

**Preliminary Cost Estimate:**

Conceptual Approach

Streambank soil erosion repairs and restoration along the portion of Arcadia Creek located near Lovell Street. This work includes engineering, permitting, excavation, grading, bioengineering, and re-vegetation. Merge into current plans MDOT and City are preparing to create a new park at this location. Replace older catch basin structures within upland contributing drainage areas with dry well infiltration structures (could potentially be worked into upcoming roadway improvement projects). Create new vegetated filtration swales where possible.

Description	Qty.	Unit	Unit Cost	Cost
<b><i>Arcadia Stretch 14 - Streambank Bioengineering</i></b> 790 ft x 2 streambank restoration (i.e., excavation, grading, root wads, log deflectors, willow stakes, erosion control blankets, etc.)	1,580	ft	\$40	\$63,200
<b><i>Arcadia Stretch 14 - Streambank Vegetative Buffers</i></b> 790 ft x 2 vegetative buffer (20 ft width)	0.75	ac	\$2,500	\$1,875
<b><i>Arcadia Stretch 14 - Upland Improvements</i></b> * Dry well infiltration structures within existing storm sewer network	3	ea	\$5,000	\$15,000
vegetated filtration swales (10% of structure costs)				\$1,500
			Subtotal	\$81,575
			Contingency (20%)	\$16,315
			Engineering Fees (10%)	\$9,789
			<b>Estimated Total</b>	<b>\$107,679</b>

**Notes:**

\* Dry well structures alone may not be protective of groundwater in some instances. Addition of a Vortechinics "pretreatment" structure would potentially add approximately \$12,000 per structure.