

Drawing File: P:\2012\12080.015 - Roanoke City Schools - Round Hill Phase M\Draws\Civil\12080.015 Round Hill Phase M 2016 FR15 Site.dwg Dec 11, 2015 - 11:31am

1. THE NOTES LISTED HERE ARE FOR GENERAL INFORMATION. THE REQUIREMENTS AND SPECIFICATIONS ARE CONTAINED IN THE PROJECT MANUAL. THE PROJECT MANUAL SUPERCEDES.

2. THE LOCATION OF EXISTING UTILITIES ACROSS, ALONG OR IN THE VICINITY OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS, AND WHERE SHOWN, ARE APPROXIMATE. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY.

1. ALL SOIL AND SOIL PLACEMENT SHALL BE AS RECOMMENDED IN THE REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION FOR ROUND HILL, ELEMENTARY SCHOOL, PREPARED BY FROELICH & ROBERTSON, DATED FEBRUARY 2013. THE REPORT IS CONTAINED IN THE APPENDIX OF THE SPECIFICATIONS.
2. THE CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS OF THE VIRGINIA OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION AS ADOPTED BY THE SAFETY AND HEALTH CODES COMMISSION OF VIRGINIA.
3. THE CONTRACTOR SHALL PERFORM MINOR, INVESTIGATIVE EXCAVATIONS TO VERIFY LOCATION OF VARIOUS EXISTING UNDERGROUND FACILITIES AT SUFFICIENT LOCATIONS TO ASSURE THAT NO CONFLICT WITH THE PROPOSED WORK EXISTS AND SUFFICIENT CLEARANCE IS AVAILABLE TO AVOID DAMAGE TO EXISTING FACILITIES.
4. SUBSEQUENT TO THE CLEARING AND ROUGH GRADING OPERATIONS AND PRIOR TO THE PLACEMENT OF THE FILL, THE EXPOSED SUBGRADE SOILS SHALL BE CAREFULLY INSPECTED. ANY UNSUITABLE MATERIAL, THIS EXPOSED SHALL BE REMOVED AND REPLACED WITH A WELL COMPACTED AND SUITABLE MATERIAL. THE INSPECTION OF THESE PHASES SHALL BE PERFORMED BY A GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE. DENSITY TESTING AT THE DISCRETION OF THE SOILS ENGINEER SHALL BE PERFORMED AT THIS TIME.
5. CUT OUT TREES, SHRUBS, BRUSH, AND VEGETATIVE GROWTH TWELVE INCHES MAXIMUM ABOVE GROUND, GRUB OUT STUMPS AND ROOTS 12 INCHES MINIMUM BELOW ORIGINAL GROUND SURFACE, EXCEPT UNDER BUILDINGS, REMOVE ROOTS ONE INCH AND LARGER ENTIRELY AND ENTIRELY REMOVE ROOTS OF PLANTS THAT NORMALLY SPROUT FROM ROOTS..
6. DO NOT PULL UP OR RIP OUT ROOTS OF TREES AND SHRUBS THAT ARE TO REMAIN. IF EXCAVATION THROUGH ROOTS IS REQUIRED, EXCAVATE BY HAND AND CUT ROOTS WITH SHARP AXE. MAKE CLEAN, SMOOTH, SLOPING CUTS.
7. STRIP EXISTING VEGETATION LAYER, THREE INCHES DEEP MINIMUM FROM AREAS OF SITE TO RECEIVE BUILDINGS, LANDSCAPING, OR PAVING AND REMOVE FROM SITE BEFORE STRIPPING TOPSOIL FOR STORAGE AND REUSE.
8. AFTER STRIPPING VEGETATION LAYER, STRIP EXISTING TOPSOIL, IF PRESENT, AN ADDITIONAL SIX INCHES DEEP MINIMUM FROM AREAS OF SITE TO RECEIVE BUILDINGS AND PAVING AND STORE ON SITE FOR LATER USE.
9. BEFORE MAKING CUTS, REMOVE TOPSOIL OVER AREAS TO BE CUT AND FILLED THAT WAS NOT PREVIOUSLY REMOVED. STOCKPILE THIS ADDITIONAL TOPSOIL WITH PREVIOUSLY STRIPPED TOPSOIL.
10. THE EXISTING STOCKPILED TOPSOIL IS PROPERTY OF CONTRACTOR WITH RESTRICTION THAT TOPSOIL IS TO BE USED FIRST FOR PROJECT LANDSCAPE TOPSOIL REQUIREMENTS AND SECOND FOR NON-STRUCTURAL FILL AND BACKFILL IF APPROVED BY THE TESTING AGENCY. AFTER PROJECT FILL, BACKFILL, AND LANDSCAPE TOPSOIL REQUIREMENTS ARE SATISFIED, REMOVE EXCESS EXISTING TOPSOIL FROM SITE. DO NOT REMOVE EXISTING TOPSOIL FROM SITE WITHOUT ARCHITECTS / ENGINEER'S WRITTEN APPROVAL.
11. 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.
12. DURING GRADING OPERATIONS, THE CONTRACTOR SHALL GRADE ALL AREAS TO DRAIN TO PREVENT THE SATURATION OF THE SOILS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE STOCKPILES FROM RAIN IF THE SOIL IS NEEDED FOR BACKFILL MATERIAL..
13. THE CONTRACTOR SHALL PROOF-ROLL THE CONSTRUCTION AREA WITH HEAVY-PNEUMATIC EQUIPMENT. ALL UNSUITABLE MATERIAL SHALL BE UNDERCUT AND RECOMPACTED WITH APPROVED STRUCTURAL FILL MATERIAL.
14. EARTHWORK SHALL BE TO THE LINES AND GRADES SHOWN, PROOF-ROLLING AND COMPACTION TESTS SHALL BE ACCOMPLISHED IN THE FIELD TO ALL GRADED AREAS. THE GRADING SHALL CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN TO WITHIN A TOLERANCE OF PLUS OR MINUS 0.10 FEET.

