

CONSTRUCTION PROCEDURE REQUIREMENTS

- RIGHT-OF-WAY EXCAVATION PERMIT – PRIOR TO THE COMMENCEMENT OF ANY DIGGING, ALTERATION OR CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY (STREETS, ALLEYS, PUBLIC EASEMENTS), A RIGHT-OF-WAY EXCAVATION PERMIT SHALL BE APPLIED FOR AND OBTAINED BY THE CONTRACTOR FROM THE CITY OF ROANOKE.
 - LAND DISTURBANCE PERMIT – AN APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR ANY BORROW/FILL SITES ASSOCIATED WITH THE PROJECT MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A LAND DISTURBANCE PERMIT.
 - PLANS AND PERMITS – A COPY OF THE PLANS AS APPROVED BY THE CITY (SIGNED BY THE PROPER CITY OFFICIALS) AND ALL PERMITS ISSUED BY THE CITY SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES OF ONGOING CONSTRUCTION.
 - LOCATION OF UTILITIES – THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
 - CONSTRUCTION ENTRANCE – THE CONTRACTOR SHALL INSTALL AN ADEQUATE CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION RELATED EGRESS FROM THE SITE. SIZE AND COMPOSITION OF CONSTRUCTION ENTRANCE SHALL BE AS SHOWN ON THE PLANS.
 - STREETS TO REMAIN CLEAN – IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT THE PUBLIC STREET ADJACENT TO THE CONSTRUCTION ENTRANCE REMAINS FREE OF MUD, DIRT, DUST, AND/OR ANY TYPE OF CONSTRUCTION MATERIALS OR LITTER AT ALL TIMES.
 - BARRICADES/DITCHES – THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL EXCAVATED DITCHES AND SHALL FURNISH AND ENSURE THAT ALL BARRICADES PROPER AND NECESSARY FOR THE SAFETY OF THE PUBLIC ARE IN PLACE.
 - SEWER AND PAVEMENT REPLACEMENT – CONSTRUCTION OF SANITARY SEWERS AND THE REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH APPROVED STANDARDS AND SPECIFICATIONS OF THE CITY OF ROANOKE AND THE WESTERN VIRGINIA WATER AUTHORITY.
 - APPROVED PLANS/CONSTRUCTION CHANGES – ANY CHANGE OR VARIATION FROM CONSTRUCTION DESIGN AS SHOWN ON THE OFFICIALLY APPROVED PLANS SHALL BE APPROVED BY THE EROSION AND SEDIMENT CONTROL AGENT PRIOR TO SAID CHANGES OR VARIATION IN CONSTRUCTION BEING MADE.
 - FINAL ACCEPTANCE/CITY – THE OWNER OR DEVELOPER SHALL FURNISH THE CITY OF ROANOKE'S PLANNING BUILDING AND DEVELOPMENT DEPARTMENT WITH A FINAL CORRECT SET OF AS-BUILT PLANS PRIOR TO FINAL ACCEPTANCE BY THE CITY.
- GENERAL SITE INFORMATION:
 - THE DESIGN OF THE DEVELOPMENT IS BASED ON EXISTING TOPOGRAPHIC FEATURES AND UTILITIES. SURVEYED BY DRAPER ADEN ASSOCIATES, SEPTEMBER 2008.
 - UNDERGROUND UTILITY LOCATIONS SHOWN BASED ON EXISTING UTILITY MARKING BY OTHERS.
 - LOCAL ZONING / REQUIREMENTS INFORMATION:

PROJECT IS LOCATED WITHIN CITY OF ROANOKE, VIRGINIA. CITY REQUIREMENTS GOVERN THE PROJECT.
 - SITE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING GENERAL REQUIREMENTS:
 - FIELD LAYOUT SHALL BE BASED ON THE DIMENSIONS SHOWN ON THE DRAWINGS. DIMENSIONS ARE FROM INSIDE BOTTOM FACE OF CURB, UNLESS NOTED OTHERWISE.
 - ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.
 - NOTHING ON THESE CONTRACT DRAWINGS SHALL BE CONSTRUED AS A GUARANTEE THAT UTILITIES INDICATED AS EXISTING ARE IN THE LOCATION INDICATED OR THAT THEY ACTUALLY EXIST, OR THAT OTHER EXISTING UTILITIES ARE NOT WITHIN THE AREA OF OPERATIONS. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL MAKE ALL NECESSARY INVESTIGATIONS TO DETERMINE THE EXISTENCE, LOCATIONS, AND ELEVATIONS OF EXISTING UTILITIES IN THE WORK AREA. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES WITHIN THE CONSTRUCTION ZONE. DAMAGE TO STRUCTURES, UTILITIES, AND EQUIPMENT TO REMAIN SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. IN ACCORDANCE WITH THE STATE AND LOCAL REQUIREMENTS, THE OWNER'S REPRESENTATIVE, AND THE AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL CONTACT MISS UTILITY AT 811, AT LEAST THREE WORKING DAYS PRIOR TO ANY EARTH MOVING OR DIGGING ACTIVITIES.
 - OBTAIN ADVANCE APPROVAL FROM THE CITY OF ROANOKE FOR ANY WORK PERFORMED IN ROADWAYS OR WALKWAYS ADJACENT TO SITE AND FOR ANY DETOURING OF TRAFFIC. PROVIDE ALL SAFETY MEASURES AND DEVICES REQUIRED BY APPLICABLE REGULATORY AGENCIES. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH SECTION 104.04 OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION'S ROAD AND BRIDGE SPECIFICATIONS.
 - BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND POST WITH WARNING LIGHTS. OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH SECTION 59.1-406, ET SEQ. OF THE CODE OF VIRGINIA (OVERHEAD HIGH VOLTAGE LINES SAFETY ACT).
 - ALL IMPROVEMENTS AND WORK SHALL BE SUBJECT TO INSPECTION BY THE CITY OF ROANOKE AND ITS REPRESENTATIVES.
 - CONTRACTOR SHALL MAINTAIN EMERGENCY, SERVICE, AND DELIVERY VEHICLE ACCESS TO THE SURROUNDING AREA; COORDINATE WITH OWNER.
 - CONTRACTOR SHALL MINIMIZE DISRUPTION OF PEDESTRIAN ACCESS AND SHALL COORDINATE DISRUPTION WITH THE CITY OF ROANOKE. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH THE CITY OF SALEM TO ENSURE ACCESSIBLE ROUTES AROUND THE CONSTRUCTION ARE MAINTAINED.

EROSION AND SEDIMENT CONTROL NOTES

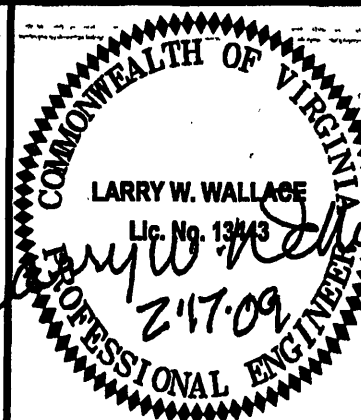
- THE LIMIT OF DISTURBANCE IS EQUAL TO 2.58 ACRES.
- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE PROVIDED ON THE SITE AT ALL TIMES.
- MINIMUM MEASURES ARE INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF THESE MINIMUM REQUIREMENTS AND ALL OTHER MEASURES NECESSARY TO CONTROL, FILTER, AND PREVENT SEDIMENT FROM LEAVING THE SITE. EROSION CONTROL MEASURES SHALL BE PLACED PRIOR TO COMMENCEMENT OF UPSLOPE EARTHWORK ACTIVITIES. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL UPSLOPE DISTURBED AREAS ARE STABILIZED.
- ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE CITY OF ROANOKE AND THE COMMONWEALTH OF VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION. THESE AGENCIES HAVE THE RIGHT TO ADD OR DELETE ESC CONTROLS IN THE FIELD. ANY CHANGES REQUIRED BY THE INSPECTOR OR NOTED DEFICIENCIES SHALL BE CORRECTED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES IMMEDIATELY AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT, AT LEAST DAILY DURING PROLONGED RAINFALL, AND AT LEAST WEEKLY WHEN NO RAINFALL OCCURS. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY. REMOVE SEDIMENT FROM DEVICES WHEN DEPOSITS REACH NO MORE THAN ONE-HALF THE HEIGHT OF THE BARRIER.
- PERMANENT SEEDING SHALL BE APPLIED TO INDICATED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. PERMANENT SEEDING SHALL ALSO BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN 1 YEAR.
- IF PERMANENT SEEDING IS NOT APPLIED TO DENUDED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE, THE ASSOCIATED AREA SHALL BE TEMPORARILY SEEDED. TEMPORARY SEEDING SHALL BE APPLIED WITHIN 7 DAYS ON DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL PERIODICALLY TOP DRESS THE CONSTRUCTION ENTRANCE WITH CLEAN STONE. VEHICLE'S TIRES SHALL BE WASHED IF THE CONSTRUCTION ENTRANCE FAILS TO REMOVE SOIL FROM THE TIRES OF VEHICLES ENTERING THE PAVED STREET. ANY MUD OR SOIL THAT ACCUMULATES ON PAVED ROADWAYS, FROM THE CONTRACTOR'S ACTIVITIES, SHALL BE REMOVED BY THE CONTRACTOR. CONTRACTOR SHALL FLAG AND CONTROL TRAFFIC WHILE REMOVAL IS BEING PERFORMED.
- DUST SHALL BE CONTROLLED IN ACCORDANCE WITH VESCH, STD. 3.39.
- SILT FENCE AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED BEFORE ANY UPSLOPE ACTIVITIES BEGIN.
- THE METHODS AND STRATEGIES TO CONTAIN EROSION AND SEDIMENT AS LISTED IN THE DOCUMENT ENTITLED "EROSION AND SEDIMENT CONTROL NARRATIVE AND STORMWATER CALCULATIONS" FOR THE ROANOKE POLICE ACADEMY SHALL BE FOLLOWED DURING CONSTRUCTION.
- DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- CUT AND FILL SLOPES SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS SOLVED.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN.
- BEFORE NEWLY CONSTRUCTED STORM WATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM ADMINISTRATOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- LOCATION OF SILT FENCE IS SHOWN SCHEMATICALLY. CONTRACTOR TO FIELD ADJUST LOCATION AS REQUIRED TO PROVIDE MAXIMUM EFFECTIVENESS IN RETAINING SEDIMENT, IN ACTIVE CONSTRUCTION AREAS.
- ALL DENUDED SLOPES, 3:1 OR GREATER AND NEW DRAINAGE CHANNELS, SHALL RECEIVE SOIL STABILIZATION MATTING, UNLESS AREA IS TO BE LANDSCAPED WITH PLANTINGS AND MULCH. INSTALL MATTING IN DRAINAGE CHANNEL A MINIMUM OF 1 FT. ABOVE INVERT.
- ALL TEMPORARY DIVERSIONS TO REMAIN UNTIL ADJACENT PROPOSED STORM SEWER IS CONSTRUCTED AND OPERATIONAL.

INSPECTION AND MAINTENANCE REQUIREMENTS FOR THE POST-CONSTRUCTION STORMWATER MANAGEMENT FACILITIES:
(NOTE: ITEMS 1A, 1B, 1C & 1D SHALL BE PERFORMED BY THE CONTRACTOR UNTIL FINAL COMPLETION OF CONTRACT)

- THE FOLLOWING ITEMS ARE INSPECTION CHECKS THAT SHALL BE PERFORMED AFTER EACH TIME THE RISER IS OVERTOPPED BY STORM FLOW AND TWICE A YEAR (WHICHEVER FREQUENCY IS GREATER).
 - OUTLET STRUCTURE SHALL BE CHECKED FOR ITS PERFORMANCE. ENSURE STRUCTURE IS NOT CLOGGED WITH DEBRIS. ANY REPAIRS MADE TO THE PRINCIPAL SPILLWAYS SHALL BE REVIEWED BY A PROFESSIONAL ENGINEER.
 - VISUALLY INSPECT FOR ANY DEBRIS OR SEDIMENT THAT HAS WASHED INTO THE FACILITY, AND REMOVE.
 - INSPECT THE EMBANKMENTS TO ENSURE NO DAMAGE HAS OCCURRED FROM EROSION OR FROM SEEPAGE. REBUILD ANY DAMAGED AREA BY REPLACING SOIL TO ORIGINAL SUBGRADE ELEV. IN 6" LIFTS, COMPACTING EACH LIFT TO A MIN. OF 98% STANDARD PROCTOR, ADDING TOPSOIL TO THE ORIGINAL FINISH GRADE ELEV., AND APPLYING PERMANENT SEEDING WITH MULCH.
 - ALL VEGETATED AREAS SHALL BE CHECKED FOR A GOOD STAND OF GRASS. ANY BARE SPOTS ARE TO BE REPAIRED AS NECESSARY.
- OTHER MAINTENANCE ITEMS:
 - MOWING SHALL OCCUR AT A FREQUENCY THAT WILL PREVENT LARGE WEEDS FROM AFFECTING THE INTEGRITY OF THE EARTH FILL EMBANKMENTS, AT LEAST ON A YEARLY BASIS.
 - PERFORM WEEDING ROUTINELY, AND AT LEAST MONTHLY DURING THE SUMMER MONTHS.
 - IF THE PLANTS ARE SHOWING SIGNS OF DISTRESS OR MORTALITY, PERFORM SOIL TESTING THAT PROVIDES RECOMMENDED SOIL AMENDMENTS TO BE INCORPORATED. IF SOIL CANNOT BE AMENDED SATISFACTORILY, REPLACE PLANTING SOIL.
 - REMOVE AND REPLACE ALL DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT IN THE SPRING AND FALL.
 - REFER TO THE MAINTENANCE SCHEDULE, TABLE 3.11-6 OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK FOR OTHER REQUIREMENTS, WITH THE FOLLOWING CHANGE: ADD A FRESH MULCH LAYER IN THE SPRING AND FALL. IF MULCH LAYER TOTAL THICKNESS BECOMES DETRIMENTAL TO THE PLANT GROWTH, REMOVE OLD MULCH BEFORE APPLYING NEW MULCH.
 - CITY OF ROANOKE DEPARTMENT OF PUBLIC WORKS IS RESPONSIBLE FOR MAINTENANCE.
- COMPLETE THE OPERATION AND MAINTENANCE INSPECTION CHECKLIST FOUND IN APPENDIX 3E OF THE SWM HANDBOOK AT EACH INSPECTION. KEEP ON FILE FOR VADCR REVIEW, IF REQUESTED.

