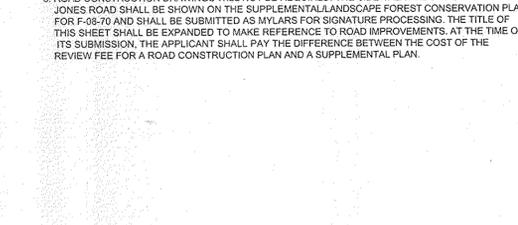
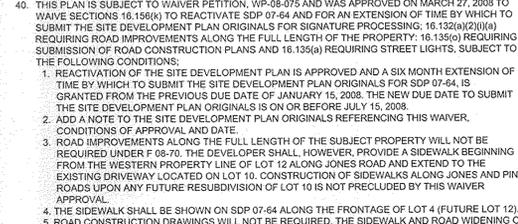
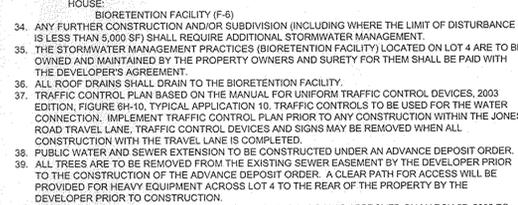


GENERAL NOTES

- THIS PROPERTY IS ZONED R-12 PER THE 02/02/04 COMPREHENSIVE ZONING PLAN AND THE "COMP LITE" ZONING AMENDMENTS EFFECTIVE 07/28/06.
- GROSS AREA OF PROPERTY = 1.48 AC.
- PROPERTY IS IN THE METROPOLITAN DISTRICT.
- PUBLIC WATER AND PUBLIC SEWER WILL BE USED WITHIN THIS SITE.
- PUBLIC WATER TO BE PROVIDED BY CONTRACT NO. 24-3312-D.
- PUBLIC SEWER TO BE PROVIDED BY CONTRACT NO. 24-3510-D.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION 410.531.5533
 - BGE (CONTRACTOR SERVICES) 410.850.4820
 - BGE (UNDERGROUND DAMAGE CONTROL) 410.787.9088
 - MISS UTILITY 800.257.7777
 - COLONIAL PIPELINE COMPANY 410.785.1390
 - HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES 410.313.4900
 - HOWARD COUNTY HEALTH DEPARTMENT 410.313.2840
 - AT&T 800.743.0033
 - VERIZON 800.743.0033
- BOUNDARY SHOWN HEREON IS BASED ON A BOUNDARY SURVEY PREPARED BY SILL, ADCOCK & ASSOCIATES, L.L.C., DATED OCTOBER 2006.
- TOPOGRAPHY IS BASED ON A FIELD RUN TOPOGRAPHICAL SURVEY PERFORMED BY SILL, ADCOCK & ASSOCIATES, L.L.C., DATED OCTOBER 2006.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: OTHER CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ALL HOPE PIPE SPECIFICATION AND INSTALLATION SHALL MEET ASTM 10-293 TYPE S, N-254 TYPE S AND ASTM D2321, RESPECTIVELY.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). DRIVEWAY PAVING TO BE HOWARD COUNTY STANDARD P-1 PAVING SECTION (SEE DETAIL, SHEET 2). GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST, PRIOR TO CONSTRUCTION.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- ALL TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS 421A AND 421B WERE USED FOR THIS PROJECT.
- IN ACCORDANCE WITH SECTION 122 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACKS.
- DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING REQUIREMENTS:
 - a) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE)
 - b) SURFACE - SIX (6) INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MINIMUM)
 - c) GEOMETRY - MAXIMUM 14% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS
 - d) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (#25-LOADING)
 - e) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - f) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- DRIVEWAY ENTRANCE TO BE PER HOWARD COUNTY STANDARD DETAIL R-6.03.
- SEWER HOUSE CONNECTION (SHC) TO BE AT 2.0% UNLESS OTHERWISE NOTES. CLEANOUTS ARE TO BE PROVIDED AT ALL BENDS.
- A WETLAND DELINEATION WAS PERFORMED BY EXPLORATION RESEARCH, INC., DATED NOVEMBER 2008.
- THERE ARE NO WETLANDS, FLOODPLAINS, HISTORIC STRUCTURES OR CEMETARIES LOCATED ONSITE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A SPEED STUDY WAS PERFORMED BY MARS GROUP, DATED NOVEMBER 2008.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND LANDSCAPE MANUAL. PERIMETER LANDSCAPE BUFFERS ARE NOT REQUIRED FOR LOTS WITHIN THE SAME SUBDIVISION.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE THE TOTAL AREA OF FOREST TO BE CUT, CLEARED OR GRADED DOES NOT EXCEED 40,000 SF. THE PROPOSED AREA OF FOREST TO BE CLEARED IS 28,743 SQUARE FEET. A DECLARATION OF INTENT FOR "A SINGLE LOT CLEARING LESS THAN 40,000 SQUARE FEET OF FOREST" HAS BEEN PROVIDED.
