



Research Problem Statement

<p>Project Title:</p>	<p>Beam Guard by Retaining wall or Rip Rap(LSRB) 2023-05-LSRB</p>
<p>Project Synopsis:</p>	<div style="text-align: center;"> </div> <p>There are times when beam guard is installed in proximity of retaining walls or rip rap.</p>
<p>Project Goal(s):</p>	<ol style="list-style-type: none"> 1.) Determine the distance between the wall/rip rap an beam guard that allow standard beam guard to operate without damaging retaining wall or move rip rap. 2.) Does distance "X" depend on type of retaining wall (sheet pile, small modular blocks, large module block
<p>Project Background:</p>	<p>There are many situations where beam guard is installed near retaining walls and rip rap. Rip rap is needed along a stream. Rip rap placed too close to the beam guard could cause problems with post rotation. In other locations a beam guard may need near retaining walls.</p>
<p>Proposed Work Plan:</p>	<ol style="list-style-type: none"> 1.) Task 1 – Use computer modeling to compare offsets from beam guard to retaining wall where the wall is not damage. 2.) Task 2 – Review if "X" distance varies depending on wall type. 3.) Task 3 – Review if there is an "X" distance to Rip Rap.
<p>Deliverables:</p>	<p>Agencies will be able to determine what offsets are acceptable for beam guard operation, and not damage retaining walls, or rip rap.</p>

Urgency and Expected Benefit:	
Problem Funding and Research Period:	Total Estimated Cost = \$XX,XXX
Developer(s) of the Problem Statement:	Name: Erik Email: Phone: