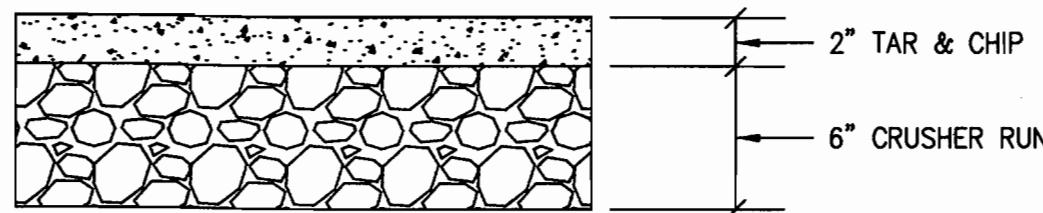


DRIVEWAY PAVING NOTES AND DETAILS:

DRIVEWAY SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:

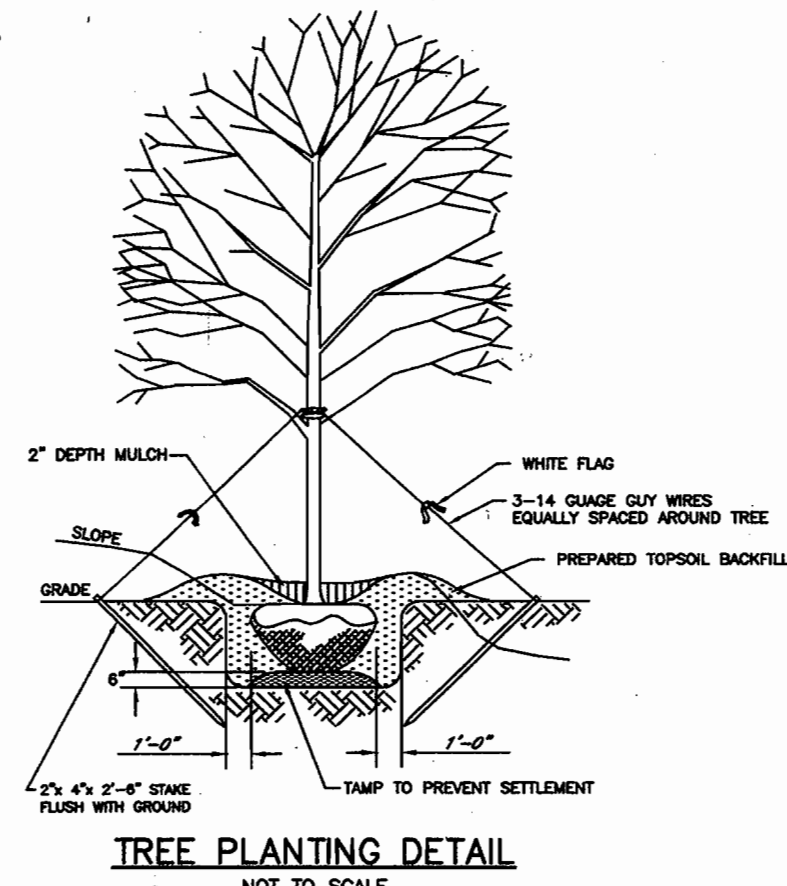
- 1) WIDTH - MINIMUM 12 FEET
- 2) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING
- 3) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT TURNING RADIUS
- 4) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
- 5) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
- 6) STRUCTURE CLEARANCES - MINIMUM 12 FEET
- 7) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE



PAVING SECTION FOR DRIVEWAY
NOT TO SCALE

NOTES:

STAKE ALL EVERGREEN TREES UNDER 12' GUY TREES 12' AND OVER AS SPECIFIED FOR DECIDUOUS TREES. TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE. NEVER CUT LEADERS. PRUNE ONLY TO REMOVE DAMAGED OR BROKEN BRANCHES.



TREE PLANTING DETAIL
NOT TO SCALE

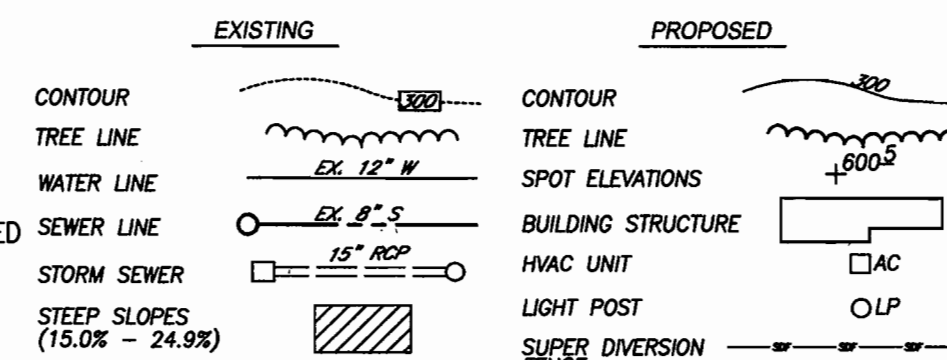
PLANT SCHEDULE				
KEY	TYPE	SIZE	QUANTITY	REMARKS
⊙	PRUNUS SARGENTII (SARGENT CHERRY)	2-1/2" - 3" 6' - 8' HT.	4	B&B

SITE ANALYSIS DATA CHART

- | | |
|--|------------------------------------|
| A) TOTAL PROJECT AREA: | 43,575.40 SQ. FT. (1.00 AC.±) |
| B) AREA OF PLAN SUBMISSION: | 43,575.40 SQ. FT. (1.00 AC.±) |
| C) LIMIT OF DISTURBED AREA: | 15,479.92 SQ. FT. (0.36 AC.±) |
| D) ZONING DESIGNATION: | R-20 |
| E) PROPOSED USE FOR SITE AND STRUCTURES: | RESIDENTIAL SINGLE FAMILY DETACHED |
| F) TOTAL NUMBER OF UNITS PROPOSED ON SUBMISSION: | 1 |
| G) BUILDING COVERAGE OF SITE: | 2,323.74 SQ. FT. (0.05 AC.±) |

SCHEDULE A PERIMETER LANDSCAPE EDGE	LOT 3
LANDSCAPE TYPE	A
LINEAR FEET OF ROADWAY FRONTAGE / PERIMETER	248.94'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	N/A
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	N/A
NUMBER OF PLANTS REQUIRED	
SHADE TREES	4
EVERGREEN TREES	-
SHRUBS	-
NUMBER OF PLANTS PROVIDED	
SHADE TREES	4
EVERGREEN TREES	-
SHRUBS	-
SURETY AMOUNT	\$1200.00

LEGEND



PLANTING NOTES:

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL AND CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.

