WILDWOOD FARMS

SECTION 5

RIVES DISTRICT

PRINCE GEORGE COUNTY, VIRGINIA

MARCH 22, 1991

ZONING: R-1

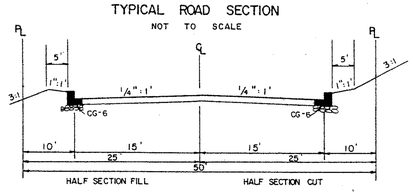
GENERAL NOTES

1. THE MOST CURRENT EDITION OF THE ROAD AND BRIDGE SPECIFICATIONS AND THE MOST CURRENT EDITION OF THE ROAD DESIGNS AND STANDARDS OF THE VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION SHALL GOVERN THE FOLLOWING:
   A. POURING, CURING, FORMS, WORKMANSHIP, ETC. OF ALL CONCRETE USED ON THIS PROJECT.
   B. STABILIZED BASE COARSE MATERIAL AND SURFACE TREATMENT OR BITUMINOUS SURFACE.
   C. MATERIALS AND INSTALLING OF ALL PIPE CULVERTS.
2. ALL CURB AND GUTTER FILLETS AT INTERSECTIONS ARE TO HAVE 30' RADII UNLESS OTHERWISE NOTED.

   ALL EARTH DITCH FILLETS AT INTERSECTIONS ARE TO HAVE 35' RADII UNLESS OTHERWISE NOTED.
3. BACKFILL FOR ALL UTILITES WITHIN PROPOSED SUBDIVISION STREETS SHALL BE PLACED GENERALLY IN ACCORDANCE WITH CHESTERFIELD COUNTY SPECIFICATIONS AND THE FOLLOWING CRITERIA:
   A. NO TRENCH SHALL BE BACKFILLED UNTIL AUTHORIZED BY THE COUNTY. MATERIALS USED FOR BACKFILL FROM THE BOTTOM OF THE TRENCH TO TWELVE (12") INCHES ABOVE THE PIPE SHALL BE SELECT MATERIAL FREE FROM FROST, LARGE CLODS, STONES AND DEBRIS. IT SHALL BE THOROUGHLY AND CAREFULLY COMPACTED TO INSURE A SOUND BACKFILL AROUND AND OVER THE PIPE.
   B. BACKFILL SHALL BE COMPACTED BY MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH TO OBTAIN 95% DENSITY AT OPTIMUM MOISTURE +20%. THIS IS TO INSURE A SUITABLE SUBBASE, ACCEPTABLE TO THE ROAD ENGINEER FOR THE PROPOSED ROADS.
   C. IF IN THE OPINION OF THE COUNTY OR ROAD ENGINEER, THE MATERIAL TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACKFILLING, IT SHALL BE REMOVED AND ACCEPTABLE MATERIAL USED FOR BACKFILLING AND TRENCH.
4. TOP ELEVATIONS OF SEWER MANHOLES TO BE SET TO COINCIDE WITH THE PAVEMENT GRADE.
5. ALL UTILITIES TO BE IN PLACE BEFORE LAYING BASE MATERIAL (AGGREGATE, TYPE 21-A).
6. CLEARING AND GRUBBING SHALL BE COMPLETE WITHIN THE ENTIRE RIGHT OF WAY UNLESS OTHERWISE APPROVED BY THE ROAD ENGINEER.
7. THE LOCATION OF ALL DRAINAGE STRUCTURES ON THESE PLANS IS APPROXIMATE. FINAL FIELD LOCATION MAY BE MADE BY THE ENGINEER TO MEET FIELD CONDITIONS.
8. GRADE LINES ON PROFILES DENOTE FINISHED GRADE AT CENTER LINE OF ROAD.
9. ALL VEGETATION AND OVERBURDEN TO BE REMOVED FROM SHOULDER TO SHOULDER PRIOR TO THE CONDITIONING OF THE SUBGRADE.
10. ALL DRAINAGE EASEMENTS TO BE CLEARED AND GRUBBED AND GRADED TO CONTAIN WATER FROM PIPE CULVERTS.
11. LENGTH OF ALL PIPE CULVERTS SHOWN ON THESE PLANS IS APPROXIMATE ONLY.
12. CONCRETE FROM CURB AND GUTTER SHALL BE CLASS A-3 PER CURRENT SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION.
