SUMMERVILLE BOROUGH WATER TREATMENT PROJECT
Redbank Creek Engineering, Inc.

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Introduction/ Project Objectives

Introduction: Summerville, PA is a small rural town located in Jefferson County, PA. The municipal authority services 210 connections, including one industrial connection, the Glen Gery Brick Factory.

• The raw water source is spring water but in the summer months the springs are depleted
• There is not enough water to provide for fire flow and drinking water in the town.

Objective: The objective of this project is to engineer an dependable source of drinking water for Summerville Borough that is resilient, affordable and sustainable.

Alternative 1
The first alternative would source water from wells and would treat the groundwater for: Iron, Manganese, and Barium removal.
• The cost of this alternative is $142,000

Alternative 2
The second alternative would source water from Redbank Creek and then would pass through a modular surface water treatment plant before distribution.
• The cost of this alternative is $455,000

Alternative 3
The third alternative would recycle the wastewater effluent from the WWTP and would be pumped to a storage tank at the brick factory, and then distributed for industrial use. The storage tank would also be constructed as part of the scope
• The cost of this alternative is $194,000

ENVISION

Envision is a framework to assess and incentivize sustainability for infrastructure projects. Based on project attributes, a level of achievement is determined for 64 credits across five categories. If total points earned is great enough, a level of verification is awarded.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1</th>
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<th>Alternative 3</th>
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<td>Leadership</td>
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<td>Climate &amp; Resilience</td>
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FINAL PROPOSED DESIGN

The final proposed design is a combination of groundwater and recycled wastewater.
• The springs will be supplemented with treated groundwater from a well during the summertime
• Recycling the wastewater will decrease the stress put on the wells and springs and will meet the needs of the industrial customer
• Envision Verified Certification Awarded- 28% of points earned

COST

The final cost of this alternative is $271,000. Partial funding for this project could come from:
• PennVest loans
• The Appalachian Regional Commission grants
• Department of Commerce Planning Program Loan

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