

# SAFER ROADSIDES: DESIGN CONSIDERATIONS CASE STUDY WITH JRA

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## ABSTRACT

The purpose of road restraint systems is to contain and redirect vehicles to avoid injury to occupants and pedestrians and reduce the risk of damage to vehicles and infrastructure. The use of barriers and containment systems must be carefully considered, as the restraining system itself also presents a hazard.

Existing designs that are implemented in Johannesburg are deemed unsafe, as these present a significant risk to road users. A new approach was needed.

The presentation details the design and implementation of protective barriers around 19m high steel monopole structures for overhead high-voltage lines in Fleurhof, Roodepoort. The monopoles are situated in the road median, which is only 5m wide. The design included an assessment of risk factors, compliance and costs between various products and treatments. A brief discussion details the obstacles at Johannesburg Roads Agency that needed to be overcome to have this accepted as part of their standard road design.