

LAYOUT 6/7/08 INSP 4 _____
 INSP 2 6/10/08 INSP 5 _____
 INSP 3 _____ INSP 6 _____

ISSUE DATE: 5/15/08
 APPROVAL DATE: 6/11/08

PERMIT *(logged in)*

P 528943
 A 518599

TAX ID # 05447887

ON-SITE SEWAGE DISPOSAL SYSTEM HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH

Hatfields Equipment IS PERMITTED TO INSTALL ALTER

ADDRESS: PO Box 519, Annapolis Junction PHONE NUMBER: 301-854-6172

SUBDIVISION: Sheppard Manor LOT NUMBER: 10

ADDRESS: 4639 Sheppard Manor Dr. PROPERTY OWNER: Williamsburg Group LLC

SEPTIC TANK CAPACITY (GALLONS): 2000 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): _____ COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 4

SQUARE FEET PER BEDROOM: _____ *4.5 x 7.5 3 x 7.5'*

LINEAR FEET OF TRENCH REQUIRED: 248 187' 187' LF @ 4-8' ?

TRENCHES:	Trench to be 2.0 feet wide. Inlet 4.0 feet below original grade. Bottom maximum depth 8.0 feet below original grade. Effective area begins at 5.5 feet below original grade. 3.0 feet of stone below distribution pipe.
LOCATION:	
NOTES:	Install system per plan unless directed by HCHD. Layout inspection required prior to installation

PLANS APPROVED: Sara Sappington DATE: 10/15/07

- NOTE: PERMIT VOID AFTER 2 YEARS
- NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT CALL 410-313-1771 FOR INSPECTION OF SEPTIC SYSTEM

NOT TO SCALE

See separate sheet for As-Built

TRENCH/DRAINFIELD DATA

WIDTH	INLET,	BOTTOM
<u>2'</u>	<u>4'</u>	<u>8'</u>
NUMBER OF TRENCHES <u>3</u>		
TOTAL LENGTH <u>185'</u>		
ABSORPTION AREA <u>370 sqw</u>		
DISTRIBUTION BOX LEVEL <u>inches'</u>		
DISTRIBUTION BOX BAFFLE <u>Yes</u>		
DISTRIBUTION BOX PORT <u>Yes</u>		

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	<u>Yes</u>
CAPACITY	<u>2000</u> GAL
SEAM LOC	<u>Top</u>
TANK LID DEPTH	<u>2.5'</u>
BAFFLES	<u>Yes</u>
BAFFLE FILTER	<u>—</u>
MANHOLE LOC	<u>Front</u>
6" PORT LOC	<u>Rear</u>
WATERTIGHT TEST	<u>—</u>
SEPTIC TANK 2 LEVEL	
CAPACITY	— GAL
SEAM LOC	—
TANK LID DEPTH	—
BAFFLES	—
BAFFLE FILTER	—
MANHOLE LOC	—
6" PORT LOC	—
WATERTIGHT TEST	—

Babylon slotted

ROAD

PRE-CONSTRUCTION 6/9/08 Set tank out of swale. Place D box @ start of top trench approx. 10' down from corner septic easement stake. Maximize

INSTALLATION area by installing a 45', 55', 75' trenches or conduits.

