

Hannah Kirkham
ARUP
The Arup Campus
Blythe Gate
Blythe Valley Park
Solihull
B90 8AE

*Postal Address: Planning, Policy & Development Control
Staffordshire County Council
2 Staffordshire Place
Tipping Street
Stafford
ST16 2DH*

SENT BY EMAIL

Our Ref: [SCE.240/Molson Coors Brewery Site](#) Your Ref: 253583-00 13 September 2017

Dear Mrs Kirkham,

SCREENING OPINION FOR PROPOSED ANAEROBIC DIGESTER AND BIOGAS COMBINED HEAT AND POWER FACILITY AT MOLSON COORS BREWERY SITE, BURTON

THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017: REGULATION 6 - SCREENING OPINION

I refer to your letter dated 23 August 2017 in connection with the above proposals and the regulations referred to above.

In accordance with the regulations the County Council is required to adopt a "Screening Opinion" to establish whether the forthcoming application should be accompanied by an Environmental Statement.

The County Council has considered the information you supplied as submitted and is of the opinion that the proposed development falls within the description provided within Schedule 2 paragraph Category 3 (a) 'Energy Industry – Industrial installations for the production of electricity, steam and hot water'; Category 11 (b) 'Other projects - Installations for the disposal of waste'; and, Category 11 (c) 'Other Projects – waste–water treatment plants' to the above regulations, but in the opinion of the County Council, having taken into account the criteria in Schedule 3 to the above regulations and the '[Planning Practice Guidance – Screening Schedule 2 projects](#)' (version 28/7/17), the proposed development would not be likely to have significant effects on the environment by virtue of factors such as its nature, size or location. Further details are provided in the accompanying 'Screening Opinion Checklist'.



Therefore, in accordance with the powers contained in the 'Scheme of Delegation to Officers', this letter confirms that the County Council is of the opinion that the proposed development **is not EIA development** and need not be accompanied by an Environmental Statement.

Yours sincerely,

Julie Castree-Denton

Team Leader – Development Control and Waste Planning Policy

Accompanied by a Screening Opinion Checklist

the knot unites



Screening Opinion Checklist Case Officer: Julie Castree-Denton Date: 13 September 2017

<p>Ref. No.: SCE.240/Molson Coors Brewery Site Site / Location: Molson Coors Brewery Site, Burton</p>	
<p>Description of development: Proposed anaerobic digester and biogas Combined Heat and Power facility</p>	
<p>PART 1 - Is a Screening Opinion Required? (ref: EIA Regulations 2017, and Planning Practice Guidance – Screening Schedule 2 projects)</p>	
<p>1 Development Description</p> <p>Do you have enough information to define the size and type of development (a plan, description of type/nature/purpose and possible effects)?**</p> <ul style="list-style-type: none"> Yes (proceed to step 2) (Request for Screening Opinion SCE.240/Molson Coors Brewery Site) No - either take the precautionary principle and assume the worst case or, request more information confirming 3 week deadline not commence until received; <p>**Note - Changes or extensions may also need an EIA! (Schedule 2, category 13)</p>	<p>Yes / No</p> <p>Yes</p>
<p>2 Is it a Schedule 1 development?</p>	<p>Yes/No (explain)</p> <p>YES – The development is category and a screening opinion is not required as an EIA mandatory! NO – If the development is not listed in Schedule 1 it may be listed in Schedule 2 (proceed to step 3)</p> <p>No</p>
<p>3 Is it a Schedule 2 development? (Schedule 2, Col 1)</p>	<p>Yes/No (explain)</p> <p>YES - The development falls/could fall within the following categories: Category 3 (a) 'Energy Industry – Industrial installations for the production of electricity, steam and hot water'; Category 11 (b) 'Other projects - Installations for the disposal of waste'; Category 11 (c) 'Other Projects – waste–water treatment plants'.</p> <p>Yes</p>
<p>4(a) Does the development fall within the absolute threshold/criteria? (Schedule 2, Col 2)</p>	<p>Yes/No – (explain)</p> <p>The threshold/criteria is are Category 3a – the area of the development exceeds 0.5 hectare; Category 11 (b)- (i) the disposal is by incineration, or (ii) the area of the development exceeds 0.5 hectares; or (iii) the installation is to be sited within 100 metres of any controlled waters; Category 11 (c) - the area of the development exceeds 1,000 square metres. The proposal relates to an area of approximately 0.55 hectares.</p> <p>Yes</p>
<p>4(b) Is the proposal within/near to a 'sensitive area'? (e.g. SSSI, NP, AONB, SAC, RAMSAR, Scheduled Monument)</p>	<p>Yes/No – (explain)</p> <p>YES – The development falls within/near to the following designated site(s) Within or metres from Within or metres from..... (OR)</p> <p>No</p>
<p>5 Conclusion</p>	<p>Screening opinion required?</p> <ul style="list-style-type: none"> If you have answered 'Yes' to the threshold/criteria a screening opinion is required – proceed to Part 2 If you have answered 'No' to the threshold/criteria and the development is within/near a sensitive area a screening opinion is required – proceed to Part 2 If you have answered 'No' to the threshold/criteria and the development is not within/near a sensitive area a screening opinion is not required. <p>Yes</p>

