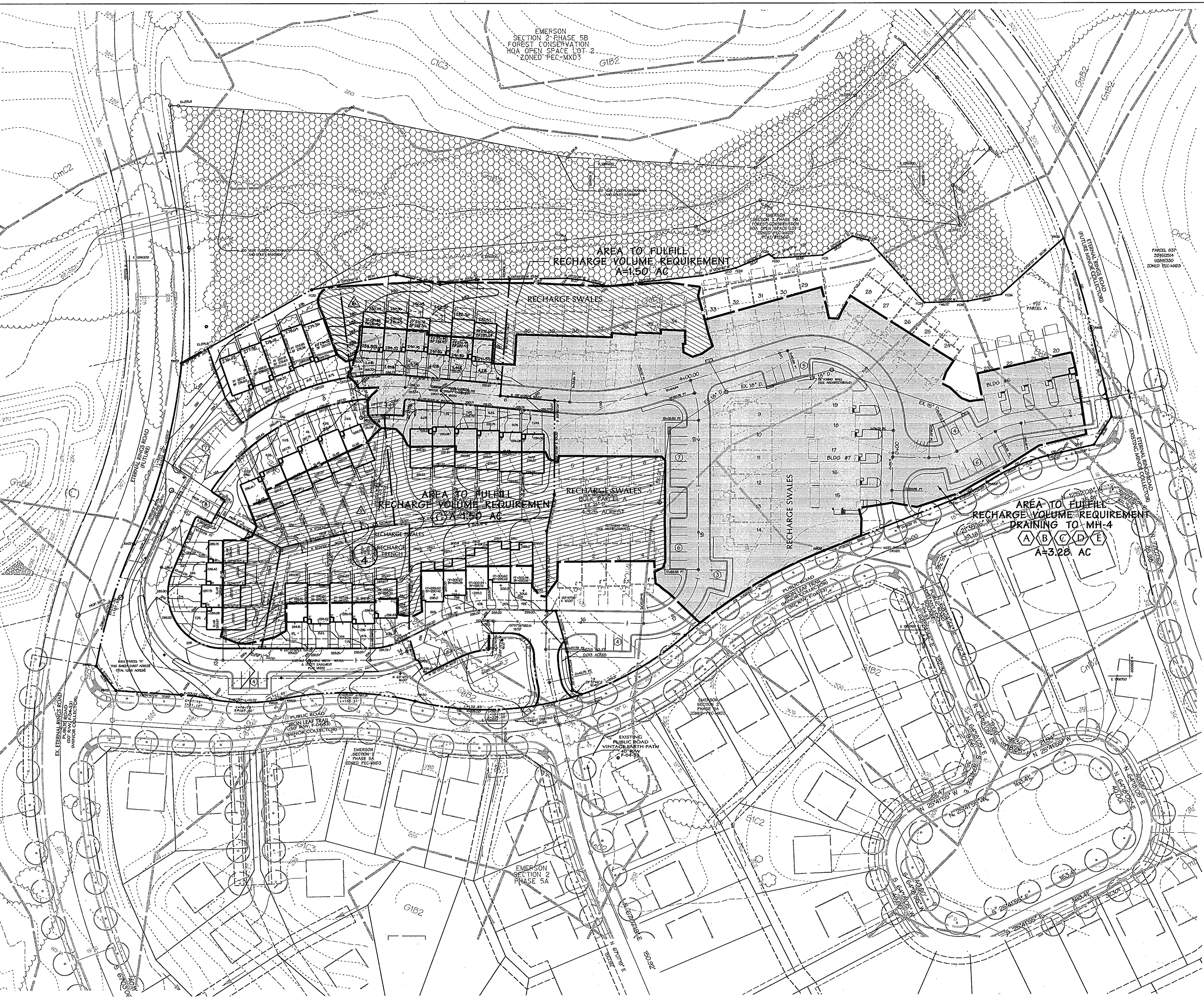
OWNER(S) / DEVELOPER:
NEWARK HOMES LIMITED
LIABILITY COMPANY
5495 HARBERS FARMS RD.
SUITE 200
COLUMBIA, MD. 21044

DMW
Duff McCreary-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 286-3333
Fax: 286-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

AREA		TAX MAP 47	PARCEL 837
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND			
TITLE			
STORM DRAIN PROFILES & BUILDING ELEVATIONS			
Des. By	KAD/CYS	Scale	1"=50'
Dm. By	GMO	Date	4/2/07
Chk. By	Approved	Proj. No.	95054R
			8 of 12

EMERSON
SECTION 2 PHASE 5B
FOREST CONSERVATION
HOA OPEN SPACE LOT 2
ZONED FEC-MXD3



OPERATION AND MAINTENANCE SCHEDULE SHEET 9
GRASS CHANNELS - ROUTINE MAINTENANCE

- SWALES SHALL BE KEPT FREE OF TRASH AND DEBRIS.
- SWALES SHALL BE MOWED AS NECESSARY.
- ANY EROSION SHALL BE REPAIRED AND STABILIZED.
- SWALE SHALL BE INSPECTED SEMI-ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT AND REPAIRED AS NEEDED.

OPERATION AND MAINTENANCE SCHEDULE SHEET 9
RECHARGE AREA - ROUTINE MAINTENANCE

- MANHOLE SHALL BE KEPT FREE OF TRASH AND DEBRIS.
- SILT AND SEDIMENT SHALL BE REMOVED FROM MANHOLE AS NEEDED WHEN FACILITY DOES NOT DRAIN WITHIN 30 HOURS AFTER A RAINFALL EVENT.
- FACILITY SHALL BE INSPECTED SEMI-ANNUALLY AND AFTER EACH MAJOR RAINFALL EVENT AND REPAIRED AS NEEDED.

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE *Feb 8 2007*

LEGEND

- HEAD OF STREAM
- STREAM CENTERLINE
- 75' STREAM BUFFER
- WETLAND
- 25' WETLAND BUFFER
- EX. TREELINE
- EX. 5' CONTOUR
- EX. 25' CONTOUR
- EX. STRUCTURE
- PROP. TREELINE
- PROPERTY BOUNDARY
- RIGHT OF WAY LINE
- ROADWAY CENTERLINE
- PROP. LOT NUMBER
- ADJACENT LOT LINE
- PROP. LOT LINE
- BUILDING SETBACK LINE
- DRAINAGE AREA LIMITS
- STRUCTURE NUMBER
- DRAINAGE AREA

Date	No.	Revision Description
2/21/08	2	REVISED BLDG.3 GRADED ADDED EX. SIGN @ ENT. SHOWN D.M.W.
3/23/08	3	REVISED BLDG. 2,4,5,6,7 GRADED ADDED D.M.W.
6/11/08	4	REVISED BLDG. 3 & 5
12/10/09	5	CONVERT UNITS 6-37 TO IN-FEE LOTS
8/12/2010	6	REVISED LOTS 27-32, 33-37. ADDED NEW HOUSE TYPE.

Date	No.	Revision Description
9/15/07	1	REVISED BLDG.1 GRADING ADDED D.M.W. SALES & CONSTR. TRAILER

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

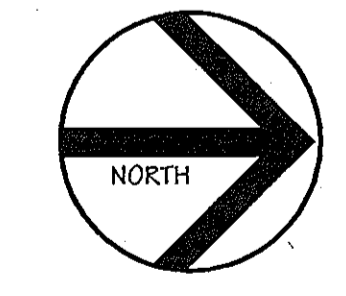
CHIEF, DEVELOPMENT ENGINEERING DIVISION *6/3/10*
DATE

CHIEF, DIVISION OF LAND DEVELOPMENT *6/5/10*
DATE

DIRECTOR *6/5/10*
DATE

3-2-10
Date

Professional Engr. No. 38633



3-24-10
Date

Professional Engr. No. 8061

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 38633, EXPIRATION DATE: 5/14/2012.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 8061, EXPIRATION DATE: 3-26-11.

OWNER(S) / DEVELOPER:
NEWPORT HOMES LIMITED
LIABILITY COMPANY
5485 HARRIS FARMS RD
SUITE 200
COLUMBIA, MD 21044

DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4706
A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

