LEGEND

ROADS

- Culvert
- Storm Sewer & Drop Inlet
- 9" Paved Ditch
- Depth of Paved Ditch
- Jute Mesh or Sodded Ditch
- 12" Depth of Jute Mesh Ditch
- Earth Ditch
- 12" Driveway Culvert & Size
- Silt Basin
- Bench Mark
- Clearing Limits
- SS VDH&T Standard Stop Sign

WATER

- Existing Water Line
- Proposed Water Line
- Valve
- Reducer
- Plug
- Cross
- Tee
- Fire Hydrant (Complete)
- Service Connection

SEWER

- Existing Sanitary Sewer
- Proposed Sanitary Sewer
- Sewer Connections
- D.I. Pipe
- (3) 240.0 M.H. No. & Top Elevation

EROSION CONTROL

- Straw Bale Dam
- Staked Straw Bales

SEWER AND WATER NOTES

1. All materials for Sewer and Water Systems shown shall be supplied and installed in accordance with the latest applicable specifications of Prince George County.
2. All work shall be subject to inspection by Utility Department officials. The Contractor shall be responsible for notification of appropriate County officials 48 hours prior to start of work.
3. Minimum clear cover for all water pipe shall be 3.5 feet.
4. The Utility contractor is responsible for obtaining any highway permits and sending a copy to the County prior to start of construction.
5. Any lot with less than 50 feet of frontage shall have front corners or end of 6' connection staked prior to construction of a 6" sewer service.
6. Sewer pipe shall be either concrete, vitrified clay, PVC or asbestos cement, to be bid at Contractor's option. All sewer joints shall be Class "A" bedding shall be Class "B" minimum, if PVC pipe, as shown in detail on sheet 5 of 7.
7. Sewer grades are based on USC&GS Datum.
8. Contractor shall install 6" sewer Service Connections to all lots (R/W line or edge of easement) as shown.
9. All water services are to be copper, type K, drawn tubing.
10. The Contractor will install all water service connections and meter boxes.
11. Fire Hydrant pumper connections shall face in the direction of arrow.
12. The exact manhole top shall be on the same grade as the finished road grade and are noted on sewer cut sheets.
13. Backfill for all utilities within proposed subdivision streets shall be placed generally in accordance with Prince George County specifications, and the following criteria: (1) No trench shall be backfilled until authorized by the County. Materials used for backfill from the bottom of the trench to 12" (twelve inches) above the pipe shall be select material, free from frost, large clods, stones and debris, and shall be thoroughly and carefully compacted. (2) Backfill shall be compacted by mechanical tamping throughout the depth of the trench to insure a suitable subbase, acceptable to the road engineer, if the material taken from the ditch is not suitable for backfilling, it shall be removed and acceptable material used for backfilling the trench.
14. The engineer will certify that the roads and ditches are within 0" of subgrade before water line construction can begin.
15. For Sewer and Water installation within existing VDH&T R/W, Utility Contractors must notify VDH&T when installation begins so that density can be tested (95% @ optimum moisture ±20%).
16. Contractor shall verify location and elevation of all underground utilities shown on the plans in areas of construction prior to starting work. Contact Engineer immediately, if: location or elevation is different from that shown on plan, or if there appears to be a conflict, and upon discovery of any utility not shown on the plan. To miss the utility call "Miss Utility" of Central Virginia: 1-800-552-7001 (Toll Free).
17. The installation of back flow device is required in all houses where the finished floor elevation is lower than upgrade manhole. This device will be inspected by the County Building Inspection Dept.
18. All future residences below the contour will require individual pressure regulators.
19. Contractor to maintain 3.5' minimum cover over Fire Hydrant lateral at ditch line crossing.
20. Individual Water Services to be 3/4"

GENERAL NOTES

1. Owner and Developer: Branchester Associates
   c/o James Jones
   P.O. Box 1402
   Hopewell, Va. 23860
   Phone: (804) 458-1512
2. Zoning: R-1 & R-2
3. Number of Lots: 88
4. Tax Map Number: Part of 13(6) 2 & 3
5. Prince George Planning Commission Approval

EROSION CONTROL NOTES

1. All disturbed areas to be seeded within 15 days after rough grading is completed.
2. All streets will be stabilized with base stone within 30 days after final grading.
3. The Prince George Engineering Office will be notified 24 hours in advance of any plans to begin clearing and grading operations.
4. The Prince George County Environmental Engineering Dept. and the Engineering Department and all other interested County Agencies shall make a continuing review and evaluation of the method used and the overall effectiveness of the Erosion and Sediment Control Program. An approved Erosion and Sediment Control Plan may be amended by the Plan Approving Authority if on site inspection indicates that the approved control measures are not effective in controlling erosion and sedimentation or because of changed circumstances, the approved plan cannot be carried out.
5. Straw Bales will be staked in roadside ditches every 100', after the road template is graded, and will be maintained until a good stand of grass is obtained.

APPROXIMATE MATERIAL QUANTITIES

ROADS

CLEARING	05 AC.
GRADING	7720 LF.
EXCAVATION (ALL CLASSES)	31,000 CY.
BASE (10", 8", 6", 5" 21-A)	10,300 TN.
6" SELECT TYPE I OR II	2450 CY.
ASPHALT (1 1/2" S-5)	2650 TN.

