



EROSION & SEDIMENT CONTROL SYMBOLS LEGEND

- CE TEMPORARY STONE CONSTRUCTION ENTRANCE (STD. 3.02)
- SF SILT FENCE (STD. 3.05)
- TP TREE PROTECTION (STD. 3.38)
- IP STORM DRAIN INLET PROTECTION (STD. 3.07)
- PS PERMANENT SEEDING MIXTURE (STD. 3.32)
- TS TEMPORARY SEEDING MIXTURE (STD. 3.31)
- DD TEMPORARY DIVERSION DIKE (STD. 3.09)
- B/M SOIL STABILIZATION BLANKETS & MATTING (STD. 3.36)
- CRS CONSTRUCTION ROAD STABILIZATION (STD. 3.03)

- GENERAL NOTES:**
- THIS EROSION AND SEDIMENT CONTROL (ESC) SHEET SHOWS ESC MEASURES WHICH ARE TO BE CONSTRUCTED DURING PHASE I OF THE SITE GRADING AND CONSTRUCTION.
 - REFER TO SHEET EC-9 FOR EROSION AND SEDIMENT CONTROL DETAILS AND DESIGN DATA.
 - PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN THIRTY (30) DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
 - THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURE SHOWN HEREON AND SHALL COMPLY WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", LATEST EDITION.
 - IF OFF-SITE FILL OR BORROW AREAS ARE TO BE USED THE LOCATION OF OFF-SITE FILL OR BORROW AREAS WILL BE PROVIDED TO THE CITY OF ROANOKE PLANNING, BUILDING, AND DEVELOPMENT DEPARTMENT. AN EROSION AND SEDIMENT CONTROL PLAN FOR THE FILL/BORROW SITES SHALL BE SUBMITTED AND APPROVED PRIOR TO THE ISSUANCE OF A LAND DISTURBANCE PERMIT.
 - PERMANENT SEEDING APPLIED TO ALL MECHANICALLY STABILIZED SLOPES AND SLOPES STEEPER THAN 3:1 SHALL MEET THE FOLLOWING MIXTURE:

POUNDS PER ACRE	SEED TYPE
108	KENTUCKY 31
2	RED TOP
20	SEASONAL NURSE CROP (ANNUAL RYE, FOXTAIL MILLET, & WINTER RYE MIX)
20	CROWN VETCH
 - SEDIMENT TRAPS SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LANDDISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
 - STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

- Standard Project Conditions**
- The activities authorized by this permit shall be executed in a manner to minimize any adverse impact on stream beneficial uses, as defined in § 62.1-10(b) of the Code.
 - No activity shall substantially disrupt the movement of aquatic life indigenous to the water body, including those species that normally migrate through the area, unless the primary purpose of the activity is to impound water. Culverts placed in streams shall be installed to maintain low flow conditions. No activity may cause more than minimal adverse effect on navigation. The activity shall not impede the passage of normal or expected high flows and the structure or discharge shall withstand expected high flows. Flows downstream of the project area shall be maintained to protect all uses.
 - All excavation, dredging, and/or filling in surface waters shall be accomplished in a manner that minimizes stream bottom disturbances and turbidity increases.
 - Virginia Water Quality Standards shall not be violated in any surface water as a result of the project activities.
 - Heavy equipment in temporarily impacted surface waters shall be placed on mats, geotextile fabric, or other suitable measures to minimize soil disturbance to the maximum extent practical. Mats shall be removed as soon as the work is complete.
 - All non-impacted surface waters within the project or right-of-way limits that are within fifty feet of any project activities shall be clearly flagged or demarcated for the life of the construction activity within that area. The permittee shall notify all contractors and subcontractors that these marked areas are surface waters where no activities are to occur.
 - Erosion and sedimentation controls shall be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992. These controls shall be placed prior to clearing and grading and maintained in good working order to minimize impacts to surface waters. These controls shall remain in place until the area stabilizes.
 - Any exposed slopes or streambanks shall be stabilized immediately upon completion of work in each impact area in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.
 - Continuous flow of perennial springs shall be maintained by the installation of spring boxes, French drains, or other similar structures.
 - The permittee shall employ measures to prevent spills of fuels, lubricants, or other pollutants into surface waters.
 - All construction, construction access (for example, cofferdams, sheetpiling, and causeways) and demolition activities associated with this project shall be accomplished in a manner that minimizes construction or waste materials from entering surface waters to the maximum extent practicable, unless authorized by this permit.
 - Stormwater runoff shall be prohibited from directly discharging into any surface waters. Best management practices (BMPs) designed, installed, and maintained as described in the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992, the Virginia Stormwater Management Handbook, First Edition, 1999, shall be deemed suitable treatment prior to discharge into surface waters. Installation of alternative practices that are not described in the aforementioned references shall be submitted to DEQ for approval prior to beginning construction.
 - All fill material shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable laws and regulations.
 - Wet or uncurd concrete shall be prohibited from entry into surface waters.
 - No machinery may enter surface waters, unless authorized by this permit.
 - In issuing this permit, DEQ has not taken into consideration the structural stability of any proposed structure.
 - The permittee shall conduct all in-stream activities in the dry or in accordance with the time-of-year (TOY) restrictions as recommended by the Department of Game and Inland Fisheries. The permittee shall maintain a copy of such TOY restriction or notification that no restriction is necessary, for the duration of the construction phase of the project. Per the TOY restriction, in-stream construction shall not occur between March 15 and June 30.

THE WORK OF THIS PROJECT IS SUBJECT TO THE REQUIREMENTS OF:

- VIRGINIA WATER PROTECTION INDIVIDUAL PERMIT NUMBER 03-1685 ISSUED BY VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY.
- SPECIAL PROGRAMMATIC GENERAL PERMIT NUMBER XX-XXX ISSUED BY THE UNITED STATES CORPS OF ENGINEERS.
- ORDINANCE NUMBER 36925-12204, ADOPTED BY THE CITY COUNCIL OF THE CITY OF ROANOKE ON DECEMBER 20, 2004.

NOTE: ESC MEASURES SHOWN IN GREY SCALE ARE EXISTING OR WERE APPROVED UNDER CITY PLAN NO. LD050019 AND SHALL REMAIN IN PLACE UNTIL THEY CONFLICT WITH NEW WORK.

REFER TO EROSION & SEDIMENT CONTROL DETAILS ON SHEET C-16.

TOTAL DISTURBED AREA = 7.341 ACRES

SCALE IN FEET

0 30 60

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Revisions	Date	By	Check
1	1/15/05	Final City of Roanoke Review	

Issue Date:	Drawn By:	Designed By:	Checked By:
OCTOBER 25, 2005	CZY	BSM/CZY/WTA	WTA

Vertical Scale: N/A

Horizontal Scale: 1" = 30'

Commission No. 2384

Sheet No. C-7

SITE DEVELOPMENT PLANS
BY MARKET - PHASE I
EROSION AND SEDIMENT CONTROL PLAN - AREA 'A'
CITY OF ROANOKE, VIRGINIA