GENERAL NOTES

1. THE SUBJECT PROPERTY IS ZONED AS R-20 OF THE HOWARD COUNTY COMPREHENSIVE ZONING PLAN OF OCTOBER 18TH, 1993.
2. TOTAL AREA OF SUBMISSION: 43,575.40± SQUARE FEET
3. TOTAL NUMBER OF LOTS OF SUBMISSION: 1 LOT
4. PLANNED USE OF SUBMISSION: RESIDENTIAL SINGLE FAMILY DETACHED
5. RECORDED PLAT #13680 ON APRIL 15TH, 1999, PREPARED BY JOHN C. MELLEMA SR. INC.
6. ALL UTILITIES ARE SHOWN EXISTING AND AVAILABLE FOR SERVICE.
7. ALL ROADWAYS SHOWN ARE PUBLIC AND EXISTING.
8. THE COORDINATES SHOWN ON THIS PLAN ARE BASED ON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS ALSO BASED ON THE MARYLAND STATE PLAN SYSTEM (NAD 83). THE HOWARD COUNTY CONTROL POINTS ARE 31E6 AND 31E7.
9. TOPOGRAPHY WAS FIELD-RUN BY THE RBA GROUP, INC. ON OCT. 21, 2002; TOPOGRAPHY FOR THE DRAINAGE AREA MAP WAS TAKEN FROM 1998 HOWARD COUNTY G.I.S. AERIAL TOPOGRAPHY MAP.
10. HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING REFERENCE FILE NUMBERS: F98-84, WP-99-28, SDP-02-141, WS-208-W/2, WATER & SEWER CONTRACTS #14-3503-D AND #10-1214-D.
11. PUBLIC WATER AND SEWER IS AVAILABLE.
12. ALL UTILITIES AND EXISTING FEATURES ARE REFERENCED FROM APPROVED HOWARD COUNTY WATER MAIN PLAN WS-208-W AND WATER AND SEWER CONTRACT #14-3503-D & 10-1214-D. LOCATION OF THESE FEATURES SHOWN HEREON ARE APPROXIMATE LOCATIONS FOR CONTRACTOR'S INFORMATION. THE CONTRACTOR SHALL LOCATE EXISTING FEATURES IN ADVANCE AND TAKE NECESSARY ACTIONS TO ENSURE THE PROTECTION AND PRESERVATION OF THESE FEATURES. ANY DAMAGE TO THESE FEATURES DURING THE CONSTRUCTION PROCESS WILL BE REPAIRED IMMEDIATELY AND WILL BE UNDER THE CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR WILL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 BUSINESS-HOURS IN ADVANCED PRIOR TO ANY CONSTRUCTION AND EXCAVATION.
14. THE CONTRACTOR WILL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, BUREAU OF UTILITIES AT (410) 313-4900 AT LEAST FIVE WORKING DAYS PRIOR TO PROCEEDING WITH ANY EXCAVATION WORK.
15. ANY DAMAGE TO COUNTY OWNED RIGHT-OF-WAYS SHALL BE REPAIRED AT THE DEVELOPER'S EXPENSE.
16. THERE ARE NO WETLANDS, STREAMS OR FLOOD PLAINS ON THIS SITE.
17. THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
18. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNAGE SHALL BE PLACED IN ACCORDANCE WITH THE LATEST ADDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE PLACED PRIOR TO ANY PLACEMENT OF PAVING.
19. A CERTIFIED LANDSCAPE PLAN IS ON-FILE WITH THE RECORDED PLAT #13680 AND HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
20. NO BURIAL GROUNDS OR CEMETERIES EXIST ON THIS SITE.
21. DRIVEWAY SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - A) WIDTH - 12 FEET (14 FEET IF SERVING MORE THAN ONE RESIDENCE).
 - B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR & CHIP CORE (1 1/2" MINIMUM).
 - C) GEOMETRY - MAXIMUM GRADE OF 15%, MAXIMUM CHANGE IN GRADE OF 10%, MINIMUM 45-FOOT TURNING RADIUS.
 - D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING)
 - E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
 - F) STRUCTURE CLEARANCE - MINIMUM OF 12 FEET.
 - G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
22. FOR DRIVEWAY ENTRANCE DETAILS, REFER TO HOWARD COUNTY DESIGN MANUAL VOLUME IV, DETAIL R.6.06.
23. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY NOT PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES, DECKS OPEN OR ENCLOSED MAY NOT EXTEND NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YEAR SETBACK.
24. THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHT-OF-WAYS ON THIS SITE DEVELOPMENT PLAN ARE NOT TO BE USED FOR CONSTRUCTION. FOR CONSTRUCTION USE, SEE APPROVED FINAL PLANS F-98-84 & APPROVED WATER & SEWER CONTRACT PLANS.

NOTE:
10 YEAR SWALE FLOW OVER DRIVEWAY = 0.38 CFS.
NO CULVERT IS NECESSARY
DRIVEWAY STD. R.6.06

GENERAL NOTES CONTINUED:

25. SURETY FOR LANDSCAPING WILL BE POSTED WITH BUILDER'S GRADING PERMIT APPLICATION, BASED ON A RATE OF \$300 PER SHADE TREE OR \$150 PER EVERGREEN TREE IN THE AMOUNT OF \$1200.00.
26. THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION DIVISION 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT (410) 313-1880.
27. SOIL BORINGS (SB-1) TESTS WERE PERFORMED BY MARSHALL, ENGINEERING, INC. ON FEB. 2003

OWNER/DEVELOPER

CARUSO HOMES, INC.
1662 VILLAGE GREEN
CROFTON, MARYLAND 21114
WASH. (301) 261-0277
BALT. (410) 721-4886

Before You Dig
Call
"MISS UTILITY"
Service Protection Center

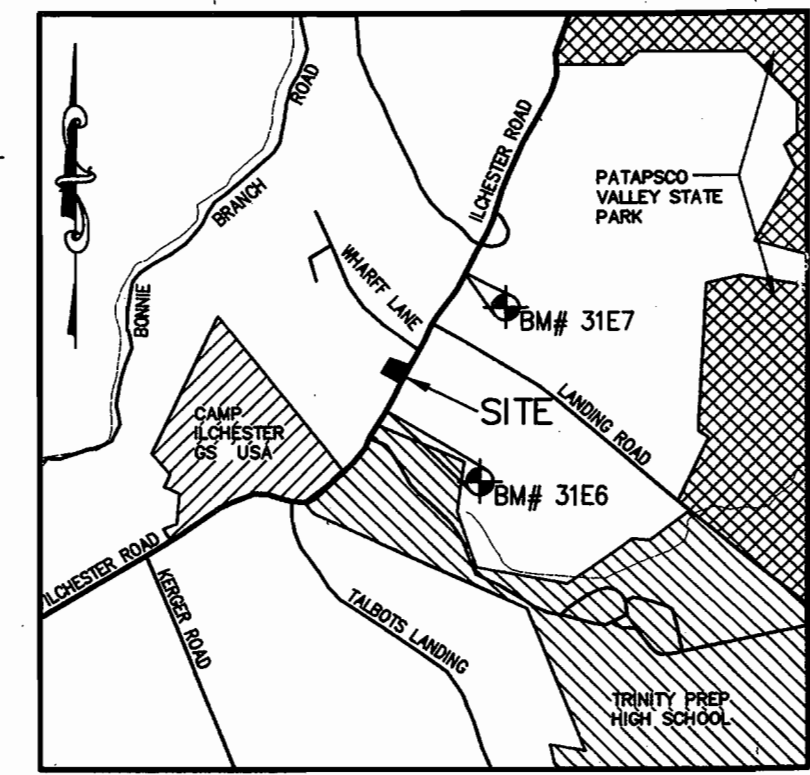
MEMBER
ONE CALL SYSTEMS INTERNATIONAL

CALL TOLL FREE
1-800-257-7777

PERMIT INFORMATION CHART				
SUBMISSION NAME	LOTS/PARCELS	CENSUS TRACT		
LOWE PROPERTY	LOT 3 / PARCEL 153	601101		
PLAT NO.	GRID NO.	ZONE	TAX MAP	ELECTION DISTRICT
13680	10	R-20	31	1ST
WATER CODE	SEWER CODE			
G-10	1251800			