DRAINAGE

15" CL. III CONC. PIPE	718 LF.
18" CL. III CONC. PIPE	1082 LF.
24" CL. III CONC. PIPE	746 LF.
30" CL. III CONC. PIPE	660 LF.
36" CL. III CONC. PIPE	500 LF.
42" CL. III CONC. PIPE	68 LF.
48" CL. III CONC. PIPE	380 LF.
DI-3A:	L=25' (3 EA)
DI-3B:	L=6' (3 EA) L=8' (1 EA) L=10' (1 EA) L=12' (1 EA)
DI-3C:	L=16' (1 EA) L=10' (2 EA) L=12' (3 EA)
DI-4B:	L=10' (1 EA) L=12' (1 EA) L=14' (1 EA)
DI-4C:	L=8' (1 EA) L=6' (1 EA)
DI-4AA:	L=25' (1 EA)
DI-4BB:	L=14' (1 EA)
DI-4CC:	L=8' (1 EA)
48" x 48" MH. TEE	7 EA.
EC-1, TYPE "A"	170 SY.
OUTFALL DITCH (EARTH)	1860 LF.
CG-6	15,000 LF.
CG-2	1450 LF.

NOTE: ALUMINUM SMOOTH WALL SPIRAL RIB PIPE (0.012) MAY BE USED IN PLACE OF CLASS III CONCRETE PIPE.

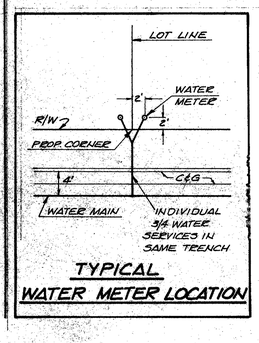
WATER

12" W/L	2565 LF
8" W/L	2100 LF
6" W/L	2591 LF
12" x 45° BEND	1 EA.
12" x 22 1/2° BEND	2 EA.
12" x 11 1/4° BEND	1 EA.
12" x 12" TEE	1 EA.
12" x 6" TEE	2 EA.
8" x 8" TEE	1 EA.
8" x 6" TEE	1 EA.
6" x 6" TEE	1 EA.
12" x 8" CROSS	1 EA.
8" x 6" CROSS	1 EA.
12" GV. & BOX	5 EA.
8" GV & BOX	6 EA.
6" GV & BOX	8 EA.
12" PLUG	1 EA.
8" PLUG	2 EA.
6" PLUG	4 EA.
2" B.O.	6 EA.
F.H. ASSEMBLY	7 EA.
TIE TO EXISTING W/L	1 EA.
SERVICES	88 EA.
12" x 6" REDUCER	1 EA.
8" x 6" REDUCER	1 EA.

SEWER

12" S/L	2508 LF.
10" S/L	1791 LF.
8" S/L	1834 LF.
6" S/L	2485 LF.
MANHOLES (21 EA)	282 VF.
12" x 6" TEE	8 EA.
10" x 6" TEE	21 EA.
8" x 6" TEE	37 EA.
6" CONN. TO M.H.	22 EA.
10" PLUG	2 EA.
8" PLUG	2 EA.
6" PLUG	73 EA.
TIE TO EXISTING S/L	1 EA.

NOTE: 1. HEIGHT ADJUSTMENT RINGS WILL NOT BE ALLOWED BY PRINCE GEORGE COUNTY.
2. CLEAN-OUTS REQUIRED FOR EACH SERVICE.
3. A SMOOTH TRANSITION OR DROP MANHOLES MUST BE PROVIDED FOR EACH LATERAL ENTERING A SANITARY SEWER MANHOLE.



TYPICAL
WATER METER LOCATION

WATER DESCRIPTION

CERTIFICATION

I/we hereby certify that the lot lines, lot numbers, block numbers and street names shown on these plans are identical to those shown on the official recorded plat, and no changes will be made without prior approval from the Utility Department. If any changes are approved, revised water and/or sewer plans will be submitted within 48 hours after approval.

Engineer

REVISIONS

1. COUNTY REVISION - DEC. 8, 1987
2. COUNTY REVISION - DEC. 30, 1987

APPROVALS

COUNTY
- EROSION CONTROL 1/4/88
- SEWER 1/4/88
- WATER 1/4/88
- ROADS & DRAINAGE

VDH
- ROADS & DRAINAGE

RELEASED FOR CONSTRUCTION

19

FINAL

J. K. TIMMONS & ASSOCIATES, P.C.
ENGINEERS · SURVEYORS · PLANNERS
411 EAST BROADWAY
HOPEWELL, VIRGINIA 23860
TELEPHONE: (804) 458-8885
8883 STAPLES MILL ROAD
RICHMOND, VIRGINIA 23228
TELEPHONE: (804) 262-7396
711 NORTH COURTHOUSE ROAD
PETERSBURG, VIRGINIA 23805
TELEPHONE: (804) 794-3500

BRANCHESTER LAKES
SECTION 2

NOTES, QUANTITIES AND LEGEND

1. COUNTY REV. 12-3-87
2. COUNTY REV. 12-30-87
3. COUNTY REV. 1-8-88

REVISIONS

COMMONWEALTH OF VIRGINIA
EDWARD L. GLASS
CERTIFICATE No. 017564
PROFESSIONAL ENGINEER

STAMP

SCALE: G.F.C.
DRAWN BY: OCT. 27, 87
DATE DRAWN: E.L.G.
DESIGNED: E.L.G.
CHECKED: 1 OF 8
SHEET NUMBER: 8708-03
JOB NUMBER