1. QUALITY CONTROL

STREETS TO BE GRADED, PAVED AND ALL STRUCTURAL COMPONENTS ERECTED IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS AND ROAD DESIGN STANDARDS AND ROANOKE COUNTY DESIGN STANDARDS AND SPECIFICATIONS. ALL MATERIALS USED SHALL BE TESTED IN ACCORDANCE WITH STANDARD POLICIES. THE DEVELOPER MUST CONTACT THE OFFICE OF THE RESIDENT ENGINEER, PRIOR TO BEGINNING ANY CONSTRUCTION AT WHICH TIME AN INSPECTION AND TESTING PROCEDURE POLICY WILL BE DRAWN. THE DEVELOPER WILL PRODUCE TEST REPORTS FROM APPROVED INDEPENDENT LABORATORIES AT THE DEVELOPER'S EXPENSE.

2. UTILITIES

ALL NECESSARY UTILITY LATERALS ALONG WITH PROVISIONS FOR CONDUITS (I.E. WATER, SEWER, STORM, GAS AND TELEPHONE) WILL BE CONSTRUCTED PRIOR TO PLACEMENT OF BASE MATERIAL.

GAS OR PETROLEUM TRANSMISSION LINES WILL NOT BE PERMITTED WITHIN THE PAVEMENT OR SHOULDER ELEMENT (BACK OF CURB TO BACK OF CURB) OF THIS DEVELOPMENT. SERVICE LATERALS CROSSING AND PIPE LINES LOCATED OUTSIDE THE PAVEMENT BUT INSIDE THE RIGHT OF WAY WILL BE CONSTRUCTED IN CONFORMITY WITH ASA B 31.8 SPECIFICATIONS AND SAFETY REGULATIONS. DISTRIBUTION LINES WITH PRESSURES LESS THAN 120 LBS. ARE UNAFFECTED BY THE ABOVE.

PERMITS WILL BE REQUIRED FOR ALL UTILITIES WITHIN STREET RIGHT OF WAY PRIOR TO ACCEPTANCE INTO THE SECONDARY HIGHWAY SYSTEM.

ANY EASEMENTS GRANTED TO A UTILITY COMPANY FOR PLACEMENT OF POWER, TELEPHONE, ETC. MUST BE RELEASED PRIOR TO ACCEPTANCE.

3. PRIVATE ENTRANCES

MODIFIED CG-9D GUTTER WILL BE PROVIDED AT ALL ENTRANCES TO PRIVATE LOTS WHERE STANDARD CG-6 CURB AND GUTTER IS APPROVED FOR USE.

DRIVEWAYS CONNECTING TO ROADS WITHOUT CURB & GUTTER SHALL CONFORM TO THE PAVEMENT,

PERMITS WILL BE REQUIRED FOR ALL PRIVATE ENTRANCES CONSTRUCTED ON STREET RIGHTS OF WAY AFTER ACCEPTANCE INTO THE SECONDARY HIGHWAY SYSTEM.

4. EROSION CONTROL AND LANDSCAPING

CARE MUST BE TAKEN DURING CONSTRUCTION TO PREVENT EROSION, DUST AND MUD FROM DAMAGING ADJACENT PROPERTY, CLOGGING DITCHES, TRACKING PUBLIC STREETS AND OTHERWISE CREATING A PUBLIC OR PRIVATE NUISANCE TO SURROUNDING AREAS.

THE ENTIRE CONSTRUCTION AREA INCLUDING DITCHES, CHANNELS, BACK OF CURBS AND OR PAVEMENT ARE TO BE BACKFILLED AND SEEDED AT THE EARLIEST POSSIBLE TIME AFTER FINAL GRADING.

DRAINAGE EASEMENTS MUST BE DEFINED BY EXCAVATED DITCHES OR CHANNELS FOR THEIR FULL LENGTH TO WELL DEFINED EXISTING NATURAL WATERCOURSES.

THE ROAD WILL BE REVIEWED DURING CONSTRUCTION FOR THE NEED OF PAVED DITCHES. IF EROSION IS ENCOUNTERED IN ANY DRAINAGE EASEMENT, IT WILL BE THE RESPONSIBILITY OF THE DEVELOPER TO SOD, RIP RAP, GROUT, PAVE OR TO DO WHATEVER IS NECESSARY TO CORRECT THE PROBLEM.

