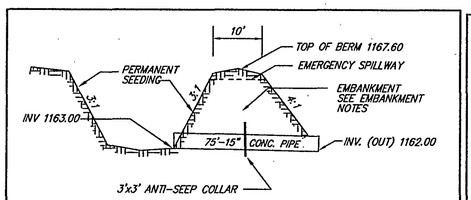
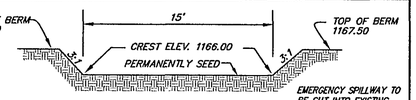


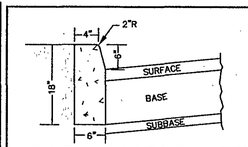
DETENTION POND SECTION
NTS



EMERGENCY SPILLWAY SECTION
NTS

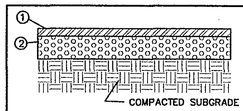
EARTH EMBANKMENT CONSTRUCTION NOTES

1. THE EMBANKMENT FOUNDATIONS AND ABUTMENTS SHALL BEAR ON FIRM AND STABLE EXISTING SUBGRADE WHICH HAS BEEN PREPARED SO AS TO REMOVE ALL ORGANIC, LOOSE, AND GENERALLY UNSUITABLE MATERIAL.
2. ALL MATERIAL TO BE USED FOR BACKFILL OR COMPACTED FILL SHALL BE INSPECTED AND TESTED BY THE SOILS ENGINEER PRIOR TO PLACEMENT, TO DETERMINE IF THEY ARE SUITABLE FOR INTENDED USE.
3. FILL SHALL BE PLACED ONLY ON A FIRM SUBGRADE APPROVED BY THE SOILS ENGINEER. SUBGRADE SHALL BE SCARIFIED A DEPTH OF 4" PRIOR TO FILL PLACEMENT TO ASSURE BONDING BETWEEN THE TWO SOILS. ALL EMBANKMENT FILL SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THAT SOIL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). THE COMPACTION SHALL BE ACCOMPLISHED BY PLACING THE FILL IN MAXIMUM 6 TO 8 INCH LOOSE LIFTS AND MECHANICALLY COMPACTING EACH LIFT TO THE REQUIRED DENSITY. THE FILL SHALL SHALL BE COMPACTED AT A MOISTURE CONTENT WHICH IS +3 TO -2 PERCENTAGE POINTS OF THE FILL MATERIAL'S OPTIMUM MOISTURE CONTENT.
   A SOILS ENGINEER SHALL PERFORM FIELD DENSITY TESTS TO ASCERTAIN THAT ADEQUATE COMPACTION HAS BEEN ACHIEVED.



THIS ITEM MAY BE PRECAST OR CAST-IN-PLACE. CONCRETE TO BE CLASS A3 IF CAST-IN-PLACE AND 4000 PSI. IF PRECAST

6" CONCRETE CURB, VDOT ST'D CG-2
NTS



① 2" ASPHALT CONCRETE SURFACE COURSE TYPE SM-9.5 AL

② 6" AGGREGATE BASE MATERIAL TYPE 1, SIZE NO. 21A

PARKING LOT PAVEMENT SECTION
NTS

PAVEMENT SECTION HAS BEEN DESIGNED W/O THE BENEFIT OF A SOILS REPORT. DESIGN IS BASED ON A CBR VALUE OF 10.

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION
The purpose of this project is to construct a +/-10,590 sf. building addition onto the east side of the existing Melrose Baptist Church. The building addition will be used for new classrooms. Additional site development includes; a new 38 space paved parking lot, a new site access road, a new retaining wall, installation of site utilities and a new detention pond. Approximately 2.90 acres will be disturbed as a result of construction.

EXISTING SITE CONDITIONS
The portion of the existing site underdevelopment includes primarily green space, however, an existing paved parking lot encompassing approximately 12,800 sf. will also be affected by construction. The existing site gently slopes from north to south at +/- 4.0% grades. Stormwater sheet flows across the parking lot and grass areas toward the roadside ditch along Peters Creek Road.

ADJACENT PROPERTY
The area under construction is bound on the northern and western sides by Melrose Baptist Church property, on the southern side by Peters Creek Road and on the eastern side by commercial development.

CRITICAL EROSION AREAS
The potentially critical erosion control areas associated with this project are the new slopes created for the detention pond and new access road. Silt fence and seeding will be installed to aid in controlling the sediment.