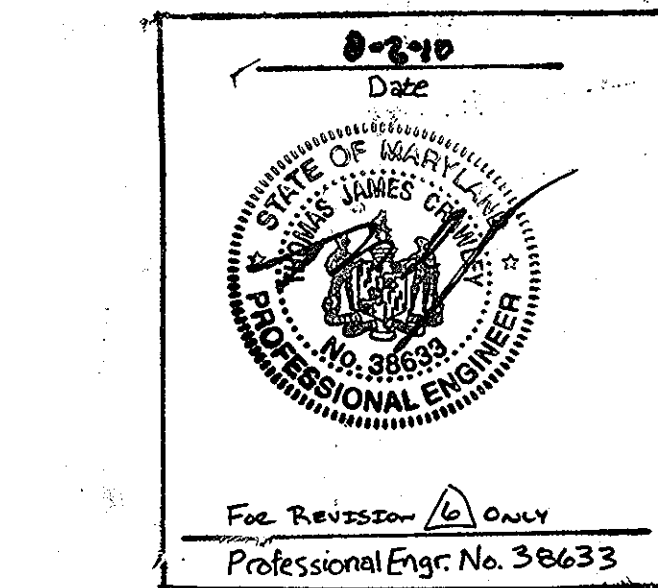
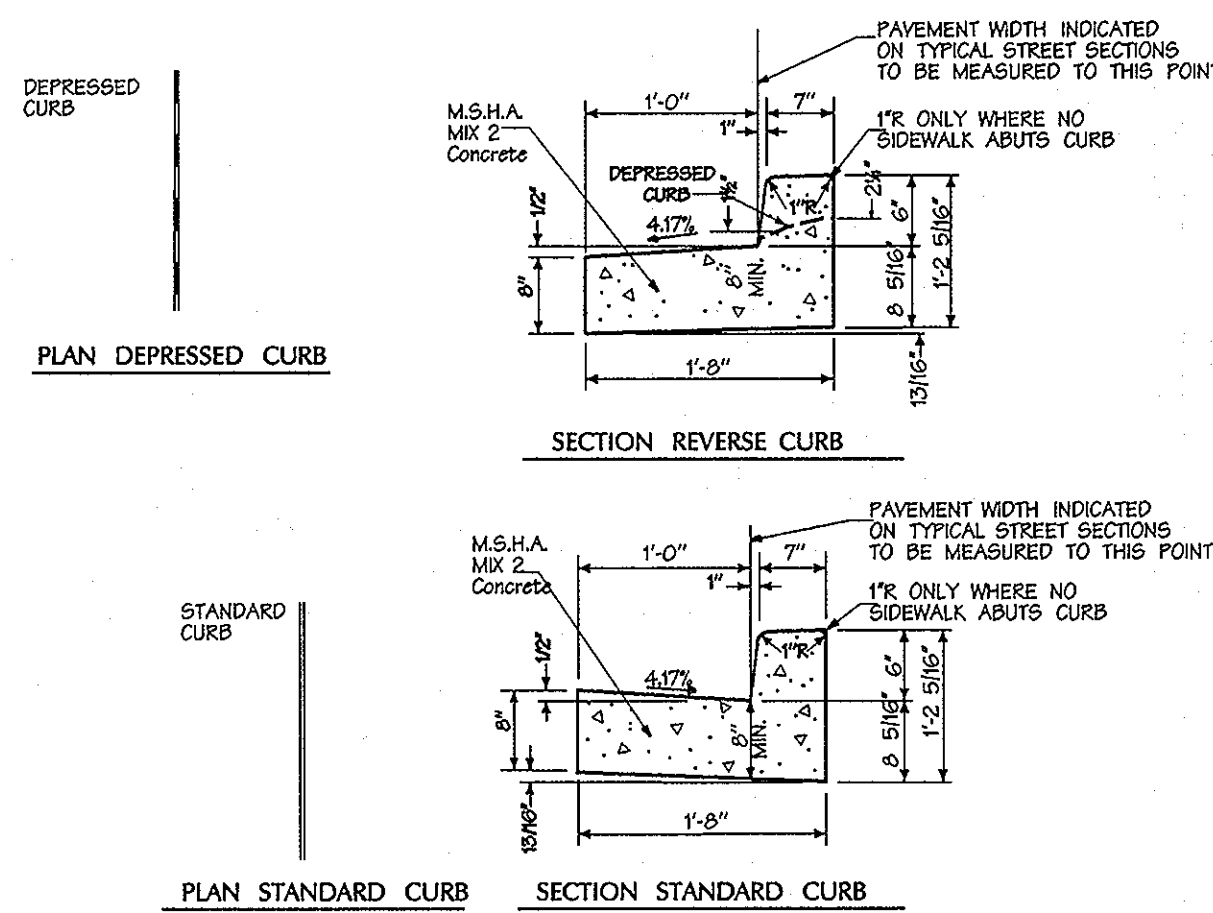
AREA	TAX MAP 47	PARCEL 837
	6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND	
TITLE	SWM CREDITS DRAINAGE AREA MAP	
Des. By	CVS	Scale 1" = 50'
Drn. By	GMO	Date 4/2/07
Chk. By	Approved	Proj. No. 95054R
9 of 12		

SDP 06-112

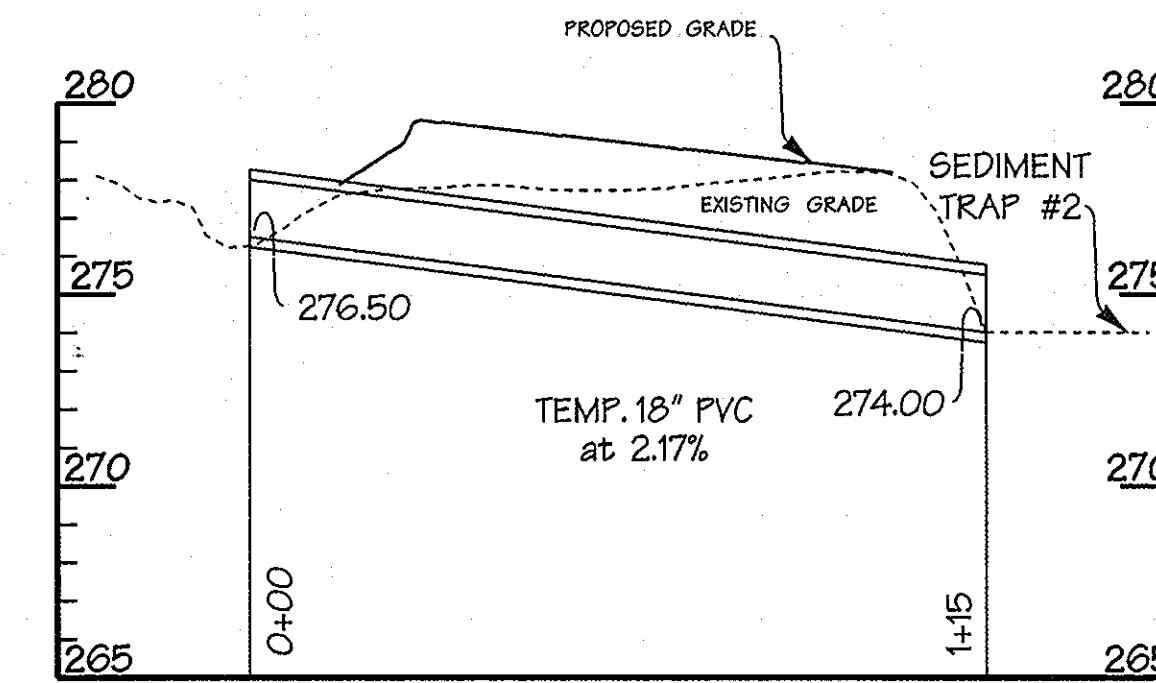
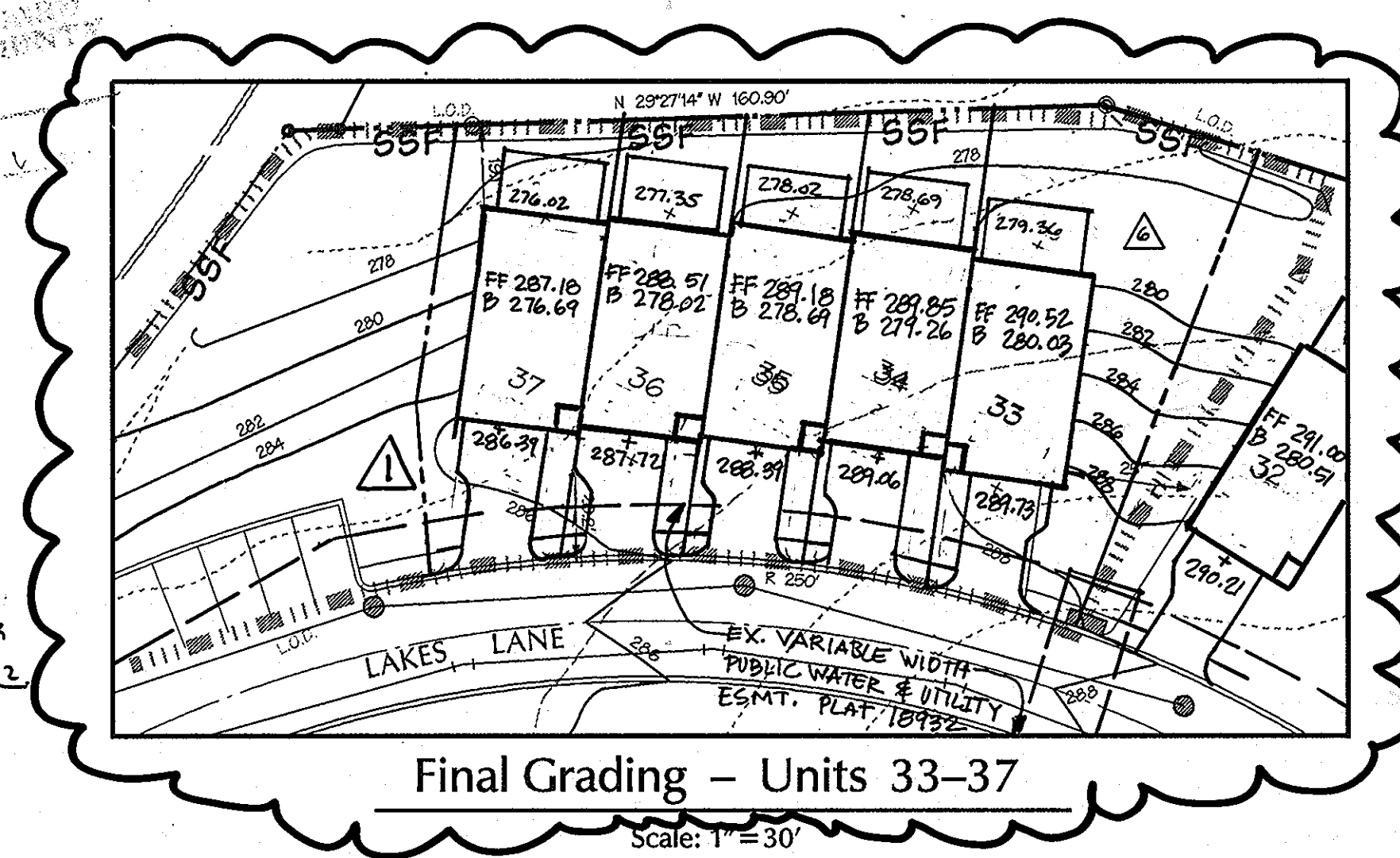
GENERAL NOTES:

- The Contractor shall be governed by the standards and requirements of the following publications:
 - Manual on Uniform Traffic Control Devices (MUTCD), 1988 Edition and subsequent revisions.
 - AASHTO - Specifications for the Design and Construction of Structural Supports for Highway Signs, April 1973 Edition.
 - AASHTO - Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, April 1995 Edition.
- Standard sign panel layouts shall be based on the MUTCD.
- Signs shall be located as shown on the plans. Any required changes in the locations of signs necessary due to field conditions shall have the prior approval of the Engineer.
- It shall be the responsibility of the Contractor to locate and protect all existing facilities that may be affected by this work.
- All new signs shown on this plan shall have Non-Reflective (Black Copy) or High Intensity Reflective Sheeting (All Other Colors) background and copy. Reflective Sheeting shall be Type III-A Encapsulated Lens Reflective Element Material.
- All new sheet aluminum signs shall have Non-Demountable Copy.
- The following minimum thicknesses shall be used for the appropriate size of sheet aluminum sign blanks:

Longest Dimension (Inches) - Minimum Thickness	
Up to 12"	0.040"
12" to 24"	0.050"
24" to 36"	0.060"
Over 36"	0.125"

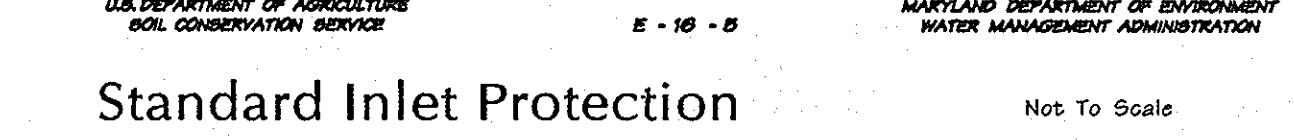
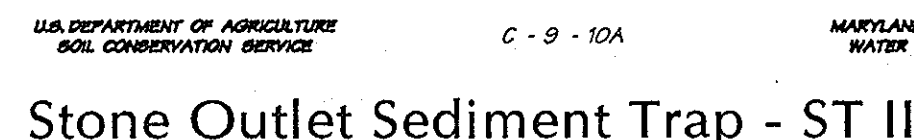
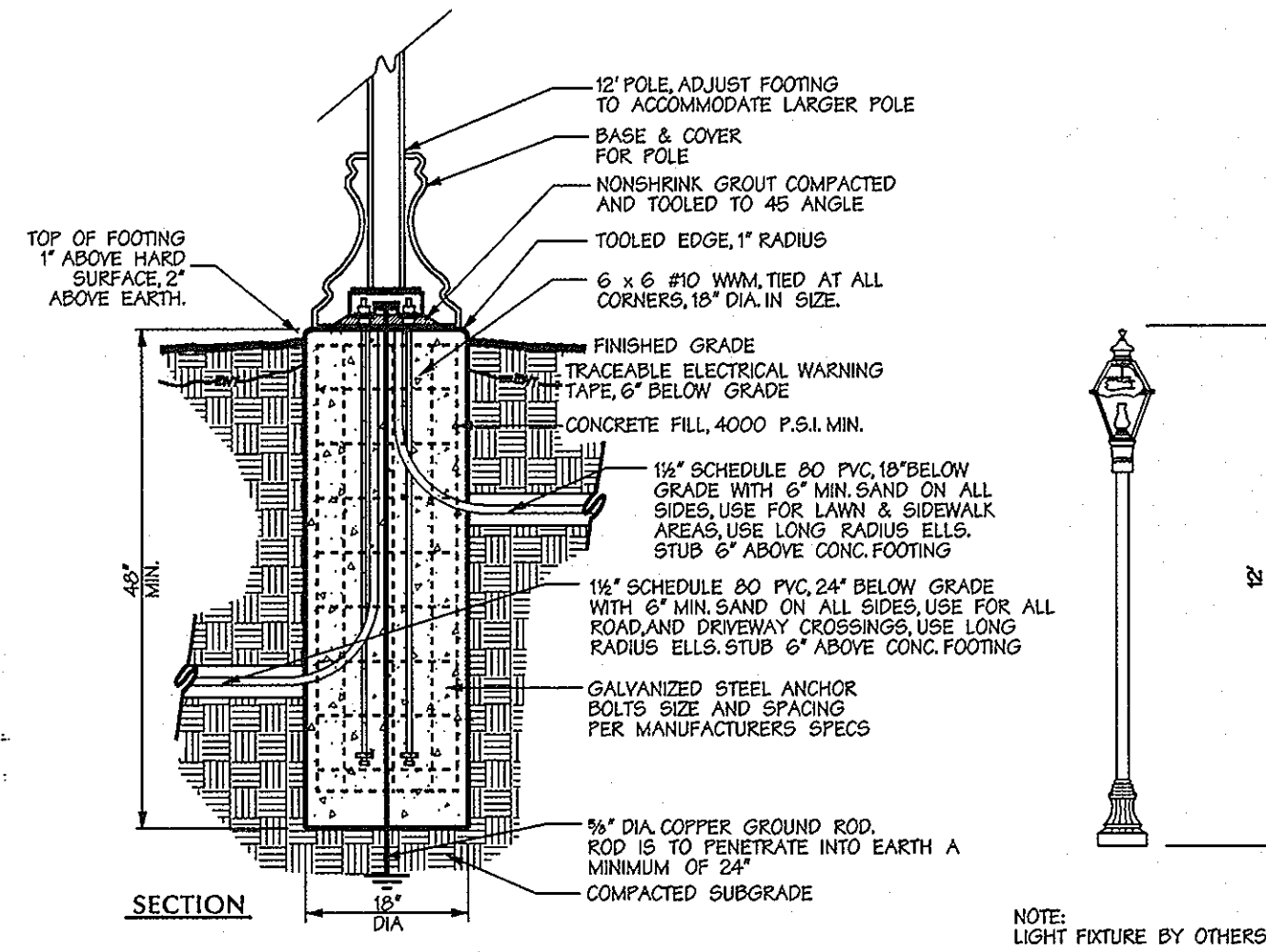
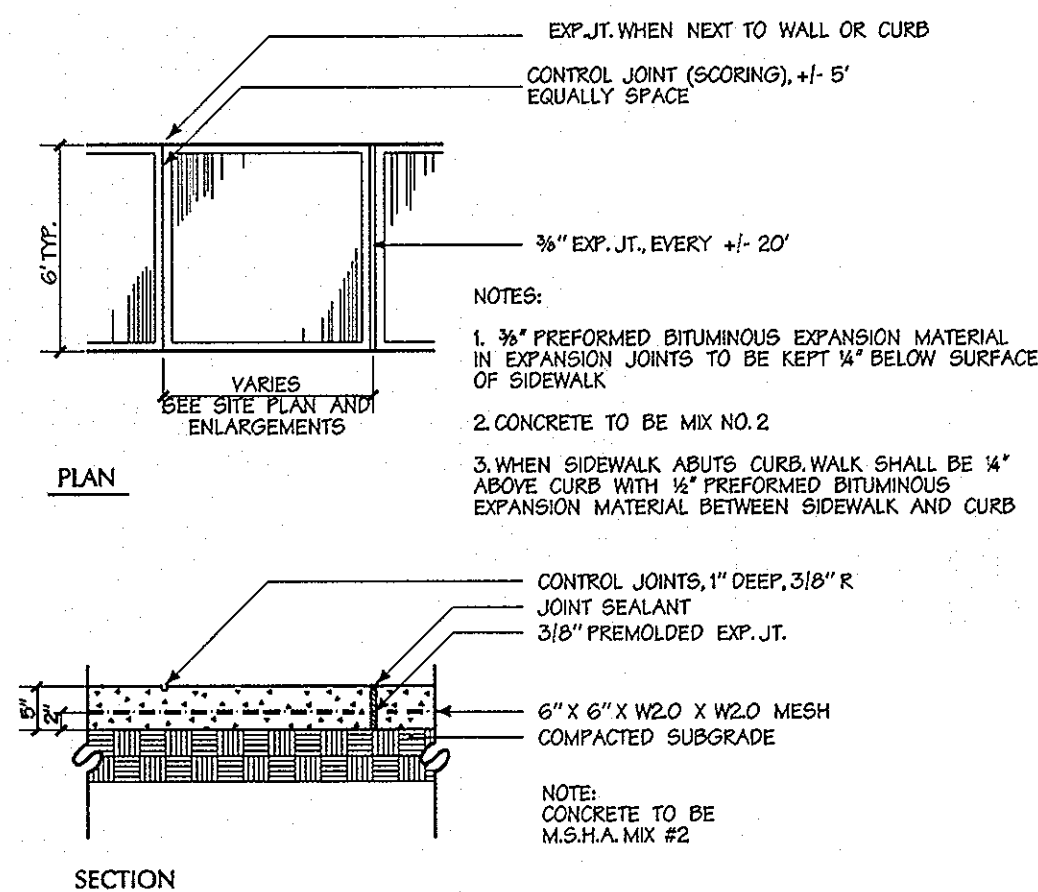
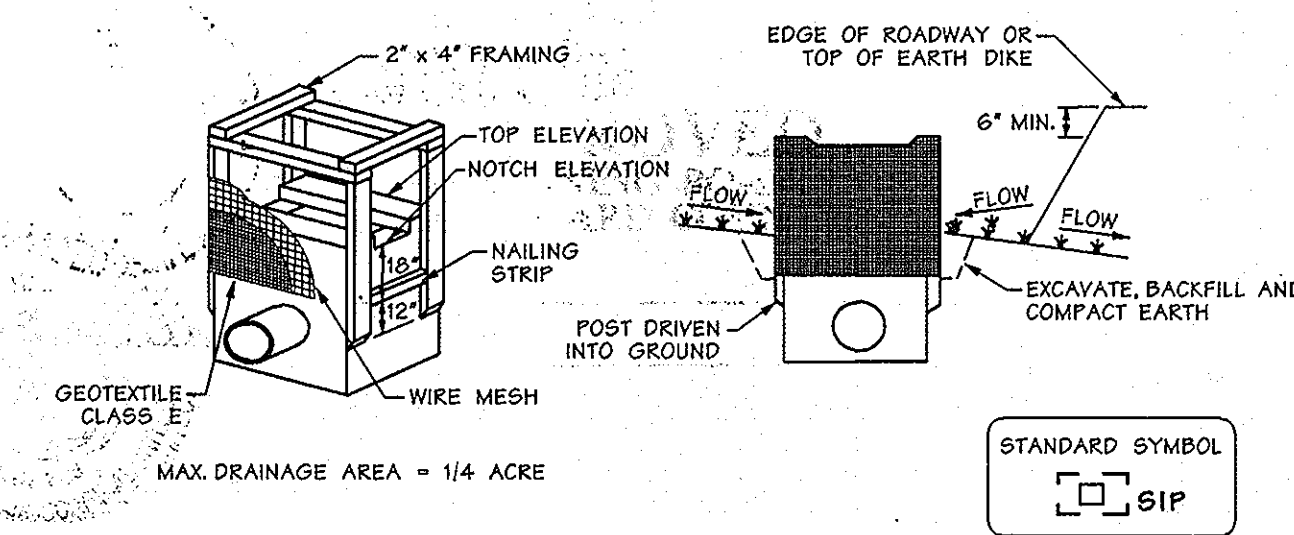
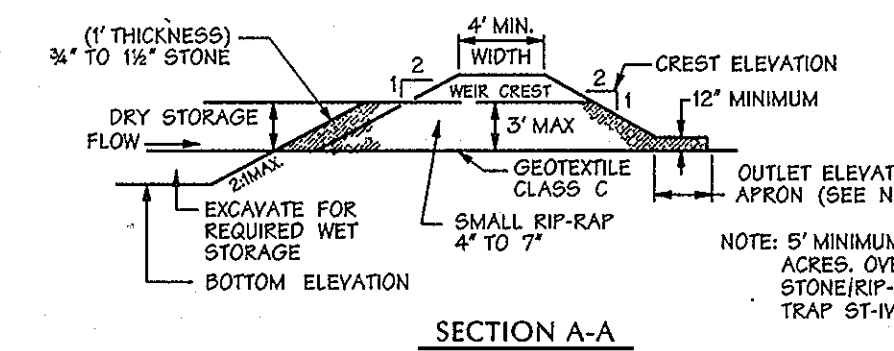
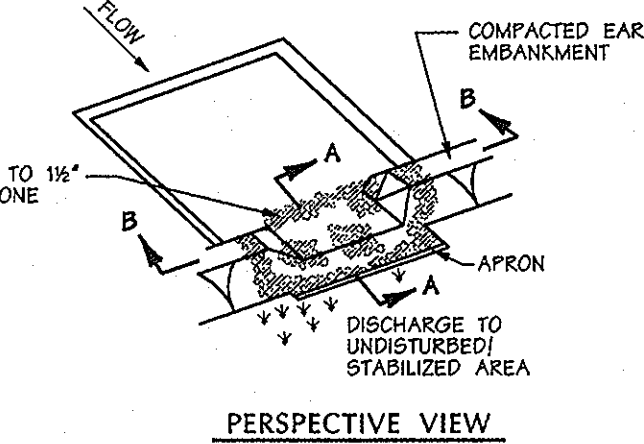
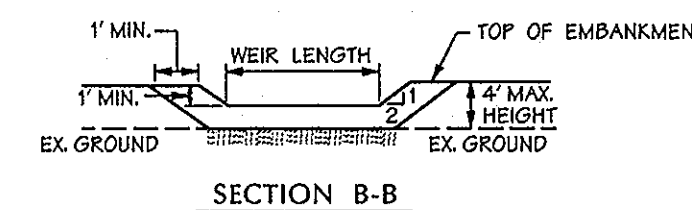


PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 38633 EXPIRATION DATE: 5/14/2012



CONSTRUCTION SPECIFICATIONS

- AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
- 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.
- ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
- THE STONE USED IN THE OUTLET SHALL BE SMALL RIP-RAP 4" TO 7" IN SIZE WITH A 1" THICK LAYER OF 1/4" TO 1/8" WASHED AGGREGATE PLACED ON THE UPSTREAM FACE OF THE OUTLET. STONE FACING SHALL BE WASHED 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.
- 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.
- THE STRUCTURE SHALL BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
- CONSTRUCTION OF TRAPS SHALL BE CARRIED OUT IN SUCH A MANNER THAT SEDIMENT POLLUTION IS ABATED ONCE CONSTRUCTED. THE TOP AND OUTSIDE FACE OF THE EMBANKMENT SHALL BE STABILIZED WITH SEED AND MULCH. POINTS OF CONCENTRATION INFLOW SHALL BE PROTECTED IN ACCORDANCE WITH GRADE STABILIZATION STRUCTURE CRITERIA. THE REMAINDER OF THE INTERIOR SLOPES SHOULD BE STABILIZED (ONE TIME) WITH SEED AND MULCH UPON TRAP COMPLETION AND MONITORED AND MAINTAINED EROSION FREE DURING THE LIFE OF THE TRAP.
- THE STRUCTURE SHALL BE DEWATERED BY APPROVED METHODS, REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
- REFER TO SECTION D FOR SPECIFICATIONS CONCERNING TRAP DEWATERING.
- MINIMUM TRAP DEPTH SHALL BE MEASURED FROM THE WEIR ELEVATION.
- THE ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO THE TRAP MUST BE EQUAL TO OR EXCEED THE ELEVATION OF THE TRAP EMBANKMENT.
- GEOTEXTILE CLASS C SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO THE PLACEMENT OF FILTER CLOTH. FILTER CLOTH MUST OVERLAP AT LEAST 1' WITH THE SECTION NEAREST THE ENTRANCE PLACED ON TOP OF THE FILTER. CLOTH SHALL BE EMBEDDED AT LEAST 6" INTO EXISTING GROUND AT THE ENTRANCE OF THE OUTLET CHANNEL.
- OUTLET - AN OUTLET SHALL BE PROVIDED, INCLUDING A MEANS OF CONVEYING THE DISCHARGE IN AN EROSION FREE MANNER TO AN EXISTING STABLE CHANNEL.