PART 2 – Are the proposals EIA development?

EIA usually required for (i) major developments of more than local importance; (ii) development in particularly environmentally sensitive or vulnerable locations; (iii) developments with unusually complex and potentially hazardous environmental effects. This checklist has been prepared with reference to Schedule 3 and Regulation 4 (2) and used to determine whether significant effects are likely to arise from the development. The Regulations also apply to changes to EIA development and reserved matters / subsequent approvals (ref: [Schedule 3 - EIA Regulations 2017](#), [Regulation 4 \(2\)](#) and [Planning Practice Guidance – Screening Schedule 2 projects](#))

<p>1 Applicable screening thresholds/criteria</p>	<p>Does the development fall within the applicable screening thresholds / criteria? (see applicable screening thresholds)</p>	<p>NO – Refer to Indicative screening thresholds of the EIA Regulations 2017:- the proposed development is an area of approximately 0.55 hectares and could fall within the following categories 3(a); 11(b) and 11(c).on the basis that the site area exceeds the area thresholds of 0.5 hectares (category 2(a) and 11 (b)), and 1,000 square metres (category 11(c)). The proposed development would however fall below the indicative criteria and threshold for the above categories. The proposed anaerobic digester and biogas Combined Heat and Power (CHP) facility would pre-treat an average of 5,000m³ per day of trade effluent from the brewing process. The capacity is approximately 41,000 population equivalent, with a heat output of approximately 0.6 MW and electricity generation of approximately 0.7 MW.</p> <p>Category 3 (a) ‘Energy Industry – Industrial installations for the production of electricity, steam and hot water’ - the indicative criteria and threshold is however thermal output of more than 50 MW. Small stations using novel forms of generation should be considered carefully and key issues to consider are level of emissions to air, arrangements for the transport of fuel and any visual impact;</p>
---	---	--

		<p>Category 11 (b) 'Other projects - Installations for the disposal of waste' - the indicative criteria and threshold are installations (including landfill sites) for the deposit, recovery and/or disposal of household, industrial and/or commercial wastes where new capacity is created to hold more than 50,000 tonnes per year, or to hold waste on a site of 10 hectares or more. Sites taking smaller quantities of these wastes, sites seeking only to accept inert wastes (demolition rubble etc.) or Civic Amenity sites, are unlikely to require Environmental Impact Assessment. The key issues to consider are scale of the development and the nature of the potential impact in terms of discharges, emissions or odour;</p> <p>Category 11 (c) 'Other Projects – waste-water treatment plants' - the indicative criteria and threshold are site area of more than 10 hectares or capacity exceeds 100,000 population equivalent. Key issues to consider are size, treatment, process, pollution and nuisance potential, topography, proximity of dwellings and the potential impact of traffic movements.</p>
<p>2</p>	<p>Characteristic of the development:</p> <p>Size and design of the whole development:</p> <p>Cumulation with other developments and/or approved development:</p>	<p>The proposed site is located to the north of the main Brewery Site and is an area of approximately 0.55 hectares currently used as a facility for keg storage, scaffold storage and temporary compound for excavated material. The proposed development consists of an anaerobic reactor (1.2m high); a biogas holder (10.1m high) and flare stack (3m high); an enclosed CHP unit (5m high); a control room building (3.5m high); an odour control unit (3.5m high); and various tanks (chemical storage tank, balance tank, diverter tank, aeration tank, anaerobic sludge holding tank and aerobic sludge holding tank – ranging from 4.5 m high to 8.8m high). There are a number of residential properties located within 30m of the proposed development, situated along the A511 (Horninglow Street) immediately to the east. The A511 has been declared an Air Quality Management Area (AQMA) for nitrogen dioxide (NO2).</p> <p>The main Brewery Site comprises approximately 30 hectares of land. The development is proposed to improve the existing wastewater discharge arrangements from the Brewery Site.</p>