- THIS SITE IS EXEMPT FROM STORMWATER MANAGEMENT REQUIREMENTS FOR CHANNEL PROTECTION, STORMWATER MANAGEMENT REQUIREMENTS FOR WATER QUALITY AND RECHARGE FOR THIS SITE HAVE BEEN PROVIDED FOR BY THE FOLLOWING METHODS:
 - DRIVEWAY:
 - NON-ROOFTOP DISCONNECT
 - HOUSE:
 - BIORETENTION FACILITY (F-6)
- ANY FURTHER CONSTRUCTION AND/OR SUBDIVISION (INCLUDING WHERE THE LIMIT OF DISTURBANCE IS LESS THAN 5,000 SF) SHALL REQUIRE ADDITIONAL STORMWATER MANAGEMENT.
- THE STORMWATER MANAGEMENT PRACTICES (BIORETENTION FACILITY) LOCATED ON LOT 4 ARE TO BE OWNED AND MAINTAINED BY THE PROPERTY OWNERS AND SURETY FOR THEM SHALL BE PAID WITH THE DEVELOPER'S AGREEMENT.
- ALL ROOF DRAINS SHALL DRAIN TO THE BIORETENTION FACILITY.
- TRAFFIC CONTROL PLAN BASED ON THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES, 2003 EDITION, FIGURE 6H-10, TYPICAL APPLICATION 10. TRAFFIC CONTROLS TO BE USED FOR THE WATER CONNECTION, IMPLEMENT TRAFFIC CONTROL PLAN PRIOR TO ANY CONSTRUCTION WITHIN THE JONES ROAD TRAVEL LANE. TRAFFIC CONTROL DEVICES AND SIGNS MAY BE REMOVED WHEN ALL CONSTRUCTION WITHIN THE TRAVEL LANE IS COMPLETED.
- PUBLIC WATER AND SEWER EXTENSION TO BE CONSTRUCTED UNDER AN ADVANCE DEPOSIT ORDER.
- ALL TREES ARE TO BE REMOVED FROM THE EXISTING SEWER EASEMENT BY THE DEVELOPER PRIOR TO THE CONSTRUCTION OF THE ADVANCE DEPOSIT ORDER. A CLEAR PATH FOR ACCESS WILL BE PROVIDED FOR HEAVY EQUIPMENT ACROSS LOT 4 TO THE REAR OF THE PROPERTY BY THE DEVELOPER PRIOR TO CONSTRUCTION.
- THIS PLAN IS SUBJECT TO WAIVER PETITION, WP-08-075 AND WAS APPROVED ON MARCH 27, 2008 TO WAIVE SECTIONS 16.156(k) TO REACTIVATE SDP 07-64 AND FOR AN EXTENSION OF TIME BY WHICH TO SUBMIT THE SITE DEVELOPMENT PLAN ORIGINALS FOR SIGNATURE PROCESSING: 16.1320(i)(2)(ii)(a) REQUIRING ROAD IMPROVEMENTS ALONG THE FULL LENGTH OF THE PROPERTY: 16.1350(i) REQUIRING SUBMISSION OF ROAD CONSTRUCTION PLANS AND 16.135(a) REQUIRING STREET LIGHTS, SUBJECT TO THE FOLLOWING CONDITIONS:
 - REACTIVATION OF THE SITE DEVELOPMENT PLAN IS APPROVED AND A SIX MONTH EXTENSION OF TIME BY WHICH TO SUBMIT THE SITE DEVELOPMENT PLAN ORIGINALS FOR SDP 07-64, IS GRANTED FROM THE PREVIOUS DUE DATE OF JANUARY 15, 2008. THE NEW DUE DATE TO SUBMIT THE SITE DEVELOPMENT PLAN ORIGINALS IS ON OR BEFORE JULY 15, 2008.
 - ADD A NOTE TO THE SITE DEVELOPMENT PLAN ORIGINALS REFERRING THIS WAIVER, CONDITIONS OF APPROVAL AND DATE.
 - ROAD IMPROVEMENTS ALONG THE FULL LENGTH OF THE SUBJECT PROPERTY WILL NOT BE REQUIRED UNDER F-08-70. THE DEVELOPER SHALL, HOWEVER, PROVIDE A SIDEWALK BEGINNING FROM THE WESTERN PROPERTY LINE OF LOT 12 ALONG JONES ROAD AND EXTEND TO THE EXISTING DRIVEWAY LOCATED ON LOT 10. CONSTRUCTION OF SIDEWALKS ALONG JONES AND PINE ROADS UPON ANY FUTURE RESUBDIVISION OF LOT 10 IS NOT PRECLUDED BY THIS WAIVER APPROVAL.
 - THE SIDEWALK SHALL BE SHOWN ON SDP 07-64 ALONG THE FRONTAGE OF LOT 4 (FUTURE LOT 12).
 - ROAD CONSTRUCTION DRAWINGS WILL NOT BE REQUIRED. THE SIDEWALK AND ROAD WIDENING OF JONES ROAD SHALL BE SHOWN ON THE SUPPLEMENTAL LANDSCAPE FOREST CONSERVATION PLAN FOR F-08-70 AND SHALL BE SUBMITTED AS MYLARS FOR SIGNATURE PROCESSING. THE TITLE OF THIS SHEET SHALL BE EXPANDED TO MAKE REFERENCE TO ROAD IMPROVEMENTS. AT THE TIME OF ITS SUBMISSION, THE APPLICANT SHALL PAY THE DIFFERENCE BETWEEN THE COST OF THE REVIEW FEE FOR A ROAD CONSTRUCTION PLAN AND A SUPPLEMENTAL PLAN.



