Adam Light
Technical Manager
Sigma Homes Ltd

26th September 2024
Our ref. LP3662/RC/1

Dear Adam,

Re: LEAP Responses to Comments Raised by EHO Against the Additional Investigation in the Southern Portion of Sumners Pond, Barns Green

Leap Environmental, a trading name of RSK Environment Ltd (hereafter referred to as LEAP) have been requested by Sigma Homes Ltd (the client) to prepare responses to comments raised by the Environmental Health Officer (EHO) at Horsham District Council in response to the submission for an investigation report for the development site at Sumners Pond, Barns Green, West Sussex, RH13 0PR, which is being redeveloped under planning application ref DC/21/2697. The instruction was given in an email dated 25th September 2024 by Adam Light of Sigma Homes Ltd.

LEAP undertook an additional investigation in the southern portion of the site, in response to queries raised by the EHO regarding a lack of investigation over the southern area during the previous Phase II investigation due to the presence of buildings. A report was prepared and submitted to Horsham District Council in support of discharge of Planning Condition 12 (b) (report ref: KM/24/LP3662/AddendumSI-South). LEAP understand that the EHO has provided a number of comments following review of the additional investigation, and at this point has not recommended discharge of Planning Condition 12 (b).

LEAP has provided comment on the responses raised by the EHO against the additional investigation in the southern portion of the site. The responses from the EHO are provided in black, and LEAP's responses are provided in green below:

1. It was originally agreed that locations TP202, TP203 and TP208 would be advanced to target areas of soft landscaping. We note the comments in the report that services were location in the original sample locations however it is not clear why two other locations were not chosen where services were not detected.
   Yes these locations had to be moved / abandoned due to below ground services. Unfortunately due to access limitations as well as other detections on the GPR / CAT and Genny it was not possible to complete pits within the proposed open space areas to a degree that was deemed safe by the engineer on the day. However, we would note that the potential sources of contamination were located as site wide in the conceptual site model (section 3.2 of the report) on the southern area of the site and are no more likely to be present in the POS areas than in the areas immediately

surrounding them i.e. we have not identified point sources of contamination that would make one area a higher risk of contamination than elsewhere.

2. Given the above none of the locations targeted areas of the site which will become private gardens / soft landscaped areas.
   TP5, TP204, TP206 all correspond with green space areas albeit not the private gardens, similar TP203 is situated very close to the proposed front garden of one property. As above there is no reason to believe that contamination is more likely to be present in the soft landscaped areas than the areas tested.
3. In email dialogue with Leap in May 2024 it was agreed that although not marked on the plan further investigation would be undertaken in the eastern part of the southern area where underground infrastructure possible a soakaway may be present.
   TP6, TP205, TP209 are all located in the eastern part of the southern area of the site. Areas in the farm south and east of the site were not accessible at the time of the works.
4. It is apparent that a large area of the west of the site has not been investigation – given the landuse history this area will need to be investigated.
   Multiple below ground service utilities are mapped in this area, including electricity, water, surface drainage etc. This area is outside of the proposed residential portion of the development, the positions of investigation were agreed with Horsham prior to site attendance and no SI was proposed in that area of the site. We note that this area historically was used as agricultural land until 2005, when thereafter it was used as a camp site. The proposed end-use will be a carpark and commercial /reception area, a relatively low sensitive land use, as ground surfacing will be sealed by hardstanding and where soft landscaping in proposed a clean cover system is required to act as a pathway break.
   Locations TP205, 209, 210 and 211 are grouped closed with an area to the west of 210 which has not been investigated. Land to the west of TP210 remained undeveloped where it appears as a field up until 2005. Post 2005 aerial images show the warden's building constructed. As above there is no reason to believe that contamination is more likely to be present in the land to west of TP210 than in other areas tested. The proposed end-use will be a carpark, a relatively low sensitive land use, as ground surfacing will be sealed by hardstanding and where soft landscaping in proposed a clean cover system is required to act as a pathway break.
5. We note that a slight hydrocarbon odour was detected in the made ground at location TP204. Whilst sampling at this location did not detect any parameters above the relevant generic assessment criteria which is welcomes our concern is that TP204 has detected the edge of a larger area of contaminated soils.
   As mentioned in this comment there is no significant contamination within the location of TP204 that could impact the future residents onsite. Any previously unencountered contamination (such as strong hydrocarbon odours) that may be encountered during earthworks (excavation of the footings and soft landscaping etc) around TP204 will be managed as per the discovery strategy set out in the RMS (section 3.4).
6. We also noted that an organic rotting odour/black staining was present in TP201, 203, 205 and 210. We are concerned with the potential ground gas risk from this material in particular in the northern part of the southern area where the residential dwellings are proposed.
   The organic odours were noted within the natural soils as opposed to the made ground soils, and were isolated in thickness. In TP201 the dark staining is only present between 0.6m and 0.8m, similarly in TP203, TP205 and TP210 the dark staining is only in limited thicknesses. Given that the staining encountered within the natural strata, and no similar odours or staining were noted in the

made ground, it is likely that these relate to natural roots/wood fragments within the natural soils. There were no noted substantial volumes of high risk degradable material to be a significant gas source (i.e. food waste, landfilled materials, paper, cardboard etc).

We note the recent NHBC guidance on Hazardous Ground Gases 2023 section 1.4.5 'over-conservatism and low risk sources' that notes the following low risk sources that may be discounted as a credible [gas] risk: buried topsoil; limestones and chalk; alluvium including geological peat; and made ground. Made ground comprising re-worked natural soils is also very unlikely to be a significant source of gas.

7. We note that a remediation method statement has been provided which is welcomes we are however not able to provide any comments in this until we are satisfied sufficient site investigation works have been undertaken.
   We would welcome your comments on the RMS at this stage, notwithstanding the RMS includes a discovery strategy outlining how any unidentified contamination will be dealt with (which your comments raise).

In summary, although the further information on the site investigation in the southern area of the site is welcomes the report does not fully address our concerns with regards to contamination on this part of the site. There would also appear to be some departure from what was formally agreed. Whilst we acknowledge that some trial hole locations have not been undertaken or have moved, these could not be completed for onsite health and safety decision with regard to services. Significant further testing has not identified any more contaminants / areas of concern beyond those already highlighted. The made ground encountered is actually shallower than anticipated and based on the remediation set out in the RMS would be almost entirely removed in open space areas.

Please do not hesitate to contact the undersigned if you require any further information.

Yours sincerely,



Lauren Stillwell MSci CGeol FGS