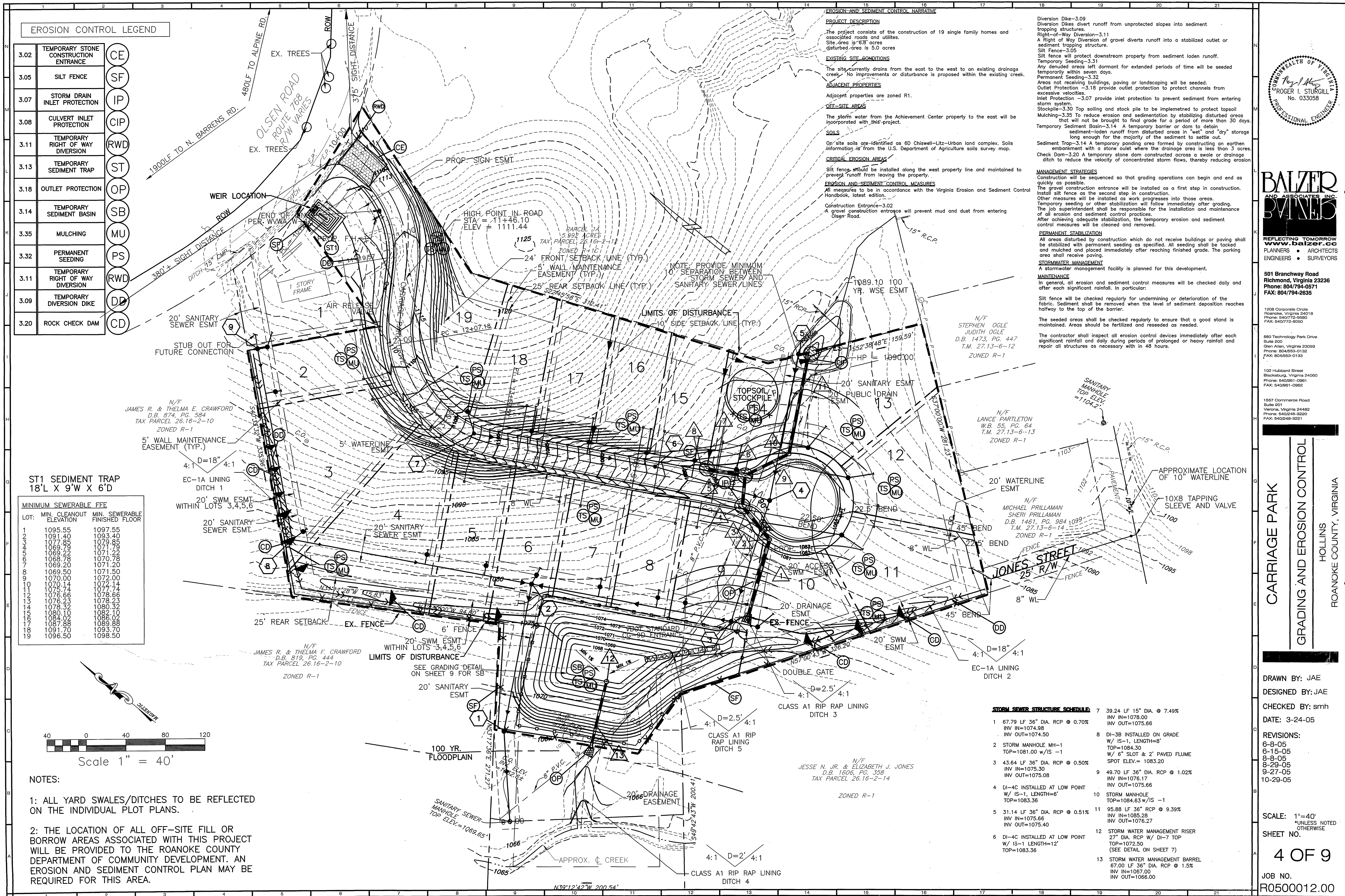


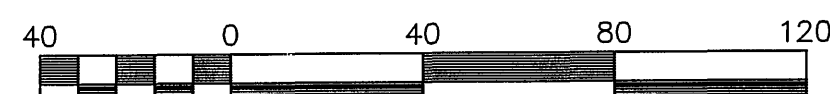


EROSION CONTROL LEGEND

3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE
3.05	SILT FENCE	SF
3.07	STORM DRAIN INLET PROTECTION	IP
3.08	CULVERT INLET PROTECTION	CIP
3.11	TEMPORARY RIGHT OF WAY DIVERSION	RWD
3.13	TEMPORARY SEDIMENT TRAP	ST
3.18	OUTLET PROTECTION	OP
3.14	TEMPORARY SEDIMENT BASIN	SB
3.35	MULCHING	MU
3.32	PERMANENT SEEDING	PS
3.11	TEMPORARY RIGHT OF WAY DIVERSION	RWD
3.09	TEMPORARY DIVERSION DIKE	DD
3.20	ROCK CHECK DAM	CD

ST1 SEDIMENT TRAP
18'L X 9'W X 6'D

LOT:	MIN. CLEANOUT ELEVATION	MIN. SEWERABLE FINISHED FLOOR
1	1095.55	1097.55
2	1091.40	1093.40
3	1077.85	1079.85
4	1069.79	1071.79
5	1069.22	1071.22
6	1069.78	1071.78
7	1069.20	1071.20
8	1069.50	1071.50
9	1070.00	1072.00
10	1070.14	1072.14
11	1070.74	1072.74
12	1078.66	1078.66
13	1078.23	1078.23
14	1078.32	1080.32
15	1080.10	1082.10
16	1080.09	1082.09
17	1087.88	1089.88
18	1091.70	1093.70
19	1096.50	1098.50



Scale 1" = 40'

NOTES:

- 1: ALL YARD SWALES/DITCHES TO BE REFLECTED ON THE INDIVIDUAL PLOT PLANS.
- 2: THE LOCATION OF ALL OFF-SITE FILL OR BORROW AREAS ASSOCIATED WITH THIS PROJECT WILL BE PROVIDED TO THE ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT. AN EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THIS AREA.

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION
The project consists of the construction of 19 single family homes and associated roads and utilities.
Site area is 9.65 acres
disturbed area is 5.0 acres

EXISTING SITE CONDITIONS
The site currently drains from the east to the west to an existing drainage creek. No improvements or disturbance is proposed within the existing creek.

ADJACENT PROPERTIES
Adjacent properties are zoned R1.

OFF-SITE AREAS
The storm water from the Achievement Center property to the east will be incorporated with this project.

SOILS
