# HATFIELD AERODROME

## Section 78 Appeal against refusal of planning permission by Hertfordshire County Council in respect of the

Application for the establishment of a new quarry on land at the former Hatfield Aerodrome, including a new access onto the A1057, aggregate processing plant, concrete batching plant and other ancillary facilities, together with the importation of inert fill materials for the restoration of the minerals working

**Rebuttal Proof of Evidence** 

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Prepared for: Brett Aggregates Limited

Planning Application Reference: 5/0394-16 Appeal Reference: APP/M1900/W/21/3278097

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## **1.0 QUALIFICATIONS AND INSTRUCTIONS**

- 1.1 My name is Ian Walton. I am a Technical Director employed by SLR Consulting Limited, a multidisciplinary environmental consultancy. I am a Chartered Civil Engineer, a Member of the Institution of Civil Engineers and of the British Hydrological Society, and hold a Master's Degree in Hydrology for Environmental Management awarded by Imperial College, London.
- 1.2 I have over 35 years of post-graduate experience as a Consulting Civil Engineer. I worked for John Taylor and Sons as a Public Health Engineer in the United Kingdom and the Middle East from 1983 to 1987. I joined Halcrow in 1987 and worked as a Tunnelling Engineer on site in East London for a period of 18 months before joining Bureau Veritas (formerly Weeks Consulting) in 1989 where I managed the Civil Engineering and Flood Risk Departments within the company as an Associate, rising to Associate Director, over a period of some 20 years. I joined my current employer in January 2013.
- 1.3 Over the last 20 years, I have specialised in the field of hydrology and currently provide technical advice on the quantification and assessment of flood risk, the management of flood risk and the impact of development on the water environment.
- 1.4 I am instructed by Brett Aggregate Limited (the Appellant) to prepare a rebuttal to address the matters raised in Mr John Jackson's statement prepared on behalf of Ellenbrook Area Residents Association and Smallford Residents Association.
- 1.5 I prepared the flood risk assessment submitted with the 2021 application.
- 1.6 I confirm that the opinions expressed in this rebuttal are my professional opinions.

## 2.0 REBUTTAL

Using the notation of Mr Jacksons' statement, I would comment as follows:

1.1 Noted.

1.2 Bullet point 1, sub bullet point 1

The flood risk assessment submitted with the 2016 (including subsequent correspondence with the Environment Agency and LLFA) and recent 2021 applications both adopted current advice on the potential impact of climate change on rainfall intensities over the lifetime of the development.

Bullet point 1, sub bullet point 2

I assume that the report referred to is called *Living better with a changing climate* and is a brochure that describes the work that the Agency do managing the impact of climate change

Bullet point 1, sub bullet point 3

I would question if this is relevant to concerns about the risk of flooding from the proposed development.

Bullet point 1, sub bullet points 4 to 7

As described in the flood risk assessment submitted with the 2016 and recent 2021 applications, the proposed development will manage surface water runoff generated from within the site boundary to ensure the flood risk elsewhere will not be made worse. Therefore, there will be no cumulative impact with adjacent development.

Bullet point 2, sub bullet point 1

The proposed Nast diversion will intercept runoff from the upslope catchment and convey it around the workings to be discharged to the Nast at the downstream limit of the workings. Therefore, there will be no increase in flow in the Nast and the Ellenbrook arising from the works during the operational phase of the quarry.

#### Bullet point 3

Overflow from the lagoons to the Nast will be limited to that of the predevelopment 'greenfield runoff



rate' (taken as the 1 in 1 year flood flow) for all storm events up to an including the 1 in 100 year event including an allowance for climate change. Therefore, for events greater than the 1 in 1 year storm, there will be a <u>reduction</u> in flow from the site compared to the current situation and therefore the flood risk downstream will in practice be reduced.

#### Bullet point 4

Whilst the sands and gravels are to be removed, they are overlain by a layer of relatively impermeable gravelly clay overburden that limits infiltration into these underlying deposits. Runoff from the restored site will be conveyed to an infiltration lagoon to allow runoff to percolate into the upper aquifer. When the inflow to the lagoon exceeds the infiltration capacity of the upper aquifer, water levels will rise and overflow into the Nast Culvert. However, the overflow rate will be limited to the greenfield runoff rate for the predeveloped site and therefore provided a net reduction in flows in the Nast and Ellenbrook for event exceeding the 1 in 1 year storm up to and including the 1 in 100 year storm event including an allowance for climate change.

