MINERAL REPORT

Date: 28th May 2019

My Ref: M108A/13

CONFIDENTIAL

NEW ROUNDABOUT PROPOSAL- A635 BARNSLEY ROAD GOLDTHORPE APPROACH

SITUATION

A new roundabout is proposed on the A635 in order to access adjacent employment land. The location of the proposed roundabout is illustrated on the attached drawing M108A/13A.
This report provides a review of the mining and geological history of the site and makes recommendations with regard to mining legacy risks the requirement for site investigation and remediation.

GEOLOGY

Geological records show that the site is located on shales, mudstones and sandstones of the Middle Coal Measures.

The Shafton Coal Seam (approx. 1400mm thick) is conjectured to outcrop to the south and dips gently to the north at approximately 3 to 5 degrees.

There are no geological faults or fissuring recorded in the immediate area.

MINING

Opencast

The Shafton Coal Seam was opencast in this vicinity in the early to mid-1990's. The approximate position of the opencast extraction is detailed on the attached drawing M108A/13A as reproduced from British Geological survey sheet SE40SW. SYMAS does not have a copy of the opencast abandonment plan. (if one exists)

It is estimated that the excavation depth ranged from between 0m near the outcrop position to around 15m in the north.

The opencast high wall is likely to be positioned just to the north of the extraction area through the proposed roundabout position.

Shallow Mining

Shallow historic mine workings in the Shafton Coal Seam were encountered during the opencast works. The opencast excavation removed the remnant coal and mining voids and the entire excavation was then backfilled. Two mine entries were encountered and removed in the approximate positions illustrated on the attached drawing. Further unrecorded mine workings may be present beneath the roundabout position to the north of the opencast area.

Tel: (01226)772689
Fax: (01226)772688
E-mail: symas@barnsley.gov.uk
Website: www.barnsley.gov.uk/symas

Deep Mining

The site has been affected by deep coal mining operations in the past but will not be affected by deep mining subsidence for the foreseeable future.

FORMER LAND USE

Other than the former opencast site there are no other records of any industrial activities within the vicinity of this site.

LANDFILL

According to the Borough Landfill Register the site does not lie within 250 m of a landfill operation.

CONCLUSIONS

1. The site is stable from the deep mining subsidence aspect and it should remain so for the foreseeable future.

2. For planning permission purposes the site is located in a High Risk Coal Authority coal mining referral area due to the presence of opencast backfill, the opencast highwall and the potential for unrecorded shallow coal mine workings to the north of the opencast extraction area.

   The site is therefore at risk from a number of shallow mining legacy risks including creep settlement of opencast backfill, differential settlement across the highwall and ground instability due to the potential presence of shallow coal mine workings.

   A coal mining risk assessment will therefore be required to accompany the planning application.

3. A geotechnical site investigation and appraisal of the site will be required to
   - confirm the position of the opencast highwall
   - investigate the suitability and level of compaction of the opencast backfill
   - confirm the depth and condition of the Shafton Coal seam to the north of the highwall.
   - provide recommendations regarding the need for any ground remediation or design mitigation to ensure the ongoing stability and sustainability of the proposed roundabout and highway.

4. Precautions with regard to potential fugitive gases should be employed during site investigation works and where site operatives are required to work in deep/confined excavations.

THIS REPORT IS BASED ON AND LIMITED TO THE RECORDS IN THE POSSESSION OF SYMAS AT THE TIME THE ENQUIRY IS ANSWERED.

This report was prepared by Paul James on the 28th May, 2019.

P. James,
Principal Mining Engineer.