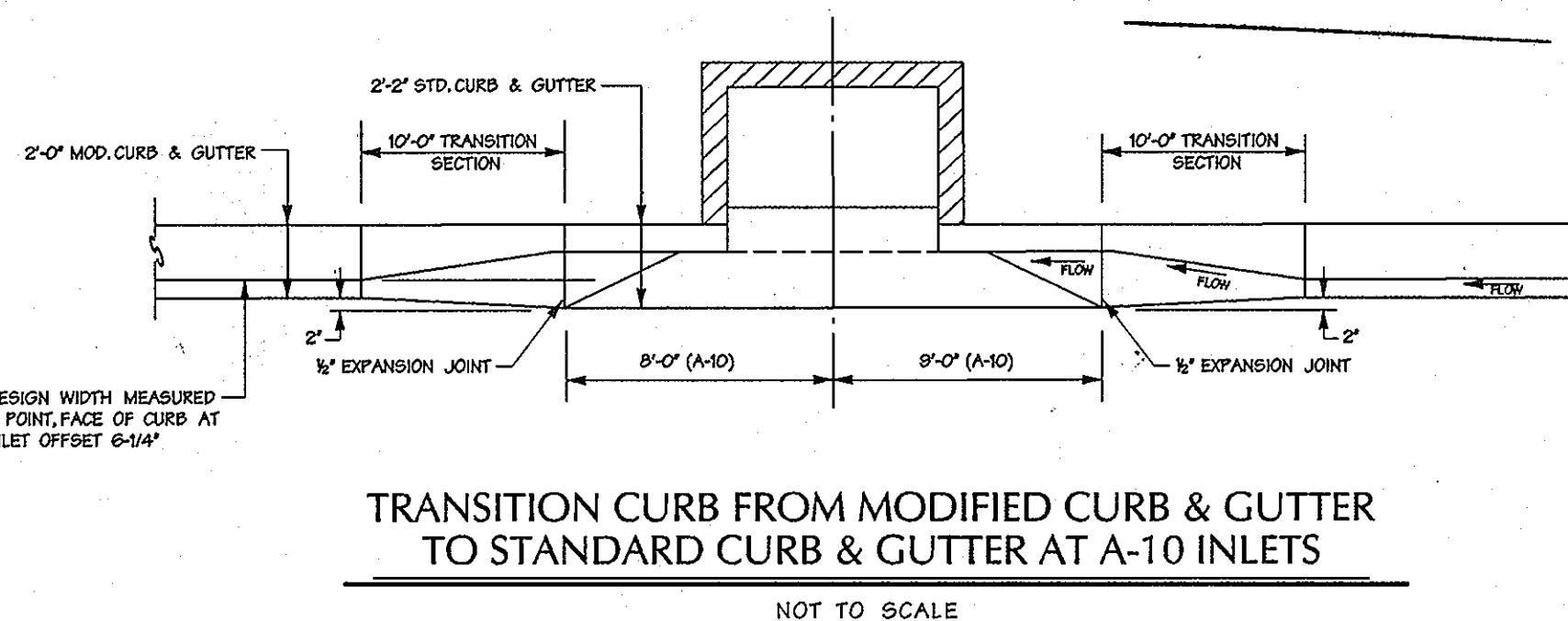
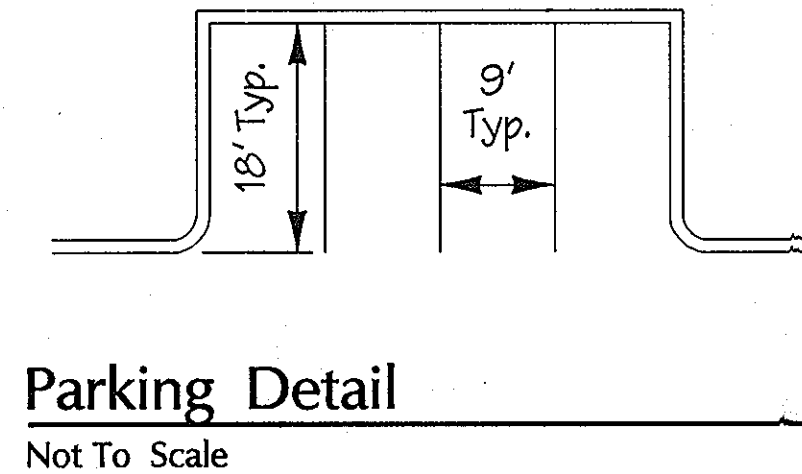
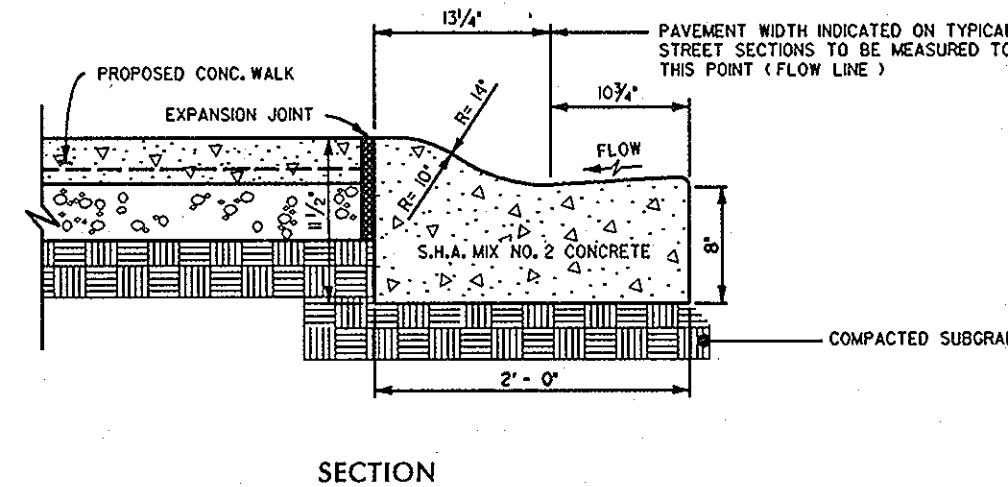
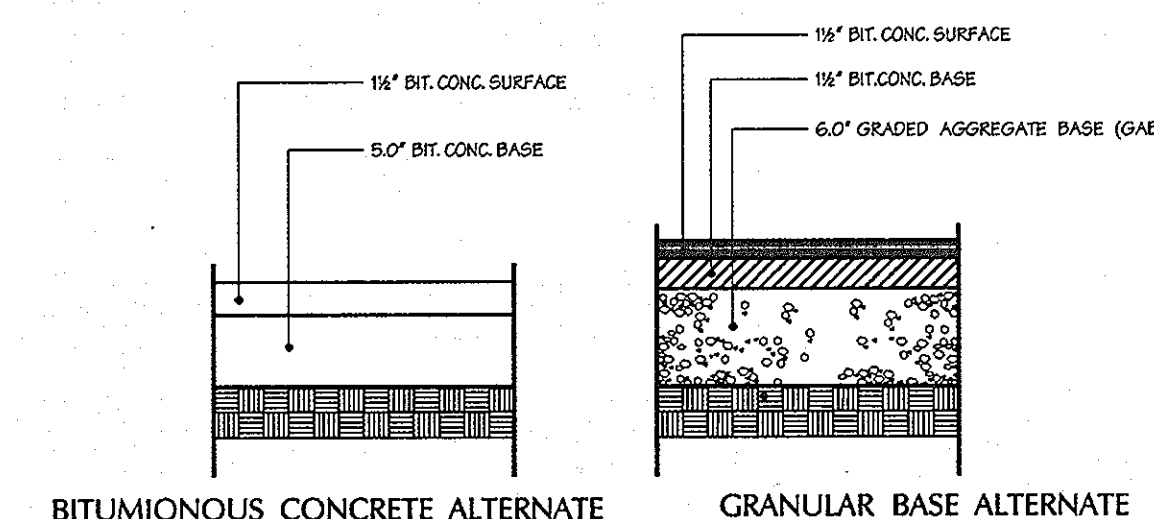
Concrete Walk
Not To Scale

Light Pole Footing Detail
Not To Scale

Stone Outlet Sediment Trap - ST II
Not To Scale

Stone Outlet Sediment Trap - ST II
Not To Scale

Standard Inlet Protection
Not To Scale



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: Feb 8, 2007

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 4/22/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 5/10/07
DIRECTOR DATE: 5/14/07

Date	No.	Revision Description
8/2/06	6	REVISED LOTS 27-32, 33-37. ADDED NEW HOUSE TYPE.
12/18/07	1	CONVERT UNITS 6-37 TO 1N-FEE LOTS

REVISD
SITE DEVELOPMENT PLAN
EMERSON SECTION 2 AREA 7 PARCEL B
UNITS 1 THRU 37
TOWNHOMES

OWNER(S) / DEVELOPER:
NEWPORT HOMES LIMITED
LIABILITY COMPANY
5485 HARPER FARM RD.
SUITE 200
COLUMBIA, MD 21044

DMW
Daft-McCune-Walkers, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4708
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

AREA	TAX MAP 47	PARCEL 837
TITLE	6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND	
SITE AND SEDIMENT CONTROL DETAILS		
Des. By	MJP	Scale AS NOTED
Drn. By	SRG	Date 4/21/07
Chk. By	Approved	Proj. No. 95054R
		10 of 12

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

Cindy Huntzberry
SIGNATURE OF DEVELOPER
Cindy Huntzberry
5-12-10
FOR REVISION ONLY

ENGINEERS 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. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Charles V. Main II
SIGNATURE OF ENGINEER
Charles V. Main II
3-29-07
DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

Jim Meyer
S.D. NATURAL RESOURCE CONSERVATION SERVICE
4/26/07
DATE

John K. Robertson
HOWARD S.C.D.
4/16/07
DATE

3-29-07
Date

Charles V. Main II
Professional Engr. No. 20784

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF MARYLAND. LICENSE NO. 30661 EXPIRATION DATE: 8/28/2011

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.

I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Laura L. Bear 5-24-10
 NAME DATE

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL."

THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

NOTES:

- As the time of plant installation, all shrubs and trees listed and approved on the Landscape Plan, shall comply with the proper height requirement in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from the Approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to the applicable plans.
- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and the Emerson Landscape Design Criteria. Financial Surety, based on the required trees, in the amount of \$40,300 must be posted as part of the Developers Agreement (15% shade trees, 2 evergreen trees, and 40 shrubs).

Modified Schedule C
 Residential Development: Internal Landscaping

Number of Dwelling Units	37 Units
Lot Classification: Non-Wooded	Non-Wooded
Number of Trees (STV) Required: (See Note (1) below)	227 du or 50
Number of Trees (STV) Provided:	
Shade Trees	24 Trees 24
Ornamental/Flowering Trees	56 Trees 28
Evergreen Trees	80 Trees 40
Shrubs	102 Shrubs 102
Total Shade Tree Value (STV) Provided:	

Note: 1) Although the Development Criteria prescribes (3) STV DU for the Non-Wooded, a prior review of this plan by the Architectural Commission (AC) has by letter dated 10/17/09 determined that the intent of the Landscape Criteria is being met and in order to avoid overcrowding, a value of 2.5 STV DU is more appropriate for this particular project.