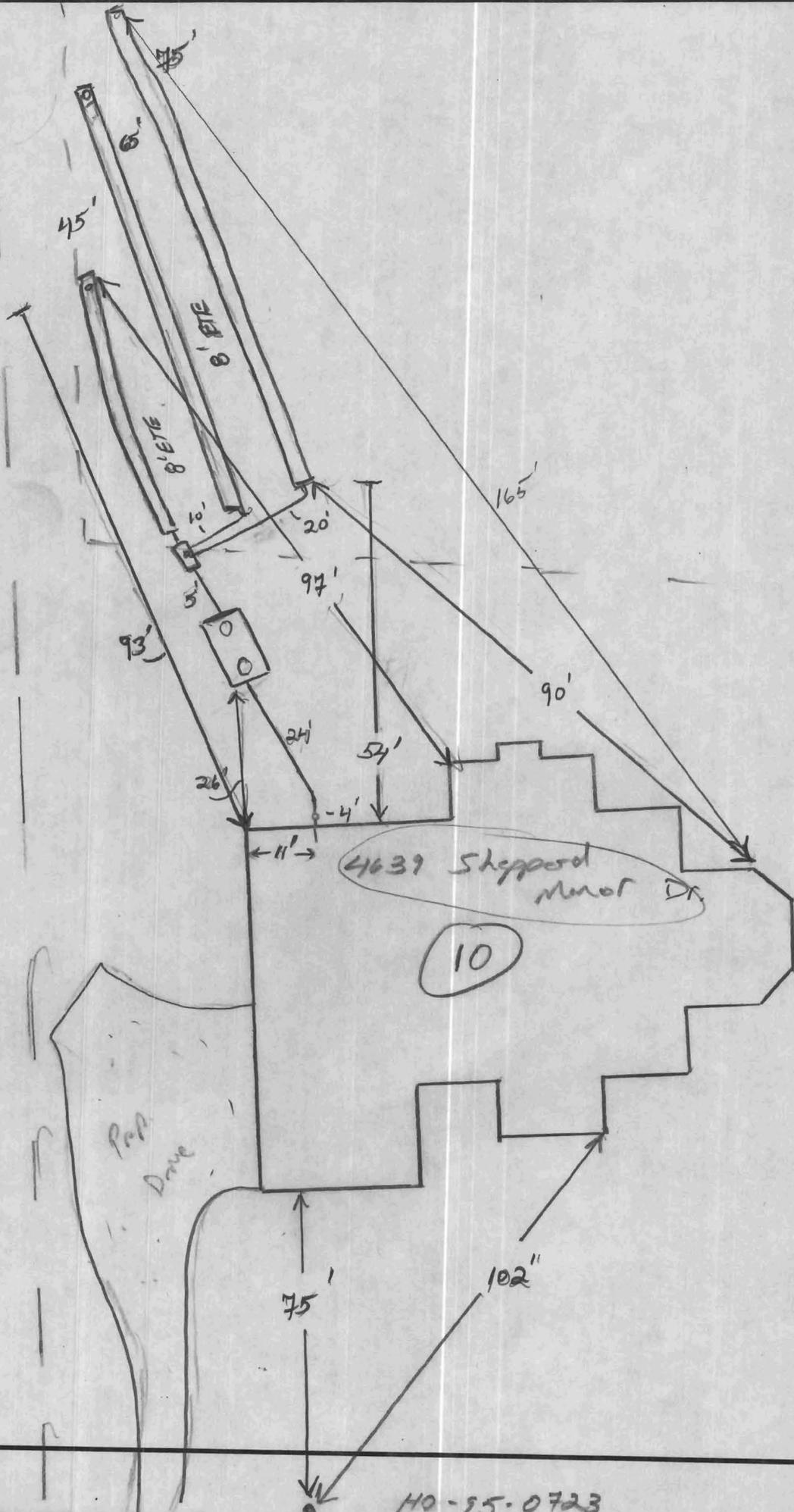
6/10/08 Plumbing installed from house to D box. Trench set per installation. Bottom 75' trench completed. OK to continue (KW)

6/11/08 System completed. 45', 65', and 75' trenches installed as instructed. OK to backfill (KW)

FINAL INSPECTOR *[Signature]*

DATE OF APPROVAL 6/10/08

NOT TO SCALE



110-95-0723

PERMANENT SEEDING NOTES

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

SEEDING 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 the following schedule: Apply 2 tons per acre dolomitic limestone (82 lbs/1000 s.f.) and 600 lbs. / acre (20.7 lbs./1000s.f.) of 10-20-20 before seeding. Harrow or disc into upper 3 in. of soil.

SEEDING: Apply a mixture of Turf Type Tall Fescue (80%) and Hard Fescue (20%) in accordance with seeding dates and rates shown in the Permanent Seeding Summary shown on this sheet. For stabilization outside of the seeding dates, apply straw mulch at rates and methods specified below and apply permanent seeding when within proper seeding dates.

MULCHING: Immediately following seeding, apply a uniform 1-2 in. Deep layer of unrotted small grain straw at a rate of 2 tons/acre. (Apply 2.5 Tons/acre if a mulch anchoring tool is used.) Straw may be anchored with wood cellulose fiber at a rate of 750 lbs. / acre mixed at a ratio of 50 lbs. of wood fiber/100 gal. of water. Synthetic liquid binders such as Terra Tex II, Acrylic DLR (Agro-Tack), DCA-70, Petrosel and other approved equips may be used at rates recommended by the manufacturers.

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth (in.)	Fertilizer Rate (lb/1000s.f.)			Lime Rate
					N	P205	K2O	
10	Tall Fescue (80%) Hard Fescue (20%)	120	3/15-5/15	0.5 in.	2.0 (80%) 2.0 (20%)	4.0 (40%) 4.0 (40%)	10.0 (100%) 10.0 (100%)	410 CT

TEMPORARY SEEDING NOTES

SEEDING 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 the following schedule: Apply 2 tons per acre dolomitic limestone (82 lbs/1000 s.f.) and 600 lbs. / acre (15 lbs./1000s.f.) of 10-10-10 before seeding. Harrow or disc into upper 3 in. of soil.