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44. TOPSOIL FURNISHED BY THE CONTRACTOR SHALL CONSIST OF A NATURAL, FRIABLE SURFACE SOIL WITHOUT ADMIXTURES OF UNDESIRABLE SUBSOIL, REFUSE, OR FOREIGN MATERIALS. IT SHALL BE FREE FROM ROOTS, HARD CLAY, COARSE GRAVEL, STONES LARGER THAN ONE INCH IN ANY DIMENSION, WEEDS, SEEDS, TALL GRASS, BRUSH, STICKS, STUBBLE OR OTHER MATERIAL WHICH WOULD BE DETRIMENTAL TO THE PROPER DEVELOPMENT OF THE DESIRED VEGETATIVE GROWTH.
45. TOPSOIL SHALL BE OBTAINED FROM NATURALLY WELL DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4-INCHES DEEP. TOPSOIL SHALL NOT BE OBTAINED FROM BOGS OR MARSHES.
46. TOPSOIL SHALL CONTAIN NOT LESS THAN 3%, OR MORE THAN 20% ORGANIC MATTER. BY WEIGHT AS DETERMINED BY LOSS-ON-IGNITION OF OVEN-DRIED SAMPLES IN ACCORDANCE WITH ASTM-6. ORGANIC MATERIAL SHALL BE DECOMPOSED AND FREE OF WOOD.
47. TOPSOIL SOURCES LACKING ORGANIC MATTER MAY BE USED IF, PRIOR TO DELIVERY TO THE PROJECT, SUFFICIENT ORGANIC MATTER IN THE FORM OF PULVERIZED PEAT MOSS OR RICH ORGANIC SOIL FROM OTHER SOURCES IS THOROUGHLY MIXED WITH THE TOPSOIL TO PROVIDE A PRODUCT MEETING THE ABOVE REQUIREMENTS. ORGANIC MATERIAL FOR INCORPORATION INTO TOPSOIL, IF REQUIRED, SHALL BE PARTIALLY DECOMPOSED FIBROUS OR CELLULAR STEMS AND LEAVES OF ANY OF SEVERAL SPECIES OF SPAGNUM MOSSES, OR ROTTED MANURE. ORGANIC MATERIAL MAY REQUIRE CHOPPING TO SHREDDING TO INSURE THOROUGH MIXING WITH THE TOPSOIL.
48. THE TOPSOIL SHALL BE TESTED TO DETERMINE THE APPROPRIATE AMENDMENTS REQUIRED FOR THE INTENDED USE. THE CONTRACTOR SHALL AMEND THE SOIL WITH NITROGEN, PHOSPHORIC ACID, POTASSIUM, LIMESTONE, ETC. AT NO EXPENSE TO THE OWNER.

