

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

The purpose of this project is to construct a 14 unit townhouse development on a 1.70 acre tract of vacant land in Roanoke County off of Route 648, Reservoir Road. Each unit has a building footprint of 1,072 sq. ft. Additional construction includes: +/-12,300 sq. ft. of new paved parking lot, a new entrance from Reservoir Road, new retaining walls, new utility installations, re-grade a detention pond and install landscaping. Approximately 74,000 sq. ft. of land will be disturbed as a result of construction. The majority of disturbance is a result of excavating the site. The most severe excavations are along the western, southeastern property lines. Cuts as deep as 10' are needed along the western portion of the site. Retaining walls will be installed to retain the cut banks. The only filling of the site is along the east and northeastern area of the site. The required fill is only 2-3 ft. The post-developed site is graded so that stormwater will sheet flow to various yard inlets located throughout the site and from south to north to a curb inlet located in the parking lot. All the new inlets will discharge to a detention pond located in the northeast corner of the site and the pond will then outfall to an existing ditch along Reservoir Road.

The detention pond will be used as a sediment basin until the site is stabilized. The contractor is required to cleanout the basin periodically. Additional erosion control measures include: a construction entrance, silt fence, drop inlet protection, culvert inlet protection and outlet protection. Erosion control problems are not anticipated as most the site will be in a excavated rather than a fill condition.

EXISTING SITE CONDITIONS

This existing site includes approximately 1.70 acres and is vacant. Ground cover consists of grass in fair condition. The site slopes from southwest to northeast at an average of 4.00% grade. A wide swale runs through the southern portion of the site and discharges into a detention pond located along the northeastern property line. An 18" pipe is the primary outfall for the pond and discharges into a ditch along Reservoir Road. A narrow poorly graded road presently enters the site from Reservoir Road.

ADJACENT PROPERTY

The site is situated on the southern side of Reservoir Road and is bound by residential properties on all of it's remaining sides.

CRITICAL EROSION AREAS

The potentially critical erosion control areas associated with this project are the new 2.5:1 slopes that will be cut in along the western and eastern property lines and the berm that will be constructed for the detention pond. No major sediment control problems are anticipated.

EROSION AND SEDIMENT CONTROL MEASURES

Unless otherwise stated, all vegetative and structural erosion and sediment control practices will be constructed and maintained in accordance with the minimum standards and specifications of the Virginia Erosion and Sediment Control Handbook (1992 Edition). If during construction, additional erosion control devices are deemed necessary, they will be installed as directed by the civil site designer or county personnel.

STRUCTURAL PRACTICES

- Temporary Construction Entrance - 3.02**
The construction entrance is to be located off of Reservoir Road as shown on the plans.
- Silt Fence - 3.05**
Silt fence to be installed along the site's northeastern property line and at the toe of the fill slopes as designated on the plans.
- Storm Drain Inlet Protection - 3.07**
Silt fence storm drain inlet protection to be installed around the new drop inlets as indicated on the plans.

VEGETATIVE PRACTICES

- Culvert Inlet Protection - 3.08**
Culvert inlet protection to be installed around the invert in of the new culverts as indicated.
 - Temporary Sediment Basin - 3.14**
The existing and new detention ponds are to serve as a sediment basin until the site is stabilized.
 - Outlet Protection - 3.18**
Riprap outlet protection to be used at the outfall of the new culverts as shown on the plans.
- Permanent Seeding - 3.32**
Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Permanent stabilization shall be applied to areas that are to be left dormant for more than a year. Permanent vegetation shall not be considered established until a ground cover is achieved that in the opinion of the local program administrator or his designated agent, is uniform, mature enough to survive and will inhibit erosion. Reference is made to the 1992 Erosion and Sediment Control Handbook addressing minimum numbers one and three (MS-1, MS-3). Refer to the Erosion Control Detail sheet for the seeding schedule.

MANAGEMENT STRATEGIES

- Construction should be sequenced so that grading operations can begin and end as quickly as possible.
- Erosion and sediment control devices will be installed as a first step of construction.
- The grading contractor will be responsible for the installation and maintenance of all erosion and sediment control measures. Inspections are to be made periodically and after every erodible rainfall.
- The grading inspection personnel will make repairs to damaged or deficient control measures immediately upon discovery of damage or upon notification of the deficiency.