ALL VEGETATION AND VERBURDEN TO BE REMOVED FROM SHOULDER TO SHOULDER PRIOR TO THE CONDITIONING (CUTTING AND/OR PREPARATION) OF THE SUBGRADE.

5. INTERSECTION PAVEMENT RADIUS

MINIMUM PAVEMENT RADIUS OF 25 FEET IS REQUIRED AT ALL STREET INTERSECTION.

6. CONNECTIONS TO STATE—MAINTAINED ROADS

WHILE THESE PLANS HAVE BEEN APPROVED, SUCH APPROVAL DOES NOT EXEMPT CONNECTIONS WITH EXISTING STATE-MAINTAINED ROADS FROM CRITICAL REVIEW AT THE TIME PERMIT APPLICATIONS ARE MADE. THIS IS NECESSARY IN ORDER THAT THE PREVAILING CONDITIONS BE TAKEN INTO CONSIDERATION REGARDING SAFETY ACCOMPANIMENTS SUCH AS TURNING LANES.

GUARDRAILS

STANDARD GUARDRAIL WITH SAFETY END SECTIONS MAY BE REQUIRED ON FILLS AS DEEMED NECESSARY BY THE RESIDENT ENGINEER. AFTER COMPLETION OF ROUGH GRADING OPERATIONS, THE OFFICE OF THE RESIDENT ENGINEER, SHALL BE NOTIFIED SO THAT A FIELD REVIEW MAY BE MADE OF THE PROPOSED LOCATIONS.

Where guardrails are to be installed the shoulder width shall be increased in accordance WITH VDOT ROAD AND BRIDGE STANDARDS.

8. STORM DRAINAGE

FIELD REVIEW WILL BE MADE DURING CONSTRUCTION TO DETERMINE THE NEED AND LIMITS OF PAVED DITCHES AND/OR DITCH STABILIZATION TREATMENTS. AND TO DETERMINE THE NEED AND LIMITS OF ADDITIONAL DRAINAGE EASEMENTS. ALL DRAINAGE EASEMENTS MUST BE CUT AND MADE TO FUNCTION TO A NATURAL WATERCOURSE. ANY EROSION PROBLEMS ENCOUNTERED IN AN EASEMENT MUST BE CORRECTED BY WHATEVER MEANS NECESSARY PRIOR TO SUBDIVISION ACCEPTANCE.

DITCH SLOPES ARE TO BE FOUR TO ONE (4:1) FOR SHOULDER WIDTHS OF SIX FEET (6') OR GREATER AND THREE TO ONE (3:1) FOR SHOULDER WIDTHS OF FOUR FEET (4') OR FIVE FEET (5'), UNLESS OTHERWISE SPECIFIED IN THE PLANS.

INSTALLATION OF ALL CULVERTS AND STORM SEWER SYSTEMS WITHIN VDOT R/W & EASEMENTS SHALL

9. ENTRANCE PERMIT

CONTRACTOR SHALL OBTAIN ENTRANCE PERMIT TO THE EXISTING VIRGINIA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY FROM RESIDENT ENGINEER PRIOR TO ROAD CONSTRUCTION.

CONFORM TO THE 2001 VDOT "ROAD & BRIDGE STANDARDS".

AN INSPECTOR WILL NOT BE FURNISHED EXCEPT FOR PERIODIC PROGRESS INSPECTION, THE ABOVE MENTIONED FIELD REVIEWS AND CHECKING FOR REQUIRED STONE DEPTHS. THE DEVELOPER WILL BE REQUIRED TO POST A SURETY TO GUARANTEE THE ROAD FREE OF DEFECTS FOR ONE YEAR AFTER ACCEPTANCE BY THE DEPARTMENT OF TRANSPORTATION.

11. STREET MAINTENANCE

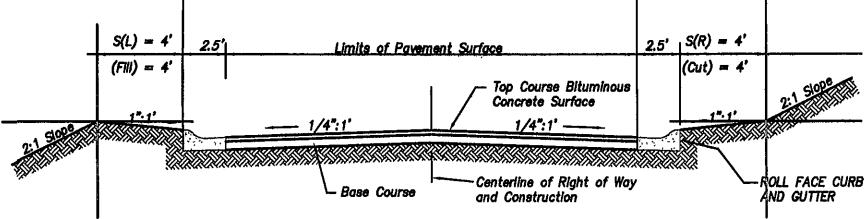
THE STREETS MUST BE PROPERLY MAINTAINED UNTIL ACCEPTANCE. AT SUCH TIME AS ALL REQUIREMENTS HAVE BEEN MET FOR ACCEPTANCE, ANOTHER INSPECTION WILL BE MADE TO DETERMINE THAT THE STREET HAS BEEN PROPERLY MAINTAINED.

