

Three Sisters Mountain Village Development – Transformation of Old Coal Mine Properties into Modern Day Use

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KEYWORDS: Brownfield, coal mine, reclamation, undermining Engineer, paste technology

ABSTRACT

The site is located in the northern region of the northwest trending Cascade Coal Basin of Alberta on the eastern edge of Canmore, Alberta. Coal mines opened up in 1887 in support of the Trans Continental Railway. Since that time, 17 different coal operations have existed, the last having ceased operation in 1979.

Standard mining operations were done in a room and pillar fashion. There is a history of ground subsidence in the area.

Three Sisters Mountain Village Development received permission to develop an 800 Ha site in the area encompassing the old mine sites. They plan to build a housing community of 10,000 people. The development includes wildlife corridors, golf courses, wellness centre, school, and commercial properties.

Key factors to development were recognizing existing hazards to public, Government Regulations allowing proven mitigation practices, and location.

Alberta Provincial Regulation (114 / 97) requires a developer to have the situation studied by an undermining engineer, who prepares a report and recommendations. When these recommendations are carried out, the engineer certifies the results, which in turn are certified by an independent expert.

Golder Associates Ltd. was commissioned by Three Sisters to study the site and make recommendations. Paste technology was chosen as the practical and most economical solution, with 24,000m³ of paste injected to date.

Submitted for Consideration in the 2007 World of Coal Ash Conference, May 7-10, 2007