PERMANENT STABILIZATION

All areas disturbed by construction will be stabilized with permanent seeding within seven days after final grading. Permanently seeded areas will be protected with straw mulch. Reference is made to the 1992 Erosion and Sediment Control Handbook addressing minimum standard numbers one and three (MS-1 & MS-3).

REMOVAL OF CONTROL MEASURES

All temporary erosion and sediment control measures will be removed within thirty days after final site stabilization or after the temporary measures are no longer needed, unless otherwise directed by the local program administrator.

FEES & SURETY

The contractor is responsible for obtaining a land-disturbing permit and posting any required surety.

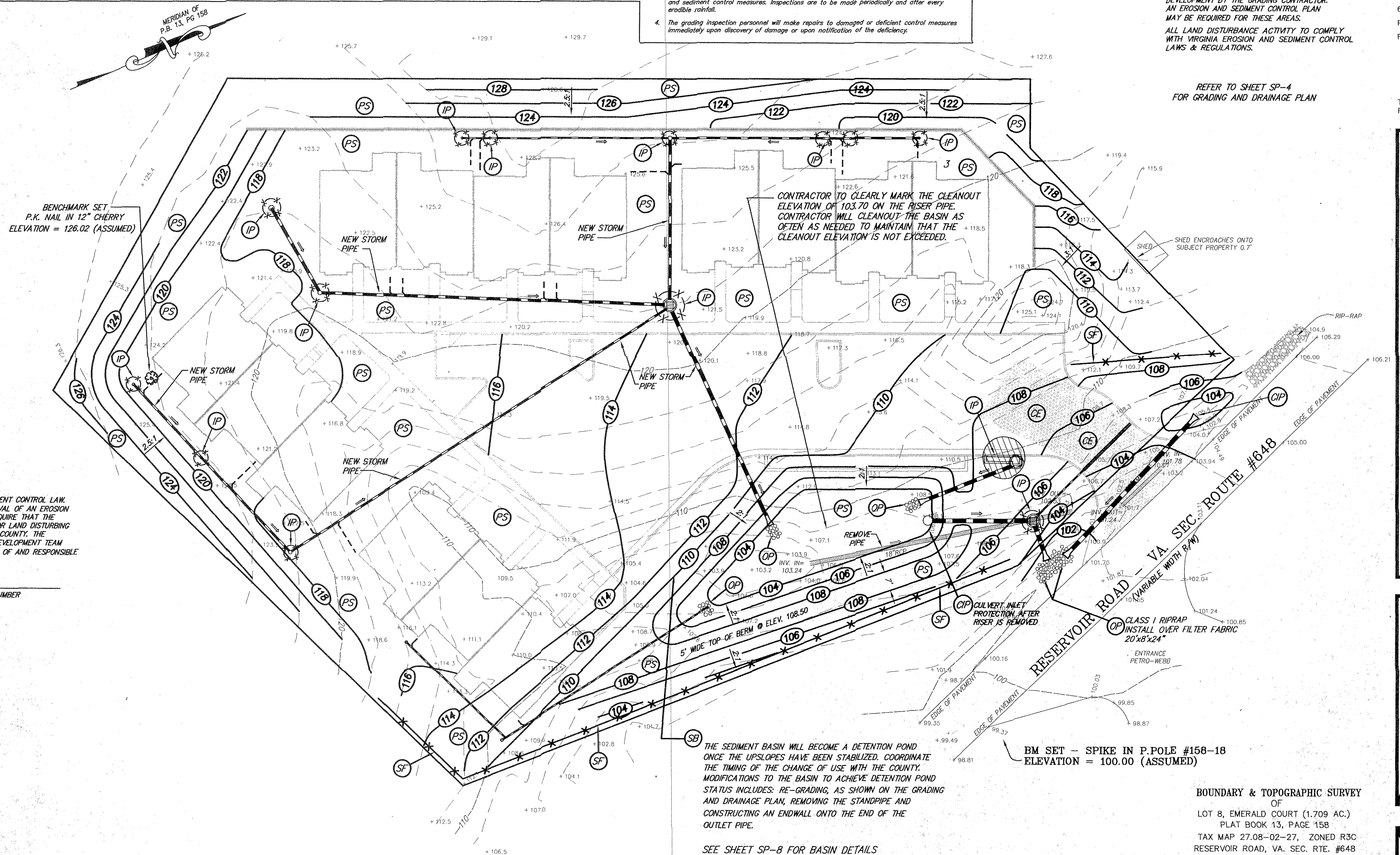
NOTES

REMOVE TREES WITHIN LIMITS OF GRADING AND HAUL OFF-SITE.