GENERAL LEGEND

EXISTING	LEGEND	PROPOSED
---1072---	CONTOURS	---1072---
~x1561.3~	GROUND ELEVATION	73.3 74.0± (M.E.) MATCH EXISTING
~~~~~	TREE LINE	N/A
~~~~~	STREAM	N/A
~~~~~	LIMITS OF CLEARING	-----
~~~~~	DECIDUOUS TREE	N/A
~~~~~	CONIFEROUS TREE	N/A
~~~~~	SHRUB	N/A
~~~~~	FENCE	-----
~~~~~	100 YEAR FLOOD ZONE	-----
~~~~~	LIMITS OF CONSTRUCTION	-----
~~~~~	BENCHMARK	-----
~~~~~	BUILDING	-----
~~~~~	HEAVY DUTY PAVEMENT	-----
~~~~~	STANDARD DUTY PAVEMENT	-----
~~~~~	CONCRETE	-----
~~~~~	DEMOLITION	-----
~~~~~	DEMOLITION KEY	-----
~~~~~	SIGN	-----
~~~~~	BOLLARD	-----
~~~~~	BOREHOLE	-----
~~~~~	METAL POST	-----
~~~~~	WOOD POST	-----
~~~~~	TEST PIT	-----
~~~~~	STORM SEWER	-----
~~~~~	STORM CLEANOUT	-----
~~~~~	STORM MANHOLE	-----
~~~~~	STORM DRAINAGE INLET	-----
~~~~~	STORM STRUCTURE KEY	-----
~~~~~	SANITARY SEWER	-----
~~~~~	FORCE MAIN	-----
~~~~~	SANITARY CLEANOUT	-----
~~~~~	SANITARY MANHOLE	-----
~~~~~	SANITARY STRUCTURE KEY	-----
~~~~~	UNDERGROUND ELECTRIC	-----
~~~~~	OVERHEAD POWER	-----
~~~~~	LIGHT POLE	-----
~~~~~	ELECTRIC POLE	-----
~~~~~	ELECTRIC MANHOLE	-----
~~~~~	WATER	-----
~~~~~	WATER VALVE	-----
~~~~~	POST INDICATOR VALVE	-----
~~~~~	GATE VALVE	-----
~~~~~	FIRE HYDRANT	-----
~~~~~	FIRE PROTECTION	-----
~~~~~	WATER METER	-----
~~~~~	WATER MANHOLE	-----
~~~~~	UNDERGROUND COMMUNICATION	-----
~~~~~	OVERHEAD COMMUNICATIONS	-----
~~~~~	FIBER OPTICS	-----
~~~~~	TELEPHONE BOX	-----
~~~~~	TELEPHONE MANHOLE	-----
~~~~~	TELEPHONE PEDESTAL	-----
~~~~~	TELEPHONE POLE	-----
~~~~~	GAS LINE	-----
~~~~~	GAS DRIP	-----
~~~~~	GAS METER	-----
~~~~~	GAS MANHOLE	-----
~~~~~	GAS VALVE	-----



**Draper Aden Associates**  
Engineering • Surveying • Environmental Services  
Blacksburg, VA  
22061  
Blacksburg, VA  
540-552-0444 Fax: 540-552-0291  
www.daa.com

Richmond, VA  
Charlottesville, VA  
Hampden Roads, VA

**NOTES & LEGEND**  
**CITY OF ROANOKE POLICE ACADEMY**  
CITY OF ROANOKE, VIRGINIA

**REVISIONS**  
11/13/2008  
CITY COMMENTS ADDRESSED  
01/12/2009  
2ND ROUND CITY  
COMMENTS ADDRESSED

DESIGNED BY JGL  
DRAWN BY JGL  
CHECKED BY LWW  
SCALE 1" = 30'  
DATE NOVEMBER 20, 2008  
PROJECT NUMBER B07184-01  
C-1