	Use of natural resources (e.g. land, soil, water and biodiversity):	Treatment of waste water /trade effluent from the brewing process.
	Production of waste:	The combined aerobic and anaerobic process would produce around 30 tonnes of sludge per day which would be removed from the site by tanker (one tanker of solid waste daily). A portion of the anaerobically treated effluent and the secondary treated effluent would also be discharged to the sewer and the Moor Mill Dam under existing discharge consents.
	Pollution and nuisances:	The key issues to consider are the treatment process, the proximity of businesses and dwellings, and the pollution and nuisance potential including noise and emissions to air and impact of traffic movements. There is potential for odour impacts associated with the operation of the anaerobic digester and biogas facility however an odour control unit would be installed as an integral part of the facility which would remove potential odours. The flare stack would also burn off excess biogas reducing odour. Given the nature of the proposal and the assumption that the site would operate within existing legislative controls (for example pollution controls and health and safety), it is reasonable to assume that the site could operate within planning and other regulatory controls (for example EA Permitting controls). It is therefore reasonable to assume that the risk in terms of pollution and nuisance would not be significant in EIA terms.
	Risk of major accidents and/or disasters relevant to the development including climate change: Risk to human health (e.g. water contamination or air pollution):	Low risk of major accidents/disasters in EIA terms if the site is operated properly in accordance with relevant health and safety legislation and pollution controls. Measures to control noise and air emissions, traffic management plans, site security and timely communication and construction activities would be implemented as part of the proposed development. Given the nature of the proposed development and the assumption that the site would operate within existing legislative controls (for example health and safety and pollution controls), it is reasonable to assume that the site could operate within planning and other regulatory controls (for example Environment Agency pollution controls). It is therefore reasonable to assume that the risk to human health would not be significant in EIA terms.
3	Location of the development Existing and approved land use (<i>include past, present and future (allocated land/with permission)</i>)	Brewery site.

<p>(the environmental sensitivity of geographical areas likely to be affected):</p>	<p>Relative abundance, availability, quality, regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground):</p>	<p>The site is relatively enclosed by vegetation along the north eastern perimeter. It is reasonable to assume that natural resources could be adequately protected during construction and operation of the facility utilising appropriate safeguards.</p> <p>As the proposed development is permanent, the regenerative capacity of natural resources would be limited. Should the proposed use cease, then the site would revert back to an area of land for brewery use.</p> <p>No designated sites affected by the proposal.</p>
<p>Types and characteristics of the potential impact</p> <p>4</p>	<p>Absorption capacity of natural environment (in Staffordshire these could include wetlands, riparian areas and forest areas; nature reserves/parks; SSSIs and international designations; areas where EU environmental quality standards have not been met; densely populated areas; landscapes of historical, cultural or archaeological significance):</p> <p>The magnitude and spatial extent (e.g. geographical area and size of affected population likely to be affected):</p>	<p>The site is established brewery land and the proposal relates to the treatment of trade effluent from the brewing process. Residential properties are located within 30m of the proposed development, immediately to the east. It is reasonable to anticipate that dust, noise, air quality, water quality, visual and residential amenity, and transport effects can be predicted with a reasonable degree of accuracy and mitigated. It is also reasonable to assume that the site could operate within planning and other regulatory controls (for example Environment Agency pollution controls). It is therefore reasonable to assume that the magnitude and spatial extent would not be significant in EIA terms.</p>
	<p>The nature of the impact:</p>	<p>The nature of the impact of the proposal i.e. visual impact, landscape and ecological impact, flood risk, air and water quality and traffic impact would need to be carefully assessed and mitigation measures may be necessary. However it is reasonable to assume that the site could operate within planning and other regulatory controls. It is therefore reasonable to assume that the nature of the impacts would not be significant in EIA terms</p>
	<p>The transboundary nature of the impact:</p>	<p>Not applicable</p>