13. THE VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION APPROVAL OF THESE PLANS WILL EXPIRE THREE (3) YEARS FROM THE DATE OF APPROVAL.
14. THE CONTRACTOR WILL SEED ALL SLOPES AS SOON AS POSSIBLE TO ELIMINATE UNNECESSARY EROSION. NO DISTURBED SURFACE WILL BE LEFT UNSEEDED. WHERE REQUIRED, ALL ROADS DITCHES ARE TO BE PAVED IN ACCORDANCE WITH STANDARD PG-2A-1 (MODIFIED TO FIT TYPICAL SECTION) WITH MINIMUM DEPTH TO CONTAIN TEN YEAR STORM, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING.
15. VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION APPROVAL OF SUBDIVISION ROAD PLANS DOES NOT PRECLUDE THE RIGHT TO ADD ADDITIONAL FACILITIES, SUCH AS SEEDING, PAVING, SILT DAMS, SILT BASINS, ETC., AS MAY BE DEEMED NECESSARY BY THE DEPARTMENT PRIOR TO THE ACCEPTANCE OF SUCH ROADS IN ORDER TO LIMIT SILTATION AND POLLUTION OF NEARBY LAKES, PONDS, STREAMS AND ADJACENT PROPERTY.
16. ALL DRAINAGE EASEMENTS ARE TO EXTEND TO A NATURAL WATER COURSE.
17. SLOPE EASEMENTS FOR FILL SLOPES ARE REQUIRED WHERE SLOPES EXCEED PROPOSED RIGHT OF WAY LIMITS.
18. PERMIT TO TIE INTO EXISTING ROAD SHALL BE OBTAINED FROM RESIDENT ENGINEER PRIOR TO ROAD CONSTRUCTION.
19. THE CONTRACTOR WILL SEED ALL SLOPES AND EASMENTS WITH AT LEAST A TEMPORARY SEEDING WITHIN FIFTEEN (15) DAYS AFTER THE COMPLETION OF STREET GRADING OR STORM SEWER PLACEMENT TO ELIMINATE UNNECESSARY EROSION. NO DISTURBED AREA WILL BE ALLOWED PRIOR TO THE ACCEPTANCE OF THE ROAD INTO THE STATE SYSTEM.
20. ALL PRIVATE ENTRANCE CULVERTS ARE TO BE CLASS III CONCRETE PIPE AND 20 FEET IN LENGTH, UNLESS OTHERWISE NOTED. DIAMETER= 15"
21. EXISTING CUL-DE-SACS TO BE REMOVED WHEN PROPOSED ROADS ARE CONSTRUCTED.
22. ALL SUBGRADE MATERIAL SHALL HAVE A MINIMUM CBR VALUE OF TEN (10).
23. PAVEMENT DESIGN SHALL BE SPECIFIED ON PLANS, AS WELL AS ROADWAY CATEGORY.
24. ROAD ENGINEER MUST BE NOTIFIED PRIOR TO ANY CONSTRUCTION OF SUBDIVISION STREETS.
25. CUL-DE-SACS SHALL BE CONSTRUCTED AT THE ENDS OF ALL DEAD END ROADS UNLESS AUTHORIZED BY THE ROAD ENGINEER (ELIMINATE STUBS IF POSSIBLE).
26. THE BASE MATERIAL FOR ALL STREETS MUST BE APPROVED BY THE ROAD ENGINEER PRIOR TO THE PLACEMENT OF THE SURFACE COURSE. IF UNSUITABLE MATERIAL FOR THE SUBGRADE IS ENCOUNTERED THEN THE ROAD ENGINEER MUST BE NOTIFIED PRIOR TO THE PLACEMENT OF THE BASE MATERIAL.
27. BASE MUST BE APPROVED BY VDH & T FOR DEPTH, TEMPLATE AND COMPACTION BEFORE SURFACE IS APPLIED.