#### Bullet points 5, sub bullet point 1

It is acknowledged in the flood risk assessment submitted with the 2016 and recent 2021 applications that the area immediately downstream of the development is at significant risk of flooding lying in Flood Zone 3 as defined by the Planning Practice Guidance. However, the proposed surface water manage strategy will ensure that the existing risk of flooding is not exacerbated and for the more severe flood events will be reduced.

- 2.1 No comment
- 2.2 No comment
- 2.3 No comment
- 2.4 I am unable to comment on the management of surface water runoff for the other developments referred to by Mr Jackson, however, the management of surface water runoff from the proposed development will be entirely 'self-contained' within the site and will not increase the flood risk elsewhere. Therefore, there will be no cumulative impact with other development within the catchment.

- 2.5 I would reiterate that runoff from the proposed development will not increase the runoff elsewhere. The surface water management proposal set out in the flood risk assessment submitted with the 2016 application and Environmental Statement were accepted by the Environment Agency and the Lead Local Flood Authority. Copies of their letter removing their initial objections to the application are enclosed at Annex 01 to this rebuttal.
- 2.6 The flood risk assessment submitted with the 2016 and recent 2021 applications acknowledged the existing risk of both surface water (pluvial) and river (fluvial) flooding.
- 2.7 The potential changes to the hydrology and hydrogeology arising from the quarrying of the mineral resources and infilling with less permeable arisings have been fully considered in the Ground Water Management Plan and the surface water management strategy set out in the flood risk assessment. The proposed surface water management strategy will ensure the flood risk will not be increased elsewhere and will, for larger events, reduce the flood risk downstream of the site.
- 3.1 Noted.
- 3.2 The impact of climate change in accordance with current guidance has been considered by the flood risk assessments submitted with the 2016 and recent 2021 applications. For the reasons set out in response to para 2.4, I do not consider that a cumulative assessment of the impact of other development within the catchment of the Ellenbrook is necessary or appropriate.
- 4.1 Noted
- 4.2 Noted. The existing flood risk is acknowledged in the flood risk assessments submitted with the 2016 and recent 2021 applications.
- 4.3 I have not had sight of the data to which Mr Jackson refers and so am unable to comment on his assertion.
- 4.4 Noted. This has been considered in detail by the flood risk assessments submitted with the 2016 and recent 2021 applications. Both the Lead Local Flood Authority and Environment Agency have accepted that the measures put forward in the flood risk assessment submitted with the 2016 application and the Environmental Statement would ensure that the flood risk elsewhere would not be increased by the proposed development. The proposed surface water management strategy set out in the 2021 flood risk assessment is essentially similar to that proposed by the flood risk assessment submitted with the 2016 application but has been updated in light of additional data collected over the last 6 years.



4.5 The analysis that supported the flood risk assessments submitted with the 2016 and recent 2021 applications included consideration of both summer and winter storm profiles.

#### 4.6 Noted

- 4.7 The current flood risk to Ellenbrook and Smallford is acknowledged in both the 2016 and recent 2021 flood risk assessments. Both flood risk assessments conclude that the proposed surface water management measures will not increase the flood risk elsewhere, including in Ellenbrook and Smallford and, as Mr Jackson confirms, this is a position agreed by the Environment Agency as well as the Lead Local Flood Authority.
- 4.8 I agree that it is incumbent on the Applicant to ensure the proposed development will not increase the current flood risk. For this reason, a surface water drainage strategy has been developed to limit runoff from the development to no more than that which would be expected for a 1 in 1 year storm for all events up to and including the 1 in 100 year storm including an allowance for climate change.
- 4.9 I agree that the impact of climate change will increase the current flood risk; however, this will occur irrespective of the development of the quarry. As set out in my response to para. 1.2, Bullet Point 4, the overburden to the existing site has a relatively low permeability; however, the proposed surface water management plan mitigates any reduction in permeability due to the infilling of the completed workings.
- 4.10 I agree with the point Mr Jackson makes. It is for this reason a surface water management plan is proposed to ensure the runoff from the proposed development does not increase the flood risk.
- 4.11 Noted
- 4.12 At para 4.11, Mr Jackson acknowledges that the Environment Agency subsequentially withdrew its objection following submission of further information to address the points they raised. A copy of the Environment Agency's letter withdrawing their objection is enclosed at Annex 01.
- 5.1 No comment.
- 5.2 No comment.
- 5.3 Noted.