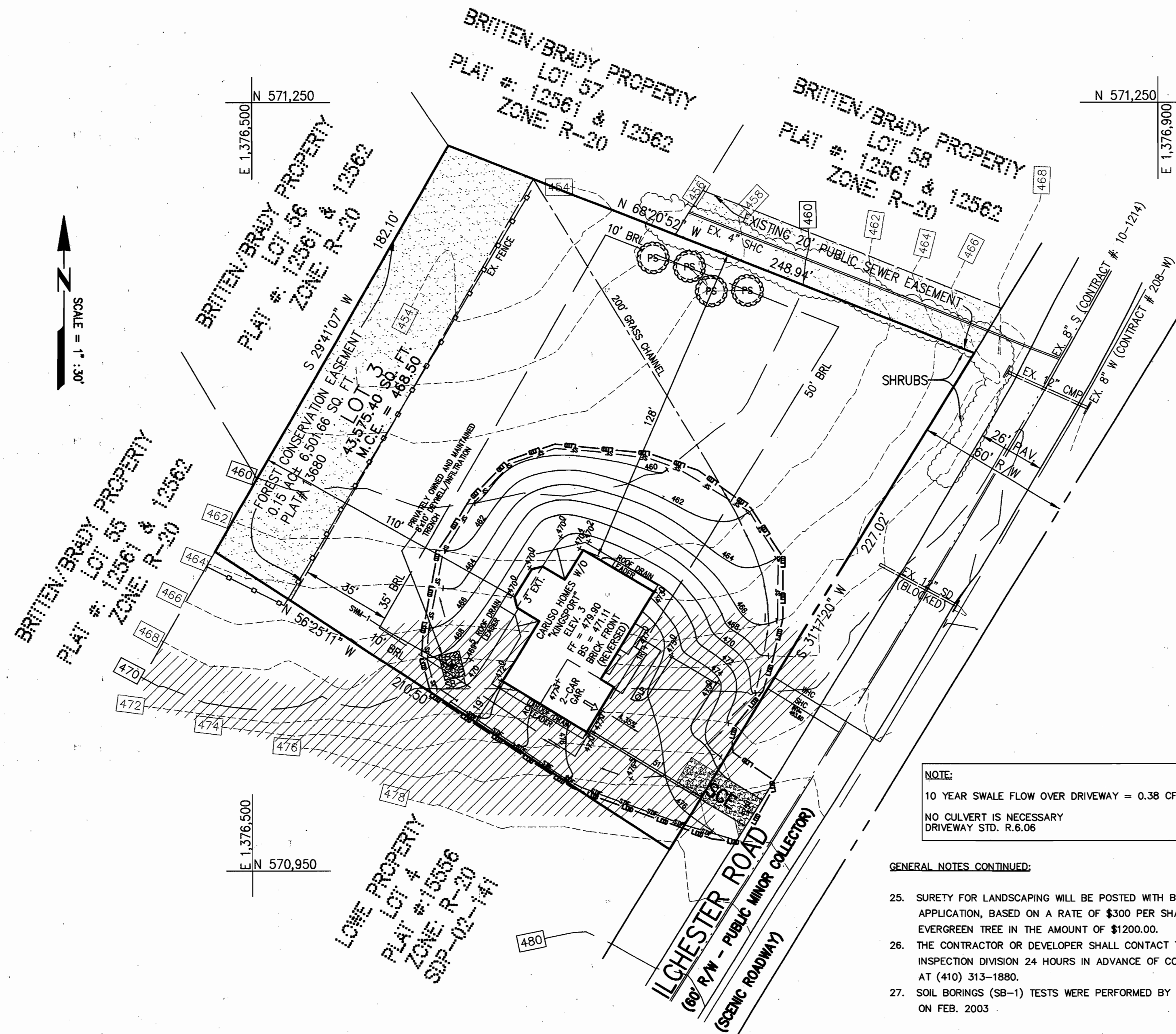
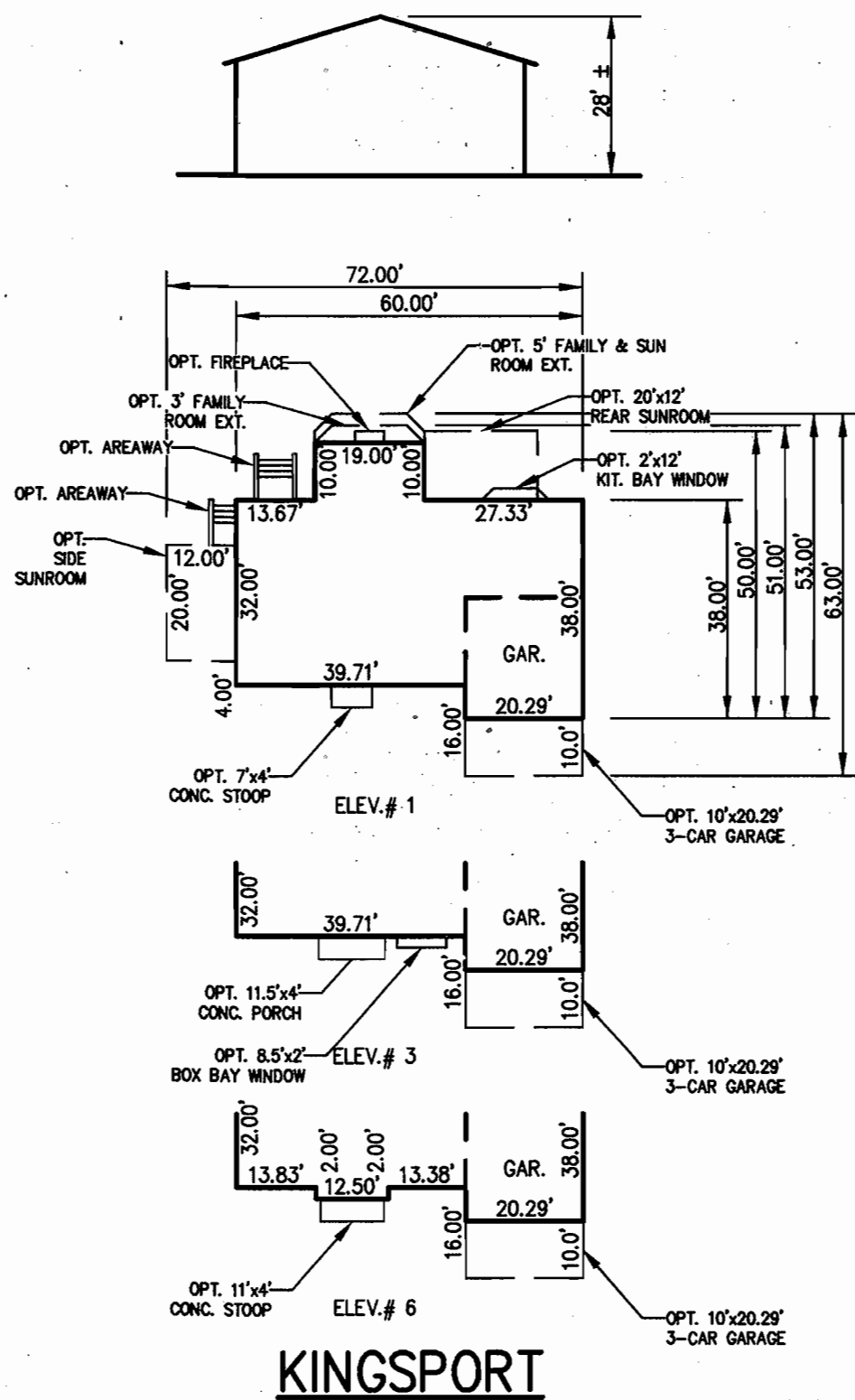
ADDRESS CHART	
LOT/PARCEL	ADDRESS
3	5000 ILCHESTER ROAD

SHEET INDEX CHART	
INDEX	SHEET NUMBER
LANDSCAPE, SITE DEVELOPMENT, SEDIMENT AND EROSION CONTROL PLAN	1 OF 2
DRAINAGE AREA MAP, SEDIMENT AND EROSION CONTROL DETAILS	2 OF 2



VICINITY MAP
1" = 2000'

STATION:	LOCATION:
STATION 31E6:	N 57082.372
ELEV.: 482.76'	E 1376700.647
STATION 31E7:	N 572335.350
ELEV.: 478.65'	E 1375904.033



APPROVED: DEPARTMENT OF PLANNING AND ZONING	
CHIEF DEVELOPMENT ENGINEER/COMMISSIONER	DATE: 4/28/03
CHIEF DIVISION OF LAND DEVELOPMENT	DATE: 4/28/03
DIRECTOR	DATE: 4/28/03

Reviewed for Howard County S.C.D. and meets technical requirements.