SCHEDULE A

PERIMETER LANDSCAPE EDGE

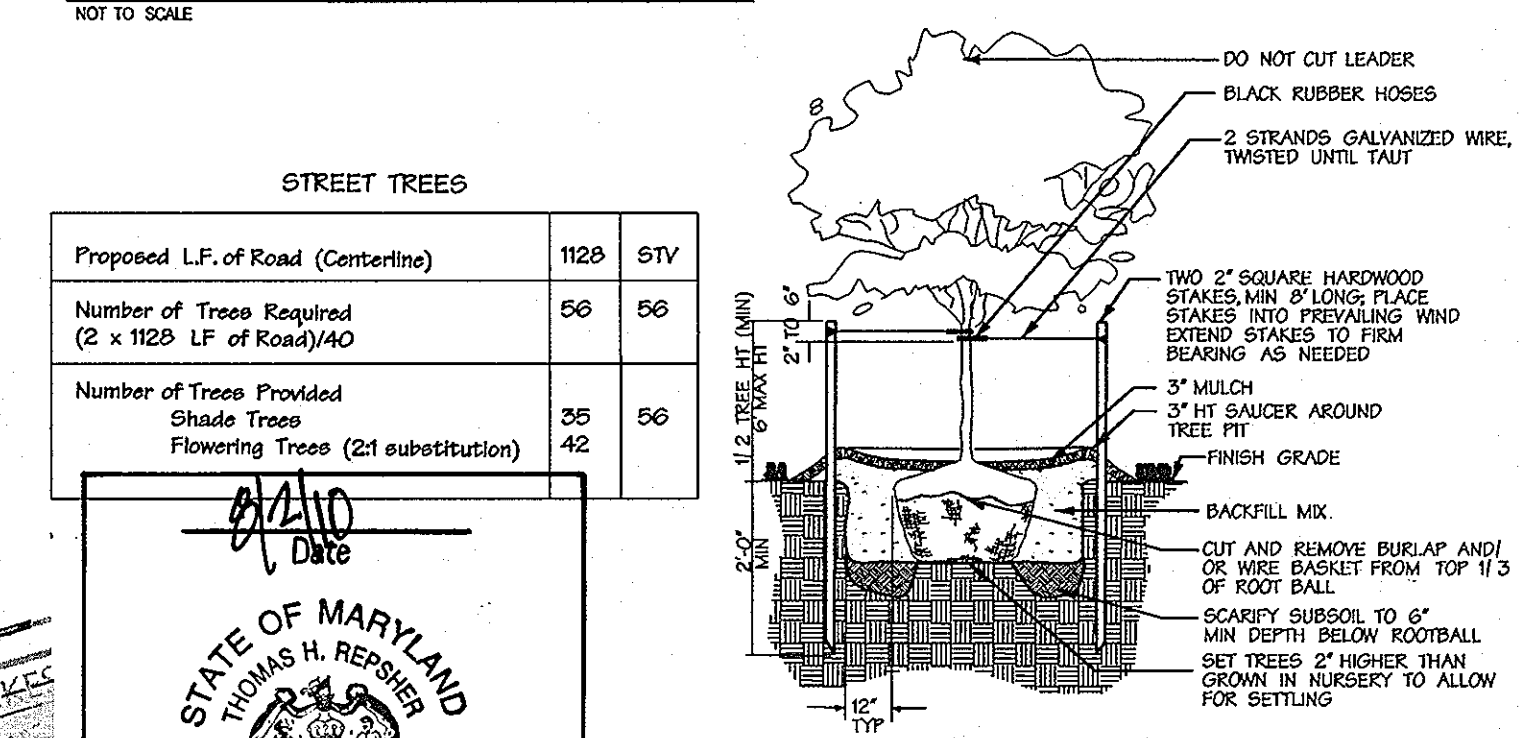
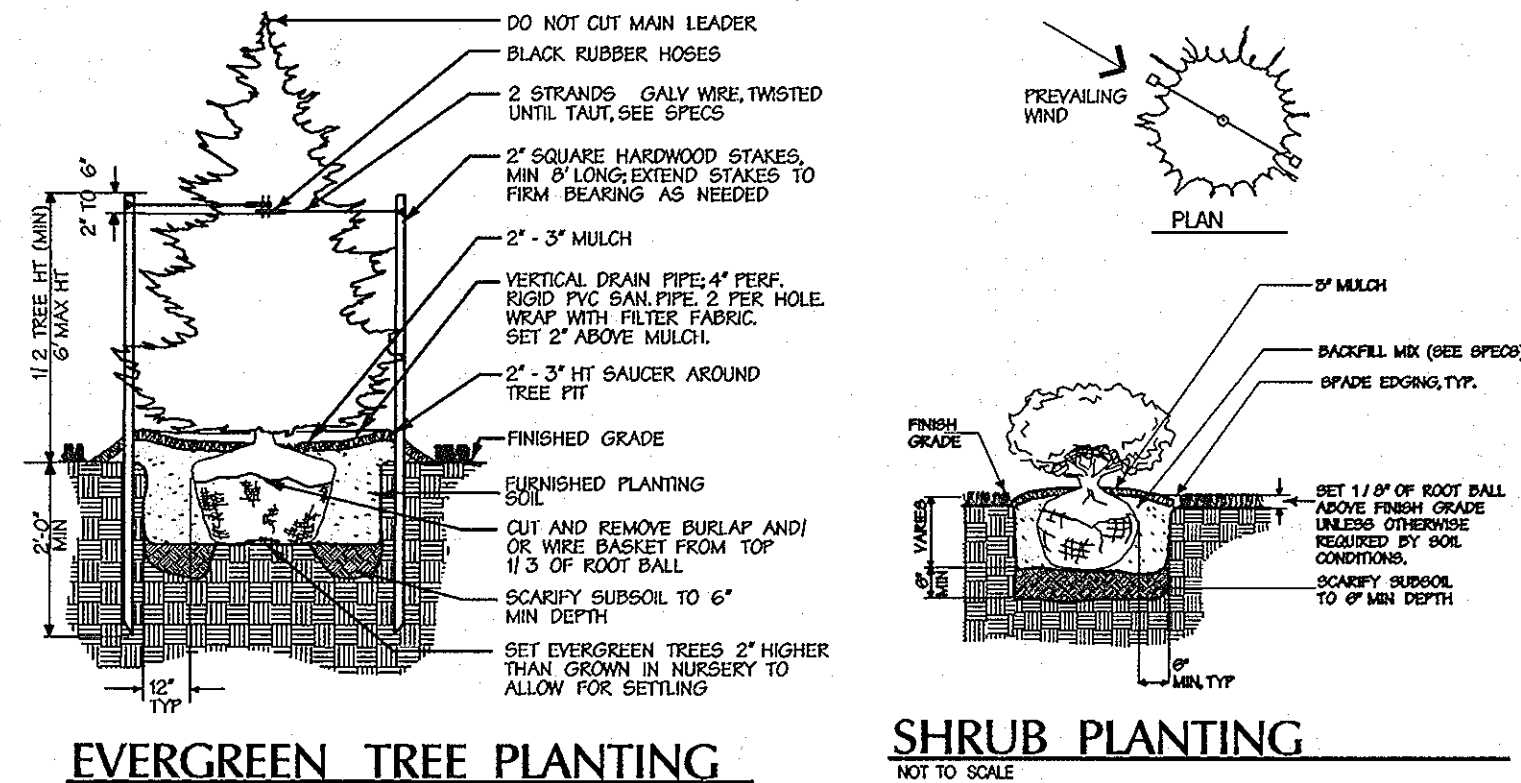
Category	Perimeter No. 1 Adjacent to Former Property	Perimeter No. 2 SFA Fronte Adjacent to Public Road	Perimeter No. 3 Parking Adjacent to Roads	Perimeter No. 4 SFA Side Adjacent to Public Roads	STV
Linear Feet of Roadway Frontage/Perimeter	377	1,150'	156'	40'	
Credits for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NA	NA	NA	NA	
Credits for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NA	NA	NA	NA	
Number of Plants Required					
Shade Trees	0	NA	4	1	5
Evergreen Trees	0	0	0	2	1
Shrubs	0	0	40	0	40
Total Required (STV)					46
Number of Plants Provided					
Shade Trees	6	NA	0	1	7
Evergreen Trees	0	0	0	2	2
Other Trees (21 substitution)	0	0	0	0	0
Shrubs (101 substitution)	0	0	40	0	40
Total Provided (STV)					19

SCHEDULE B

PARKING LOT INTERNAL LANDSCAPING

Number of Parking Spaces	26	STV
Number of Trees Required	2	2
Number of Trees Provided	2	2
Shade Trees		
Other Tree (21 substitution)		

Summary of Shade Tree Values	Required	Provided
Street Trees	56	56
Schedule A	10	16
Schedule B	2	2
Schedule C	80 (25/du)	102
Total Required	148	176
Total STV Provided (Plant List)		176