- 5.4 As described in the 2021 flood risk assessment, the combined capacity of the upper and lower mineral lagoons, even allowing for the extreme groundwater levels witnessed in March 2014 (probably a 1 in 100 year event) is sufficient to hold the runoff from a 1 in 100 year storm over the restored site to allow it to infiltrate to ground. It should be noted that this is before the connection to the Nast is reinstated as part of the restoration proposals.
- 5.5 I am not clear the point that Mr Jackson is trying to make other than to say the proposed development will not exacerbate the existing flood risk.
- 5.6 Surface water will only be pumped during the excavation of the upper mineral resource until such time as the inter-burden layer is removed. If there is any concern that the infiltration lagoons are reaching capacity, the operator will simply stop pumping and allow the workings to flood.
- 6.1 The flood risk assessments submitted with the 2016 and recent 2021 applications considered the runoff from the surface of the restored workings. The reduced porosity compared to the current site and the potential increase in the runoff that may results has been explicitly considered in the analysis to ensure the flood risk elsewhere would not be increased.
- 6.2 The connection to the Nast will be made following restoration of the workings, infilling of the lower mineral lagoon and reinstatement of the inter-burden layer.

Runoff from the entire 87ha site will drain to the lagoon and the primary means of surface water disposal under normal conditions will be via infiltration into the upper mineral aquifer. If the inflow exceeds the infiltration rate, there is considerable volume available to hold the runoff to allow it to infiltrate after the storm has abated.

However, for extreme events, if the capacity of the lagoon is exceeded, excess runoff will be drained to the Nast at a rate equivalent to the runoff from a 1 in 1 year storm for all events up to and including the 1 in 100 year event allowing for the impact of climate change.

Therefore, under normal circumstances 87ha of land will have been effectively removed from the catchment of the Nast and under extreme events, runoff will be no more than that which would be expect from a 1 in 1 year event.

The proposed surface water management scheme will therefore <u>reduce</u> the flood risk downstream of the site.

#### 6.3 No comment

- 6.4 Please refer to my response to para. 6.2.
- 7 Bullet points 1 to 3

Current guidance on climate change has been explicitly considered by the flood risk assessments submitted with the 2016 and recent 2021 applications.

#### **Bullet Point 4**

The potential increase in runoff during and after the works has been explicitly considered by the flood risk assessments submitted with the 2016 and recent 2021 applications.

**Bullet Point 5** 

No comment

**Bullet Point 6** 

The lagoons are below ground structures and therefore the volume of water they may contain under extreme conditions poses no increased flood risk. The lagoons will be regularly maintained during the operational phase of the works and it can be anticipated an appropriate management and maintenance regime will be put in place following restoration when the site is transferred to new owners to become a country park.

#### **Bullet Point 7**

I agree that the proposed development will change the hydrogeological and hydrological regime; however, as described in my response to para. 6.2, this will result in a net reduction in flood risk for the more severe storm events.

#### **Bullet Point 8**

I agree that any increase in runoff from the development would have consequences for the flood risk downstream of the site and for that reason a surface water management plan has been devised to ensure this will not occur.

**Bullet Point 9** 

As set out in my response to paras. 5.4 and 6.2, the capacity the lagoons during both the operational and restored phases of the quarry are sufficient to manage surface water runoff under the most extreme conditions, i.e. a 1 in 100 year groundwater level coinciding with a 1 in 100 year storm allowing for the impact of climate change. The risk of the lagoons overflowing is therefore not considered significant.

#### Bullet Point 10

The site will be regulated by the Environment Agency under an Environmental Permit. In addition, a Ground Water Management Plan has to be agreed prior to the commencement each phase of the works. It is my unders5anding that the operator is also experienced in the quarrying of sands and gravels in complex hydrogeological settings. Whilst there is always a risk of human error, the surface water management system is largely passive requiring no intervention other than regular maintenance to remain effective.

# 3.0 Conclusion

In conclusion, it is my option that the measures proposed to manage surface water runoff during the operational and restoration phases of the quarry are sufficient to ensure that the flood risk elsewhere, and in particular immediately downstream of the site, would not be increased by the development. As such, I do not consider that the appeal should be refused on grounds of flood risk and drainage.

# **ANNEX 01**

Environment Agency letter of 5 September 2016

and

Lead Local Flood Authority letter of 31 August 2016

#### creating a better place



Mr Chay Dempster Hertfordshire County Council Minerals & Waste Planning County Hall Pegs Lane Hertford Hertfordshire SG13 8DN Our ref:NIYour ref:PI

NE/2016/124652/02-L01 PL\0755\16

Date:

5 September 2016

Dear Chay

Land at Hatfield Aerodrome, Off Hatfield Road

Application for the establishment of a new quarry on land at the former Hatfield aerodrome, including a new access onto the A1057, aggregate processing plant, concrete batching plant and other ancillary facilities, together with the importation of inert fill materials for the restoration of the minerals working. Additional information.

Thank you for consulting us on the amended flood risk assessment and justification for not restoring the River Nast. We are now in a position to **remove** our objections if the following measures are implemented and secured by way of planning conditions on any planning permission.

#### **Condition 1**

No development shall take place until a water management plan has been submitted to and approved by the local planning authority in writing. The plan shall include but not be limited to:

- 1. Details of construction and water management during construction of the two infiltration lagoons.
- 2. Clarification of the restored site discharge point for the UML back-drain.
- 3. A Long-term groundwater monitoring plan to continue during and post the operational phase. The plan should include monitoring and reporting programs, location of monitoring points including additional monitoring boreholes particularly in the vicinity of the infiltration lagoons, analytical suites, limits of detection and groundwater level monitoring. Details of contingency actions in the event of impact shall also be included.

#### Reason

To protect controlled waters throughout the mineral extraction phasing, and to ensure there is no deleterious impact to groundwater quality.

This condition is in line with your waste development framework policy 16: Soil, Air and Water and National Planning Policy Framework paragraph 109, which states that the planning system should contribute to and enhance the natural and

Environment Agency

Apollo Court, 2 Bishops Sq Business park, Hatfield, Herts, AL10 9EX.

local environment by preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels water pollution.

#### **Condition 2**

No development shall take place until a landscape management plan, including long- term design objectives, management responsibilities and maintenance schedules for all landscaped areas shall be submitted to and approved in writing by the local planning authority. The landscape management plan shall be carried out as approved and any subsequent variations shall be agreed in writing by the local planning authority.

The scheme shall include the following elements:

- detail extent and type of new planting (NB planting to be of native species)
- details of maintenance regimes
- details of any new habitat created on site
- details of treatment of site boundaries and/or buffers around water bodies
- details of management responsibilities

#### Reason

This condition is necessary to ensure the protection of wildlife and supporting habitat and secure opportunities for the enhancement of the nature conservation value of the site in line with national planning policy.

This condition is supported by the National Planning Policy Framework (NPPF), paragraph 109 which recognises that the planning system should aim to conserve and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Paragraph 118 of the NPPF also states that opportunities to incorporate biodiversity in and around developments should be encouraged.

#### **Environmental Permits**

This development must comply with the Environmental Permitting (England and Wales) Regulations 2010 (as amended) and will require an Environmental Permit to be issued by the Environment Agency. Based on the information provided, the development will be a waste disposal operation (landfill). An Environmental Permit Application will need to demonstrate the development will comply with the Landfill Directive and relevant sector guidance. The applicant is advised to contact Rob Devonshire on 0203 025 9152 to discuss the issues likely to be raised.

#### **Extractive Waste (Mining Waste)**

The Operator must submit an Extractive Materials Management Statement (EMMS) to the Environment Agency for assessment. Written information on the materials and the waste needs to be collated and submitted to our Permitting Support Centre (PSC) in Sheffield for assessment. This needs to be signed off by a verifier before being submitted to us.

The quarry industry (represented by the CBI minerals group) has developed their own guidance known as Minerals Industry Guidance Note for Extractive

Materials. It describes the procedure they will follow to assess their extractive materials against our Position Statement (PS015), Their guidance also specifies the information necessary to be included in an EMMS and has a template statement. It also describes the knowledge and experience necessary to be a verifier of an EMMS.

This development will also require a permit under the Environmental Permitting (England and Wales) Regulations 2010 from the Environment Agency for any proposed works or structures, in, under, over or within eight metres of the top of the bank of the River Nast, designated a 'main river'.

