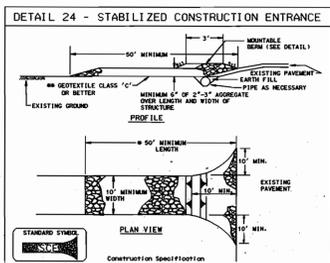
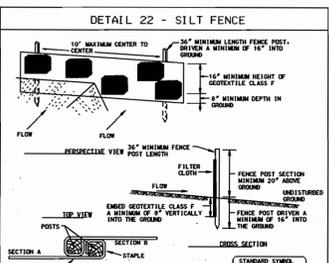


SANITARY CONNECTION PROFILE

HORIZ.: 1" = 20'
VERT.: 1" = 2'



- Length - minimum of 50' (60' for single residence lots).
- Width - 10' minimum, should be placed on the existing road to provide a turning radius.
- Sealant fabric (filter cloth) shall be placed over the existing ground prior to placing stone. Sealant fabric approval authority may not require staple fasteners to be used.
- Stone - crushed aggregate (1/2" to 3/4") or recycled 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 entrance shall be placed through the entrance. Sealing positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a minimum 6" of 1/2" aggregate base and a 1/2" of stone over the pipe. Flow line to be at least 6" above the aggregate. When the SEE 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" diameter 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.



- Fabric shall be placed on a minimum of 30' long or 10' wide 1/2" aggregate into the ground. Road posts shall be 1/2" x 1/2" square (minimum cut) or 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 1,000 pounds per linear foot. Filter efficiency 75% minimum.
- Sealant shall be fastened securely to each fence post with wire ties or staples or top and bottom and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lb/in. (min.)	Test Method	509
Tensile Extension	30 (min.)	Test Method	509
Flow Rate	0.3 gal/ft ² /min (max.)	Test Method	332
Filter Efficiency	75% (min.)	Test Method	332
- Where ends of geotextile fabric come together, they shall be overlapped, rolled 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 silt height.

BY THE DEVELOPER
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE 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.

David L. American, Jr. 2/28/03
DEVELOPER DATE

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

Robert C. Richardson, Jr. 2/10/03
ENGINEER DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

Jim Meyer 3-11-03
DATE

USDA - NATURAL RESOURCE CONSERVATION SERVICES
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John K. Robertson 3-11-03
DATE

HOWARD SOIL CONSERVATION DISTRICT

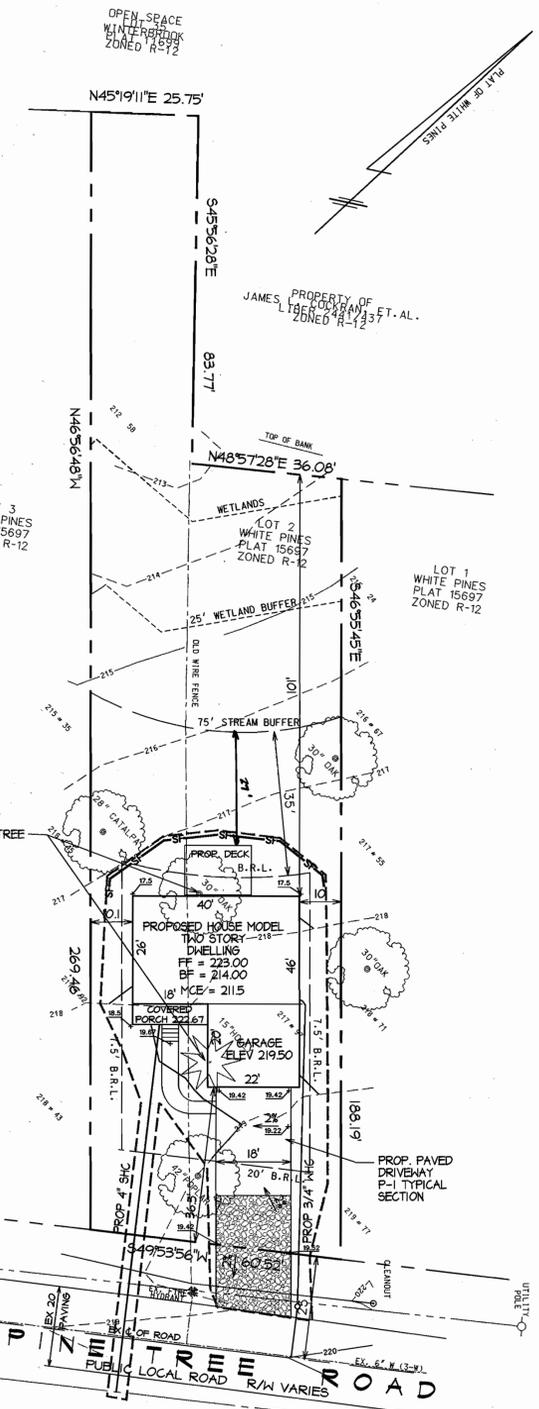
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Mark D. Cagle 2/10/03
DATE