12. UNDERGROUND UTILITIES

CONTRACTOR SHALL VERIFTY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK BY CONTACTING MISS UTILITY. CONTACT SITE ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLANS. IF THERE APPEARS TO BE A CONFLICT, AND UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THIS PLAN, CALL "MISS UTILITY" OF CENTRAL VIRGINIA AT 1-800-552-7001.

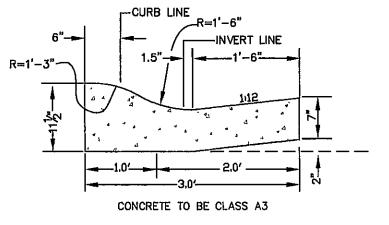
13. REVISIONS OF SPECIFICATIONS AND STANDARDS

APPROVAL OF THESE PLANS WILL BE BASED ON SPECIFICATIONS AND STANDARDS IN EFFECT AT THE TIME OF APPROVAL AND WILL BE SUBJECT, UNTIL COMPLETION OF THE ROADWAY AND ACCEPTANCE BY THE DEPARTMENT, TO FUTURE REVISIONS OF THE SPECIFICATIONS AND STANDARDS.



TYPICAL STREET SECTION

NO SCALE



ROLL FACE CURB DETAIL

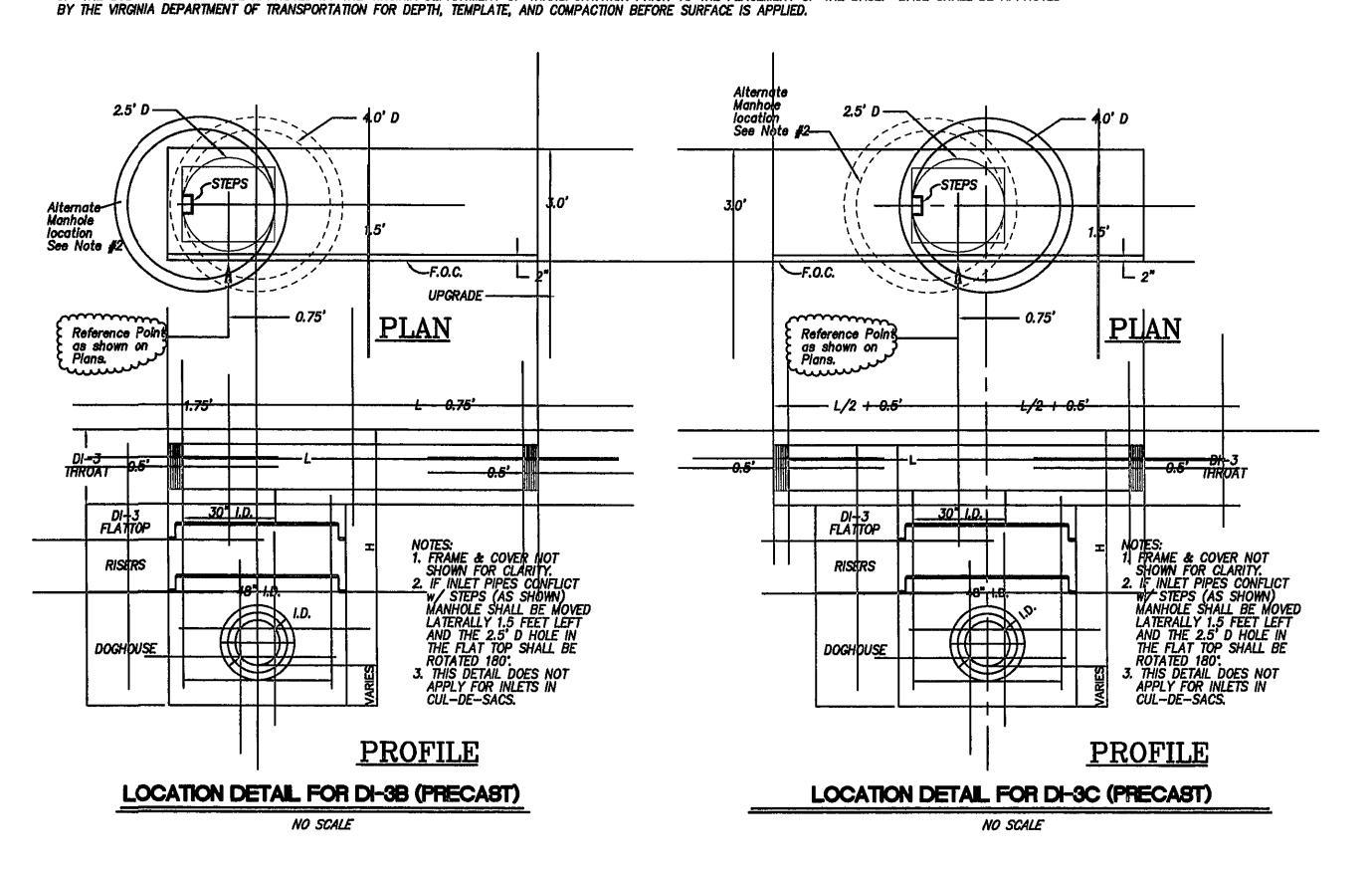
NO SCALE

PAVEMENT SPECIFICATIONS:						
STREET NAME	FROM STATION TO STATION	PAVEMENT WIDTH	RIGHT OF WAY WIDTH	VEHICLE TRIPS PER DAY	NUMBER OF REQ'D CBR TESTS	PAVEMENT SPECIFICATION
COTTAGE ROSE LANE	30+00 TO 33+80.92	24'	40'	160	2 (INCL. ONE AT CONNECTION POINT OF GOLDEN IVY DR.)	220 PSY ASPH. CONCRETE (2"), TYPE SM-9.5A 330 PSY ASPH. CONCRETE (3"), TYPE BM-25.0 8" AGGREGATE BASE-21B

NOTES:

1. THE SIZE 21B AGGREGATE SHALL BE PRIMED WITH APPROXIMATELY 0.35 GAL/SY OF RC-250 ASPHALT AND COVERED WITH 16 TO 18 LBS/SY OF SIZE 8-P