This was formerly called a Flood Defence Consent. Some activities are also now <u>excluded</u> or <u>exempt</u>. A permit is separate to and in addition to any planning permission granted.

Further details and guidance are available on the GOV.UK website: https://www.gov.uk/guidance/flood-risk-activities-environmental-permits

#### Oil storage

given the vulnerability of the aquifer, particularly where soils and unsaturated aquifer have been removed it is essential that the oil storage regulations are followed.

It is a requirement of the Control of Pollution (Oil Storage) (England) Regulations 2001 that any facilities for the storage of oils, or fuels shall be provided with secondary containment that is impermeable to both the oil, fuel and water, for example a bund, details of which shall be submitted to the local planning authority for approval. The minimum volume of the secondary containment should be at least equivalent to the capacity of the tank plus 10%. If there is more than one tank in the secondary containment the capacity of the containment should be at least the capacity of the largest tank plus 10% or 25% of the total tank capacity, whichever is greatest. All fill points, vents, gauges and sight gauge must be located within the secondary containment.

The secondary containment shall have no opening used to drain the system. Associated above ground pipework should be protected from accidental damage. Below ground pipework should have no mechanical joints, except at inspection hatches and either leak detection equipment installed or regular leak checks. All fill points and tank vent pipe outlets should be detailed to discharge downwards into the bund.

#### Abstraction advice to applicant

#### Licensing

The use of dewatering in mineral extraction is currently exempt from licensing control. However, under the New Authorisations programme (currently under consultation) some currently exempt activities, including dewatering, will be brought under regulation. Further information about this process can be found here: <u>https://consult.defra.gov.uk/water/water-abstraction-licensing-exemptions</u>.

Although currently still exempt from licensing, we advise that the applicant is aware of this proposed change moving forward with their planning application. The present timetable provided would indicate this exemption will be removed before the end of 2016.

#### **Potential derogation**

The application lists licensed abstractions within a 2km radius (Pg.15, Chapter 6). Cemex UK Materials Ltd (Licence No: 28/39/28/0598/R01) is the only licence holder also abstracting from the gravel layers, approximately 449m west of the proposed site. The applicant will need to demonstrate no derogation issues will result from their dewatering activities on the licensed abstractions and/or non licensed abstractions (private water supplies) listed in section 6.59 Chapter 6 Water Environment.

#### Water requirement

Chapter 3 Development description provides details of an intention to include concrete batching plant (section 3.5). There is further reference to a wheel washing facility (section 3.19) and dust suppression (section 3.67) requirement. All these activities will require a water supply, and where this source of water is not provided by the local water company then an abstraction licence could be required.

The proposed Hatfield Aerodrome Quarry site is situated in the headwaters of the River Colne. The Environment Agency has published the licensing policies for managing abstractions in the Colne CAMS area. This document can be downloaded at <u>https://www.gov.uk/government/publications/colne-catchment-abstraction-licensing-strategy</u>

The licensing strategy divides abstractions into consumptive and non consumptive activities. Mineral washing is normally considered to be non consumptive subject to the actual process involved but water used for dust suppression and concrete production is considered to be consumptive. The licensing strategy for the Colne catchment does not permit new consumptive abstractions proposals. All non consumptive abstraction proposals are subject to a local assessment before a decision is made on any licensing proposal. We would advise the applicant to contact us to discuss their requirements for water as this could have significant implications for their proposal.

The applicant is advised to contact Alastair Wilson (Environment Planning Specialist, Water Resources) on 0203 025 8953 or via email at alastair.wilson@environment-agency.gov.uk

#### Water quality monitoring program

Due to the sensitivity regarding potential groundwater contamination from bromate, we assume that no secondary uses of the dewatering water are proposed. If this isn't the case, any secondary uses could be licensable and subject to water quality monitoring; we would ask the applicant to contact us and discuss this further.

#### Advice to County Council

#### **Dust and Particulates**

Although we now have a strategic duty relating to air quality, we do not have a duty to comment on this matter within the planning process. However, we feel that it is relevant and necessary to raise our concerns when commenting on this particular planning application. Therefore in principle we would recommend that the Planning Authority look to impose conditions that make this development, wherever possible, air quality neutral.