PLANT LIST

QTY	SYM	BOTANICAL NAME / COMMON NAME	REMARKS	STV
40	AK	RED SUNSET MAPLE	2 1/2" CAL. FULL HEAD	40
14	AO	RED SUNSET MAPLE	2 1/2" CAL. FULL HEAD	14
14	OF	QUEENSLAND GUM	2 1/2" CAL. FULL HEAD	14
4	CK	ORANGE BLOSSOM	2 1/2" CAL. 8-10'	4
25	CC	ORANGE BLOSSOM	2 1/2" CAL. 8-10'	125
11	CY	ORANGE BLOSSOM	2 1/2" CAL. 8-10'	55
20	PT	ORANGE BLOSSOM	2 1/2" CAL. 8-10'	100
12	PT	ORANGE BLOSSOM	2 1/2" CAL. 8-10'	60
21	AC	ORANGE BLOSSOM	2 1/2" CAL. 8-10'	105
41	IN	ORANGE BLOSSOM	7-8' HT.	205
5	FB	ORANGE BLOSSOM	7-8' HT.	25
44	PO	ORANGE BLOSSOM	7-8' HT.	220
142	TM	ORANGE BLOSSOM	50-50'	142

LEGEND

- 3/4" --- EXISTING CONTOUR
- 1/2" --- EXISTING WATER
- 1/2" --- EXISTING STORM DRAIN
- 1/2" --- EXISTING SEWER
- 1/2" --- PROPOSED SEWER
- 1/2" --- PROPOSED WATER
- 1/2" --- PROPOSED STORM DRAIN
- 1/2" --- PROPOSED SHRUBS
- 1/2" --- PROPOSED EVERGREEN
- 1/2" --- PROPOSED FLOWERING TREE
- 1/2" --- PROPOSED DECIDUOUS TREE
- 1/2" --- REQUIRED DECIDUOUS STREET TREE
- 1/2" --- REQUIRED FLOWERING STREET TREE
- 1/2" --- PROPOSED UTILITY EASEMENT
- 1/2" --- EXISTING TREELINE
- 1/2" --- PROPOSED TREELINE
- 1/2" --- PARCEL A PLANTING
- 1/2" --- STREET LIGHT

REVISIONS

Date	No.	Revision Description
6/21/10	1	REVISED BLDG. 1 GRADED ADDED DRAIN.
6/21/10	2	REVISED BLDG. 3 GRADED ADDED DRAIN. EX. SIGN SHOWN.
6/21/10	3	REVISED BLDG. 2, 4, 5, 6, 7 GRADED ADDED DRAIN.
6/21/10	4	REVISED BLDG. 3 & 5
12/18/09	5	CONVERT UNITS 6-37 TO IN-FEE LOTS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6/21/10
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/21/10
 DIRECTOR DATE 6/15/10

REVISIONS

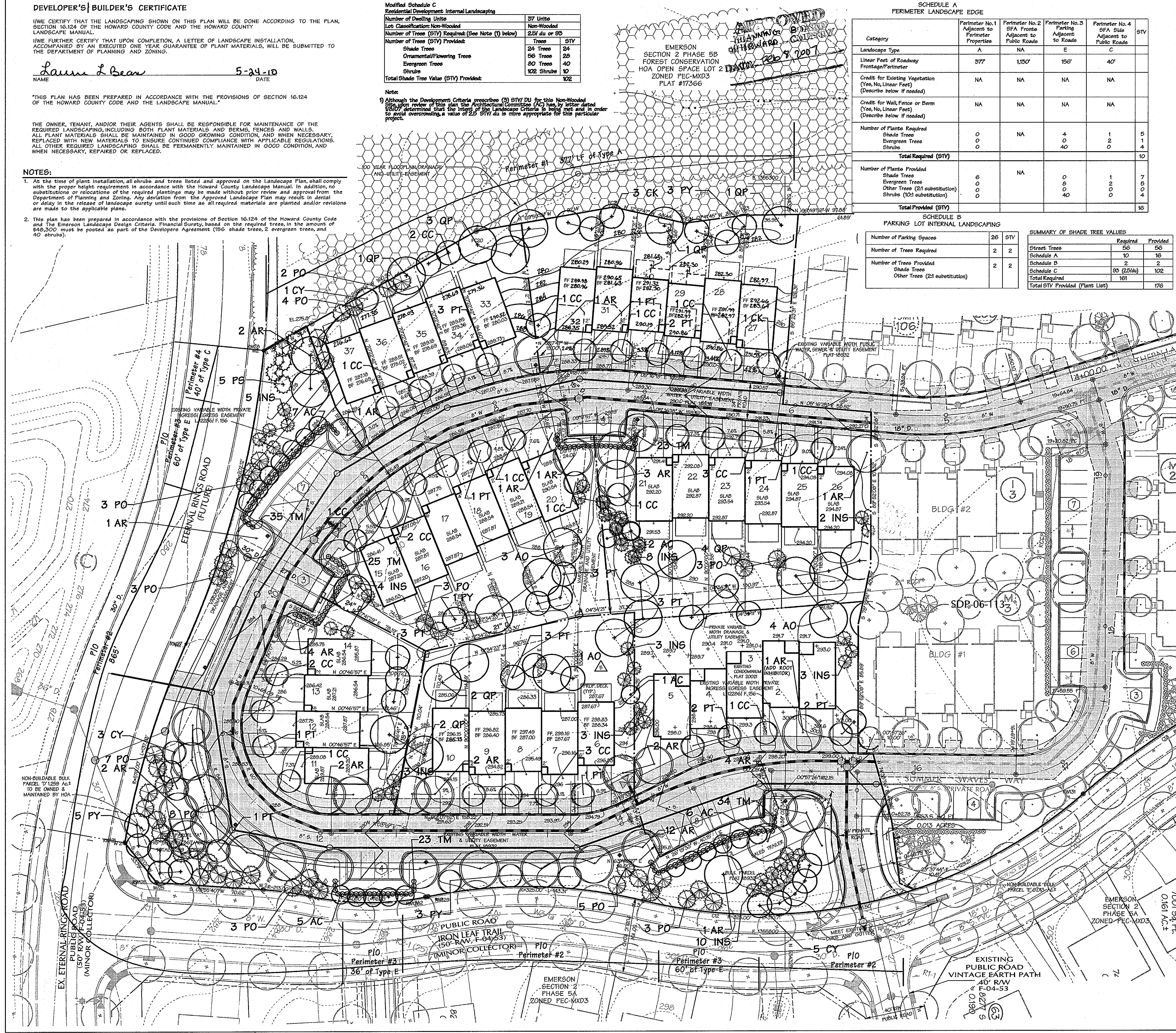
Date	No.	Revision Description
9/10/07	1	REVISED BLDG. 1 GRADED ADDED DRAIN.
		SALES & CONSTR. TRAILER

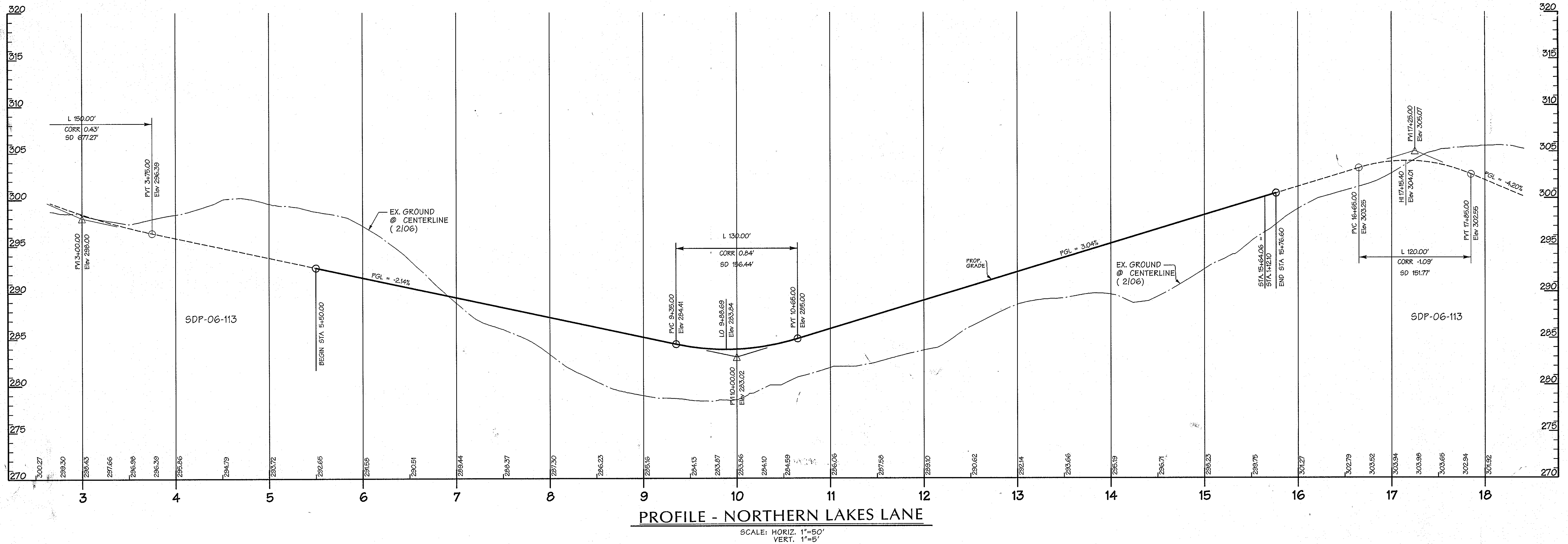
REVISED SITE DEVELOPMENT PLAN
EMERSON SECTION 2 AREA 7 PARCEL B
 UNITS 1 THRU 37
 TOWNHOMES
 OWNER(S) / DEVELOPER:
 NEWPORT HOMES LIMITED
 5485 HARPER'S FERRY RD.
 SUITE 200
 COLUMBIA, MD 21044