On-site soils are identified as 6D Chiswell-Litz-Urban land complex. Soils information is from the U.S. Department of Agriculture soils survey map.

CRITICAL EROSION AREAS
Silt fence should be installed along the west property line and maintained to prevent runoff from leaving the property.

EROSION AND SEDIMENT CONTROL MEASURES
All measures to be in accordance with the Virginia Erosion and Sediment Control Handbook, latest edition.

Construction Entrance-3.02
A gravel construction entrance will prevent mud and dust from entering Olsen Road.

Diversion Dike-3.09
Diversion Dikes divert runoff from unprotected slopes into sediment trapping structures.

Right-of-Way Diversion-3.11
A Right of Way Diversion of gravel diverts runoff into a stabilized outlet or sediment trapping structure.

Silt Fence-3.05
Silt fence will protect downstream property from sediment laden runoff.

Temporary Seeding-3.31
Any denuded areas left dormant for extended periods of time will be seeded temporarily within seven days.

Permanent Seeding-3.32
Areas not receiving buildings, paving or landscaping will be seeded.

Outlet Protection-3.18
Outlet Protection -3.18 provide outlet protection to protect channels from excessive velocities.

Inlet Protection-3.07
Inlet Protection -3.07 provide inlet protection to prevent sediment from entering storm system.

Stockpile-3.30
Topsoil and stock pile to be implemented to protect topsoil.

Mulching-3.35
To reduce erosion and sedimentation by stabilizing disturbed areas that will not be brought to final grade for a period of more than 30 days.

Temporary Sediment Basin-3.14
A temporary barrier or dam to detain sediment-laden runoff from disturbed areas in "wet" and "dry" storage long enough for the majority of the sediment to settle out.

Sediment Trap-3.14
A temporary ponding area formed by constructing an earthen embankment with a stone outlet where the drainage area is less than 3 acres.

Check Dam-3.20
A temporary stone dam constructed across a swale or drainage ditch to reduce the velocity of concentrated storm flows, thereby reducing erosion.

MANAGEMENT STRATEGIES
Construction will be sequenced so that grading operations can begin and end as quickly as possible.

The gravel construction entrance
will be installed as a first step in construction.

Install silt fence
as the second step in construction.

Other measures
will be installed as work progresses into those areas.

Temporary seeding
or other stabilization will follow immediately after grading.

The job superintendent
shall be responsible for the installation and maintenance of all erosion and sediment control practices.

After achieving adequate stabilization
the temporary erosion and sediment control measures will be cleaned and removed.

PERMANENT STABILIZATION
All areas disturbed by construction which do not receive buildings or paving shall be stabilized with permanent seeding as specified. All seeding shall be tacked and mulched and placed immediately after reaching finished grade. The parking area shall receive paving.

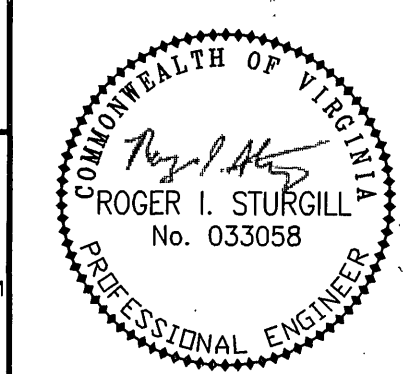
STORMWATER MANAGEMENT
A stormwater management facility is planned for this development.

MAINTENANCE
In general, all erosion and sediment control measures will be checked daily and after each significant rainfall. In particular:

Silt fence will be checked regularly for undermining or deterioration of the fabric. Sediment shall be removed when the level of sediment deposition reaches halfway to the top of the barrier.

The seeded areas shall be checked regularly to ensure that a good stand is maintained. Areas should be fertilized and reseeded as needed.

The contractor shall inspect all erosion control devices immediately after each significant rainfall and daily during periods of prolonged or heavy rainfall and repair all structures as necessary within 48 hours.



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FAX: 804/248-3221

CARRIAGE PARK
GRADING AND EROSION CONTROL
HOLLIS
ROANOKE COUNTY, VIRGINIA

DRAWN BY: JAE
DESIGNED BY: JAE
CHECKED BY: smh
DATE: 3-24-05

REVISIONS:
6-8-05
6-15-05
8-8-05
8-29-05
9-27-05
10-29-05

SCALE: 1"=40'
*UNLESS NOTED OTHERWISE

SHEET NO.

4 OF 9
JOB NO.
R0500012.00

STORM SEWER STRUCTURE SCHEDULE

1	67.79 LF 36" DIA. RCP @ 0.70% INV IN=1074.98 INV OUT=1074.50	7	39.24 LF 15" DIA. @ 7.49% INV IN=1078.00 INV OUT=1075.66
2	STORM MANHOLE MH-1 TOP=1081.00 w/IS -1	8	DI-3B INSTALLED ON GRADE W/ IS-1, LENGTH=8' TOP=1084.30 W/ 6" SLOT & 2' PAVED FLUME SPOT ELEV.= 1083.20
3	43.64 LF 36" DIA. RCP @ 0.50% INV IN=1075.30 INV OUT=1075.08	9	49.70 LF 36" DIA. RCP @ 1.02% INV IN=1076.17 INV OUT=1075.66
4	DI-4C INSTALLED AT LOW POINT W/ IS-1, LENGTH=6' TOP=1083.36	10	STORM MANHOLE TOP=1084.63 w/IS -1
5	31.14 LF 36" DIA. RCP @ 0.51% INV IN=1075.66 INV OUT=1075.40	11	95.88 LF 36" RCP @ 9.39% INV IN=1085.28 INV OUT=1076.27
6	DI-4C INSTALLED AT LOW POINT W/ IS-1, LENGTH=12' TOP=1083.36	12	STORM WATER MANAGEMENT RISER 27" DIA. RCP W/ DI-7 TOP TOP=1072.50 (SEE DETAIL ON SHEET 7)
		13	STORM WATER MANAGEMENT BARREL 67.00 LF 36" DIA. RCP @ 1.5% INV IN=1087.00 INV OUT=1066.00