SEEDING: Apply the Maryland State Highway approved seed mixture of Barley or Rye plus Foxtail Millet in accordance with seeding dates and rates shown in the Temporary Seeding Summary shown on this sheet. For stabilization outside of the seeding dates, apply straw mulch at rates and methods specified below.

MULCHING: Immediately following seeding, apply a uniform 1-2 in. Deep layer of unrotted small grain straw at a rate of 2 tons/acre. (Apply 2.5 Tons/acre if a mulch anchoring tool is used.) Straw may be anchored with wood cellulose fiber at a rate of 750 lbs. / acre mixed at a ratio of 50 lbs. of wood fiber/100 gal. of water. Synthetic liquid binders such as Terra Tex II, Acrylic DLR (Agro-Tack), DCA-70, Petrosel and other approved equips may be used at rates recommended by the manufacturers.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth (in.)	Fertilizer Rate (lb/1000s.f.)			Lime Rate
					N	P205	K2O	
2	Barley or Rye plus Foxtail Millet	150 (3 lbs./1000sqft)	2/1-3/30 (7a) 3/15-10/31 (5a)	1/4 in. 1/2 in.	600 lb/acre (15lb/1000sqft)	2 tons/acre (100lb/1000sqft)		

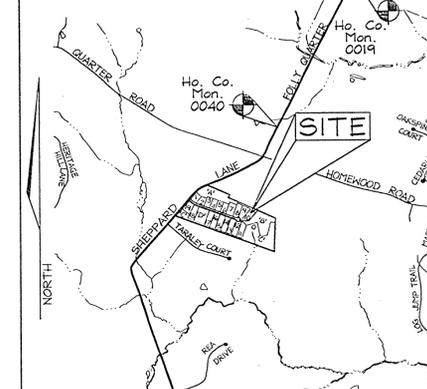
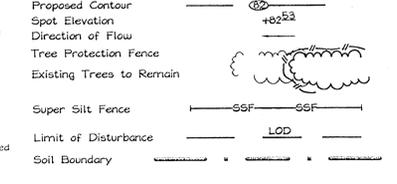
SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.
2. Notify Howard County Department of Inspections, License and Permits at (410) 313-1880 at least 24 hours before starting any work.
3. Install Stabilized Construction Entrance.
4. After receiving permission from the sediment control inspector, rough grade site and begin building construction.
5. Construct driveway and finish building construction.
6. Fine grade site.
7. Upon stabilization of all disturbed areas and with the permission of the Sediment Control Inspector, remove all sediment control measures and stabilize any remaining disturbed area.

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (410-313-1880).
2. All vegetation 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 thereto.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within (a) 7 calendar days for all perimeter sediment control structures, dikes, 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 shall be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, 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, soil, temporary seeding, and mulching (Sec. c). Temporary stabilization with mulch alone shall 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: 1.074 Acres
 - Area Disturbed: 0.618 Acres
 - Area to be roofed or paved: 0.139 Acres
 - Area to be vegetatively stabilized: 0.480 Acres
 - Total Cut: 345 CY
 - Total Fill: 410 CY
 - 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 controls 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.
12. Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction.
13. To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved active grading permit.

LEGEND



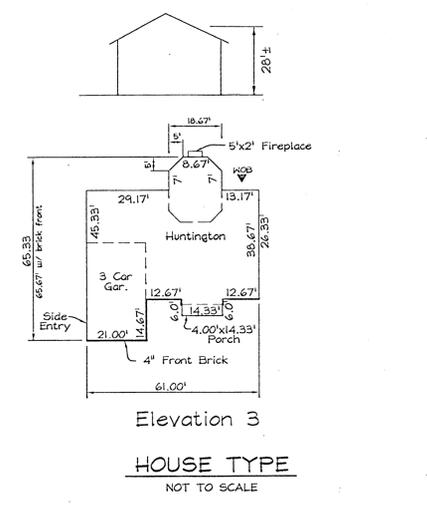
VICINITY MAP
SCALE: 1"=2000'
ADC MAP 10 E18, MAP 14 E1

BENCHMARKS

Sta.	0019	N 176,927.0394	E 406,505.1110	El.: 117.6061 (meters)
		N 580,468.126	E 1,335,675.518	El.: 385.846 (feet)
Sta.	0040	N 175,982.4260	E 405,995.1970	El.: 111.3465 (meters)
		N 577,270.584	E 1,332,002.575	El.: 365.304 (feet)