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

1. Temporary Construction Entrance – 3.02
   The construction entrance is located off the existing entrance from Peter's Creek Road.
2. Silt Fence – 3.05
   Silt fence to be installed along the construction site's southern and eastern perimeters as designated on the plans.
3. Storm Drain Inlet Protection – 3.07
   Storm drain inlet protection to be installed around the new and existing drop inlets as indicated on the plans.
4. Culvert Inlet Protection – 3.08
   Culvert inlet protection to be installed around the inlet of the new culvert from the new detention pond.
5. Temporary Sediment Trap – 3.13
   New detention pond to be used as a sediment trap until the upslopes are stabilized.
6. Outlet Protection – 3.18
   Outlet protection to be installed at the outfall of the new culverts, as shown on the plans.

VEGETATIVE PRACTICES
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.

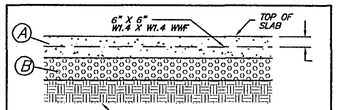
MANAGEMENT STRATEGIES

1. Construction should be sequenced so that grading operations can begin and end as quickly as possible.
2. Erosion and sediment control devices will be installed as a first step of construction.
3. 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.
4. 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 finish 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.



Ⓐ = 4" thick, 3000 PSI air-entrained reinforced concrete with 6" X 6" W1.4 X W1.4 welded wire fabric.

Ⓑ = 4" gravel base – VDOT NO. 57 stone or equal.

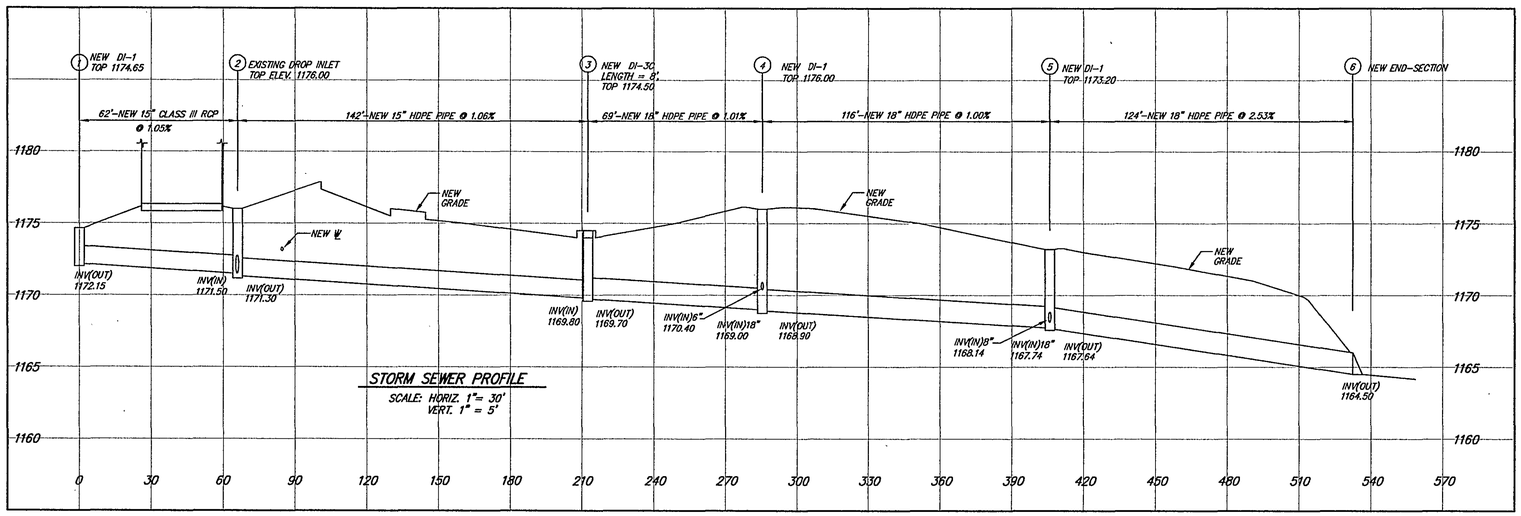
CONCRETE SIDEWALK SECTION
NTS

Concrete Finish: Concrete shall first be smooth trowelled, then ending with a "Light Broom Finish".

