



A 5.1-acre RSF is also proposed to be constructed. This facility consists of an offline detention basin and is proposed to be located upstream of Vallotton Drive, and will provide additional storage and peak flow attenuation downstream. The secondary benefit of this facility is retrofitting existing urban development. The proposed RSF will treat and attenuate 627 acres of untreated tributary area, the majority of which is urban and developed.

The proposed RSF would be 5.1 acres in size with a Permanent Pool Volume of 9 ac-ft and a Residence Time of 2.3 days. The tributary area to the facility is 627 acres. The land on which this facility is proposed is owned by the City. The location of the RSF is shown on **Figure 4.4.5**. Also shown on this figure is an alternate location for a RSF. This location at the site of an existing playground can be used to construct a 6-acre RSF.

Table 4.4.7 shows the conceptual cost estimate for this alternative.

Alternative OM4 - Installation of Baffle Box to provide End of Pipe Treatment @ Vallotton Drive

Alternative OM4 provides sediment control and other water quality benefits in the One Mile Branch sub-basin. This alternative involves installation of offline baffle boxes for retrofit treatment of nutrient and sediment loads.

One baffle box is considered just near Vallotton Drive crossing at the end of a 42-inch drainage pipe. This baffle box will provide retrofit treatment to about 65 acres with a considerable impervious area. **Figure 4.4.6** shows the tributary area to the Baffle Box and its approximate location. **Table 4.4.8** shows the conceptual cost estimate for this alternative.

Alternative OM5 - Installation of Baffle Box to provide End of Pipe Treatment @ Lee Street

Similar to Alternative OM4, another offline baffle box is proposed at the end of a 30-inch drainage pipe near the Lee Street crossing on One Mile Branch. This baffle box will provide retrofit treatment to about 45 acres with a considerable impervious area. **Figure 4.4.6** also shows the tributary area to this Baffle Box and its approximate location. **Table 4.4.9** shows the conceptual cost estimate for this alternative.

Alternative OM6 -- Installation of Baffle Boxes to provide End of Pipe Treatment @ VSU Parking Lot

Similar to Alternative OM4 and OM5, two offline baffle boxes are proposed, one each at the end of the 30-inch drainage pipes off the VSU parking lot. These baffle boxes will provide retrofit treatment to about 10 acres of completely impervious area. **Figure 4.4.7** shows the tributary area to this Baffle Box and its approximate location.