GENERAL NOTES

1. This property is zoned "RC-DEO" per the 02/02/04 Comprehensive Zoning Plan and the Comp Lite Zoning Regulations Amendments effective 07/26/06.
2. Total area of property = 46,774 sq ft or 1.074 Acs.
3. Public water and private sewer will be used within this site.
4. This area designates a private sewage easement, of at least 10,000 SF as required by the Maryland State Department of the Environment for individual sewage disposal (COMAR 26.04.03). Improvements of any nature in this area are restricted until public sewerage is available. These easements shall become null and void upon connection to a public sewerage system. The County Health Officer shall have the authority to grant adjustments to the private sewage easement. Recordation of a modified sewage easement shall not be necessary.
5. The septic fields are located on soil types BRC2, BRC3, MIB2, MIC2, MIB3, MID2 and MIB2 as per the soil survey of Howard County, Soils Map #3.
6. On-site topography based on a Field Run Topographic Survey prepared by FSH Associates dated 1/12/04. Off-site and non-critical topography based on Howard County 1990 Aerial Topographic Surveys with five foot contours.
7. Spoil Material of Septic Trench Excavation shall be placed uphill of trench.
8. Private water, and sewer will be used within this site.
9. When digging septic trenches contractor shall place excavated material on the uphill side of the trench.



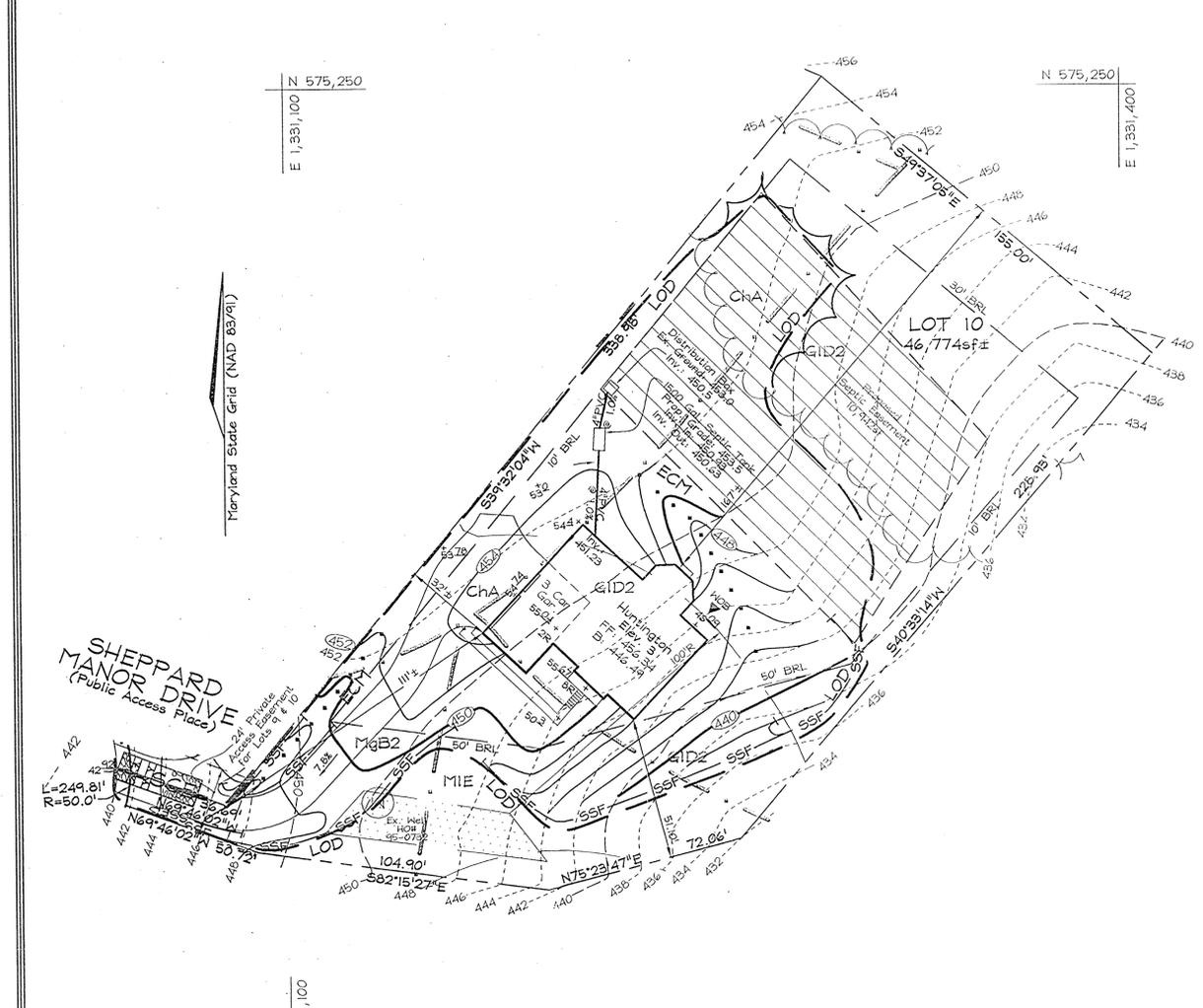
OWNER/DEVELOPER
WILLIAMSBURG GROUP LLC
5485 Harpers Farm Road #200
Columbia, Maryland 21044-3834
Telephone: (410) 947-8800
Fax: (410) 947-4356