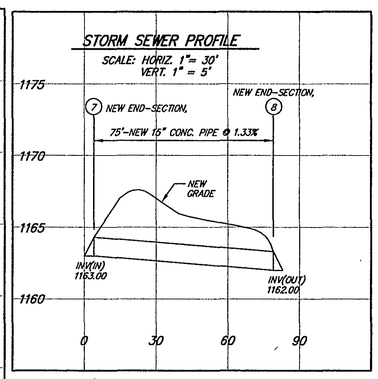
When slab abuts a building, a 1/2" Expansion joint filled with preformed joint filler extending from the bottom of the slab to approximately 1/4" below the top surface shall be used.

Tooled control joints shall extend into the concrete for at least 1" and be approximately 1/8" in width.

Curing shall be accomplished by the use of a liquid membrane seal containing white pigment, applied at the rate of one (1) gallon per 150 square feet.



STORM SEWER PROFILE
SCALE: HORIZ. 1"= 30'
VERT. 1" = 5'



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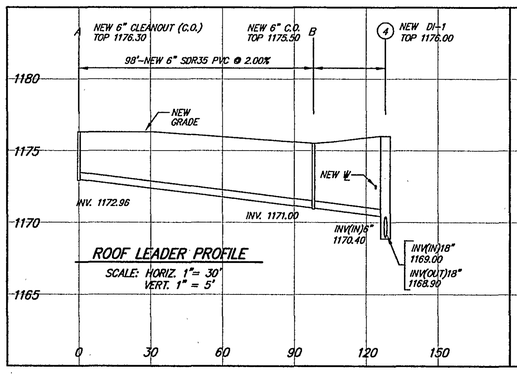
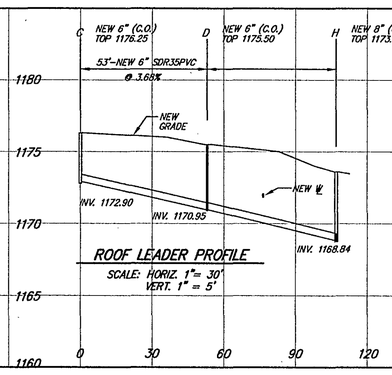
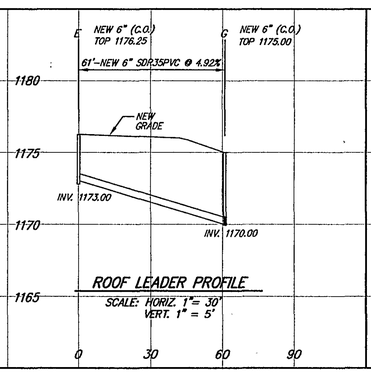


ROOF LEADER PROFILE
SCALE: HORIZ. 1"= 30'
VERT. 1" = 5'



ROOF LEADER PROFILE
SCALE: HORIZ. 1"= 30'
VERT. 1" = 5'



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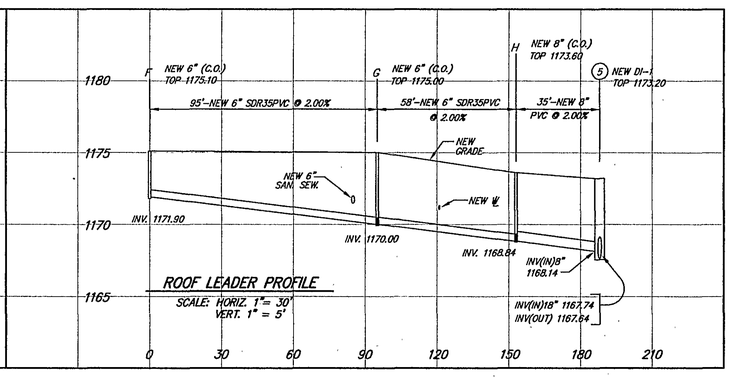

ROOF LEADER PROFILE
SCALE: HORIZ. 1"= 30'
VERT. 1" = 5'

DATE: May 25, 2004
REVISIONS
1 June 7, 2004
2 June 18, 2004

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ADDITIONS AND RENOVATIONS TO MELROSE BAPTIST CHURCH

ROANOKE COUNTY, VIRGINIA

EROSION CONTROL NARRATIVE, SITE DETAILS, & STORM SEWER PROFILES

COMMONWEALTH OF VIRGINIA
D. JEFFRY PARKHILL
CERTIFICATE No. 3933
ARCHITECT
6/18/04

COMMISSION No. 04022

SHEET SP-5

No. 9 of 35

Drawing File: P:\Projs\04022\04022 - melrose-baptist-classroom.dgn\04022sp5.dwg Jun 18, 2004 - 12:45pm