THE LOCATION OF ALL OFF-SITE FILL AREAS OR BORROW AREAS ASSOCIATED WITH THIS CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY COMMUNITY DEVELOPMENT BY THE GRADING CONTRACTOR. AN EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE AREAS.

ALL LAND DISTURBANCE ACTIVITY TO COMPLY WITH VIRGINIA EROSION AND SEDIMENT CONTROL LAWS & REGULATIONS.

REFER TO SHEET SP-4 FOR GRADING AND DRAINAGE PLAN



PLEASE NOTE THE 2001 GENERAL ASSEMBLY REVISIONS TO VA EROSION & SEDIMENT CONTROL LAW, EFFECTIVE JULY 1, 2001. ALL LAND DISTURBING PROJECTS THAT REQUIRE APPROVAL OF AN EROSION AND SEDIMENT CONTROL PLAN, GRADING PERMIT OR CLEARING PERMIT SHALL REQUIRE THAT THE APPLICANT PROVIDE THE NAME OF AN INDIVIDUAL WHO WILL BE RESPONSIBLE FOR LAND DISTURBING ACTIVITIES, HOLDING A RESPONSIBLE LAND DISTURBER CERTIFICATE TO ROANOKE COUNTY. THE RESPONSIBLE LAND DISTURBER CAN BE ANYONE FROM THE PROJECT TEAM OR DEVELOPMENT TEAM HOLDING A RESPONSIBLE LAND DISTURBER CERTIFICATE THAT WILL BE IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY FOR THE PROJECT.

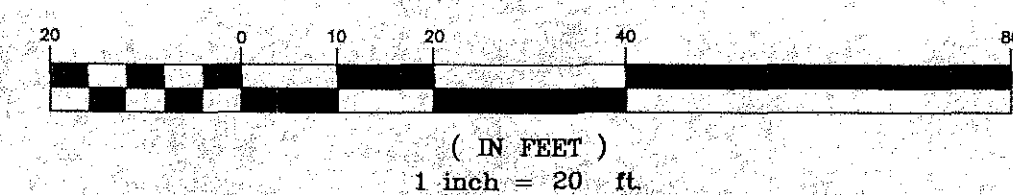
SHELDON HENDERSON
CERTIFIED LAND DISTURBER

16,900
CERTIFICATE NUMBER

THE SEDIMENT BASIN WILL BECOME A DETENTION POND ONCE THE UPSLOPES HAVE BEEN STABILIZED. COORDINATE THE TIMING OF THE CHANGE OF USE WITH THE COUNTY. MODIFICATIONS TO THE BASIN TO ACHIEVE DETENTION POND STATUS INCLUDES: RE-GRADING, AS SHOWN ON THE GRADING AND DRAINAGE PLAN, REMOVING THE STANDPIPE AND CONSTRUCTING AN ENDWALL ONTO THE END OF THE OUTLET PIPE.

SEE SHEET SP-8 FOR BASIN DETAILS

GRAPHIC SCALE



BOUNDARY & TOPOGRAPHIC SURVEY OF
LOT 8, EMERALD COURT (1.709 AC.)
PLAT BOOK 13, PAGE 158
TAX MAP 27.08-02-27, ZONED R3C
RESERVOIR ROAD, VA. SEC. RTE. #648
HOLLINS MAGISTERIAL DISTRICT, ROANOKE COUNTY, VA

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DATE: JULY 9, 2003

REVISIONS

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3

2

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HUGHES
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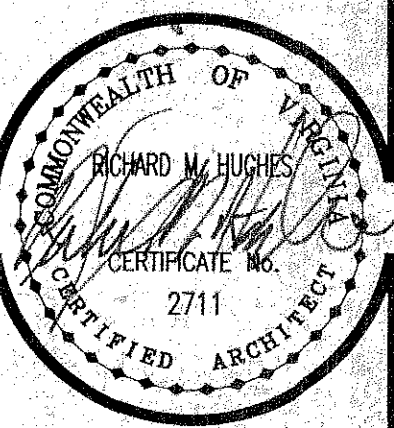
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EMERALD COURT HOMES
ROANOKE COUNTY, VIRGINIA

EROSION
CONTROL
PLAN



COMMISSION No.
02029
SHEET
SP-3
No. 3 of 8