BIORETENTION PLANT LIST

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
1	☼	PLATANUS x ACERIFOLIA	LONDON PLANE TREE	2-1/2" - 3" CAL.
1	☼	ILEX GLABRA	INK BERRY	2' - 3' HT.
6	☼	LOBELIA CARDINALIS	CARDINAL FLOWER LOBELIA	1 GAL. CONTAINER
4	☼	DRYOPTERIS SP.	WOOD FERN	1 GAL. CONTAINER
3	☼	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER

TOTAL: 13 PERENNIALS, 1 SHRUB, 1 TREE

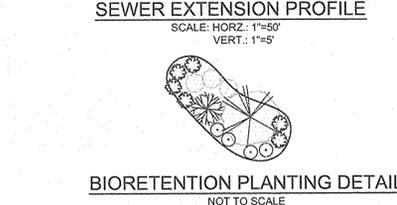
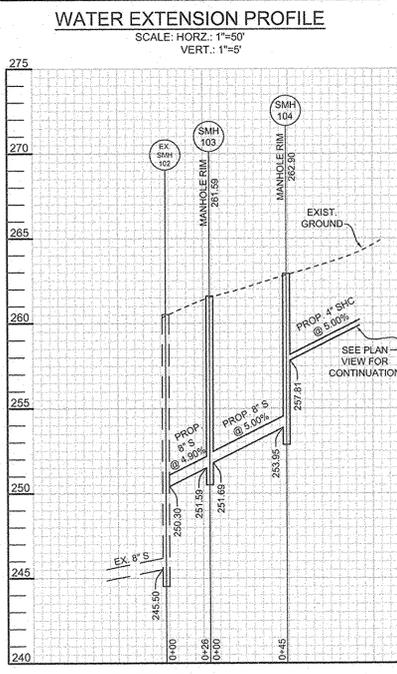
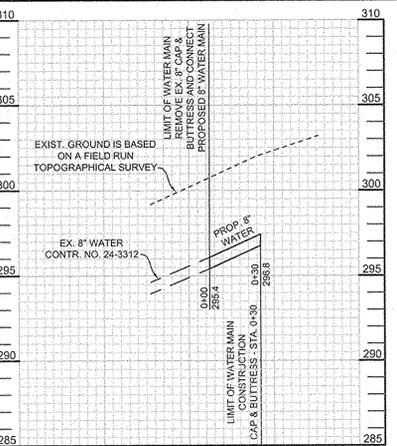
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

