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全国首个IX度地震烈度区高速公路隧道群



昆明市功山至东川高速公路项目起于G85功山立交互通，止于东川区小龙潭村，全长49.4 km，为双向4车道高速公路，设计行车速度80 km/h。全线共12座隧道，含徐家地隧道（长3.9 km）和达德隧道（长3.6 km）2座特长隧道，隧道总长18.8 km，桥隧长度占线路总长的70%。项目全线位于小江活动断裂带影响区，平行于活动断裂东支，距离主断层最近处仅300~500 m；主要项目区分布泥石流26条、大型滑坡11处，是国内首次在IX度地震烈度区建设的高速公路特长隧道群。隧道群多次穿越破碎带、断层泥区等不良地质，施工期间突泥、涌水、围岩大变形多发，安全风险极高。该工程由云南省交通投资建设集团投资建设，苏交科集团股份有限公司设计，于2019年1月23日通车。

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