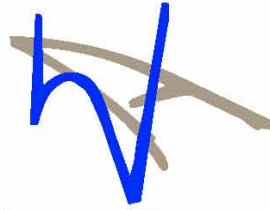


*James D. Wamble, P.E., R.L.S.
Jimmy C. Yates, R.L.S.
Jack L. Whitson, R.L.S.*



*40 Middleton Street
Nashville, Tennessee 37210
Phone: 615.251.9555
Fax: 615.251.9034*

Wamble & Associates, Pllc
Civil Engineering • Land Surveying • Land Planning

May 18, 2010

Porter Ragsdale, President
Homeowners Association
2945 Glenway Drive
Nashville, TN 37221

Re: Devon Glen – Phases 1, 2 and 3
Devon Valley – Phases 1 and 2
Devon Highlands – Phase 1 (Devon Highlands North)
Devon Highlands – Phase 2 (Devon Highlands South)

Dear Mr. Ragsdale:

I am writing this letter to report my recommendations for the clean-up and maintenance of drainage facilities in the above referenced communities that were overwhelmed by the rainfall event on May 2, 2010. This work is based on my site visit and inspection of the drainage facilities on May 6, 2010.

2961 Glenway Drive

Behind the house, in the right rear corner of the yard, there is an existing concrete headwall with a drainage pipe that had been overtopped by runoff from the rainfall event on May 2, 2010. Photo 2580 shows the headwall; photo 2581 shows the upland wooded drainage area that flows down to the headwall; photo 2582 shows the right rear corner of the yard behind the headwall. Besides the obvious task of cleaning out the pipe and removing the debris that has accumulated, the following work should be performed:

- Excavate soil to create a pond-like area in front of the headwall to provide additional storage for stormwater runoff until the pipe can receive and convey the water through the underground storm sewer system.
- Place the excavated soil on top of and behind the headwall to create a higher berm along the edge of the yard. This will allow the runoff to stand at a deeper depth and will result in an increase in the amount of stormwater that will flow into and through the pipe.
- The new berm area should be stabilized with vegetative ground cover or erosion control matting to prevent any erosion during and after construction. To stabilize the excavated storage area in front of the headwall, use rip-rap placed over a geotextile fabric.

2416 Devon Valley Drive

A fairly large wooded area with heavy tree cover on the adjacent property drains down into the backyard of this property. The backyard of the property is shown in photos 2585, 2588, and 2589. These photos show that the homeowner has constructed several small rock check dams in an attempt to slow down the flow of stormwater and stop erosion of their landscaped beds. Once the water comes down into the backyard, it flows around the side of the house, which is shown in photos 2587 and 2591. The adjacent lot at 2420 Devon Valley Drive has a drainage ditch in the rear that catches the upland runoff and conveys it to a headwall that is located two lots to the left. However, this ditch is too far up the hill to extend to provide any benefit. I recommend the following:

- Starting in the right side yard near the front of the house where there is an existing small drainage ditch, construct a larger drainage ditch all the way around the rear of the house and across the backyard. Place the excavated soil on the downhill side of the ditch to create a gently sloping berm that will catch and convey a larger quantity of stormwater. This drainage ditch will terminate in the front yard and the water will spread out into the front yard, spill over the curb, and drain into the gutter on the street. As this drainage ditch is constructed into the backyard, it should be placed in a location that is continuously sloping upward so that there is positive grade to convey the water from the backyard to the front yard. This may require it to go across the property line. If so, easements should be worked out with the adjacent property owner. This ditch should terminate at the point where it has wrapped all the way around the backyard and will intercept, catch, and convey the upland stormwater to the street.
- All the area that is disturbed and re-graded with the construction of this ditch should be stabilized with vegetative ground cover or erosion control matting.
- During construction of this ditch, an engineer should be employed to inspect and determine if vegetative ground cover in this shaded area will be able to be established to control erosion. If not, this ditch may have to be lined with geotextile fabric and rip-rap in order to stabilize it.

2584 Devon Valley Drive

Behind this house, there's a large, steep valley that drains down to a headwall and pipe that is shown in photos 2597 and 2600. The area that drains to the headwall from the west is shown in photo 2598. Photos 2604 and 2607 show the area that drains from the east down to this headwall. We recommend the following work:

- Excavate soil to create a pond-like area in front of the headwall to provide additional storage for stormwater runoff until the pipe can receive and convey the water through the underground storm sewer system.
- Place the excavated soil on top of and behind the headwall to create a higher berm which will allow the water to stand at a greater depth before it can spill over into the yard and then flow across the yard towards the back of the house.
- Stabilize the berm area with vegetative ground cover or erosion control matting.
- Stabilize the excavated storage area in front of the headwall with rip-rap placed over a geotextile fabric.