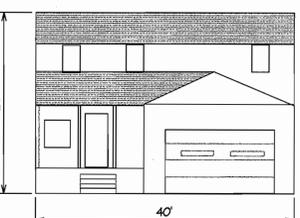
Mark D. Cagle
DIRECTOR

**GENERAL NOTES
RESIDENTIAL
SITE DEVELOPMENT PLAN**

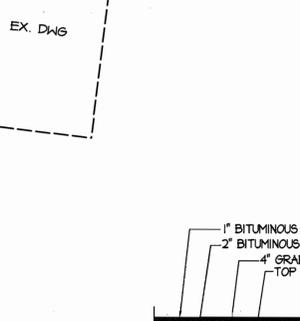
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/ BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- A BOUNDARY SURVEY WAS PERFORMED BY FISHER COLLINS & CARTER, JULY, 2000. EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS PREPARED BY BRIAN DIETZ, DATED OCTOBER, 2002.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NOS. 48AB AND 47FS WERE USED FOR THIS PROJECT.
- IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME I, SECTION 512.B.2 AND THE SUPPLEMENTAL PLAN ON FILE WITH THIS SUBDIVISION, THIS PROJECT IS EXEMPT FROM PROVIDING STORM-WATER MANAGEMENT IF THE SDP DISTURBES LESS THAN 5,000 SQUARE FEET.
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY RECORDS AND FIELD RUN SURVEY WHERE VISIBLE.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- SHC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06.



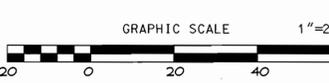
**BUILDING ELEVATION
NO SCALE**



**P-1 BITUMINOUS CONCRETE PAVING SECTION
NOT TO SCALE**



SHEET INDEX
SHEET # DESCRIPTION
1 SITE PLAN



SEQUENCE OF CONSTRUCTION

- OBTAIN A GRADING PERMIT THROUGH THE DEPARTMENT OF INSPECTIONS, LICENSE & PERMITS.
- NOTIFY HOWARD COUNTY SEDIMENT CONTROL DIVISION (410-313-1855) AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- CLEAR AND GRUB AS NECESSARY FOR SEDIMENT CONTROL INSTALLATION. INSTALL CONSTRUCTION ENTRANCE, SILT FENCE. (2 DAYS)
- CONSTRUCT DWELLING ON SITE. (90 DAYS)
- WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES. (2 DAYS)
- STABILIZE ALL AREAS DISTURBED AS A RESULT OF SEDIMENT CONTROL REMOVAL. (2 DAYS)

SITE ANALYSIS NOTES :

- Total Area of Lot 2 : 13,599 SF or 0.3067 AC. +/-
- Purpose of this SDP: Single-Family Detached House
- Owner/Developer : Horizons Unlimited Home Improvements, Inc. 7387 Washington Boulevard, Suite 104 ElkrIDGE, MD 21075
- Required Setbacks : Front: 20' Side: 7.5' Rear: 25'
- Open Space : Fee-in-lieu was paid with plat
- Trash Collection is Public.
- Disturbed Area : 4,993 SF or 0.11 AC +/-
- Previous Files: F-01-116, F-01-117
- Forest Conservation obligations have been met with a fee-in-lieu payment of \$1,060.20 for required afforestation with F-01-116.
- Landscaping for Lot 2 has been fulfilled by taken credit for existing vegetation, per F-01-116.
- The subject property is zoned R-12 per the 10/18/93 Comprehensive Zoning Plan.
- In accordance with Section 12b of the Howard County Zoning Regulations, bay windows, chimneys or exterior stalks not more than 16 feet in width may project not more than 4 feet into any setbacks, porches, decks, open or enclosed may project not more than 10 feet into the front or rear yard setback.
- No clearing, grading or construction is permitted within the required wetlands, stream(s) or their buffers and forest conservation easement areas.
- Driveways shall be provided prior to issuance of a use and occupancy permit for any new driveway to insure safe access for fire and emergency vehicles per the following minimum requirements:
 - Width 12' minimum
 - Surface 6' of compacted crusher run base w/tar and chip coating (1 1/2" min.)
 - Geometry: Max. 15% grade, max. 10% grade change and min. 45' turning radius
 - Structure: capable of supporting 25 gross tons (425 loading)
 - Drainage Elements: capable of safely passing 100-year flood with no more than 1 foot depth over driveway surface
 - Maintenance: sufficient to insure all weather use

HOWARD COUNTY CONTROL POINTS

NO.	NORTHING	EASTING	ELEV.
48AB	538,384.423	1,366,415.860	226.36
47FS	535,985.053	1,365,653.461	235.76

TEMPORARY SEEDING NOTES
Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.
SEED 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 the periods March 1 through April 30, and August 15 through November 15, seed with 1-1/2 bushel per annual ryegrass (3.2 lbs/1,000 sq.ft.) for the period May thru August. Seed with 3 lbs/acre of seeding lovegrass (1.07 lbs/1000 sq.ft.)
For the period November 16 thru February 28, protect site by applying 2 tons per acre of well-anchored straw mulch and seed as soon as possible. In the spring, or use sod.
MULCHING:
Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1,000 sq.ft.) or unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using multi-anchoring technique. 215 gallons per acre (5 gal/1,000 sq. ft.) of aquilified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1,000 sq. ft.) for anchoring.