PLOT PLAN
SHEPPARD MANOR
LOT 10

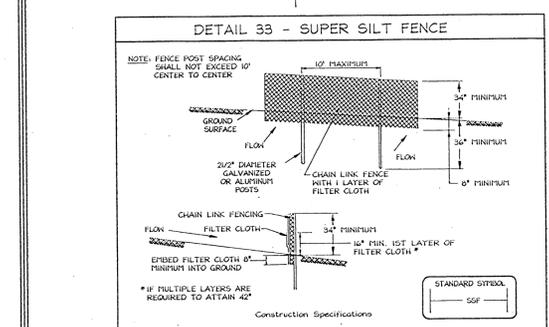
TAX MAP 39 GRIDS 01
5TH ELECTION DISTRICT
PARCEL 268
HOWARD COUNTY, MARYLAND

FSH Associates
Engineers Planners Surveyors
8339 Howard Lane, Elkridge, MD 21075
Tel: 410-567-5200 Fax: 410-756-1562
E-mail: info@fsh.com

DESIGN BY: AY
DRAWN BY: AY
CHECKED BY: ZYF
SCALE: As shown
DATE: Aug. 16, 2007
W.O. No.: 3160
SHEET No.: 1 OF 1



DETAIL 33 - SUPER SILT FENCE

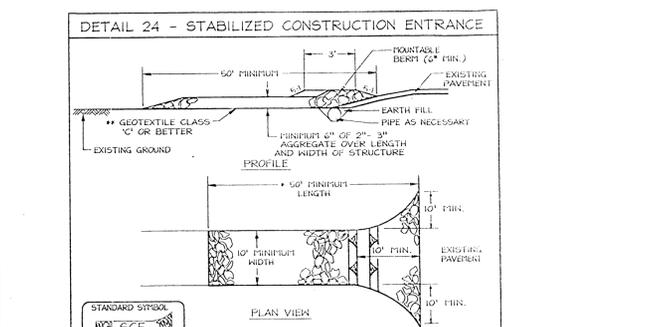


1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6" length posts.
2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
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 6" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and sealed.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSPT 504
Tensile Modulus	20 lbs/in (min.)	Test: MSPT 504
Flow Rate	0.5 gal/ft Minute (max.)	Test: MSPT 322
Filtering Efficiency	75% (min.)	Test: MSPT 322

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SOIL CONSERVATION SERVICE
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DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



1. Length - minimum of 50' (+ 30' for a 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. ** 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 manhole berr with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe 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.

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WATER MANAGEMENT ADMINISTRATION

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
Ba	Baile silt loam	D
CgB2	Chester gravelly silt loam, 3 to 8 percent slopes, moderately eroded	B
CgC2	Chester gravelly silt loam, 8 to 15 percent slopes, moderately eroded	B
ChA	Chester silt loam, 0 to 3 percent slopes	B
ChB2	Chester silt loam, 3 to 8 percent slopes, moderately eroded	B
GID2	Gienelg loam, 15 to 25 percent slopes, moderately eroded	B
MIB2	Manor gravelly loam, 3 to 8 percent slopes, moderately eroded	B
MIB3	Manor gravelly loam, 8 to 15 percent slopes, severely eroded	B
MID2	Manor loam, 15 to 25 percent slopes, moderately eroded	B
MIE	Manor loam, 25 to 45 percent slopes	B

ENGINEERS CERTIFICATE

I, **Michael L. Taylor**, J.E. 8/23/07
DATE
SIGNATURE OF ENGINEER
MICHAEL L. TAYLOR, JR.

DEVELOPER'S CERTIFICATE

I, **William J. Taylor**, J.E. 8/23/07
DATE
SIGNATURE OF DEVELOPER

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. #34684, Expiration Date: 7/08/2004.