2580 Devon Valley Drive (next door to 2584 Devon Valley Drive)

Behind this house, the land slopes steeply upward. A portion of this slope area failed and slid down to the back of this house as is shown in photos 2616 and 2618. When this slope failed, a series of cross-tie retaining walls in the backyard of this house were pushed down as can be seen in photos 2622 and 2623. A tree also slid down the hill and onto the back patio of the house as is shown in photos 2621, 2614, and 2613. The sloping nature of the backyard of this house is shown in photos 2607, 2612, 2615, and 2619. Photos 2608 and 2609 show an existing tree, with a large portion of its canopy curving toward the house. This tree did not slide, however, I recommend that the portion of the tree that is leaning toward the house be removed by an arborist or tree trimming service. I also recommend the following:

- Remove the portion of the tree that is leaning toward the house.
- For the unstable failed slope area, contact GEC at (615) 599-9660 and speak to K. Michael Garmon about retaining them to advise you of your options in stabilizing this slope area for future large rainfall events. I am sending a copy of this letter to GEC for their review.

2552 Devon Valley Drive

There is a headwall and pipe that collects drainage from an upward sloping area behind the house. The headwall is shown in photos 2634, 2633, and 2638. The area of the pipe that runs from the headwall to the street is exposed in the side yard, as shown in photo 2642, and erosion caused by the overflow of this headwall is shown in 2643. The side yard of the house, looking down from the headwall, is shown in photos 2640 and 2641. A drainage ditch behind the lots to the north, coming down to this headwall, is shown in photo 2636, and the drainage area behind this house to the east is shown in photo 2639. We recommend the following:

- Excavate soil to create a pond-like area in front of the headwall to provide additional storage for stormwater runoff until the pipe can receive and convey the water through the underground storm sewer system.
- Place the excavated soil on top of and behind the headwall to create a higher berm along the edge of the yard. This will allow the runoff to stand at a deeper depth and will result in an increase in the amount of stormwater that will flow into and through the pipe.
- The new berm area should be stabilized with vegetative ground cover or erosion control matting to prevent any erosion during and after construction. To stabilize the excavated storage area in front of the headwall, use rip-rap placed over a geotextile fabric.
- Repair the erosion area. Cover the exposed pipe with topsoil in the side yard and stabilize the vegetative ground cover.

2617 South Highlands

The backyard of this house was covered with stormwater that flowed from the drainage that is located to the northwest of the house. There was a small drainage ditch behind the house which is shown in photos 2647 and 2651. Water flowed southeast, across the backyards of several houses in this area, washing debris and mulch from the landscaping areas as shown in photos 2657 and 2653. The area that drains from the southeast into this backyard flows through a drainage ditch across the adjacent property shown in photo 2650. We recommend the following:

- In the location of the existing small drainage ditch near the rear property line, starting where it enters the woods (photo 2651), construct a ditch and place the excavated soil on the lower side that slopes downward, creating a berm to provide more depth and capacity to increase its ability to convey stormwater. This ditch should be a minimum of four feet wide and about 18 inches deep, if it's possible to construct without encountering rock. The berm on the downhill side should be sloped 3-to-1 to allow easy maintenance and mowing.
- The downhill berm side should be stabilized with vegetative ground cover or erosion control matting.
- The excavated ditch should be stabilized with vegetative ground cover or erosion control matting. If grass won't grow in this shaded area, stabilize rip-rap placed over geotextile fabric.
- Terminate the ditch and berm in the area adjacent to the pool which is shown in photo 2653.

809 North Highlands Court

A fairly large hillside drains from the west, down to a headwall behind this house. The headwall is shown in photo 2661; the upland drainage area is shown in photo 2667. We recommend the following:

- Clean the debris away from the front of the headwall to allow it to receive drainage.
- Excavate soil to create a pond-like area in front of the headwall to provide additional storage for stormwater runoff until the pipe can receive and convey the water through the underground storm sewer system.
- Place the excavated soil on top of and behind the headwall to create a higher berm along the edge of the yard. This will allow the runoff to stand at a deeper depth and will result in an increase in the amount of stormwater that will flow into and through the pipe.
- The new berm area should be stabilized with vegetative ground cover or erosion control matting to prevent any erosion during and after construction. To stabilize the excavated storage area in front of the headwall, use rip-rap placed over a geotextile fabric.
- Stormwater that drains from the southwest flows to this headwall but bypasses the headwall as shown in photos 2664 and 2665. As seen in these photos, the homeowner had placed wood to direct water to the headwall. A small diversion ditch should be constructed from the headwall southward, in a location that will allow the ditch to intercept the flow and direct it into the headwall storage area so that it will be caught by the storm sewer system. This diversion ditch should be approximately four feet wide and one foot deep with the excavated materials being placed on the downhill side at no greater than 3-to-1 slopes to create a small berm to help divert the stormwater runoff. The ditch and berm areas should be stabilized with vegetative ground cover or erosion control matting.

805 North Highlands Court

There was a headwall that had been completely silted in, as shown in photo 2674. This headwall is supposed to receive drainage from an upland sloped area located to the

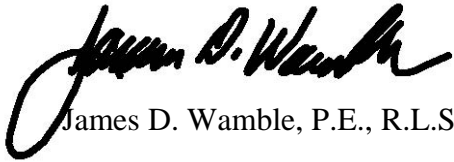
southwest, which is shown in photos 2673 and 2675. An area that flows in from the west was flowing down through a ditch which is shown in photos 2676 and 2680. We recommend the following:

- Clean out all silt and debris from in front of headwall.
- Excavate soil to create a pond-like area in front of the headwall to provide additional storage for stormwater runoff until the pipe can receive and convey the water through the underground storm sewer system.
- Place the excavated soil on top of and behind the headwall to create a higher berm along the edge of the yard. This will allow the runoff to stand at a deeper depth and will result in an increase in the amount of stormwater that will flow into and through the pipe.
- The new berm area should be stabilized with vegetative ground cover or erosion control matting to prevent any erosion during and after construction. To stabilize the excavated storage area in front of the headwall, use rip-rap placed over a geotextile fabric.

Once these areas have been re-graded, cleaned out, and re-established as outlined above, a maintenance program should be established to inspect all of these areas after any sizeable rainfall event. Debris and silt should be cleaned out from in front of the headwalls so that capacity can be restored for future rainfall events.

If you have any questions, or if you need any assistance during the above implementations, please don't hesitate to contact us.

Sincerely,
Wamble & Associates, PLLC



James D. Wamble, P.E., R.L.S.

JDW/kh

cc: K. Michael Garmon, GEC, Inc.



PHOTO NO. 2580



PHOTO NO. 2581



PHOTO NO. 2582

2961 Glenway Drive



PHOTO NO. 2585



PHOTO NO. 2589



PHOTO NO. 2587



PHOTO NO. 2591



PHOTO NO. 2588

2416 Devon Valley Drive



PHOTO NO. 2597



PHOTO NO. 2604



PHOTO NO. 2598



PHOTO NO. 2600



PHOTO NO. 2607

2584 Devon Valley Drive



PHOTO NO. 2608



PHOTO NO. 2612



PHOTO NO. 2609



PHOTO NO. 2613

2580 Devon Valley Drive



PHOTO NO. 2614



PHOTO NO. 2618



PHOTO NO. 2615



PHOTO NO. 2619



PHOTO NO. 2616

2580 Devon Valley Drive



PHOTO NO. 2621



PHOTO NO. 2623



PHOTO NO. 2622

2580 Devon Valley Drive



PHOTO NO. 2633



PHOTO NO. 2636



PHOTO NO. 2634



PHOTO NO. 2638

2552 Devon Valley Drive



PHOTO NO. 2639



PHOTO NO. 2642



PHOTO NO. 2640



PHOTO NO. 2643



PHOTO NO. 2641

2552 Devon Valley Drive



PHOTO NO. 2647



PHOTO NO. 2651



PHOTO NO. 2653



PHOTO NO. 2650



PHOTO NO. 2657

2617 S. Highlands Court



PHOTO NO. 2661



PHOTO NO. 2665



PHOTO NO. 2664



PHOTO NO. 2667

809 N. Highlands Court



PHOTO NO. 2673



PHOTO NO. 2676



PHOTO NO. 2674



PHOTO NO. 2675



PHOTO NO. 2680

805 N. Highlands Court