4/30/08
DATE

5/2/08
DATE

5/5/08
DATE

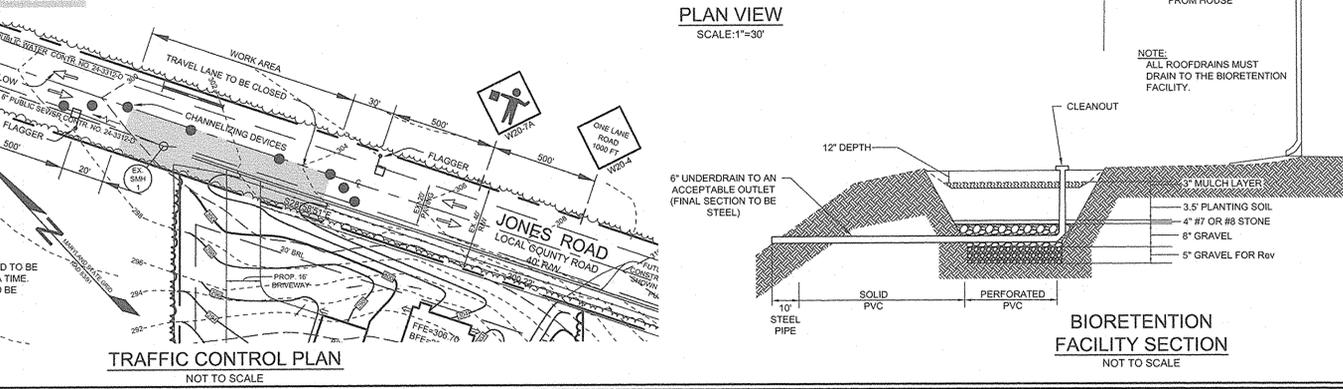
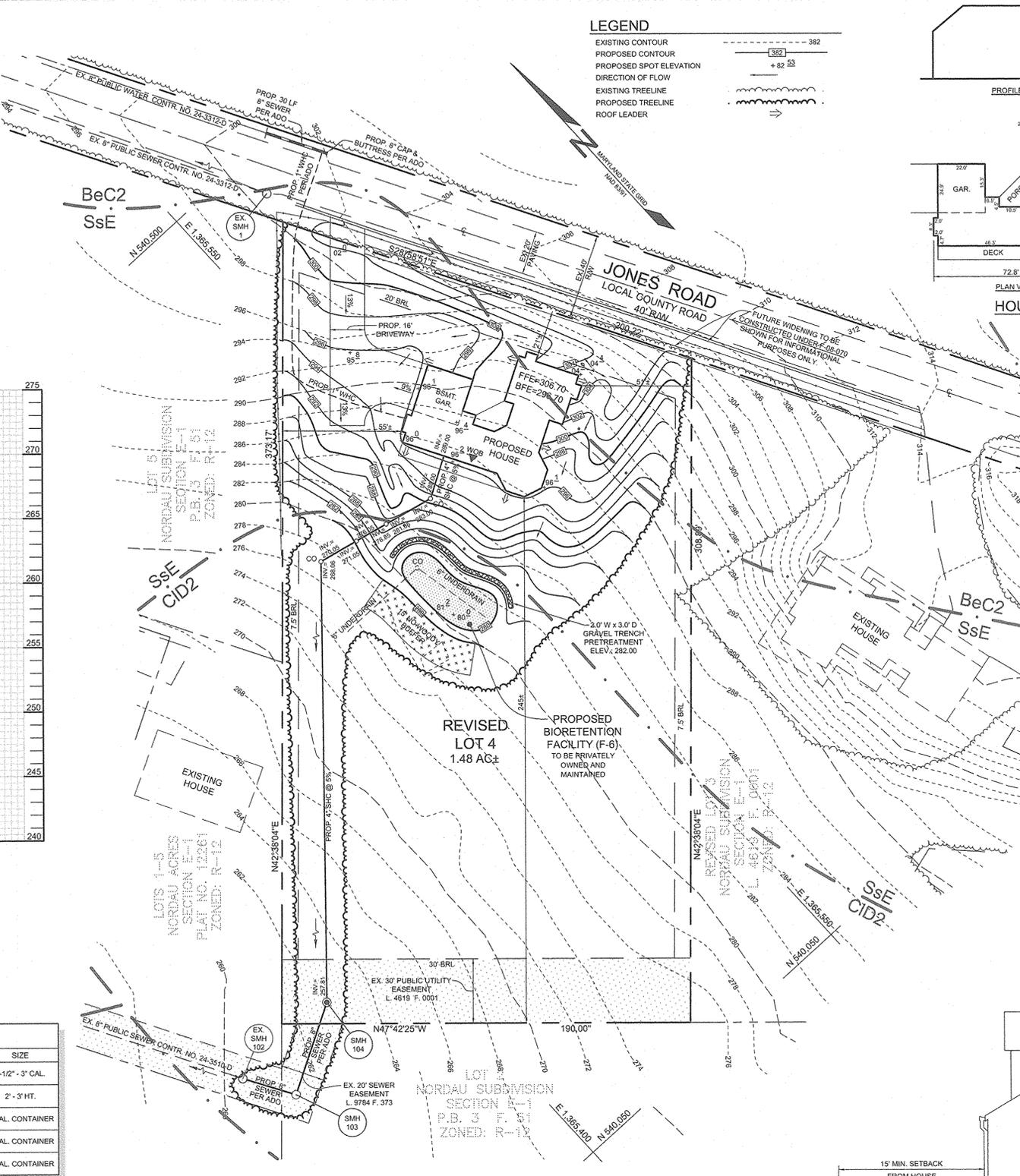
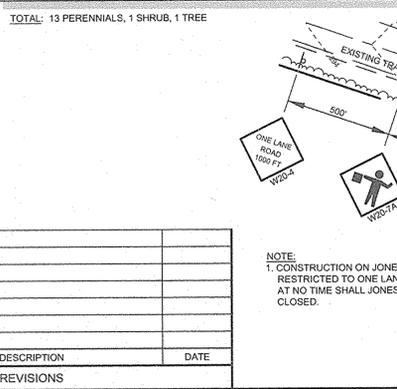
NO.	DESCRIPTION	DATE