28. THE LOCATION OF EXISTING UTILITIES, STORM SEWERS, SANITARY SEWER, GAS LINES, WATER LINES, ELECTRICAL LINES AND TELEPHONE LINES EITHER UNDERGROUND AND/OR OVERHEAD ACROSS OR ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL ON HIS OWN INITIATIVE AND AT NO EXTRA COST, LOCATE ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPES OR OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO THE REMOVAL OR REARRANGEMENT OF SAME.
29. ALL CUT AND FILL SLOPES AND CHANNELSIDE SLOPES WHICH ARE NOT PAVED SHALL BE SEEDED UNTIL A GOOD STAND OF GRASS IS OBTAINED IS ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK AND THE FOLLOWING TABLE:
   A. 100 LB. PER 1000 SQ. FT. GROUND LIMESTONE OR EQUIVALENT. NO SOIL TEST REQUIRED FOR INITIAL ESTABLISHMENT.
   B. 25 LB OF 5-20-10 FERTILIZER OR EQUIVALENT PER 1,000 SQ. FT.
   C. VARIETIES TO BE SEEDED:
      1. SPRING SEEDING - MARCH 1 THRU MAY 1; MIXTURE #5 AT 1 LB. PER 1,000 SQ. FT.
      2. SUMMER SEEDING - MAY 1 THRU AUGUST 1; MIXTURE #4 AT 1-1/2 LBS. PER 1,000 SQ. FT
      3. AUTUMN SEEDING - AUGUST 1 THRU OCTOBER 1; MIXTURE #5 AT 1 LB. PER 1,000 SQ. FT.
      4. MULCH 80 LB. STRAW PER 1,000 SQ. FT. OR ASPHALT MULCH 10 GAL. PER 1,000 SQ. FT.
      5. ALL SEEDING MUST BE MULCHED.
30. AUTHORIZED LOCAL OFFICIALS SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF THE WORK TO BE STARTED SO AN AUTHORIZED REPRESENTATIVE MAY BE ASSIGNED TO MAKE ANY AND ALL NECESSARY INSPECTIONS OF THE WORK PERFORMED.
31. CONTRACTOR SHALL CALL FOR AUTHORITY INSPECTION OF ALL PIPE LINE INSTALLATION PRIOR TO PLACING BACKFILL.
32. WHEN ALL IMPROVEMENTS ARE COMPLETED, ALL DRAINAGE AND SANITARY SEWER LINES ARE FLUSHED AND CLEANED OF FOREIGN MATTER AND ALL CURBS AND GUTTERS AND STREETS ARE CLEANED AND FREE OF DIRT AND DEBRIS, THE SUBDIVIDER SHALL NOTIFY THE APPROPRIATE LOCAL OFFICIAL TO MAKE FINAL INSPECTION, A REPRESENTATIVE OF THE SUBDIVIDER SHALL BE PRESENT AT THE FINAL INSPECTION.
33. THE CONTRACTOR SHALL NOTIFY THE LOCAL INSPECTOR AT LEAST 24 HOURS BEFORE PLACING BASE STONE SO THE SUBGRADE MAY BE INSPECTED AND 24 HOURS BEFORE PLACING SURFACE COURSE SO THE LOCAL INSPECTOR WILL BE ON SITE.
34. WHERE SPRINGS ARE ENCOUNTERED WITHIN THE RIGHT OF WAY, STANDARD SPRING BOXES SHALL BE PROVIDED AND PIPED TO THE NEAREST DRAINAGE OUTLET.
35. WHERE DITCHES ARE DEEPENED TO ACCOMMODATE CULVERTS, THE SLOPE FROM THE SHOULDER TO THE DITCH SHALL BE MAINTAINED 2.7 :1, THEREBY MOVING THE DITCH PROFILE FURTHER FROM CENTERLINE.
36. CONTRACTOR SHALL NOTIFY "MISS UTILITY" BEFORE BEGINNING ANY EXCAVATION (1-800-552-7001).
37. ALL CONCENTRATED DRAINAGE BEING CONVEYED FROM ROADSIDE DITCHES IN CUT SECTIONS INTO FILL SECTIONS SHOULD BE CONFINED ALONG SUCH AREAS BY TOE DITCHES WHERE ADJACENT PROPERTY SLOPES AWAY FROM ROADWAY, TO PREVENT CONCENTRATED DRAINAGE FROM BEING TURNED ONTO ADJACENT LOTS.

