STORM SEWER SCHEDULE

E1 — DI-7, TOP= 30.26, H=3.45' RELOCATED 6.64' ALONG E2

E2 — EXISTING 24" RCP S=0.15% EXTENDED 6.53' TO 4
INV. IN= 26.81 INV. OUT=26.68

E3 — EXISTING 24" RCP S=0.36%
INV. IN= 26.58 INV. OUT=26.08

1 — DI-3B, L= 6, TOP= 32.30, H= 4.01'

2 — 47.00LF 15" CL.III CONC. PIPE S=1.82%
INV IN= 28.29 INV. OUT=27.43

3 — 8.00 LF 15" CL.III CONC. PIPE S=11.63%
INV. IN= 27.61 INV. OUT=26.68

4 — MH-1, TOP= 29.60, H=2.92'

5 — DI-3B, TOP= 31.10, H=3.90'

6 — 10.00LF 15" CL.III CONC. PIPE S= 1.00%
INV. IN= 27.20 INV. OUT= 27.10 W/ES-1
(LENGTH INCLUDES ES-1)

7 — DI-3B, L=6', TOP= 32.27 , H=3.92'

7A — 16.00 LF 18" CL.III CONC. PIPE S= 1.00%
INV. IN= 27.70 INV. OUT= 27.54

8 — 34.00 LF 18" CL.III CONC. PIPE S= 1.00%
INV. IN= 27.44 INV. OUT= 27.10

9 — DI-3B, L=12', TOP= 32.27 , H=5.27'

9A — 8.00 LF 15" CL.III CONC. PIPE S= 1.55%
INV. IN= 27.97 INV. OUT= 27.85

10 — 226.46 LF 30" CL.III CONC. PIPE S= 0.67%
INV. IN= 27.00 INV. OUT= 25.48

11 — DI-3B L=4', TOP= 30.67, H=5.61'

11A — 8.00 LF 24" CL.III CONC. PIPE S= 0.50%
INV. IN= 25.52 INV. OUT= 25.48

12 — 100.00 LF 36" CL.III CONC. PIPE S= 0.50%
INV. IN= 25.38 INV. OUT= 24.88
ADDITIONAL 296.42 LF TO BE CONSTRUCTED IN FUTURE
INV. OUT=23.40

13 — FUTURE DI-3B, L=6', TOP= 28.97, H=4.26'

14 — FUTURE 34.02 LF 15" CL.III CONC.PIPE S= 1.00%
INV. IN= 25.05 INV. OUT= 24.71

15 — FUTURE DI-3B, L=6', TOP= 28.97, H=5.67'

16 — FUTURE 60.00 LF 36" CL.III CONC.PIPE S= 0.50%
INV. IN= 23.30 INV. OUT= 23.00 W/ ES-1 BOTH ENDS

17 — 284.00 LF 24" CL.III CONC.PIPE S= 0.50%
INV. IN= 24.01 INV. OUT= 22.60

18 — MH-1, TOP= 35.85, H=13.35'

19 — 300.00 LF 24" CL.III CONC.PIPE S= 0.50%
INV. IN= 22.50 INV. OUT= 21.00

20 — FUTURE 324.00 LF 24" CL.III CONC.PIPE S= 0.50%
INV. IN= 25.63 INV. OUT= 24.01

21 — 8.00LF 24" CL.III CONC.PIPE S= 1.0%
INV. IN= 30.82 INV. OUT= 30.72

MINIMUM STANDARDS

1. Permanent or temporary seeding soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within seven days to denuded areas that may not be at final grade but will remain dormant (undisturbed) for longer than 30 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.

2. During construction of the project, soil stockpiles shall be stabilized or protected with sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as soil intentionally transported from the project site.

3. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that, in the opinion of the local program administrator or his designated agent, is uniform, mature enough to survive and will inhibit erosion.

4. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope land disturbance takes place.

5. Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately after installation.

6. Surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to three acres shall be controlled by a sediment basin. The sediment basin shall be designed and constructed to accommodate the anticipated sediment loading from the land-disturbing activity. The outfall device or system design shall take into account the total drainage area flowing through the disturbed area to be served by the basin.

7. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Slopes that are found to be eroding excessively within one year of permanent stabilization shall be provided with additional slope stabilizing measures until the problem is corrected.

8. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure.

9. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.

10. All storm sewer inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.

11. Before newly constructed stormwater conveyance channels are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel.

12. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these structures if armored by nonerodible cover material.

13. When construction vehicles must cross a live watercourse more than twice in any six-month period, a temporary stream crossing constructed of nonerodible material shall be provided.

14. All applicable federal, state and local regulations pertaining to working in or crossing live watercourses shall be met.

15. The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.

16. Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria:
a. No more than 500 linear feet of trench may be opened at one time.
b. Excavated material shall be placed on the uphill side of trenches.
c. Effluent from dewatering operations shall be filtered or passed through approved sediment trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or off-site property.
d. Restabilization shall be accomplished in accordance with these regulations.
e. Applicable safety regulations shall be complied with.

17. Where construction vehicle access routes intersect paved public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a public road surface, the road shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual subdivision lots as well as to larger land-disturbing activities.

