

See discrepancies from GZA  
Weap Submittal in Red



## Pile and Driving Equipment Data Form

<p><b>Project Name:</b> ROCKINGHAM  <b>Project No.:</b> BRF 0126 (12)  <b>Route No.:</b> RT 121</p>	<p><b>Structure Name:</b> SAXTONS RIVER BRIDGES  <b>Structure No:</b> BRIDGE # 11R  <b>Pile Driving Contractor:</b> COLD RIVER BRIDGES, LLC  <b>Foreperson:</b> JOSH MARTIN</p>	
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 5px;">Hammer Components</div> <div style="margin-left: 10px;"> <p><b>Hammer</b></p> </div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-left: 10px;"> <p><b>Capblock (Hammer Cushion)</b></p> </div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-left: 10px;"> <p><b>Pile Cap</b></p> </div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-left: 10px;"> <p><b>Pile Cushion</b></p> </div> </div> <div style="display: flex; align-items: center;"> <div style="margin-left: 10px;"> <p><b>Pile</b></p> </div> </div> </div>	<p><b>Manufacturer:</b> APE  <b>Type:</b> Diesel Impact Hammer  <b>Rated Energy (kip-ft):</b> 52,362  <b>Length of Stroke (ft):</b> 12'-6"  <b>Model:</b> D19-42  <b>Serial No:</b> 0309222</p>	
	<p><b>Modifications:</b></p>	<p style="border: 1px solid red; padding: 2px;">GZA used a thickness of 2 in., area of 398 in<sup>2</sup>, modulus of 175 ksi, and COR of 0.92</p>
	<p><b>Material:</b> Enter hammer cushion info here</p>	<p style="border: 1px solid red; padding: 2px;">←</p>
	<p><b>Thickness (in):</b> 6</p>	<p><b>Area (in<sup>2</sup>):</b> 471</p>
	<p><b>Modulus of Elasticity – E (ksi):</b></p>	
	<p><b>Coefficient of Restitution-e:</b></p>	
	<p><b>Also named:</b>          Helmet          Bonnet          Anvil Block          Drivehead</p>	<p><b>Weight (lbs):</b> 1076</p> <p style="border: 1px solid red; padding: 2px;">GZA used a value of 3000 lbs for the pile cap</p>
	<p><b>Cushion material:</b> Monocast MC 904</p>	<p><b>Thickness (in):</b> 2      <b>Area (in<sup>2</sup>):</b> 397.6  <b>Modulus of Elasticity – E (ksi):</b> 285  <b>Coefficient of restitution – e:</b> 0.8</p>
	<p style="border: 1px solid red; padding: 2px;">Typically a pile cushion is only used when installing concrete piles</p>	<p><b>Pile Type &amp; Size:</b> HP 10X57  <b>Length (in Leads) (ft):</b> 40  <b>Weight (lb/ft):</b> 757  <b>Wall thickness (in):</b>  <b>Taper:</b> N/A  <b>Cross Sectional Area (in<sup>2</sup>):</b> 16.7  <b>Ultimate Axial Pile Capacity (kips):</b> 265 KIPS  <b>Steel Yield Strength (ksi):</b> 50 KSI  <b>Description of Splice:</b> WELDED VTRANS STANDARD  <b>Tip Treatment Description:</b> HARD POINT</p>
	<p><b>Distribution- One copy each to:</b></p> <p><input type="checkbox"/> State Structures Engineer</p> <p><input type="checkbox"/> State Soils &amp; Foundations Engineer</p> <p><input checked="" type="checkbox"/> Resident Engineer:</p>	<p><b>NOTE:</b> If mandrel is used to drive the pile, please attach separate manufacturer's detail sheet(s), including weight and dimensions.</p>
	<p><b>Submitted by:</b> Chad Contaldi  <b>Title:</b> Project Manager</p>	
	<p><b>Date:</b> 10-20-2014</p>	