TYPICAL ROAD SECTION

NOT TO SCALE



HUGHES FARM LANE
1. AGGREGATE BASE COURSE: 8" TYPE I WITH #21B STONE
2. AGGREGATE BASE TREATED WITH 2" BITUMINOUS CONCRETE (S-5)
3. CURB & GUTTER - VIRGINIA DEPARTMENT OF HIGHWAYS STANDARD CG-6

SHALLOWOOD DRIVE
1. AGGREGATE BASE COURSE: 6" TYPE I WITH # 21B STONE
2. AGGREGATE BASE TREATED WITH 1 1/2" BITUMINOUS CONCRETE (S-5)
3. CURB & GUTTER - VIRGINIA DEPARTMENT OF HIGHWAYS STANDARD CG-6

NOTE: AN ASPHALT PRIME COAT OF RC-250 IS REQUIRED OVER THE STONE BASE AT A RATE OF 0.25 - 0.30 GALS. / SQ.YD. FOR ALL PROPOSED ROADS.

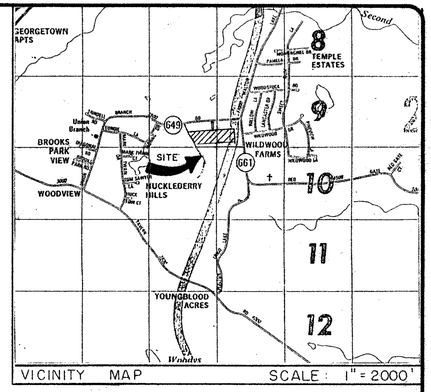
LIST OF MATERIALS

SANITARY SEWER	
STANDARD MANHOLE FRAME & COVER	7 EACH
MANHOLE (VT. FT.)	69.08 VT. FT.
8" PVC PIPE	1,359.02 L.F.
6" PVC SERVICES (VIA TEE)	13 EACH
6" PVC SERVICES (VIA M/H)	5 EACH
WATER	
8" PVC PIPE	522 L.F.
6" PVC PIPE	880 L.F.
8" x 8" TAPPING SLEEVE & VALVE	1 EACH
8" x 6" CROSS	1 EACH
8" x 6" TEE	1 EACH
8" GATE VALVE	1 EACH
6" GATE VALVE	3 EACH
8" BLIND CAP	1 EACH
2" BLOW OFF	1 EACH
FIRE HYDRANT ASSEMBLY	3 EACH
SERVICES	18 EACH

NOTE: ALL QUANTITIES LISTED ABOVE ARE APPROXIMATE ONLY, CONTRACTOR IS RESPONSIBLE FOR DOING HIS OWN TAKE OFFS FROM THESE PLANS.