Signature: *Jim Meyer* 4/22/03 Date
Signature: *John L. Robertson* 4/22/03 Date
Approved: Howard S.C.D.

Developer's/Builders Certificate

I/We certify that the landscaping shown on this plan will be done according to plan, section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a Certification of Landscape Installation, accomplished by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

Signature: *Dal M. Zapp* 4/14/03 Date
Signature: *V. Romano* 4/14/03 Date
Name: *Caruso Homes*

REVISIONS

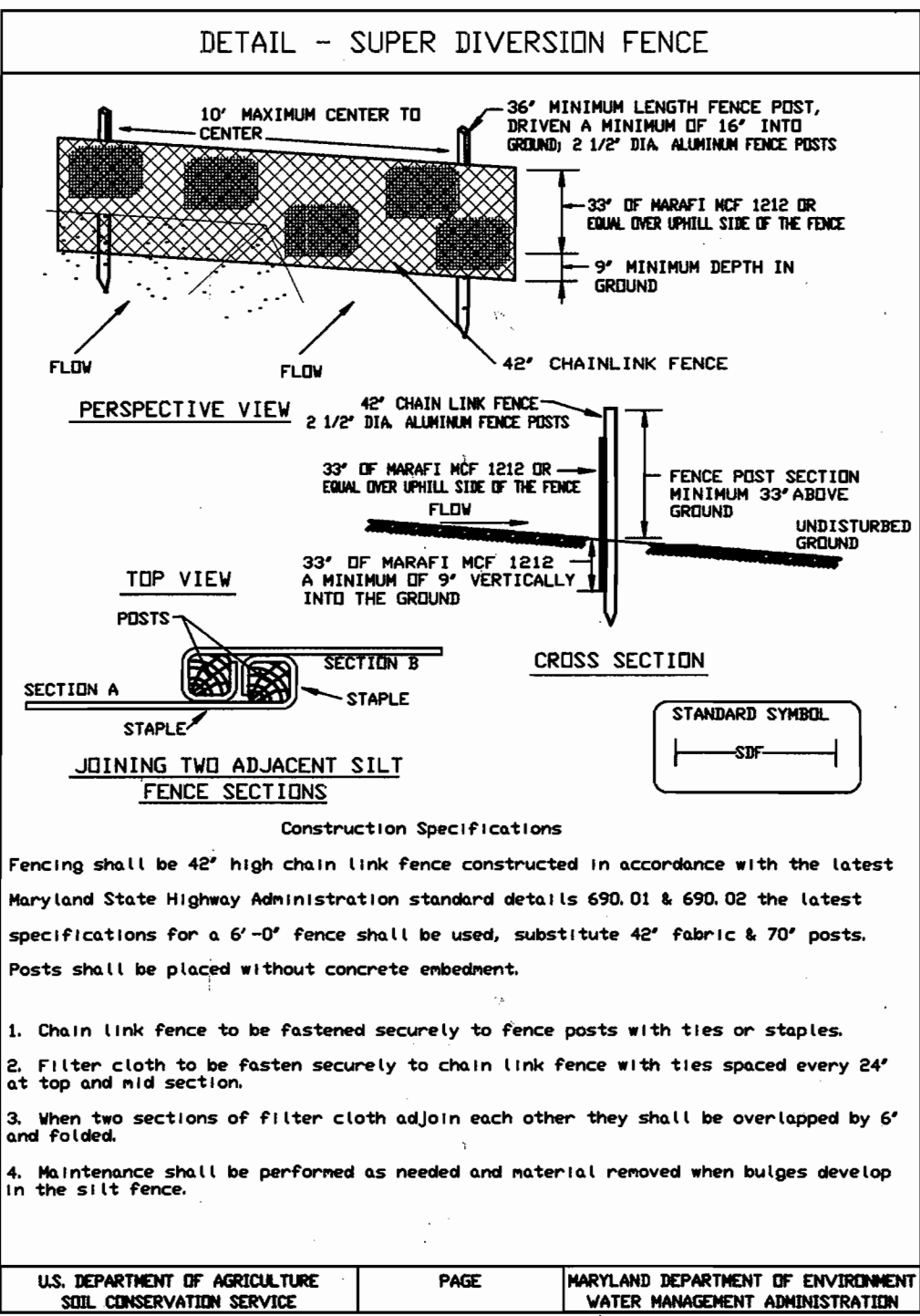
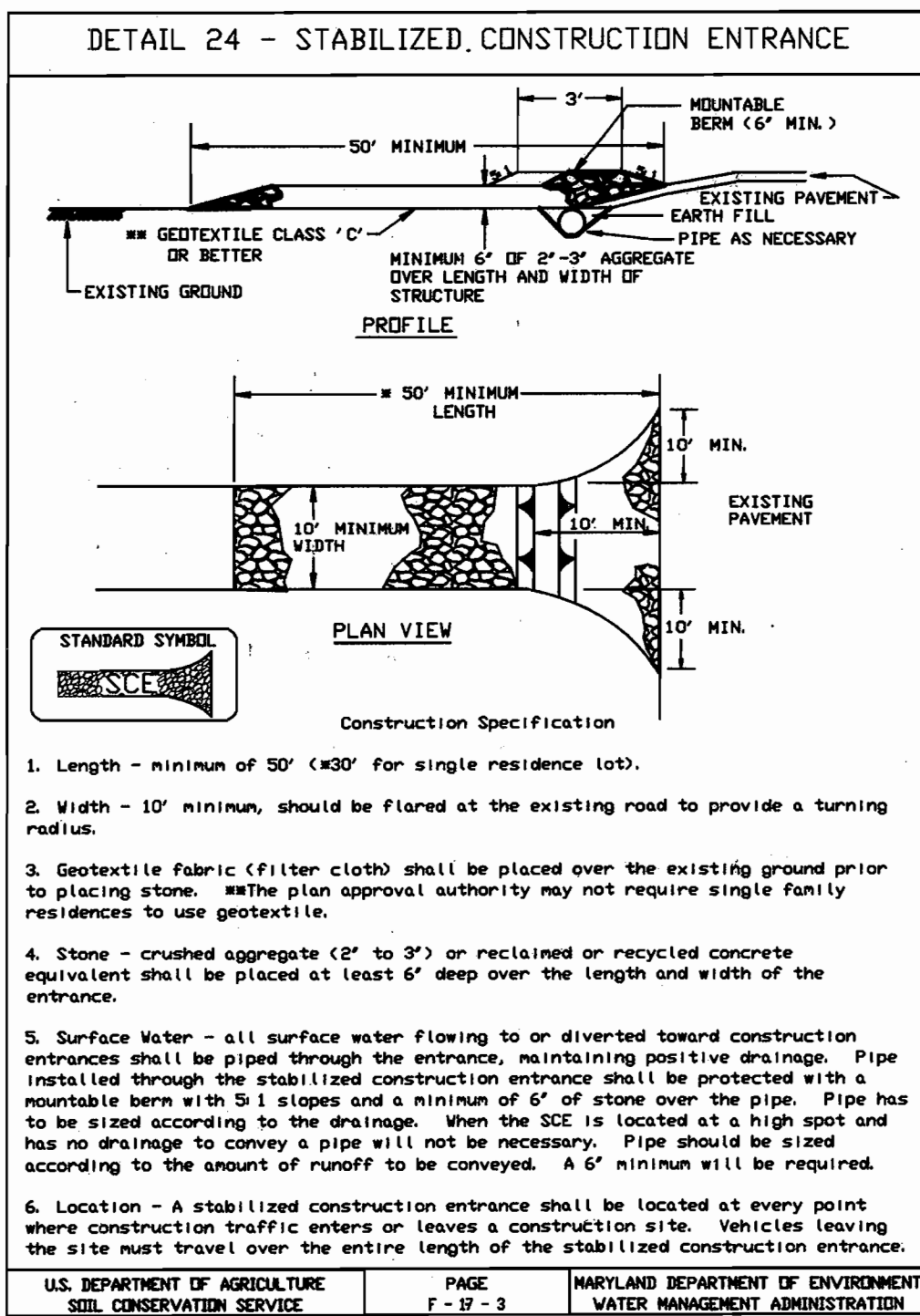
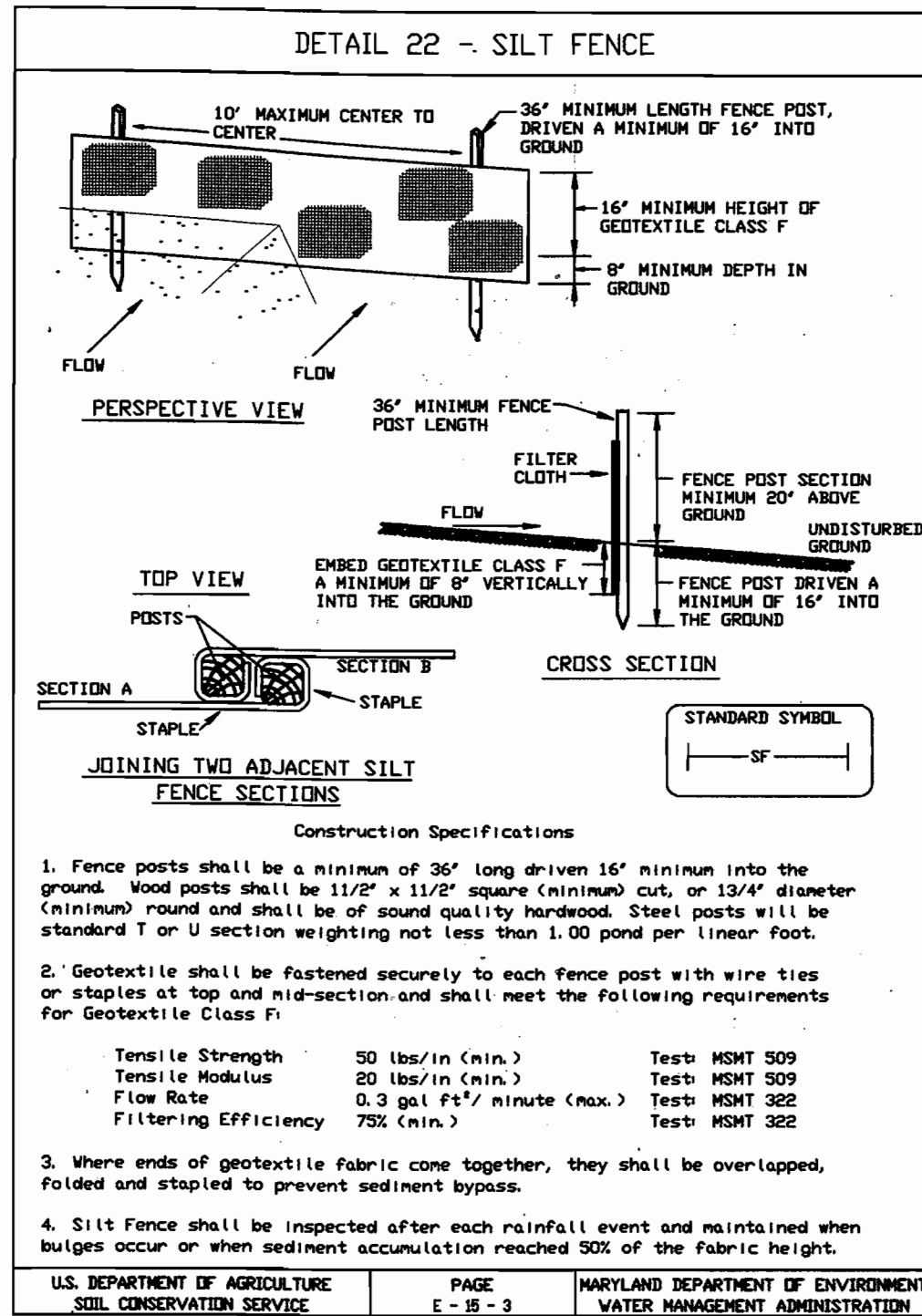
PLANS PREPARED FOR:
CARUSO HOMES, INC.

