

Stonecreek Subdivision Section 3 - Remaining Sections

The site is located at the intersection of Kansas and Seib Road in Center Township, Vanderburgh County.

The site consists of flat to hilly ground that has been previously cultivated. The entire site drains directly to Firlick Creek. The approved Floodway boundary is depicted on the enclosed utility/drainage plan drawings along with the 100 yr./25 yr. storm elevations provided by the Indiana Department of Natural Resources, Division of Water.

Two retention basins will be constructed on site to provide more than adequate storm water detention. Storm water runoff will be conveyed to the basin via storm sewers, swales, and overland flow. Due to the topography, storm runoff from part of the site will be allowed to exit the property undetained. Two separate discharge points were determined for this site, UN-1 and UN-2, and an allowable discharge was figured for each using a peak runoff rate for the 10 year storm under undeveloped conditions. The total allowable discharge for UN-1 and UN-2 were 28.30 cfs and 13.65 cfs, respectively. When taking into account the undetained runoff leaving the site, the allowable discharge rate was reduced to 3.19 cfs (UN-1) and 12.5 cfs (UN-2).

Retention basin #4 was placed within and will capture and release the allowable discharge for the discharge area of UN-1. The required storm water detention volume from the Form 800, using a discharge rate of 3.00 cfs, was calculated to be 86,661 cubic feet for the 25 year storm. The storage volume available within basin #4 was calculated to be 144,613 cubic feet which is 40% more than required. Retention basin #4 utilizes a 24" RCP as the primary spillway outlet at elevation 390.50 which is the permanent pool elevation of the large borrow basin #2 that it will be directly draining into.

Retention basin #5 will be capturing and detaining the runoff for the discharge area of UN-2. The required storm water detention volume from the Form 800, using a discharge rate of 5 cfs (allowable discharge = 12.5 cfs), was calculated to be 68,190 cubic feet for the 25 year storm. The storage volume available within basin #5 was calculated to be 92,606 cubic feet which is 26% more than required. Retention basin #5 utilizes a 21" RCP as the primary spillway outlet at elevation 395.15.

The borrow basin #2 which is located within the floodway boundary will not be used for any retention purposes. The borrow basin will have a riprapped spillway draining directly to Firlick Creek. Before any construction can occur within the Floodway, a construction in a floodway permit will have to be obtained from the Indiana Department of Natural Resources, Division of Water.