Although the site is not located in an Air Quality Management Zone (AQMZ), we feel this proposed development has the potential to contribute to the poor air

quality in the area if robust abatement measures <u>and</u> management systems are not put in place.

We strongly advise that robust conditions are placed on any permission granted to aim to address the air quality issues. The issues that we recommend that you address by planning conditions are:

**Mineral Processing and Concrete Batching –** These activities can give rise to dust and noise beyond the site boundary if it is not carefully located and managed. It is critical that modern plant is used and maintained at a high level to minimise impact to the environment and human health.

**Road Sweeping –** In 2008 and working in partnership with TfL we used contractors to carry out a study into the monitoring data at the Horn Lane area of Ealing. This study was to determine the most effective abatement measure to reduce dust emissions. The study showed that an increased frequency of road sweeping removed dust particulates and therefore reduced the risk of resuspension of the particulates. As a result we consider that it is advisable that the planning permission should include a requirement that the public highway and the private haul road are swept by a high efficacy road sweeper on a daily basis.

**Road Surfaces –** We strongly recommend that site roads which are used on a daily basis are constructed of impermeable concrete or bituminous material or other easily cleaned surfaces to reduce PM10 emissions. A spine drain down the middle of road or impermeable surfaced area with short hard standing roads branching off it, will minimise the potential for PM10 to be generated. We support a maximum site speed limit of 10mph which will also help reduce the risk further.

Wheel Washing – The same 2008 report showed that wheel washing helps reduce mud and debris from escaping the site and reduce the re-suspension of dust from vehicles passing over it. A lack of space on sites can mean traditional wheel-wash systems are not always possible but smaller systems, designed to clean a single axle at a time are readily available. Please note a trough (bath) and/or spinner is not an acceptable alternative.

It would be consistent with other businesses in the waste management sector to install and operate a wheel-wash and ensure use by all vehicles using the site. The GLA's draft guidance in "The Control of Dust and Emissions During Construction and Demolition" also recommends the use of wheel washers.

**Vehicle and Plant Emissions –** We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on non-road going machinery are imposed as a planning permission condition for the life of the site. As the site is sensitive for NO<sub>2</sub> emissions we recommend that the Tier 3b standard is required for all NRMMs on site and only vehicles rated to Euro5 and Euro6 emission standard are permitted to use the site.

**Dealing with Spillages –** We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on spillages is imposed as a planning permission condition for the life of the site.

**Reducing Vehicle Ideling –** We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on vehicle idling is imposed as a planning permission condition for the life of the site.

**Construction Logistic Plans –** We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on construction logistic plans are imposed as a planning permission condition for the life of the site.

**Travel Plans -** Given the lack of parking facilities and the impact that uncontrolled parking is having on the ability to effectively road sweep local roads we recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on travel plans are imposed as a planning permission condition for the life of the site.

**Diesel or Petrol Generators –** We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on diesel or petrol generators are imposed as a planning permission condition for the life of the site.

**Chutes, conveyors and skips -** As the site involved chutes and conveyors we recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on chutes, conveyors and skips are imposed as a planning permission condition for the life of the site.

**Covering Vehicles –** We recommend that the GLA's guidance in "The Control of Dust and Emissions During Construction and Demolition" on covering vehicles serving the quarry and landfilling operations are imposed as a planning permission condition for the life of the site.

Advice on use of dust suppressants – Using chemical dust suppressants can offer significant reductions in the level of dust and particulates produced in an area. They should not be used in isolation but form part of a comprehensive strategy to control dust at source. A targeted strategy using chemical dust suppressant can achieve up to 36% reduction in the level of dust and particulates escaping from dusty activities. As a result we advise that the GLA's guidance "The Control of Dust and Emissions During Construction and Demolition" on dust suppressants are adhered to and that the applicant should be required to comply with this guidance by a suitable planning condition for the life of the site.

Should you have any queries please contact me.