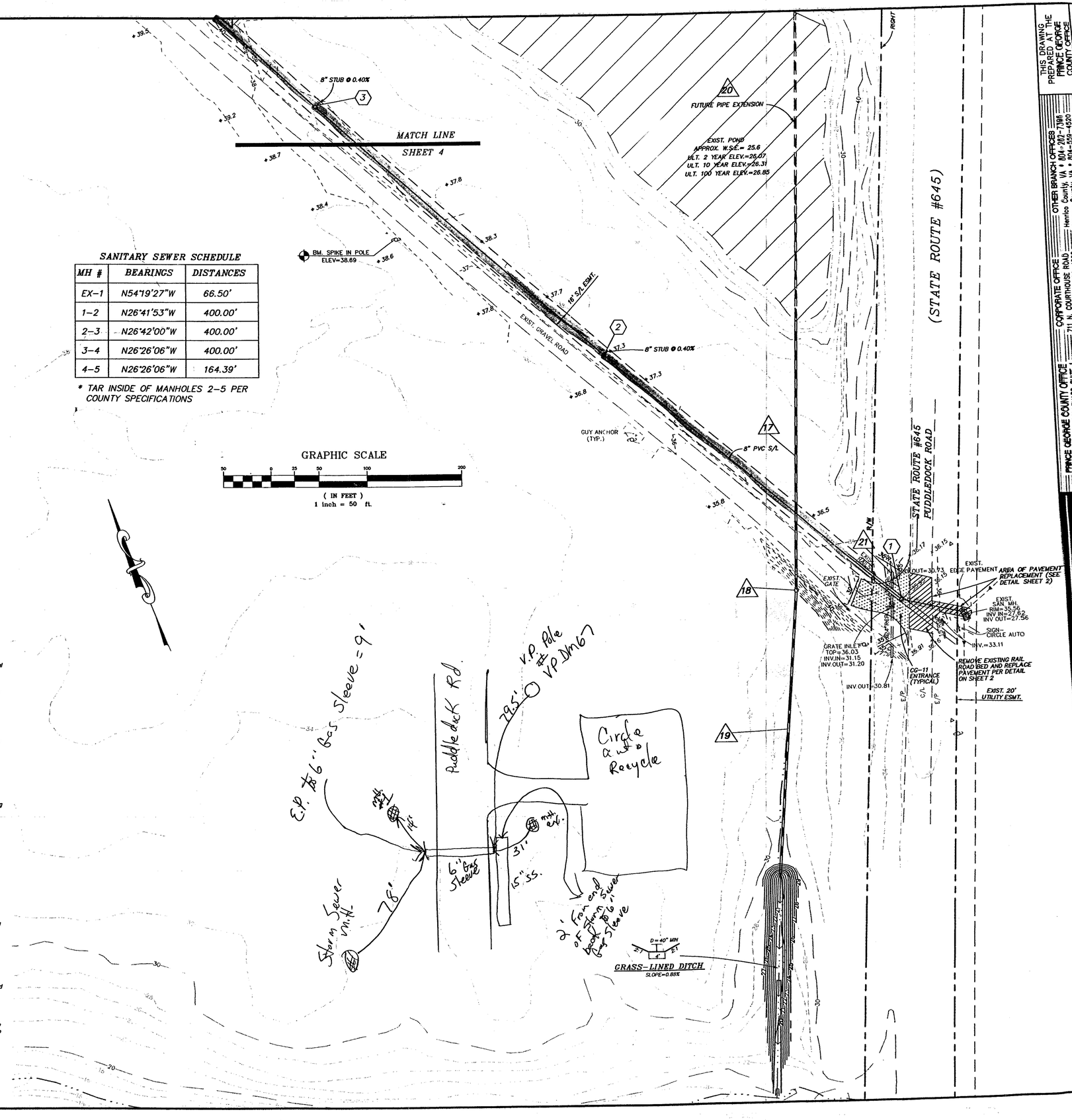
18. All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization or after the temporary measures are no longer needed, unless otherwise authorized by the local program administrator. Trapped sediment and the disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.

19. Properties and waterways downstream from development sites shall be protected from sediment deposition, erosion and damage due to increases in volume, velocity and peak flow rate of stormwater runoff for the stated frequency storm of 24-hour duration.

SANITARY SEWER SCHEDULE

MH #	BEARINGS	DISTANCES
EX-1	N54°19'27"W	66.50'
1-2	N26°41'53"W	400.00'
2-3	N26°42'00"W	400.00'
3-4	N26°26'06"W	400.00'
4-5	N26°26'06"W	164.39'

* TAR INSIDE OF MANHOLES 2-5 PER COUNTY SPECIFICATIONS



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DATE	REVISION DESCRIPTION
2-25-02	COUNTY AND OWNER REVISIONS
3-8-02	COUNTY REVISIONS

TIMMONS
ENGINEERS * SURVEYORS * PLANNERS * LANDSCAPE ARCHITECTS * ENVIRONMENTAL SCIENTISTS * GEOGRAPHIC INFORMATION SYSTEMS CONSULTANTS

WHITEHILL TRACT INFRASTRUCTURE PLAN

PRINCE GEORGE, VIRGINIA

SITE AND UTILITY PLAN

DATE	1-19-01
DRAWN BY	S.C. RUTCHFIELD
DESIGNED BY	S.C. RUTCHFIELD
CHECKED BY	D. JOHNSON
SCALE	1" = 50'
JOB# NO.	65728
SHEET NO.	5

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