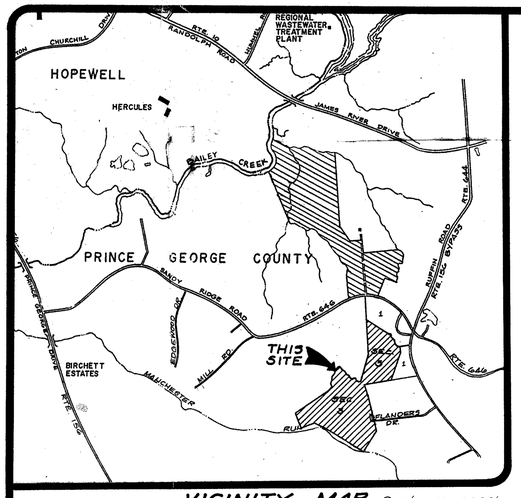

VICINITY MAP Scale 1" = 2000'

LEGEND

ROADS

- Culvert
- Storm Sewer & Drop Inlet
- Paved Ditch
- 9' Depth of Paved Ditch
- Jute Mesh or Sodded Ditch
- 12" Depth of Jute Mesh Ditch
- Earth Ditch
- 15" Driveway Culvert & Size
- Silt Basin
- Bench Mark
- Clearing Limits
- 33 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 10 of 10.
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 6" 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.

GENERAL NOTES

1. Owner and Developer: Bogese, Inc.
   15 Avenue at Elm Street
   Hopewell, Va. 23860
   Phone: 458-8585
2. Zoning: RE
3. Number of Lots: 102
4. Tax Map Number: 13 (11)

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 Enviromental 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	
R/W	12.0 AC.
EASEMENTS	1.3 AC.
GRADING	9738 LF.
10" 21-A	2596 TN.
8" 21-A	1260 TN.
6" 21-A	7109 TN.
1½" S-5	2468 TN.
EXCAVATION	89,000 CY.

DRAINAGE

84" CL. III CONC. PIPE	150 LF.
66" CL. III CONC. PIPE	100 LF.
36" CL. III CONC. PIPE	90 LF.
24" CL. III CONC. PIPE	80 LF.
18" CL. III CONC. PIPE	0 LF.
15" CL. III CONC. PIPE	284 LF.
JUTE MESH (ROADSIDE)	5860 LF.
PAVED DITCH (ROADSIDE)	2615 LF.
PAVED DITCH (PG-4)	420 LF.
EC-1, TYPE 'B'	370 SY.
EC-1, TYPE 'A'	412 SY.
EW-2	2 EA.
EW-1	2 EA.
EW-23	2 EA.
CG-6	885 LF.
CG-2	750 LF.
JUTE MESH (OUTFALLS)	195 LF.
RELOCATE EXISTING ROADSIDE DITCH	280 L.F.
PAVED DITCH (OUTFALL)	1170 L.F.

SEE ALTERNATE INLET & OUTLET DESIGN FOR STR. 1, 7 & 8 ON SHEET 8 OF 10.

APPROXIMATE QUANTITIES

EC-1, TYPE 'A'	90 SY.
84" CL. III CONC. PIPE W/ MITERED END SECTION	185 LF.
66" CL. III CONC. PIPE W/ MITERED END SECTION	128 LF.
36" CL. III CONC. PIPE W/ MITERED END SECTION	106 LF.

NOTE: CORRUGATED STEEL PIPES (FULLY BITUMINOUS COATED AND FULLY PAVED, N = 0.013) MAY BE SUBSTITUTED FOR CL. III CONCRETE PIPE.

WATER

WELLS

EROSION CONTROL

TEMPORARY SEDIMENT TRAP	17 EA.
CONSTRUCTION ENTRANCE	1 EA.
SEEDING	6.0 AC.

SEWER

12" SEWER LINE	4143 LF.
8" SEWER LINE	5377 LF.
6" SEWER LINE	8285 LF.
MANHOLES (36 EA.)	404 VF.
12" x 6" TEE	25 EA.
8" x 6" TEE	44 EA.
12" CONN. TO M.H.	10 EA.
6" CONN. TO M.H.	23 EA.
TIE TO EXISTING S/L	2 EA.
8 & 6" PVC FORCE MAIN	880 LF.
TIE FORCE MAIN TO M.H.	1 EA.
8 & 6" x 90° BEND (F.M.)	1 EA.
8 & 6" PLUG (F.M.)	1 EA.

NOTE: 1. HEIGHT ADJUSTMENT RINGS WILL NOT BE ALLOWED BY PRINCE GEORGE COUNTY.

~~2. CLEAN OUTS REQUIRED FOR EACH SERVICE.~~ Rebar in top 1' of Trench

3. A SMOOTH TRANSITION OR DROP MANHOLES MUST BE PROVIDED FOR EACH LATERAL ENTERING A SANITARY SEWER MANHOLE.

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 MISC. VDOT REVISIONS 11-18-87
△2 MISC. CO & VDOT REVISIONS 1-14-88

APPROVALS

COUNTY
- EROSION CONTROL 11/26/87
- SEWER 2/17/88
- WATER n/a
- ~~ROADS &~~ DRAINAGE 2/17/88 SEM

VDH
- ROADS & DRAINAGE

RELEASED FOR CONSTRUCTION
SEM 2/17 1988

ALL MODIFICATIONS TO BE APPROVED BY COUNTY ENGINEER

J. K. TIMMONS & ASSOCIATES, P.C.
ENGINEERS · SURVEYORS · PLANNERS
711 NORTH COURTHOUSE ROAD, RICHMOND, VIRGINIA 23235, TELEPHONE: (804) 794-2500
8803 STAPLES MILL ROAD, RICHMOND, VIRGINIA 23228, TELEPHONE: (804) 262-7396
411 EAST BROADWAY, HOPEWELL, VIRGINIA 23860, TELEPHONE: (804) 458-8585

FOUNTAIN RIDGE
SECTION 3
BLAND DISTRICT PRINCE GEORGE COUNTY, VA.

NOTES, QUANTITIES AND LEGEND

△1 NOV. 13, 1987
△2 JAN. 14, 1988

REVISIONS

COMMONWEALTH OF VIRGINIA — WALTER M. ALTMAN III — LICENSE NO 11039 — PROFESSIONAL ENGINEER

STAMP

SCALE: G.F.C.
DRAWN BY: SEP 18, 87
DATE DRAWN: E.L.G.
DESIGNED: W.M.A. III
CHECKED: 1 OF 1
SHEET NUM: 8610-
JOB NUM: