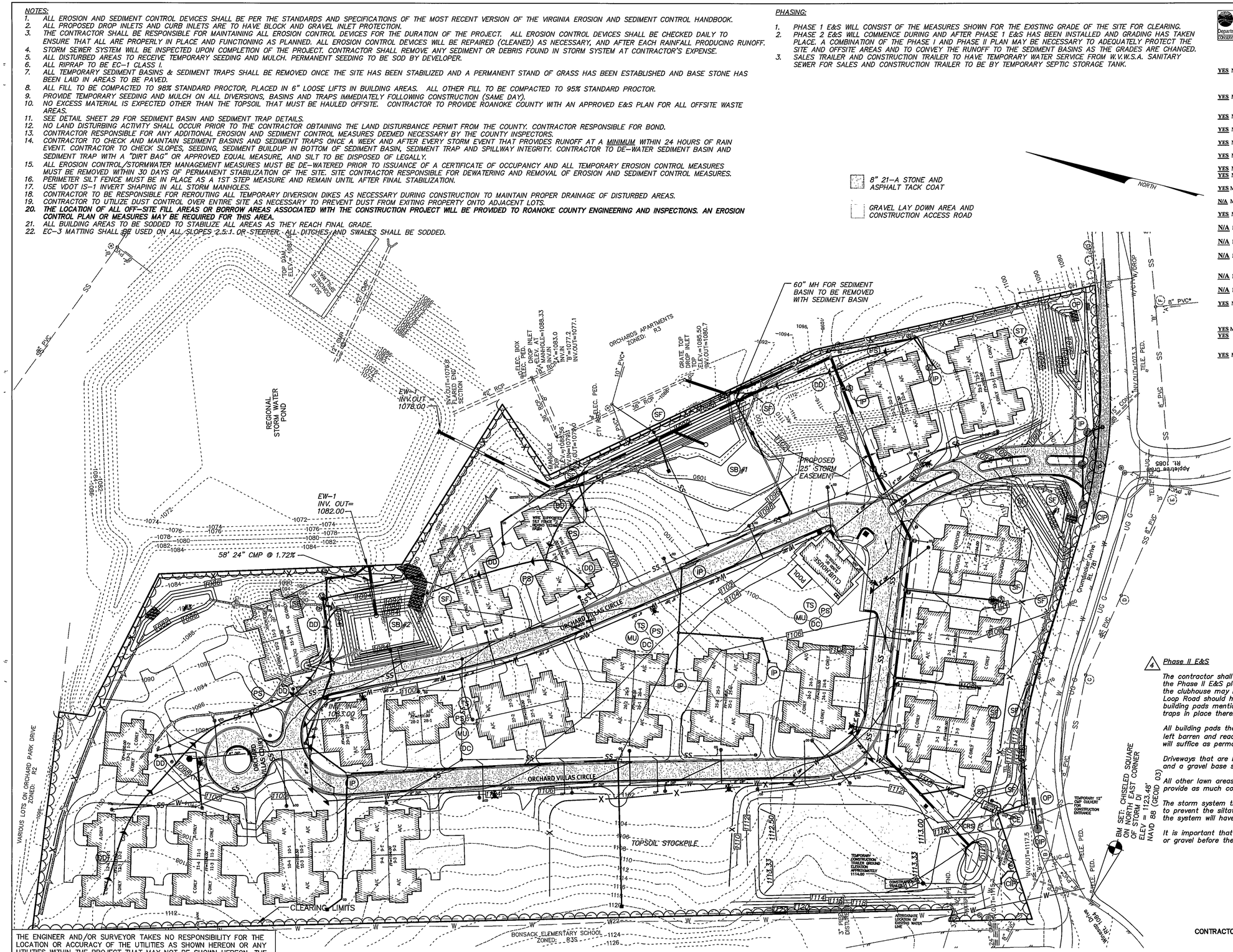
NOTES:

1. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PER THE STANDARDS AND SPECIFICATIONS OF THE MOST RECENT VERSION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
2. ALL PROPOSED DROP INLETS AND CURB INLETS ARE TO HAVE BLOCK AND GRAVEL INLET PROTECTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES FOR THE DURATION OF THE PROJECT. ALL EROSION CONTROL DEVICES SHALL BE CHECKED DAILY TO ENSURE THAT ALL ARE PROPERLY IN PLACE AND FUNCTIONING AS PLANNED. ALL EROSION CONTROL DEVICES WILL BE REPAIRED (CLEANED) AS NECESSARY, AND AFTER EACH RAINFALL PRODUCING RUNOFF.
4. STORM SEWER SYSTEM WILL BE INSPECTED UPON COMPLETION OF THE PROJECT. CONTRACTOR SHALL REMOVE ANY SEDIMENT OR DEBRIS FOUND IN STORM SYSTEM AT CONTRACTOR'S EXPENSE.
5. ALL DISTURBED AREAS TO RECEIVE TEMPORARY SEEDING AND MULCH. PERMANENT SEEDING TO BE SOD BY DEVELOPER.
6. ALL RIPRAP TO BE EC-1 CLASS I.
7. ALL TEMPORARY SEDIMENT BASINS & SEDIMENT TRAPS SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED AND A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED AND BASE STONE HAS BEEN LAID IN AREAS TO BE PAVED.
8. ALL FILL TO BE COMPACTED TO 98% STANDARD PROCTOR, PLACED IN 6" LOOSE LIFTS IN BUILDING AREAS. ALL OTHER FILL TO BE COMPACTED TO 95% STANDARD PROCTOR.
9. PROVIDE TEMPORARY SEEDING AND MULCH ON ALL DIVERSIONS, BASINS AND TRAPS IMMEDIATELY FOLLOWING CONSTRUCTION (SAME DAY).
10. NO EXCESS MATERIAL IS EXPECTED OTHER THAN THE TOPSOIL THAT MUST BE HAULED OFFSITE. CONTRACTOR TO PROVIDE ROANOKE COUNTY WITH AN APPROVED E&S PLAN FOR ALL OFFSITE WASTE AREAS.
11. SEE DETAIL SHEET 29 FOR SEDIMENT BASIN AND SEDIMENT TRAP DETAILS.
12. NO LAND DISTURBING ACTIVITY SHALL OCCUR PRIOR TO THE CONTRACTOR OBTAINING THE LAND DISTURBANCE PERMIT FROM THE COUNTY. CONTRACTOR RESPONSIBLE FOR BOND.
13. CONTRACTOR RESPONSIBLE FOR ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES DEEMED NECESSARY BY THE COUNTY INSPECTORS.
14. CONTRACTOR TO CHECK AND MAINTAIN SEDIMENT BASINS AND SEDIMENT TRAPS ONCE A WEEK AND AFTER EVERY STORM EVENT THAT PROVIDES RUNOFF AT A MINIMUM WITHIN 24 HOURS OF RAIN EVENT. CONTRACTOR TO CHECK SLOPES, SEEDING, SEDIMENT BUILDUP IN BOTTOM OF SEDIMENT BASIN, SEDIMENT TRAP AND SPILLWAY INTEGRITY. CONTRACTOR TO DE-WATER SEDIMENT BASIN AND SEDIMENT TRAP WITH A "DIRT BAG" OR APPROVED EQUAL MEASURE, AND SILT TO BE DISPOSED OF LEGALLY.
15. ALL EROSION CONTROL/STORMWATER MANAGEMENT MEASURES MUST BE DE-WATERED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY AND ALL TEMPORARY EROSION CONTROL MEASURES MUST BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION OF THE SITE. SITE CONTRACTOR RESPONSIBLE FOR DEWATERING AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES.
16. PERIMETER SILT FENCE MUST BE IN PLACE AS A 1ST STEP MEASURE AND REMAIN UNTIL AFTER FINAL STABILIZATION.
17. USE VDOT IS-1 INVERT SHAPING IN ALL STORM MANHOLES.
18. CONTRACTOR TO BE RESPONSIBLE FOR REROUTING ALL TEMPORARY DIVERSION DIKES AS NECESSARY DURING CONSTRUCTION TO MAINTAIN PROPER DRAINAGE OF DISTURBED AREAS.
19. CONTRACTOR TO UTILIZE DUST CONTROL OVER ENTIRE SITE AS NECESSARY TO PREVENT DUST FROM EXITING PROPERTY ONTO ADJACENT LOTS.
20. **THE LOCATION OF ALL OFF-SITE FILL AREAS OR BORROW AREAS ASSOCIATED WITH THE CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY ENGINEERING AND INSPECTIONS. AN EROSION CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THIS AREA.**
21. ALL BUILDING AREAS TO BE SODDED TO STABILIZE ALL AREAS AS THEY REACH FINAL GRADE.
22. EC-3 MATTING SHALL BE USED ON ALL SLOPES 2.5:1 OR STEEPER. ALL DITCHES AND SWALES SHALL BE SODDED.

PHASING:

1. PHASE 1 E&S WILL CONSIST OF THE MEASURES SHOWN FOR THE EXISTING GRADE OF THE SITE FOR CLEARING.
2. PHASE 2 E&S WILL COMMENCE DURING AND AFTER PHASE 1 E&S HAS BEEN INSTALLED AND GRADING HAS TAKEN PLACE. A COMBINATION OF THE PHASE I AND PHASE II PLAN MAY BE NECESSARY TO ADEQUATELY PROTECT THE SITE AND OFFSITE AREAS AND TO CONVEY THE RUNOFF TO THE SEDIMENT BASINS AS THE GRADES ARE CHANGED.
3. SALES TRAILER AND CONSTRUCTION TRAILER TO HAVE TEMPORARY WATER SERVICE FROM W.V.W.S.A. SANITARY SEWER FOR SALES AND CONSTRUCTION TRAILER TO BE BY TEMPORARY SEPTIC STORAGE TANK.



THE ENGINEER AND/OR SURVEYOR TAKES NO RESPONSIBILITY FOR THE LOCATION OR ACCURACY OF THE UTILITIES AS SHOWN HEREON OR ANY UTILITIES WITHIN THE PROJECT THAT MAY NOT BE SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TO SEE IF ANY UTILITIES EXIST WITHIN THE AREA OF THE PROJECT BEFORE ANY CONSTRUCTION BEGINS. ANY COST INCURRED BY DAMAGING ANY UTILITY WITHIN THE PROJECT SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

48 WORKING HOURS PRIOR TO STARTING THE WORK, THE CONTRACTOR SHALL CALL MISS UTILITY AT 1-800-552-7001 AND ADVISE THE NATURE AND LOCATION OF THE WORK.

DCR
Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

PLAN REVIEW MINIMUM STANDARD CHECKLIST

YES	MS-1	Have temporary and permanent stabilization been address in the narrative? Are practices shown on the plan? YES Seed specifications? YES Mulching? YES Gravel? N/A
YES	MS-2	Has stabilization of soil stockpiles been addressed in the narrative? YES Is sediment trapping measures provided? YES- SEDIMENT BASIN
YES	MS-3	Has maintenance of permanent stabilization been addressed?
YES	MS-4	Are sediment trapping facilities to be constructed as a first step in LDA?
YES	MS-5	Has stabilization if earthen structures been addressed?
YES	MS-6	Are sediment basins required where needed?
YES	MS-7	Has stabilization of cut and fill slopes been adequately addressed?
YES	MS-9	(i.e. Surface Roughening, Outlet Protection)
YES	MS-8	Are paved flumes, channels, or slope drains required where necessary?
N/A	MS-10	Is adequate inlet protection required on all operational storm sewer inlets?
YES	MS-11	Has maintenance of permanent stabilization been addressed?
N/A	MS-12	Are in stream construction measures required so that channel damaged is minimized?
N/A	MS-13	Are temporary stream crossings of non-erodible material required where applicable?
N/A	MS-14	(NOTE: This regulation requires that all applicable federal, state, and local regulations pertaining to working in or crossing live watercourses be followed.)
N/A	MS-15	Has restabilization of areas subject to in-stream construction been adequately addressed?
N/A	MS-16	Is stabilization of utility trenches addressed?
YES	MS-17	Is the transport of soil and mud onto public roadways properly controlled? (i.e. Construction Entrances, Wash Racks, daily cleaning of road ways, transport of sediment to a trapping facility)
YES	MS-18	Has the removal of temporary practices been addressed?
YES		Has maintenance of practices been addressed? (i.e. repair of structures and removal of accumulated sediment)
YES	MS-19	Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increases in peak stormwater runoff?

VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES
* CHART TAKEN FROM THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (JULY 1992)

- (CE) TEMP. STONE CONSTRUCTION ENTRANCE
- (SF) SILT FENCE
- (CIP) CULVERT INLET PROTECTION
- (DV) DIVERSION
- (SB) TEMPORARY SEDIMENT BASIN
- (OP) OUTLET PROTECTION
- (SR) SURFACE ROUGHENING
- (TS) TEMPORARY SEEDING
- (PS) PERMANENT SEEDING (SOD BY DEVELOPER)
- (MU) MULCHING
- (DC) DUST CONTROL
- (SO) SODDING
- (CRS) CONSTRUCTION ROAD STABILIZATION
- (IP) STORM INLET PROTECTION

4 *Phase II E&S*

The contractor shall leave all basins, traps, and diversions in place as part of the Phase II E&S plan. Buildings pads 1, 2, 3, 9-13, 15, 17, 18, 22-29, and the clubhouse may be graded to subgrade as part of Phase II of the plan. The Loop Road should have the storm system and curb & gutter installed. The building pads mentioned can be constructed while leaving all of t he basins and traps in place thereby collecting all runoff from the site in the basins and traps.

All building pads that are to have the concrete poured within 30 days may be left barren and ready for final stabilization (by gravel and/or concrete) as this will suffice as permanent stabilization of the soil in this area.

Driveways that are between slabs that will be poured may be cut to subgrade and a gravel base set to stabilize this area.

All other lawn areas and building pad areas shall be seeded and mulched to provide as much cover as possible across the site.

The storm system that is to be installed shall have inlet protection on all inlets to prevent the siltation of the storm system. If silt enters the storm system, the system will have to be cleaned and the silt disposed of properly.

It is important that as much of the site be covered with either seed and mulch or gravel before the contractor can continue to the Phase III of the plan.

CONTRACTOR TO REFER TO SHEETS 9-11 FOR FINAL GRADES

60 30 0 60 120
GRAPHIC SCALE IN FEET

1	09/06/05	PER COUNTY COMMENTS
2	09/06/05	PER CLIENT COMMENTS
3	11/04/05	PER COUNTY COMMENTS
4	12/06/05	PER COUNTY COMMENTS
6	01/23/06	PER COUNTY AND VDOT COMMENTS

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*ENGINEERING >> SURVEYING >> PLANNING
HURT & PROFFITT INCORPORATED
2524 LANGHORNE ROAD
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800.242.4906 TOLL FREE
434.847.7796 MAIN
434.847.0047 FAX

PHASE II E & S CONTROL PLAN
FOR
ORCHARD VILLAS
ROANOKE COUNTY, VIRGINIA

PROJECT NO.	20040345
G.L. NO.	260-04-C4.7
FILE NO.	LS-11039
DATE:	09/06/05
DRAWN BY:	DLC
CHECKED BY:	MDM

COMMONWEALTH OF VIRGINIA
MICHAEL D. MORGAN, II
No. 041247
02/10/06
PROFESSIONAL ENGINEER

HURT & PROFFITT

SHEET NO.
7 OF 33