DMW
 Dan McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

LANDSCAPE ARCHITECT

Des. By	MJP	Scale	1" = 30'	Proj. No.	95054R
Dim. By	SRG	Date	4/2/07	11 of 12	
Chk. By	Approved	SDP 06-112			





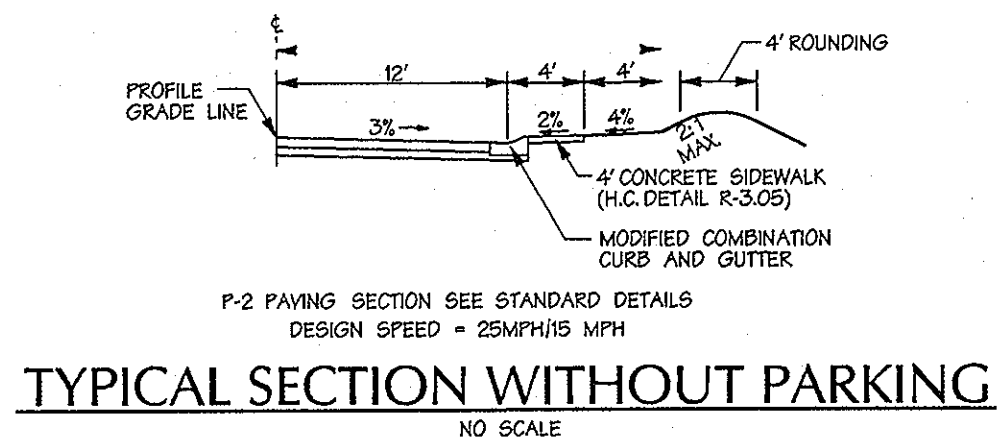
PROFILE - NORTHERN LAKES LANE

SCALE: HORIZ. 1"=50'
VERT. 1"=5'

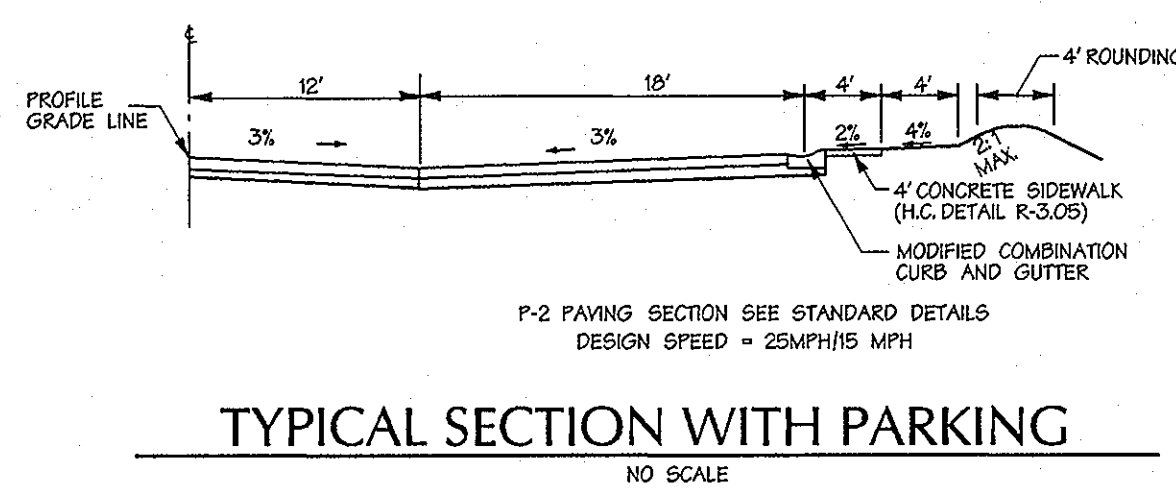
FILL COMPACTION NOTE: ALL FILLS ARE FILLS ARE TO BE COMPACTED TO 95% PER AASHTO T-180

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE Feb 8, 2007

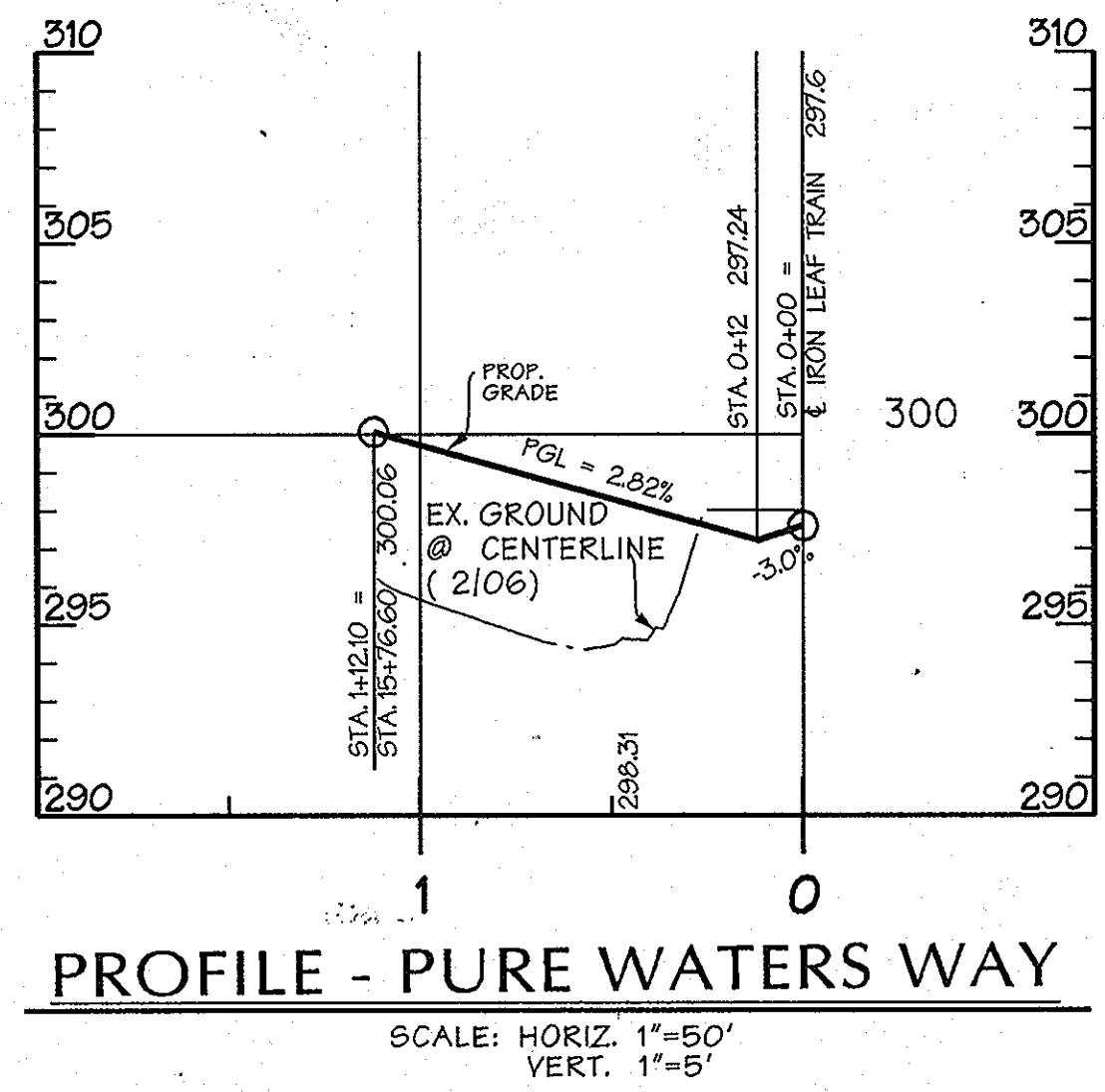
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 Chief, Development Engineering Division: *[Signature]* DATE 4/22/07
 Chief, Division of Land Development: *[Signature]* DATE 5/10/07
 Director: *[Signature]* DATE 5/11/07



TYPICAL SECTION WITHOUT PARKING
NO SCALE



TYPICAL SECTION WITH PARKING
NO SCALE



PROFILE - PURE WATERS WAY

SCALE: HORIZ. 1"=50'
VERT. 1"=5'

3-29-07
Date

 20184
 Professional Engr. No.

Date	No.	Revision Description
		SITE DEVELOPMENT PLAN EMERSON SECTION 2 AREA 7 PARCEL B UNITS 1 THRU 37 TOWNHOMES
OWNER(S) / DEVELOPER: NEWPORT HOMES, LLC 5405 HARPER FARMS RD SUITE 200 COLUMBIA, MD 21044		
 Darin McCune-Walkers, Inc. 200 East Pennsylvania Avenue Towson, Maryland 21286 (410) 296-3333 Fax: 296-4702 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals		
AREA: TAX MAP 47 PARCEL B 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND		
TITLE: ROAD PROFILES		
Des. By: KAD/CYS	Scale: 1"=50'	Proj. No. 95054.R
Drn. By: WDE	Date: 4/2/07	12 of 12
Chk. By:	Approved:	