2. THE PRELIMINARY PAVEMENT DESIGNS SHOWN ARE BASED ON A PREDICTED SUB-GRADE CBR VALUE OF 7.0 AND A RESILIENCY FACTOR (RF) OF 2.0 AS SHOWN IN APPENDIX I OF THE 2000 VIRGINIA DEPARTMENT OF TRANSPORTATION PAVEMENT DESIGN GUIDE FOR SUBDIVISION AND SECONDARY ROADS. THE SUB-GRADE SOIL IS TO BE TESTED BY AN INDEPENDENT LABORATORY AND THE RESULTS SUBMITTED TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO BASE CONSTRUCTION. SHOULD THE SUB-GRADE CBR VALUE AND/OR THE RF VALUE BE LESS THAN THE PREDICTED VALUES, ADDITIONAL BASE MATERIAL WILL BE REQUIRED IN ACCORDANCE WITH DEPARTMENTAL SPECIFICATIONS. REFER TO THE SAME MANUAL FOR THE NUMBER AND LOCATIONS OF THE REQUIRED SOIL SAMPLES TO BE TESTED. ALL PAVEMENT DESIGNS SHALL BE SUBMITTED TO THE DEPARTMENT FOR REVIEW AND APPROVAL. (CHANGE VALUES FOR EACH SPECIFIC LOCATION). 3. THE SUB-GRADE SHALL BE APPROVED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO THE PLACEMENT OF THE BASE. BASE SHALL BE APPROVED



SITE AND ZONING TABULATIONS

CURRENT ZONING: R1 PROPOSED USE: SINGLE-FAMILY DETACHED HOMES, ZERO LOT LINE OPTION SITE ACREAGE: 4.89 ACRES MINIMUM LOT SIZE: 5.760 SF

MINIMUM ROAD FRONTAGE: 48 MINIMUM SETBACKS:

GENERAL NOTES

FRONT: 24' REAR: 25' (R1 SETBACK, ADJACENT LOTS NOT WITHIN COMMON DEVELOPMENT)

20' (ADJACENT LOTS WITHIN COMMON DEVELOPMENT) SIDE: ZERO (0) FEET ON ONE SIDE AND 10' ON SIDE OPPOSITE THE ZERO SIDE LINE; A PERPETUAL FIVE-FOOT WALL-MAINTENANCE EASEMENT SHALL BE PROVIDED ON THE LO ADJACENT TO THE ZERO LOT LINE PROPERTY LINE. THIS EASEMENT SHALL BE KEPT CLEAN OF STRUCTURES OR ANY OTHER IMPROVEMENT WHICH WOULD INFRINGE ON THE USE OF THE EASEMENT, WITH THE EXCEPTION OF FREESTANDING WALLS AND FENCES.