Yours sincerely

Mr Kai Mitchell Sustainable Places Planning Advisor

Tel: 0203 0259074 E-mail SPHatfield@environment-agency.gov.uk

# Environment Director & Chief Executive: John Wood



Chay Dempster Hertfordshire County Council County Hall Pegs Lane Hertford Herts SG13 8DN Lead Local Flood Authority Post Point CHN 215 Hertfordshire County Council County Hall, Pegs Lane HERTFORD SG13 8DN

Contact Sana Ahmed Tel 01992 556279 Email <u>FRMConsultations@hertfordshire.gov.uk</u>

Date 31 August 2016

#### RE: Land at Hatfield Aerodrome, off Hatfield Road

Dear Chay,

Thank you for consulting us on the above application for the establishment of a new quarry on land at the former Hatfield Aerodrome, including a new access onto the A1057, aggregate processing plant, concrete batching plant and other ancillary facilities, together with the importation of inert fill materials for the restoration of the minerals working at Land at Hatfield Aerodrome, Off Hatfield Road.

Following a review of the information submitted by SLR reference 403.01009.00132 dated 07 July 2016 satisfactorily addresses the points raised in our previous response dated 18 February 2016. Therefore we can confirm that we Hertfordshire County Council as the Lead Local Flood Authority are now in a position to remove our objection on flood risk grounds.

The proposed drainage strategy is based upon infiltration and infiltration tests have been carried out to ensure the feasibility of the proposed scheme. We note that part of the access road will be constructed from gravel therefore it will drain freely. The remaining roads will be constructed of tarmac and will be drained via swales/ditches.

We note there are complex works proposed to the ordinary watercourses located on-site. This will require ordinary watercourse consent prior to any works beginning onsite. As details in relation to the work to the ordinary watercourses have yet to be provided, we recommend the following planning conditions to the LPA should planning permission be granted.

#### LLFA position

Condition 1

The development permitted by this planning permission shall be carried out in accordance with the approved FRA carried out by SLR reference 403.01009.00132 dated November 2015 and letter from SLR reference 403.01009.00132 dated 07 July 2016 and the following mitigation measures detailed within the FRA:

- 1. Limiting the surface water run-off generated by the 1 in 100 year + climate change critical storm so that it will not exceed the run-off from the undeveloped site and not increase the risk of flooding off-site.
- 2. Providing attenuation to ensure no increase in surface water run-off volumes for all rainfall events up to and including the 1 in 100 year + climate change event.
- 3. Implementing appropriate drainage strategy based on infiltration.

The mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

#### Reason

- 1. To prevent flooding by ensuring the satisfactory disposal and storage of surface water from the site.
- 2. To reduce the risk of flooding to the proposed development and future occupants

#### **Condition 2**

No development shall take place until a detailed surface water drainage scheme for the site based on the approved Drainage strategy and sustainable drainage principles and an assessment of the hydrological and hydro geological context of the development, has been submitted to and approved in writing by the local planning authority. The drainage strategy should demonstrate the surface water run-off generated up to and including 1 in 100 year + climate change critical storm will not exceed the run-off from the undeveloped site following the corresponding rainfall event. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed.

- 1. Detailed engineered drawings of the proposed SuDS features including their size, volume, depth and any inlet and outlet features including any connecting pipe runs.
- 2. Detailed ground investigations and record the level of groundwater.
- 3. Detailed surface water run-off and volume calculations to ensure that the site has the capacity to accommodate all rainfall events up to 1:100 year plus climate change.

#### Condition 3

No development herby approved shall be commenced until the Minerals Planning Authority has received confirmation in writing that a scheme of modifications to the ordinary water courses has been approved by the Lead Local Flood Authority.

#### Reason

To prevent flooding by ensuring the satisfactory storage of/disposal of surface water from the site

#### Informative to the LPA

We would advise the LPA and applicant to begin the application for ordinary watercourse consent as soon as possible. Any works proposed to be carried out that may affect the flow within an ordinary watercourse will require the prior written consent from the Lead Local Flood Authority under Section 23 of the Land Drainage Act 1991. This includes any permanent and or temporary works regardless of any planning permission.

For more information about ordinary watercourses and link to the consent application forms; please refer to our ordinary watercourse webpage below;

http://www.hertfordshire.gov.uk/services/envplan/water/floods/ordwatercourse/

Please note if the LPA decide to grant planning we wished to be notified for our records. We ask to be consulted on the details submitted for approval to your Authority to discharge this condition and on any subsequent amendments/alterations.

For further guidance on HCC's policies on SuDS, HCC Developers Guide and Checklist and links to national policy and industry best practice guidance please refer to our surface water drainage webpage

http://www.hertfordshire.gov.uk/services/envplan/water/floods/surfacewaterdrainage/

Yours sincerely,

Sana Ahmed

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