The RBA Group
ENGINEERS • ARCHITECTS • PLANNERS
7184 Columbia Gateway Drive, Suite 200
Crofton, Maryland 21114
Phone (410) 422-0985, Fax (410) 313-0897

SITE DEVELOPMENT AND SEDIMENT & EROSION CONTROL PLAN FOR:
LOWE PROPERTY - LOT 3
SINGLE FAMILY DETACHED
TAX MAP 31 PARCEL 153 GRID 10
FIRST (1ST) ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



DATE: 1/16/03
JOB NUMBER: M3359.00
FILE NUMBER: BASE.DWG
PLOTTED: 4/10/03
DRAWN BY: KQL
DESIGNED BY: KQL
CHECKED BY: PMW
SITE DEVELOPMENT & SEDIMENT EROSION CONTROL PLAN
SHEET SDP 1 OF 2



1-1 OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER INFILTRATION TRENCHES

- THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER A EVERY LARGE STORM EVENT.
- WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
- A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

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

PURPOSE: TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES:

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - 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.
 - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - THE SOIL IS SO ACHIEVE THAT TREATMENT WITH LIME IS NOT FEASIBLE.
- 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:

- 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.
- TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
 - TOPSOIL SHALL BE A LOAM, SANDY 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, REGARDLESS OF PH. TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CONCRETES, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STOKES, TRASH, RAILS, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.
 - TOPSOIL SHALL BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTCRACK, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - WHERE THE SUBSOIL IS EITHER HEAVILY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 1.5 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.
- 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.
- FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
 - ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
 - PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATE A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PREPARED TO RAISE THE PH TO 6.5 OR HIGHER.
 - ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
 - TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
 - NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SOIL HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
 - NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
- PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- TOPSOIL APPLICATION:
 - WHEN TOPSOILING, MAINTAIN NEGATIVE EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIMENSIONS, GRADE STABILIZATION STRUCTURES, EARTH DAMS, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
 - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, UNLESS 4" - 8" HIGHER ELEVATION.
 - TOPSOIL SHALL BE UNIFORM DISTRIBUTED IN A 4" - 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SOODING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - 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 SEDIMENT PREPARATION.
- 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 UNDER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.05.
 - COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.
 - COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
 - COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SOODING, MD-VI, PUB#1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTE, REVISED 1973.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LOW-VEGETATIVE COVER IS WISHED.

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAVING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TESTS RECOMMENDATIONS USE ONE OF THE FOLLOWING SCHEDULES:

1. PREPARED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (82 LBS/1000 SQ. FT.) AND 800 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.
 1. PREPARED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (2 LBS/1000 SQ. FT.)
2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (2 LBS/1000 SQ. FT.)

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 2 LBS PER ACRE (0.5 LBS/1000 SQ. FT.) OF WINDSOR FESCUE 18 DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28. PROJECT SITE EPH OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING 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 80 LBS/1000 SQ. FT.) OF UNWEIGHTED SMALL GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 216 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF ENHANCED ASPHALT ON FLAT AREAS ON SLOPES 5 FEET OR HIGHER. USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDEVELOPED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAVING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 800 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.)

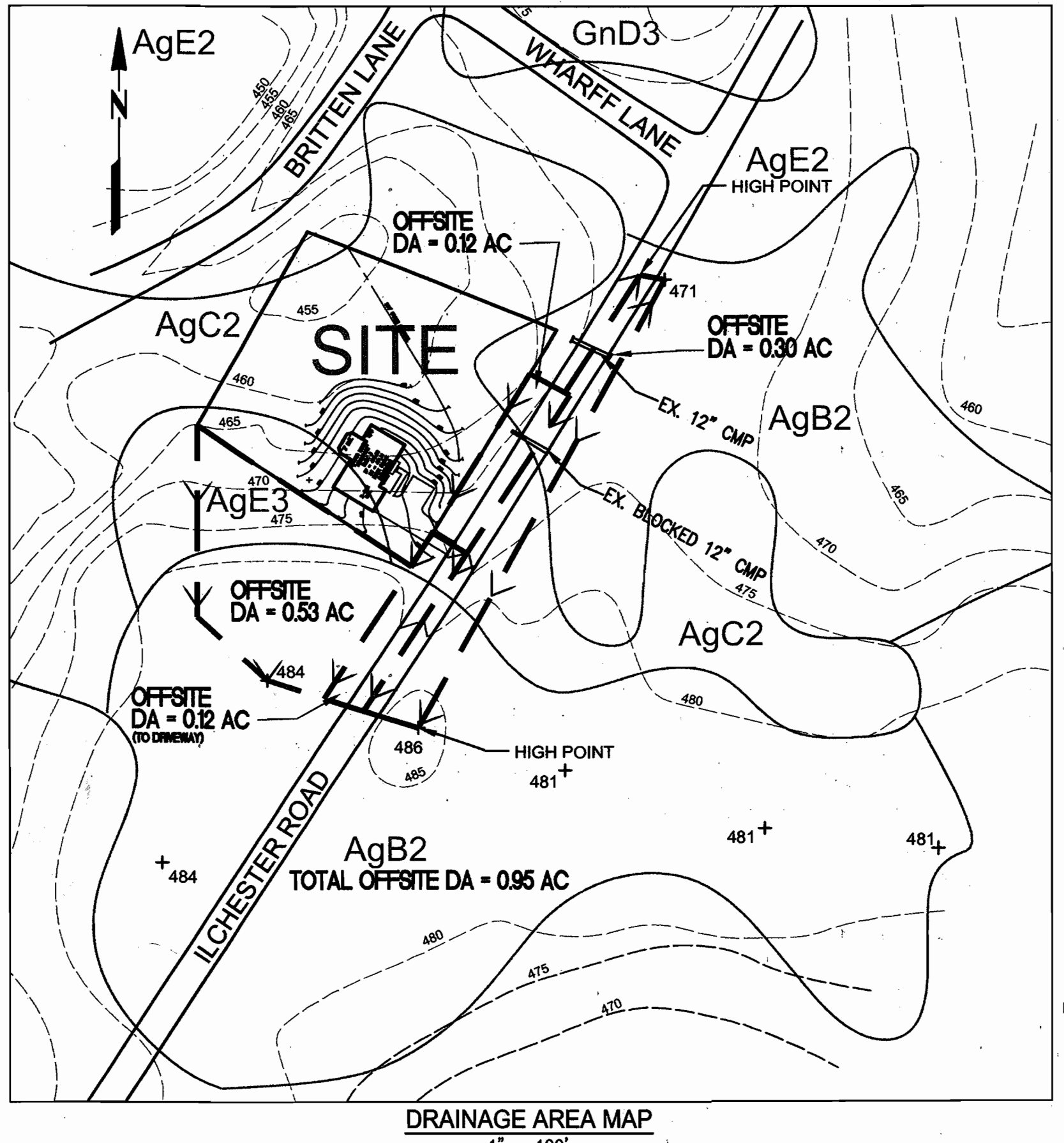
SEEDING - FOR PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (32 LBS/1000 SQ. FT.) FOR THE PERIOD OF MAY 1 THRU AUGUST 31, SEED WITH 3 LBS PER ACRE OF WINTER TURFGRASS (20 LBS/1000 SQ. FT.) FOR THE PERIOD OF NOVEMBER 16 THRU FEBRUARY 28. PROJECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING USE SO.

MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 80 LBS/1000 SQ. FT.) OF UNWEIGHTED SMALL GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 216 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF ENHANCED ASPHALT ON FLAT AREAS ON SLOPES 5 FEET OR HIGHER. USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT AND EROSION CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSING AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE MAINTAINED WITH THE MOST CURRENT "M" STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS HERETO.
- FOLLOWING THE INITIAL SOIL DISTURBANCE OR REDISTRIBUTION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETE WITHIN A (7) SEVEN (7) CALENDAR DAYS FOR ALL PERMITS SEEDING CONTROL. STABILIZATION SHALL BE COMPLETE WITHIN 14 CALENDAR DAYS FOR ALL SLOPES GREATER THAN 2:1, BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOULD BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (DEC. 50), SOD (SEC. 54), TEMPORARY SEEDING (DEC. 50), AND MULCHING (DEC. 50). TEMPORARY SEEDING SHALL BE APPLIED TO ALL AREAS WHERE MULCHING IS NOT APPLICABLE. MULCHING SEEDING DOES NOT ALLOW FOR PROPER EROSION CONTROL 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 THE SITE: 1.00 ACRES
 - AREA DISTURBED: 0.53 ACRES
 - AREA TO BE RESEED OR PAVED: 0.08 ACRES
 - AREA TO BE VEGETATIVELY STABILIZED: 0.52 ACRES
 - TOTAL SOD: 288.00 LBS
 - TOTAL MULCH: 288.00 LBS
 - ESTIMATE WASTE/DRAINAGE AREA LOCATION: N/A/LF
 - TOTAL AMOUNT OF SUPER DIVERSION FENCE: 122.14 LF
 - TOTAL AMOUNT OF EARTH DAMS: N/A/LF
 - TOTAL AMOUNT OF SLOPE SILT FENCE: N/A/LF
 - TOTAL AMOUNT OF FROGGER CONTROL MATS: N/A/LF
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY DEPT. OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES, DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMITS EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER PERMITS OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PILE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FILL ADJUSTMENTS CAN BE MADE TO MAINTAIN THE CONTROL OF ANY EXISTING CHANGES IN THE SEDIMENT CONTROL PRACTICES BEFORE PROCEEDING WITH THE CONSTRUCTION OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
- ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO HOWARD COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
- ANY VARIATION FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
- AT THE END OF EACH WORK DAY ALL SEDIMENT CONTROL PRACTICE WILL BE INSPECTED AND LEFT IN THE OPERATIONAL CONDITION.
- ALL SEDIMENT AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE AGREEMENT MADE BETWEEN COLUMBIA ASSOCIATION AND HSCD AND AS AMENDED 8/7/00.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, AND/OR RIGHTS-OF-WAYS THAT ARE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES AND THE PROVISIONS OF ANY EASEMENT, RIGHTS, OR RIGHTS-OF-WAYS ADJACENT TO DISTURBED PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAYS THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
- THE SEDIMENT CONTROL APPROVALS ON THIS PLAN EXTEND ONLY TO AREAS AND PRACTICES IDENTIFIED AS PROPOSED WORK AND SHALL APPLY AS IF SHOWN ON ALL PLANS.
- THE APPROVAL OF THE PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE COUNTY REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SEDIMENT CONTROL DIVISION AND NOTIFY ANY OTHER AGENCIES APPROVED BY THE SEDIMENT CONTROL INSPECTOR OF THE SITE AND ITS GRADING NUMBER AT THE TIME OF CONSTRUCTION.



DRILL HOLE LOG

BORING NO.: SWM-1

PROJECT: 5000 Ichester Road, Lot 3

CLIENT: Caruso Homes, Inc.

LOCATION: See Boring Plan

DRILLER: Diamond Drilling, Inc.