MAXIMUM STRUCTURE HEIGHT: 45' PROPOSED BUILDING HEIGHT: VARIES, MAXIMUM 32' MAXIMUM BUILDING COVERAGE: 40% PROPOSED BUILDING COVERAGE: VARIES, MAXIMUM SHOWN 31.4% MAXIMUM LOT COVERAGE: 50%

PROPOSED LOT COVERAGE: VARIES, MAXIMUM SHOWN 46.2%

1. THE PROPERTY SHOWN ON THIS PLAN IS LOCATED ON ROANOKE COUNTY TAX ASSESSMENT MAP #40.13-01-01.00 OWNER/DEVELOPER: STRAUSS DEVELOPMENT CORPORATION

3. THE PROPERTY ON THIS PLAN SHALL BE ACCESSED BY PUBLIC ROADS.

C/O STEVE STRAUSS

P.O. BOX 20287 ROANOKE, VIRGINIA 24018 2. THE BOUNDARY SURVEY WAS PERFORMED BY LUMSDEN ASSOCIATES, P.C., AND TOPOGRAPHIC MAPPING IS BASED ON A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C.

4. ANY NEW ALIGNMENTS, CHANGES IN GRADES, ALTERNATE PIPE SIZES, MANHOLES. OR ESC MEASURES WILL REQUIRE A NEW SET OF PLANS STAMPED BY THE CONSULTING ENGINEER. COUNTY ENGINEERS WILL REVIEW PLANS WITHIN ONE DAY OF SUBMITTAL PLAN SHEETS CAN BE 8.5 x 11 IF THE INFORMATION IS LEGIBLE AND WITHIN THE LIMITS OF THE APPROVED PLANS. 5. Any deviations between the proposed contours and plans and the asbuilt

CONDITIONS MAY REQUIRE ADDITIONAL DRAINAGE STRUCTURES AND EASEMENTS. 6, NO FIELD REVISIONS TO THE DEVELOPMENT PLANS ARE ALLOWED WITHOUT THE APPROVAL OF THE DESIGN ENGINEER, ROANOKE COUNTY, AND VDOT.

7. ALL EXTERIOR LIGHTING FIXTURES SHALL BE DESIGNED, LOCATED AND ARRANGED SO A NOT TO DIRECT GLARE ON ADJOINING STREETS OR RESIDENTIAL PROPERTIES. THE INTENSITY AT ADJOINING STREETS OR RESIDENTIAL PROPERTIES SHALL NOT EXCEED 0.5 FOOT CANDLES. 8. NO FREESTANDING LIGHT POLE, INCLUDING FIXTURE, SHALL BE MORE THAN EIGHTEEN (18) FEET ABOVE GRADE. ALL EXTERIOR LIGHTS, INCLUDING SECURITY LIGHTING, SHALL BE DOWN-LIT OR SHIELDED SO AS NOT TO DIRECT GLARE ONTO ADJOINING STREETS OR RESIDENTIAL PROPERTIES. THE INTESITY AT ADJOINING STREETS OR RESIDENTIAL PROPERTIES SHALL NOT

9. ALL REFUSE SERVICE AREAS AND ALL GROUND LEVEL EQUIPMENT SHALL BE SCREENED AND/OR LANDSCAPED PER SECTION 30-92-6(E), ROANOKE COUNTY ZONING ORDINANCE.

EXCEED 0.5 FOOT CANDLES, PER SECTION 30-94 OF THE ROANOKE COUNTY ZONING

10. ALL GROUND LEVEL EQUIPMENT SHALL BE BE SCREENED OR LANDSCAPED PER SECTION 30-92-6(E) OF THE ROANOKE COUNTY ZONING ORDINANCE. 11. A SIGN PERMIT MUST BE OBTAINED PRIOR TO INSTALLATION OF SIGNAGE ON SITE PER COUNTY

CONSTRUCTON NOTES

SIGN REGULATION SECTION 30-93.

