




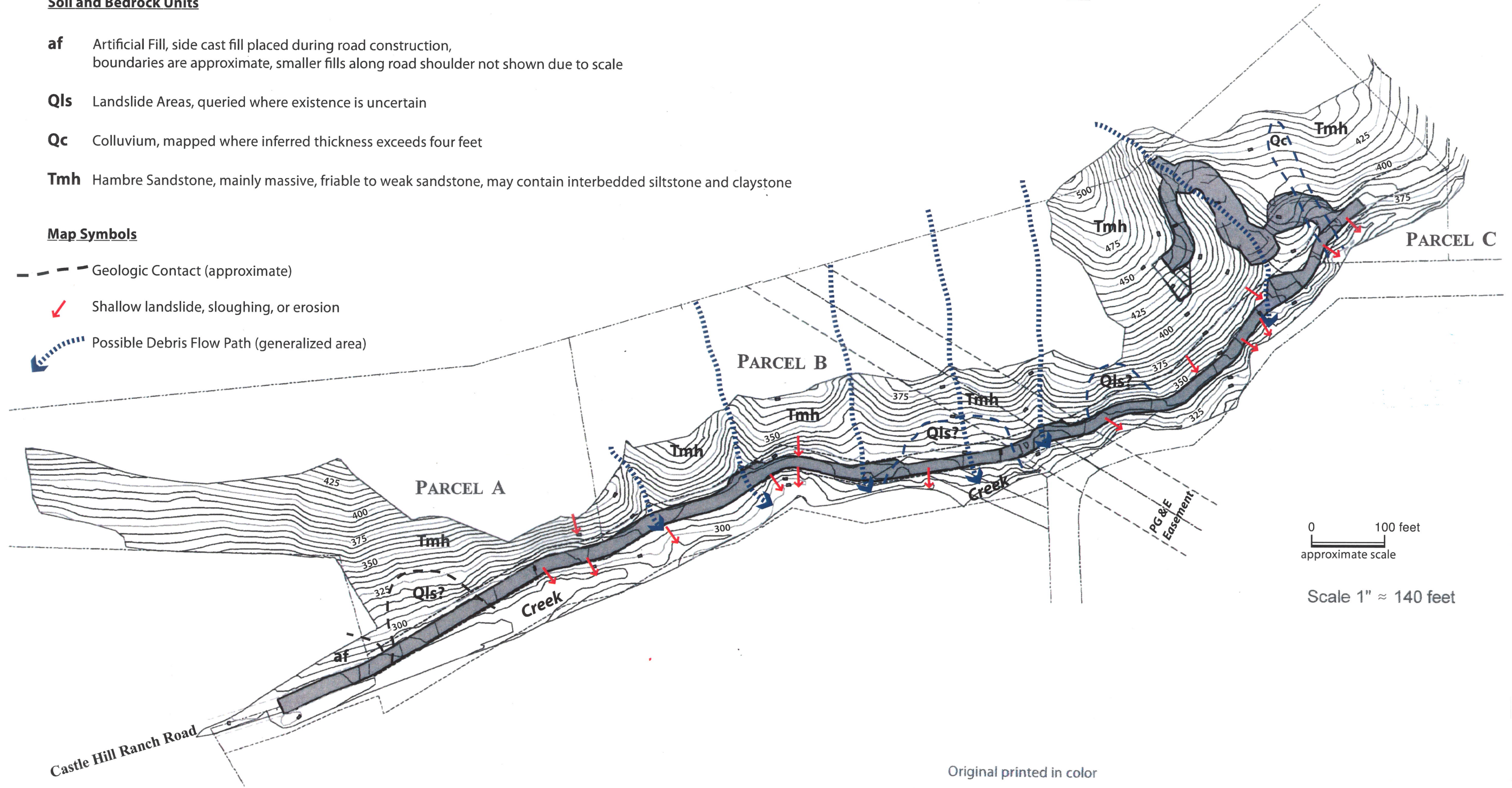
**EXPLANATION**

**Soil and Bedrock Units**

- af** Artificial Fill, side cast fill placed during road construction, boundaries are approximate, smaller fills along road shoulder not shown due to scale
- Qls** Landslide Areas, queried where existence is uncertain
- Qc** Colluvium, mapped where inferred thickness exceeds four feet
- Tmh** Hambre Sandstone, mainly massive, friable to weak sandstone, may contain interbedded siltstone and claystone

**Map Symbols**

-  Geologic Contact (approximate)
-  Shallow landslide, sloughing, or erosion
-  Possible Debris Flow Path (generalized area)



0 100 feet  
approximate scale  
  
Scale 1" ≈ 140 feet

Original printed in color

**JOYCE ASSOCIATES**

<p><b>LAWRENCE B. KARP</b> CONSULTING <b>GEOTECHNICAL ENGINEER</b> 100 TRES MESAS ORINDA, CALIFORNIA 94563 (925) 254-1222</p>			<p><b>GEOLOGIC MAP</b></p>		
			<p>End of Castle Hill Ranch Road Walnut Creek, Contra Costa County Site Investigation &amp; Recommendations</p>		
DATE		PROJECT		FIGURE: <b>B</b>	
August 2011		21117			