DATE: 02/27/03

ELEVATION: 467.5'

LOGGED BY: me

ELEVATION/DEPTH	SOIL, ROCKS, AND TEST DATA	USCS	Description	MOISTURE	DEPTH	PH	PERCENTAGE
467.5	SC-SM	Very Moist Brown, Red and Tan medium dense (m) Sandy Loam (SC-SM) w/ gravel	45	0-2'	11	6.5	10
466.5	CL-MH	Moist to Very Moist Red and Tan layered very stiff to hard Clay (CL) w/ gravel	25	2-4'	31	6.5	10
465.5	SC-SM	Moist to Very Moist Red and Tan medium dense (m) Sandy Loam (SC-SM) w/ gravel	45	4-6'	27	6.5	10
464.5	SC-SM	Moist to Very Moist Red and Tan medium dense (m) Sandy Loam (SC-SM) w/ gravel	45	6-8'	25	6.5	10
463.5	SC-SM	Moist to Very Moist Red and Tan medium dense (m) Sandy Loam (SC-SM) w/ gravel	45	8-10'	23	6.5	10
462.5	SM-W	Moist to Very Moist Red and Tan medium dense (m) Sandy Loam (SM-W) w/ gravel	25	10-12'	14	6.5	10
461.5	SM-W	Moist to Very Moist Red and Tan medium dense (m) Sandy Loam (SM-W) w/ gravel	25	12-14'	18	6.5	10

AMOCO 4552 GEOTECH N70 MESTIC07 CARTRIDGE FV-BOS MIRAF 180-N

IF A SIX (6") SAND FILTER IS PLACED ON THE BOTTOM OF THE INFILTRATION TRENCH, THE SAND FOR THE SAND FILTER MUST BE WASHED AND MEET ASTM-D-43, SIZE NO.9 OR NO.10. ANY ALTERNATIVE SAND GRADATION MUST BE APPROVED BY THE PLAN APPROVAL AUTHORITY.

THIS STONE AGGREGATE SHOULD BE PLACED IN A MAXIMUM LOOSE LIFT THICKNESS OF 12 INCHES. THE GRAVEL (ROUNDED "BANK RUN" GRAVEL IS PREFERRED) FOR THE INFILTRATION TRENCH SHALL BE WASHED AND MEET ONE OF THE FOLLOWING ASTM-D-43, SIZE NO. 2 OR NO. 3.

FOLLOWING THE STONE AGGREGATE PLACEMENT, THE FILTER FABRIC SHALL BE FOLDED OVER THE STONE AGGREGATE TO FORM A 6-INCH MINIMUM LONGITUDINAL LAP. THE DESIGNED TRENCH FILL SOIL OR STONE AGGREGATE SHALL BE PLACED OVER THE LAP AT SUFFICIENT INTERVALS TO MAINTAIN THE LAP DURING SUBSEQUENT BACKFILLING.

CARE SHALL BE EXERCISED TO PREVENT NATURAL OR FILL SOILS FROM INTERFERING WITH THE UNCONTAMINATED STONE AGGREGATE. ALL CONTAMINATED STONE AGGREGATE SHALL BE REMOVED AND REPLACED WITH UNCONTAMINATED STONE AGGREGATE.

VOIDS MAY OCCUR BETWEEN THE FABRIC AND THE EXCAVATION SIDES SHALL BE AVOIDED. REMOVING SOLIDORS OR OTHER OBSTACLES FROM THE TRENCH WALLS IS ONE SOURCE OF SUCH VOIDS. THEREFORE, NATURAL SOILS SHOULD BE PLACED IN THESE VOIDS AT THE MOST CONVENIENT TIME DURING CONSTRUCTION TO ENSURE FABRIC CONFORMITY AND EXCAVATION SIDES.

VERTICALLY EXCAVATED WALLS WILL BE DIFFICULT TO MAINTAIN IN AREAS WHERE SOIL MOISTURE IS HIGH OR WHERE SOFT CONCRETES OR CONCRETELESS SOILS ARE DOMINANT. THESE CONDITIONS MAY REQUIRE LAYING BACK OF THE SLOPE TO MAINTAIN STABILITY.

PVC DISTRIBUTION PIPES SHALL BE SCHEDULE 40 AND MEET ASTM-A-1785. ALL FITTINGS SHALL MEET ASTM-A-2729. PERFORATIONS SHALL BE 3/8" IN DIAMETER. A PERFORATED PIPE SHALL BE PROVIDED ONLY WITHIN THE INFILTRATION TRENCH AND SHALL TERMINATE 1 FOOT SHORT OF THE INFILTRATION TRENCH WALL. THE END OF THE PVC PIPE SHALL BE CARPED. NOTE: PVC PIPE WITH A WALL THICKNESS CLASSIFICATION OF OR-5 MEETING ASTM-D-3025 IN AN ACCEPTABLE SUBSTITUTE FOR THE SCHEDULE 40 PIPE.

THE OBSERVATION WELL IS TO CONSIST OF 6-INCH DIAMETER PERFORATED PVC SCHEDULE 40 (W/28 OR F758, TYPE PS 28) WITH A CAP SET 6 INCHES ABOVE THE GROUND LEVEL AND IS TO BE LOCATED NEAR THE LONGITUDINAL CENTER OF THE INFILTRATION TRENCH. THE PIPE SHALL BE PLACED VERTICALLY WITH A LOCKING MECHANISM OR SPECIAL BOLT TO DISCOURAGE VANDALISM. THE DEPTH OF THE INVERT SHALL BE MARKED ON THE I.D. THE PIPE SHALL BE PLACED VERTICALLY WITHIN THE GRAVEL PORTION OF THE INFILTRATION TRENCH AND A CAP PROVIDED AT THE BOTTOM OF THE PIPE. THE BOTTOM OF THE CAP SHALL REST ON THE INFILTRATION TRENCH BOTTOM.

COMBUSTIBLE METAL DISTRIBUTION PIPES SHALL CONFORM TO ASTM-A-36, AND SHALL BE ALUMINIZED IN ACCORDANCE WITH ASTM-A-274. ALUMINIZED PIPE IN CONTACT WITH CONCRETE SHALL BE COATED WITH AN INERT COMPOUND CAPABLE OF PREVENTING DELETERIOUS EFFECT OF THE ALUMINUM ON THE CONCRETE. PERFORATED DISTRIBUTION PIPES SHALL CONFORM TO ASTM-A-36, CLASS 2 AND SHALL BE PROVIDED ONLY WITHIN THE INFILTRATION TRENCH AND SHALL TERMINATE 1 FOOT SHORT OF THE INFILTRATION TRENCH WALL. AN ALUMINIZED METAL PLATE SHALL BE WELDED TO THE END OF THE PIPE.

DRYWELL/INFILTRATION DETAIL NOT TO SCALE

2.2 A INFILTRATION TRENCH GENERAL NOTES AND SPECIFICATIONS

PURPOSE: AN INFILTRATION TRENCH MAY NOT RECEIVE RUN-OFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO THE INFILTRATION TRENCH HAS RECEIVED FINAL STABILIZATION.

HEAVY EQUIPMENT AND TRAFFIC SHALL BE RESTRICTED FROM TRAVELING OVER THE PROPOSED LOCATION OF THE INFILTRATION TRENCH TO MINIMIZE COMPACTION OF THE SOIL.

EXCAVATE THE INFILTRATION TRENCH TO THE DESIGN DIMENSIONS. EXCAVATED MATERIAL SHALL BE PLACED AWAY FROM THE TRENCH SIDES TO ENHANCE TRENCH WALL STABILITY. LARGE TREE ROOTS MUST BE TRIMMED FLUSH WITH THE TRENCH SIDES IN ORDER TO PREVENT FABRIC PUNCTURING OR TEARING OF THE FILTER FABRIC DURING SUBSEQUENT INSTALLATION PROCEDURES. THE WALLS OF THE TRENCH SHALL BE ROUGHENED WIDELY SHEARED AND SEALED BY HEAVY EQUIPMENT.