49. ~~AGGREGATE BASE AND PAVING MUST BE PLACED BEFORE ANY MOISTURE OR SEASONAL CHANGES OCCUR TO SUBGRADE THAT WOULD CAUSE COMPACTION TESTS PREVIOUSLY PERFORMED TO BE ERRONEOUS. RE-COMPACT AND RETEST SUBGRADE SOILS THAT HAVE BEEN LEFT EXPOSED TO WEATHER.~~
50. ~~ALL PAVEMENT SHALL COMPLY WITH VDOT SUPERPAVE SPECIFICATIONS AND STANDARDS.~~
51. ~~CONCRETE CURB SHALL BE VDOT STANDARD CG-2 AND CONSTRUCTED TO VDOT SPECIFICATIONS. CONCRETE CURB AND GUTTER SHALL BE VDOT STANDARD CG-6 AND CONSTRUCTED TO VDOT SPECIFICATIONS.~~
52. ~~ALL WORK SHALL COMPLY WITH VDOT SPECIFICATIONS IN ACCORDANCE WITH THE LATEST REVISION OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.~~

53. CONCRETE SIDEWALKS, LANDINGS AND RAMPS SHALL BE 4" THICK, VDOT STANDARD A-4 (4,000 PSI) AIR ENTRAINED CONCRETE, INSTALLED WITH PWF AND IN ACCORDANCE WITH SECTION 504 OF THE LATEST REVISION OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.
54. SPACING FOR EXPANSION JOINTS SHALL BE THE SAME FOR SIDEWALKS AS THAT FOR THE VDOT CG-6 CURBING AND AS S THE DETAIL SPECIFIES.
55. SIDEWALK FINISH: SIDEWALK SHALL FIRST BE SMOOTH TROWELLED, THEN ENDING WITH A "LIGHT BROOM FINISH" UNLESS OTHERWISE NOTED.
56. WHEN SIDEWALK ABUTS CURB OR BUILDING, A 1/2" PREMOLDED EXPANSION JOINT IS TO BE USED.
57. CURING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTION 220 OF THE LATEST REVISION OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.

58. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH DIMENSIONED AS-BUILT DRAWINGS INDICATING LOCATIONS, ELEVATIONS, MATERIALS, ETC. OFF ALL UNDERGROUND UTILITIES. NO UTILITY TRENCHES SHALL BE BACKFILLED UNTIL THE AS-BUILT DRAWING ARE UPDATED.
59. ALL UTILITIES REQUIRE WARNING TAPE. ACID AND ALKALI RESISTANT POLYETHYLENE FILM WARNING TAPE MANUFACTURED FOR MARKING AND IDENTIFYING UNDERGROUND UTILITIES, MINIMUM SIX INCHES WIDE AND FOUR MILLS THICK, CONTINUOUSLY INSCRIBED WITH A DESCRIPTION OF THE UTILITY. ALL NON METALLIC UTILITIES SHALL ALSO WITH A METALLIC CORE ENCASED IN A PROTECTIVE JACKET FOR CORROSION PROTECTION, DETECTABLE BY A METAL DETECTOR WHEN TAPE IS BURIED THIRTY INCHES DEEP AND COLOR CODED TO THE TO AMERICAN PUBLIC WORKS ASSOCIATION STANDARDS.
60. ALL UTILITY LATERALS SHALL BE INSTALLED UNDERGROUND.
61. EXCAVATE TO PROPER ALIGNMENT, DEPTH, AND GRADE. EXCAVATE TO SUFFICIENT WIDTH TO ALLOW ADEQUATE SPACE FOR PROPER INSTALLATION AND INSPECTION OF UTILITY PIPING.
62. IF TRENCHES ARE EXCAVATED DEEPER THAN REQUIRED, BACKFILL UNTIL TRENCH BOTTOM IS PROPER DEPTH WITH PROPERLY COMPACTED NATIVE MATERIAL.
63. WHERE ROCK EXCAVATIONS ARE REQUIRED, EXCAVATE ROCK WITH MINIMUM OVER-DEPTH OF 4 INCHES BELOW REQUIRED TRENCH DEPTHS AND BACKFILL WITH THOROUGHLY COMPACTED MATERIAL.
64. IN CONFINED AREAS SUCH AS UTILITY TRENCHES, PORTABLE COMPACTION EQUIPMENT AND THIN LIFTS OF 3 TO 4 INCHES MAY BE REQUIRED TO ACHIEVE THE SPECIFIED DEGREE OF COMPACTION.