BIORETENTION PLANT LIST

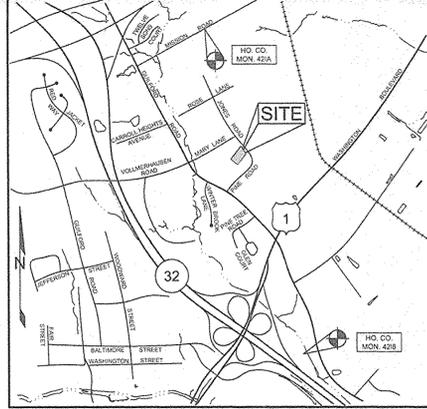
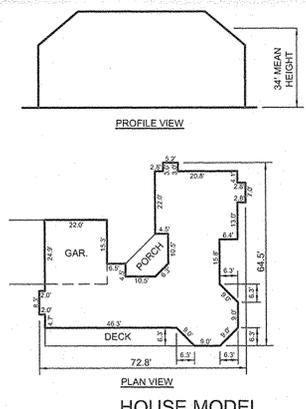
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
1	☼	PLATANUS x ACERIFOLIA	LONDON PLANE TREE	2-1/2" - 3" CAL.
1	☼	ILEX GLABRA	INK BERRY	2' - 3' HT.
6	☼	LOBELIA CARDINALIS	CARDINAL FLOWER LOBELIA	1 GAL. CONTAINER
4	☼	DRYOPTERIS SP.	WOOD FERN	1 GAL. CONTAINER
3	☼	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER

TOTAL: 13 PERENNIALS, 1 SHRUB, 1 TREE



LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREELINE
- PROPOSED TREELINE
- ROOF LEADER



BENCHMARKS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
421A	543,390.4135	1,364,912.6627	312.00'	74.3' NORTH OF BG&E POLE
421B	542,107.8895	1,362,386.0376	301.46	283' WEST OF EXISTING SIGN 72' NORTH OF EDGE OF MACADAM

STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARKS
103	STD. 4" PRECAST MANHOLE	N 540.179.1 E 1,365.316.1	261.59	251.69	251.59	G-5.12
104	STD. 4" PRECAST MANHOLE	N 540.179.7 E 1,365.348.8	262.58	257.72	253.95	G-5.12

- NOTES:**
- TOP ELEVATIONS FOR PRECAST MANHOLES ARE TO THE CENTER TOP OF MANHOLE COVER.
 - TOP SLOPE OF STRUCTURES TO CONFORM TO SLOPE OF PAVING/GROUND.
 - LOCATION COORDINATES ARE CENTER OF STRUCTURE FOR MANHOLES.

SITE ANALYSIS DATA CHART

TOTAL PROJECT AREA	AREA OF SUBMISSION	DISTURBED AREA	PRESENT ZONING
1.48 AC±	1.48 AC±	30,203 SF±	R-12
PROPOSED USE	FLOOR SPACE PER USE	TOTAL UNITS ALLOWED	TOTAL UNITS PROPOSED
RESIDENTIAL	NA	1	1
MAX. # EMPLOYEES	PARKING SPACES REQ.	PARKING SPACES PROV.	HC SPACES PROVIDED
NA	2 PER DWELLING	2 PER DWELLING	NA
OPEN SPACE REQUIRED	OPEN SPACE PROVIDED	REC. O.S. REQUIRED	REC. O.S. PROVIDED
NA	NA	NA	NA
BUILDING COVERAGE	FLOOR AREA RATIO	DPZ FILE REFERENCES	
3,000 SF±	NA	F-08-070	

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION	PARCEL # / LOT #			
NORDAU SUBDIVISION	E-1	49 / REVISED 4			
DEED REF.	GRID #	ZONING	TAX MAP #	ELECT. DIS.	CENSUS TRACT
4619 / 0001	6	R-12	47	6TH	6089.01
WATER CODE	SEWER CODE				
803	4360000				

SHEET INDEX

SHEET NO.	DESCRIPTION
1	SITE DEVELOPMENT PLAN
2	SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS

ADDRESS CHART

LOT	STREET ADDRESS
4	8020 JONES ROAD

OWNER/ DEVELOPER

FORSTER W. HARMON
MARGARET T. HARMON
8550 PINE ROAD
JESSUP, MARYLAND 20794
301.776.9412

SITE DEVELOPMENT PLAN

NORDAU SUBDIVISION

LOT 4, SECTION E-1

LOT 4 REVISED UNDER LIBER 4619 FOLIO 0001

SINGLE FAMILY DETACHED DWELLING

TAX MAP 47 GRID 6 HOWARD COUNTY, MARYLAND
6TH ELECTION DISTRICT

Sill · Adcock & Associates · LLC

Engineers · Surveyors · Planners

3300 North Ridge Road, Suite 160
Lillicott City, Maryland 21043
Phone: 443.325.7670 Fax: 443.325.7685
Email: info@sasland.com

DESIGN BY: JT
DRAWN BY: JT
CHECKED BY: PS
SCALE: 1"=30'
DATE: APRIL 22, 2008
PROJECT #: 08-050
SHEET #: 1 of 2

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. 30205. EXPIRATION DATE: JUNE 08, 2009.

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOILS

DEFINITION
 PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE
 TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETABLE 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 A SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CHINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIAL LARGER THAN 1" AND 1/2" 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.

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.

V. 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.

VI. 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.

PERMANENT SEEDING NOTES
 APPLY TO GRADED OR CLEARED AREAS 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 SQ.FT.) 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 THE TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ.FT.)

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND APPLY 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 PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (14 LBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 1 THRU JULY 31, SEED WITH 80 LBS PER ACRE OF WEeping LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOIL OPTION (2) 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
 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 NOVEMBER 15, SEED WITH 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 (0.7 LBS/1000 SQ.FT.). FOR THE PERIOD NOVEMBER 1 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 SOIL.

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.

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

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) 313-1860.