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT COUNTY OF ROANOKE STANDARDS

AND SPECIFICATIONS. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY issuing permits.

3. NO SUBSOIL INVESTIGATIONS HAVE BEEN FURNISHED TO THE DESIGNING ENGINEER.

4. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.

5. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION. 6. ALL STORM DRAINAGE ITEMS INCLUDING CONCRETE CURB AND OTHER STORM DRAIN ITEMS

SHALL CONFORM TO THE 2001 VDOT ROAD AND BRIDGE STANDARDS. 7. THE CONTRACTOR AND OR OWNER SHALL PROVIDE A STORAGE CONTAINER FOR TEMPORARY STORAGE AND DISPOSAL OF LAND CLEARANCE DEBRIS AND BUILDING MATERIALS. ON-SITE BURIAL OF MATERIAL SHALL NOT BE PERMITTED.

8. All retaining walls over two (2) feet in height require a permit from the ROANOKE COUNTY BUILDING DEPARTMENT. 9. Sanitary sewer tap to existing manhole to be performed by the Western Virginia

WATER AUTHORITY UTILITY DEPARTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION AND SHORING PER OSHA REGULATIONS. CONTRACTOR SHALL PROVIDE CENTERMARK FOR TAPPING.

GRADING NOTES

1. AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION, STRUCTURES, AND OTHER

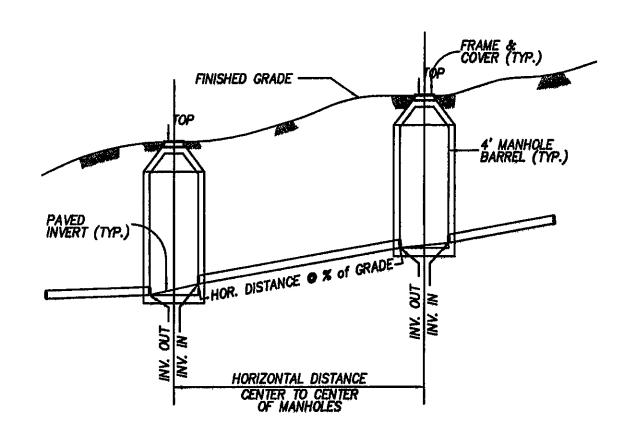
PHYSICAL FEATURES IN PREPARATION OF GRADING. 2. Topsoil shall be removed from the cleared area and stockpiled for future use. 3. FILL MATERIAL SHALL BE FREE FROM ORGANIC MATTER AND ROCKS LARGER THAN 6 INCHES IN DIAMETER.

4. FILL MATERIAL SHALL BE PLACED AND COMPACTED IN EIGHT (8) INCH LOOSE LIFTS AND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698, STANDARD PROCTOR. MAINTAIN MOISTURE CONTENT OF FILL MATERIAL WITHIN THREE (3) PERCENT OF OPTIMUM TO ATTAIN REQUIRED COMPACTION DENSITY.

5. NO SUBSURFACE SOILS INFORMATION HAS BEEN FURNISHED TO THE DESIGNING ENGINEER (LUMSDEN ASSOCIATES, P.C.). A QUALIFIED GEOTECHNICAL ENGINEER, LICENSED IN THE STATE OF VIRGINIA, SHOULD BE CONSULTED CONCERNING SOIL STABILITY, SLOPE STABILIZATION, SOIL COMPACTION, TESTING, AND OTHER SOIL CHARACTERISTICS. LUMSDEN ASSOCIATES ASSUMES NO RESPONSIBILITY OR LIABILITY RELATING TO FAILURES RESULTING

6. PROVIDE A MINIMUM 5% SLOPE AWAY FROM BUILDINGS IN ALL DIRECTIONS WITH THE

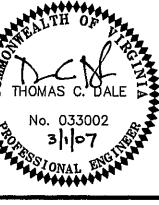
EXCEPTION OF POINTS OF ACCESS INCLUDING DRIVEWAYS AND WALKS.



SANITARY SEWER HORIZONTAL AND SLOPE DISTANCE DETAIL

NO SCALE

LUMSDEN ASSOCIATES, P.C. ENGINEERS-SURVEYORS-PLANNERS ROANOKE, VIRGINIA



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MARCH 1, 2007

NO SCALE 04-336

5 OF 11

OMMISSION NO: SHEET