UTILITY NOTES

1. SEWER AND WATER LINES ARE TO BE CONSTRUCTED ACCORDING TO DESIGN STANDARDS AND SPECIFICATIONS FOR UTILITY CONSTRUCTION IN PRINCE GEORGE COUNTY.
2. WATER LINE TO BE C-900 PVC WITH CAST IRON FITTINGS. JOINTS TO BE PER MANUFACTURES SPECIFICATIONS.
3. ALL WATER LINES TO EXTEND A MINIMUM OF ONE SECTION PAST VALVE BEFORE CAPPING.
4. FIRE HYDRANTS ARE TO BE THREADED ACCORDING TO PRINCE GEORGE COUNTY FIRE DEPARTMENT REQUIREMENTS.
5. MINIMUM CLEAR COVER OVER TOP OF PIPE SHALL BE 3'-6".
6. BEFORE CONSTRUCTION OF THIS WATER LINE CAN BEGIN, THE ENGINEER MUST CERTIFY IN WRITING THAT THE ROADS ARE WITHIN 6" OF FINAL SUB-GRADE.
7. SANITARY SEWER LINES TO BE SDR-35 PVC OR CLASS 52 DUCTILE IRON UNLESS OTHERWISE SPECIFIED.
8. ONLY ONE HEIGHT ADJUSTMENT RING WILL BE ALLOWED FOR MANHOLES LOCATED IN THE PAVEMENT AREA. NO HEIGHT ADJUSTMENT RINGS WILL BE ALLOWED FOR THOSE LOCATED OUTSIDE OF PAVED AREAS.
9. ALL SANITARY SEWER MANHOLES ARE TO HAVE THE CONE SECTION EXTEND ONE FOOT ABOVE THE GROUND LEVEL.
10. A FULL 2" x 4" BOARD EXTENDING DOWN TO THE LATERAL PIPE AND MINIMUM 2 FEET ABOVE GROUND LEVEL SHALL BE USED TO MARK LATERAL LOCATION. AN "S" SHALL BE STAMPED IN THE CURB BEFORE THE CONCRETE HAS SET-UP SO A PERMANENT RECORD OF THE SANITARY SEWER LATERAL IS OBTAINED.



LEGEND

ROAD AND DRAINAGE

- PROPOSED CULVERT OR STORM SEWER PIPE
- EXISTING CULVERT OR STORM SEWER PIPE
- PROPOSED DRIVEWAY CULVERT
- DROP INLET
- MANHOLE
- PAVED DITCH
- JUTE MESH OR SODDED DITCH
- EARTH DITCH GRASS LINED
- BENCHMARK
- EROSION CONTROL DEVICE WITH SPEC. NUMBER
- DRAINAGE STRUCTURE NUMBER
- STOP SIGN
- STREET LIGHT

UTILITIES

- EXISTING WATERLINE
- PROPOSED WATERLINE
- GATE VALVE
- FIRE HYDRANT ASSEMBLY
- TEE OR TAPPING SLEEVE
- CROSS
- BLIND CAP
- REDUCER
- HOUSE CONNECTION
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED MANHOLE
- EXISTING MANHOLE
- HOUSE CONNECTION
- BORE CROSSING

RELEASED FOR CONSTRUCTION
Jan 11 1993
Water & Wastewater lines
Erosion Control only
JEM

OWNER / DEVELOPER

M & G ASSOCIATES, INC.
CHARLES L. LUNDIE, INC.
3833 S. CRATER ROAD
PETERSBURG, VIRGINIA 23805
PHONE: (804) 732-5777

ALL WORK SUBJECT TO INSPECTION BY COUNTY ENGINEER

FINAL

CHARLES C. TOWNES & ASSOCIATES, P.C.
Engineers, Planners, Land Surveyors
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Chesterfield, Virginia 23832
804-748-9011

COMMONWEALTH OF VIRGINIA
JEFFREY T. COLLINS
LICENSE NO. 013001
PROFESSIONAL ENGINEER

COVER SHEET

REVISIONS

DATE	ITEM
7-8-91	
7-22-92	
10-2-92	VDOT PG. ENG

DATE
SCALE
DRAWN BY
CHECKED BY
F.B. #
SHEET # 1