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 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, 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 MUST 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. 6). 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 PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

7. SITE ANALYSIS:

TOTAL AREA:	1.48 ACRES
AREA DISTURBED OR PAVED:	0.69 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.71 ACRES
TOTAL CUT:	50 CY
TOTAL FILL:	1000 CY

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.

** EARTHWORK QUANTITIES ARE SOLELY FOR THE PURPOSE OF CALCULATING FEES. CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO THE START OF CONSTRUCTION.

** TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSE AND PERMITS AT (410) 313-1860 AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND SUPER SILT FENCE, (3 DAYS)
- ROUGH GRADE SITE AND BEGIN BUILDING CONSTRUCTION, (1 WEEK)
- FINISH BUILDING CONSTRUCTION AND PAVE DRIVEWAY, (4 MONTHS)
- FINE GRADE SITE AND INSTALL EROSION CONTROL MATTING, (1 WEEK)
- 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, (1 WEEK)

NOTE: -FOLLOWING INITIAL SOIL DISTURBANCE OR ANY REDISTURBANCES, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SVALES AND ALL SLOPES GREATER THAN 3:1.
 B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS.

-DURING GRADING AND AFTER EACH RAINFALL, CONTRACTOR WILL INSPECT AND PROVIDE NECESSARY MAINTENANCE TO THE SEDIMENT CONTROL MEASURES ON THIS PLAN.

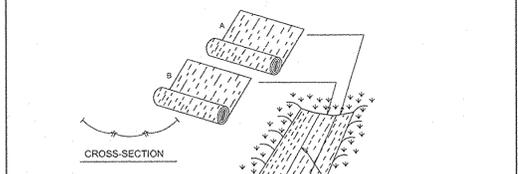
NOTE: -FOLLOWING INITIAL SOIL DISTURBANCE OR ANY REDISTURBANCES, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SVALES AND ALL SLOPES GREATER THAN 3:1.
 B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS.

SOIL BORING CHART

BORING	WATER (DEPTH)	ROCK (DEPTH)	CLAY (DEPTH)	SOIL CONDITION	REMARKS
B-1	NO	NO	NO	GOOD	
B-2	YES (2)	NO	YES (2)	GOOD	SMOOTH RIVER ROCK FRAGS.
B-3	YES (3)	NO	NO	GOOD	MOTTLED GREY AT 9'
B-4	YES (3)	NO	NO	GOOD	SMOOTH RIVER ROCK FRAGS.
B-5	NO	NO	NO	GOOD	MOTTLED GREY AT 9'
B-6	NO	NO	NO	GOOD	SAND CAVED TO 10'
B-7	NO	NO	NO	GOOD	SANDY, SMALL ROCK TO 10'

NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA AFFECTED BY THE FLOW MUST BE KEYED IN.

DETAIL 30 - EROSION CONTROL MATTING



PAVING SECTIONS

SEC. NO.	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)		MIN HMA WITH GAB		HMA WITH CONSTANT GAB		
		< 5	5 TO < 7	> 7	< 5	5 TO < 7	> 7	
P-1	PARKING BAYS: RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	PAVEMENT MATERIAL (INCHES)		MIN HMA WITH GAB		HMA WITH CONSTANT GAB		
		HMA SUPERPAVE FINAL SURFACE (9.5 MM, PG 64-22, LEVEL 1 (ESAL))		1.5	1.5	1.5	1.5	1.5
		HMA SUPERPAVE INTERMEDIATE SURFACE (NA)		N/A	N/A	N/A	N/A	N/A
		HMA SUPERPAVE BASE (19.0 MM, PG 64-22 LEVEL 1 (ESAL))		2.0	2.0	2.0	3.5	3.0
GRADED AGGREGATE BASE (GAB)		8.5	7.0	5.0	4.0	4.0	4.0	