Refer to the 1988 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rates and methods not covered.

PERMANENT SEEDING NOTES:
All disturbed areas shall be stabilized as follows:
SEED PREPARATION:
Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.
SOIL AMENDMENTS:
Apply 1 ton per acre Dolomitic Lime Stone (92 lbs/1,000 sq.ft.) and 600 lbs per acre 0-20-20 fertilizer (14 lbs/1,000 sq.ft.) before seeding on harrow or discing, into upper three inches of soil. At time of seeding apply 400 lbs per acre 38-0-0 urea form fertilizer (9 lbs/1,000 sq. ft.) and 500 lbs per acre (11.5 lbs/1,000 sq.ft.) of 10-20-20 fertilizer.

For the periods March 1 through April 30, and August 1 through October 15, seed with 100 lbs per acre (12.2 lbs/1,000 sq.ft.) of Kentucky 31 Tall Fescue, for the period May 1 through July 31, seed with 60 lbs/acre (14 lbs/1,000 ft.) Kentucky 31 Tall Fescue and 2 lbs. per acre (0.05 lbs/1,000 sq.ft.) of seeding Lovegrass. During the period of October 15 through February 28 project site by: (1) - two tons per acre of well-anchored straw mulch and seed as soon as possible in the spring option (2) - use 500' option (3) - seed with 100 lbs/acre Kentucky 31 Tall Fescue and mulch with two tons/acre well anchored straw. All slopes should be hydroseeded.

MULCHING:
Apply 1-1/2 to 2 tons per acre (10 to 90 lbs/1,000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using 200 gallons per acre (5 gal/1,000 sq.ft.) of unrotted asphalt on flat areas. On slopes 8 feet or higher use 348 gallon per acre (8 gal/1,000 sq.ft.) for anchoring.

MAINTENANCE:
Inspect all seeded areas and make needed repairs, replacements and reseeded.
For public ponds substitute Chemung Crownwath at 15 lbs/acre and Kentucky 31 Tall Fescue at 40 lbs/acre as the seeding requirement. Optimum seeding date for this mixture is March 1 to April 30.

TOPSOIL SPECIFICATIONS:
Soil to be used as topsoil must meet the following: Topsoil shall be a 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. Topsoil shall not be a mixture of contrasting texture subsoil and shall contain less than 5% by volume of cinders, stones, stumps, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1-1/2" in diameter. Topsoil must be free of plants or plant parts such as Bermuda Grass, Quackgrass, Johnson grass, Nutgrass, Poison Ivy, Thistle, or others as specified. Where the topsoil 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/1,000 sq.ft.) or to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with fill operations as described in the following procedures. For sites having disturbed areas under 5 acres:
Place topsoil (if required) and apply soil amendments as specified in 20.0 vegetative stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
ALTERNATIVE FOR PERMANENT SEEDING - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
Composted sludge material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
a. Composted sludge shall be applied by, or originate by a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under Cover 25-04-06.
b. Composted sludge shall contain at least 1 percent Nitrogen, 1.5 percent Phosphorus, and 0.2 percent Potassium and have a Ph of 1.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
c. Composted sludge shall be applied at a rate of 1 ton/1,000 sq.ft. Composted sludge shall be amended with a Potassium fertilizer applied at the rate of 4lb/1,000 sq.ft., and 1/3 the normal lime application rate.



VICINITY MAP
SCALE: 1"=2000'

SEDIMENT CONTROL NOTES :

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. 410-313-1855
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTRIBUTION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; B) 14 DAYS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHALL BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL - STORM DRAINAGE.
- 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 CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 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.
- SITE ANALYSIS:
TOTAL AREA OF SITE 13599 SF / 0.3067 ACRES
AREA TO BE DISTURBED 4993 SF / 0.11 ACRES
AREA TO BE VEGETATIVELY STABILIZED 2,245 SF / 0.05 ACRES
TOTAL CUT 154 CU. YDS
TOTAL FILL 10 CU. YDS
OFFSITE WASTE/BORROW AREA LOCATION - A SITE WITH A CURRENTLY ACTIVE GRADING PERMIT.
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. 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. PERMITS FOR GRADING 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 FEET DEPTH OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

DATE	NO.	REVISION

OWNER/DEVELOPER
HORIZONS UNLIMITED HOME IMPROVEMENT, INC.
7387 WASHINGTON BLVD., SUITE 104
ELKRIDGE, MD 21075
Attn: WILLIAM GMEINWEISER, 410-796-1333

PROJECT: **PROPOSED HOUSE
WHITE PINES, LOT 2**

**TITLE
SITE DEVELOPMENT PLAN**

Richardson Engineering, LLC

730 W. Padonia Road
Cockeysville, Maryland 21030
Phone: 410-560-1502 Fax: 410-560-0827

CHECKED BY: PCR
DESIGNED BY: PCR
DRAWN BY: PCR
PROJECT NO.: 02069
DATE: 2/10/2003
SCALE: 1" = 20'
DRAWING NO. 1 OF 1