71. A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED WATER LINES.
72. ALL WATER LINES SHALL BE INSTALLED AS SHOWN ON THE PLANS. ALL PIPES, VALVES, AND FITTINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ANNA STANDARDS, ALL LOCAL CODES AND THEIR STANDARDS AND THE WESTERN VIRGINIA REGIONAL STANDARDS AND SPECIFICATIONS, 2014 EDITION.
73. WATER LINES SHALL BE PRESSURE TESTED, DISINFECTED, AND TESTED IN ACCORDANCE WITH ANNA STANDARDS (LATEST EDITION), WITH LOCAL LOCAL CODES AND THEIR STANDARDS AND THE WESTERN VIRGINIA WATER AUTHORITY.
74. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT, AND NECESSARY TAPS AND SHALL PERFORM ALL WORK REQUIRED FOR STERILIZATION, TESTING, AND FLUSHING.
75. ALL TRENCHES SHALL BE THOROUGHLY COMPACTED TO PREVENT SETTLEMENT AND DAMAGE TO FUTURE PAVEMENT AND STRUCTURES AS SPECIFIED BY THE WESTERN VIRGINIA REGIONAL STANDARDS AND SPECIFICATIONS, 2014 EDITION.
76. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND UNCOVERING ALL VALVE VAULTS, METERS, ETC., AFTER PAVING AND ADJUSTING TO FINAL GRADE.
77. ALL WATER LINES SHALL BE MARKED WITH UNDERGROUND BLUE UTILITY WARNING TAPE

84. ALL WATER AND SEWER PIPING SHALL CONFORM TO THE REQUIREMENTS OF THE WESTERN VIRGINIA WATER AUTHORITY AND SHALL BE INSTALLED PER THE SAME REQUIREMENTS, THE WESTERN VIRGINIA REGIONAL STANDARDS AND SPECIFICATIONS 2014 EDITION.

05. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

06. THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, OR OTHERWISE MODIFY CERTAIN MEASURES WHERE FIELD CONDITIONS WARRANT. EROSION CONTROL MEASURES SHOWN ARE NOT NECESSARILY ALL THAT WILL BE REQUIRED.

07. EROSION CONTROL MEASURES SHALL BE INSTALLED IN ADVANCE OF WORK BEING PERFORMED, AS FAR AS PRACTICAL.

08. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.

09. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAY'S WORK.

10. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EVERY ERODIBLE RAINFALL. ANY NECESSARY REPAIRS OR CLEANUP SHALL BE MADE IMMEDIATELY AND AT NO EXTRA COST TO THE OWNER.

91. ALL CULVERTS AND STORM-DRAINER SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS, LATEST EDITION AND THE VDOT ROAD AND BRIDGE STANDARDS, LATEST EDITION/REVISION. PIPES SHALL BE BEDDED PER PB-1, METHOD A.
92. UNLESS INDICATED OTHERWISE WHERE PIPING OR STRUCTURES OF DIFFERING MATERIALS ARE CONNECTED, PROVIDE AN CONCRETE ENCASED BLOCK THAT IS 12" LARGER THAN THE OUTSIDE DIAMETER OF THE PIPES AND EXTENDS 18" ONTO EACH PIPE OR STRUCTURE.
93. WHERE SPECIFIED, ALL INLET SHAPING SHALL CONFORM TO THE VDOT ROAD AND BRIDGE STANDARD 106.08, 15-1.
94. ALL UNDERGROUND PIPING SHALL BE MARKED WITH GREEN UNDERGROUND UTILITY WARNING TAPE.

95. ALL PAVEMENT MARKINGS SHALL BE MADE WITH TRAFFIC RATED PAINT, VDOT TYPE A PAINT.

96. ALL PARKING SPACES AND NO PARKING AREAS REQUIRE 4 INCHES WIDE LINES.

99. THE LANDSCAPING SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ACCEPTANCE BY OWNER

100. THE SWM BMP'S MUST BE COMPLETED EARLY IN THE PROJECT CONSTRUCTION. THE BMP'S AND THEIR DRAINAGE AREA SHALL BE STABILIZED PRIOR TO OBTAINING A OCCUPANCY PERMIT.

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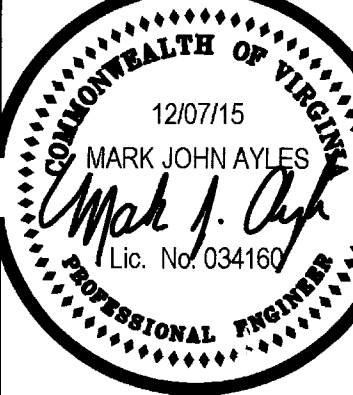
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# GENERAL SITE CONSTRUCTION NOTES

SCHOOL PLAN NO  
124-43-00-101



COMMISSION No.  
12090.015

**SHEET**  
**SP-2**

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