A CLASS "C" GEOTEXTILE OR BETTER (SEE SECTION 24.0, MATERIAL SPECIFICATIONS, 1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WOE, 1994) SHALL INTERFACE BETWEEN THE TRENCH SIDE WALLS AND BETWEEN THE STONE RESERVOIR AND GRAVEL FILTER LAYER. A PARTIAL LIST OF NON-WOVEN FILTER FABRICS THAT MEET THE CLASS "C" CRITERIA FOLLOWS. ANY ALTERNATIVE FILTER FABRIC MUST BE APPROVED BY THE PLAN APPROVAL AUTHORITY.

THE WIDTH OF THE GEOTEXTILE MUST INCLUDE SUFFICIENT MATERIAL TO CONFORM TO TRENCH PERIMETER IRREGULARITIES AND FOR A 6" MINIMUM TOP OVERLAP. THE FILTER FABRIC SHALL BE TUCKED UNDER THE SAND LAYER ON THE BOTTOM OF THE INFILTRATION TRENCH FOR A DISTANCE OF 6 TO 12 INCHES. STONES OR OTHER ANCHORING OBJECTS SHOULD BE PLACED ON THE FABRIC AT THE EDGE OF THE TRENCH TO KEEP THE TRENCH OPEN DURING WET PERIODS. WHEN OVERLAPS ARE REQUIRED BETWEEN ROLLS, THE OVERLAP SHOULD LAP A MINIMUM OF 2 FEET OVER THE DOWNHILL ROLL IN ORDER TO PROVIDE A SINGLE EFFECT.

IF A SIX (6") SAND FILTER IS PLACED ON THE BOTTOM OF THE INFILTRATION TRENCH, THE SAND FOR THE SAND FILTER MUST BE WASHED AND MEET ASTM-D-43, SIZE NO.9 OR NO.10. ANY ALTERNATIVE SAND GRADATION MUST BE APPROVED BY THE PLAN APPROVAL AUTHORITY.

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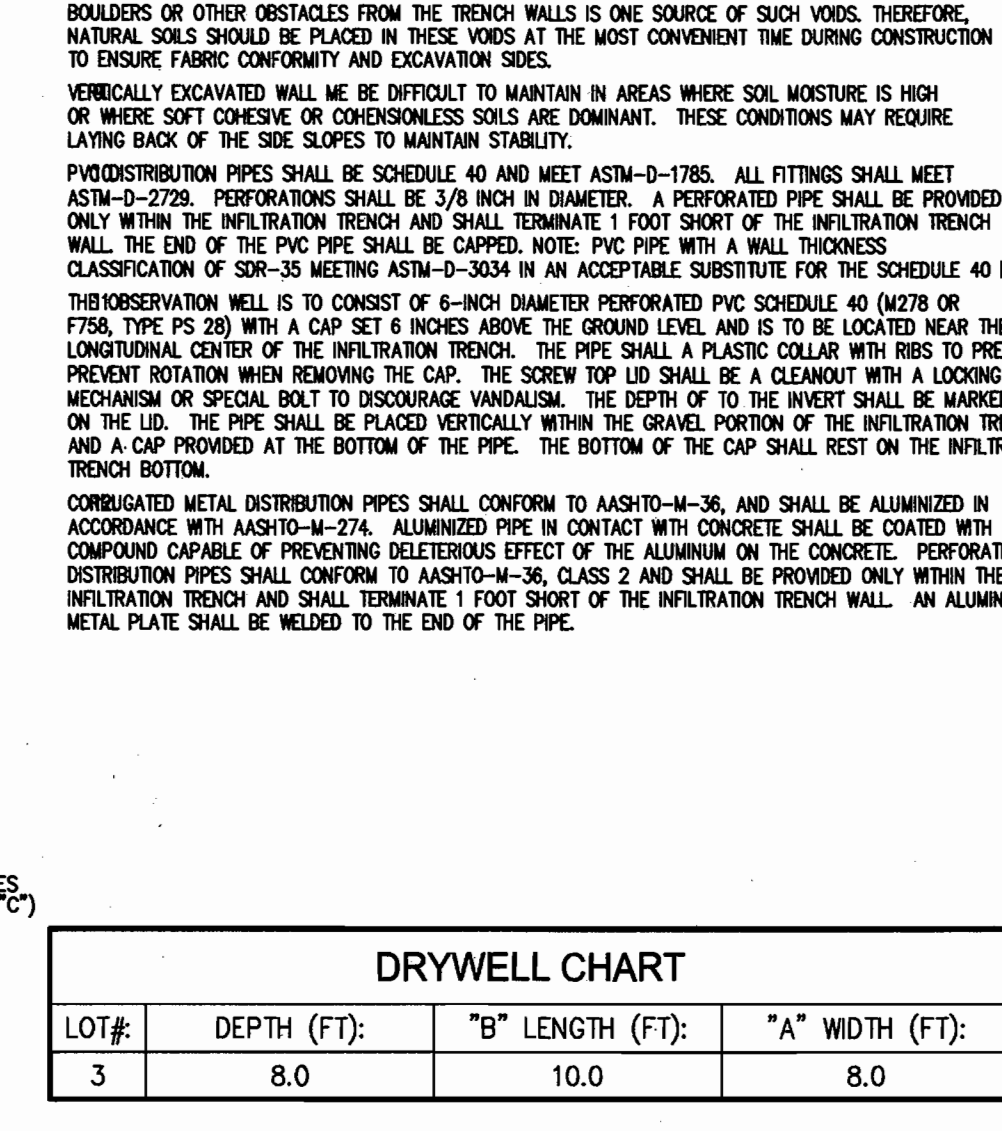
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APPROVED: DEPARTMENT OF PLANNING AND ZONING

DEVELOPMENT ENGINEER DIVISION

CHEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR

DATE: 4/25/03

Reviewed for Howard County S.C.D. and meets technical requirements.

Signature: U.S. Natural Resources Conservation Service

DATE: 4/22/03

This development plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

Approved: Howard S.C.D.

Certification By The Developer/Builder

"I/we certify that all development and construction will be done according to this development and 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 or their authorized agents, as are deemed necessary."

Signature: D. M. R. G. VP Caruso Homes

DATE: 4/17/03

Certification By The Engineer

I hereby 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: E. M. White

DATE: 4/10/03

OWNER/DEVELOPER

CARUSO HOMES, INC.

1662 VILLAGE GREEN

CROFTON, MARYLAND 21114

WASH. (301) 261-0277

BALT. (410) 721-4886

DATE: 1/16/03

JOB NUMBER: M3359.00

FILE NUMBER: BASE.DWG

PLOTTED: 4/10/03

DRAWN BY: KOL

DESIGNED BY: KOL

CHECKED BY: PMW

SEDIMENT EROSION CONTROL DETAILS SHEET

SDP 2 OF 2

REVISIONS

PLANS PREPARED FOR: CARUSO HOMES, INC.

1662 VILLAGE GREEN CROFTON, MARYLAND 21114 (301) 261-0277

THE RBA CONSULTING ENGINEERS & ARCHITECTS INC. 7184 Columbia Gateway Drive, Suite 200A Columbia, Maryland 21046 (410) 518-9887

SITE DEVELOPMENT AND SEDIMENT & EROSION CONTROL PLAN FOR: LOWE PROPERTY - LOT 3 SINGLE-FAMILY DETACHED TAX MAP 31 PARCEL 153 GRID 10 FIRST (1ST) ELECTION DISTRICT HOWARD COUNTY, MARYLAND

STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT

GRAPHIC SCALE 1"=30'

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SDP 2 OF 2