NOTES:
 1. HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARAGE TRUCKS.
 2. HMA SUPERPAVE LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICKNESS: 19.0 MM BASE (2" MIN TO 4" MAX), 12.5 MM SURFACE (1.5" MIN TO 3" MAX), AND 9.5 MM SURFACE (1" MIN TO 2" MAX).
 3. GRADED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 4" MAXIMUM COMPACTED THICKNESS LAYERS.
 4. THE INTERMEDIATE SURFACE COURSE LAYER MUST BE PLACED WITHIN 2 WEEKS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUBSTANTIAL COMPLETION OF INSPECTION AND BOND REDUCTION.
 5. IN LIEU OF PLACING THE INTERMEDIATE SURFACE COURSE LAYER FOR COMMERCIAL/INDUSTRIAL ENTRANCE APPROXIMATELY THE COUNTY RIGHT-OF-WAY WHERE ADJUTARY LANES ARE NOT REQUIRED, THE THICKNESS OF THE INTERMEDIATE PAVEMENT LAYER CAN BE ADDED TO THE REQUIRED THICKNESS OF THE BASE ASPHALT LAYER.
 6. THE CONSTRUCTION DRAWINGS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CRB VALUE FOR EACH ROADWAY.

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 4/23/08
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 5/1/08
 DIRECTOR DATE 5/1/08

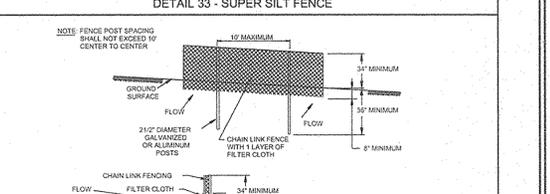
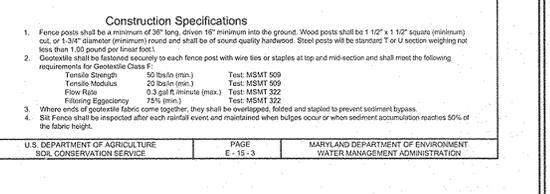
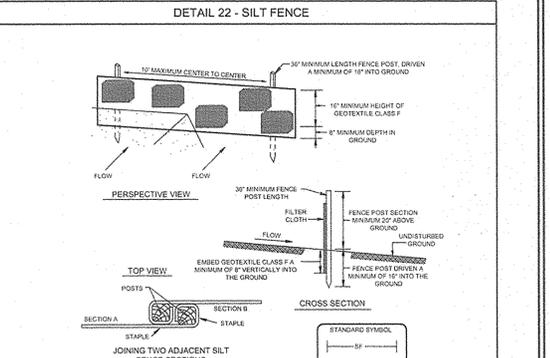
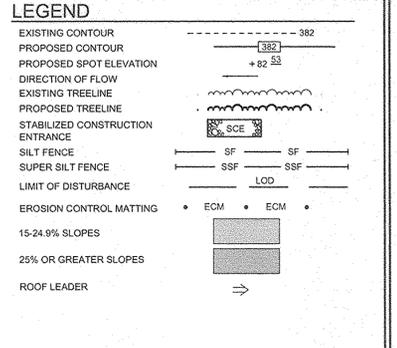
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 ENGINEERS CERTIFICATE
 "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 SIGNATURE OF ENGINEER PAUL M. SILL, P.E. DATE 4/22/08

DEVELOPER'S CERTIFICATE
 "I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 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 HOWARD SOIL CONSERVATION DISTRICT."
 SIGNATURE OF OWNER MARGARET T. HARMON DATE 4/21/08

NO.	DESCRIPTION	DATE

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
BeC2	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	C
CID2	CHILLUM GRAVELLY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
SSE	SASSAFRAS SOILS, 15 TO 40 PERCENT SLOPES	B



OWNER/ DEVELOPER
 FORSTER W. HARMON
 MARGARET T. HARMON
 8650 PINE ROAD
 JESSUP, MARYLAND 20794
 301.776.9412

SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS
NORDAU SUBDIVISION
 LOT 4, SECTION E-1
 LOT 4 REVISED UNDER LIBER 4619 FOLIO 0001
 SINGLE FAMILY DETACHED DWELLING

TAX MAP 47 GRID 6 PARCEL 49
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Sill · Adcock & Associates · LLC
 Engineers · Surveyors · Planners
 3300 North Ridge Road, Suite 160
 Ellicott City, Maryland 21043
 Phone: 443.325.7682 Fax: 443.325.7685
 Email: info@silladcock.com

DESIGN BY: JT
 DRAWN BY: JT
 CHECKED BY: PS
 SCALE: 1"=30'
 DATE: APRIL 22, 2008
 PROJECT #: 06-050
 SHEET #: 2 OF 2

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. 32225, EXPIRATION DATE: JUNE 03, 2009