	<p>The intensity and complexity of the impact:</p> <p>The probability of the impact:</p> <p>The duration, frequency and reversibility of the impact:</p> <p>The cumulation of the impact with the impact of other existing and/or approved development:</p> <p>The possibility of effectively reducing the impact:</p>	<p>It is reasonable to assume that the anaerobic digester and biogas Combined Heat and Power (CHP) facility using established methods could be carried out in accordance with planning controls and other regulatory controls. It is therefore reasonable to assume that the intensity and complexity of the impacts would not be significant in EIA terms.</p> <p>Due to the nature, scale, and location of the proposal, it is reasonable to assume that the potential effects can reasonably be predicted and would not be significant in EIA terms.</p> <p>Should the operation of the permanent facility cease, the site should be cleared of waste, product, redundant structures, plant and equipment</p> <p>It is reasonable to assume that the cumulative impact can reasonably be predicted and would not be significant in EIA terms.</p> <p>It is reasonable to assume that appropriate mitigation measures could be imposed to minimise the impact of the development.</p>		
<p>EIA Development</p>	<p>The main reasons for the conclusion reached having regard to (Reg 5 (5)(a)) / (Reg 5 (5)(b)).</p> <p>Due to the nature, the scale, the location of the proposed development, it is reasonable to assume that the potential environmental effects can be predicted with a reasonable degree of accuracy and mitigated. It is also reasonable to assume that the site could operate within planning and other regulatory controls (for example Environment Agency pollution controls) which could be anticipated to be modest in scope. It is therefore reasonable to assume that in EIA terms no significant effects are likely to arise from the development.</p> <p>Nevertheless, as you have identified, there are potential environmental effects which would need to be carefully considered. You should also have regard to our pre-application advice dated 13 June 2017 (ref. PAS/105/ES). Please note, as indicated in our pre-application advice, we have now published updated validation requirements in our <u>A to Z Guide to Planning Applications</u> 17 July 2017). The relevant new requirements include: a Construction Environmental Management Plan; a Flood Risk Assessment and Sustainable Drainage Scheme/Strategy; complete Validation Checklist 1; and, a Waste Development Statement.</p>	<p style="text-align: center;">No</p>		
<p>Signed and dated</p>	<p>Case Officer</p>	<p>Julie Castree-Denton 12/9/17</p>	<p>Team Leader/Team Manager</p>	<p>Mike Grundy 13/09/17</p>

Your ref
Our ref 253583-00
File ref

P/17/01203

By Email and Post

Julie Castree-Denton
Planning, Policy & Development Control
Staffordshire County Council
2 Staffordshire Place
Tipping Street
Stafford
ST16 2DH

23 August 2017

Dear Mrs Castree-Denton

Town and Country Planning (Environmental Impact Assessment) Regulations 2017

Regulation 6 Request for Screening Opinion in relation to Molson Coors Burton Brewery Anaerobic Digester and Biogas Facility

Please accept this letter as a formal request from Molson Coors Brewery Company to the planning authority for a Screening Opinion in accordance with Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations') which implement the requirements of the Directive 2011/92/EU¹ (as amended)² (the 'EIA Directive').

In order to improve the existing wastewater discharge arrangements from the site, Molson Coors Brewery Company proposes to construct an anaerobic digester and biogas Combined Heat and Power (CHP) facility (the 'Proposed Development') within its existing site at Horninglow Street, Burton on Trent, to pre-treat an average of 5,000 m³ per day of trade effluent from the brewing process prior to discharge to a Severn Trent sewer and Moor Mill Dam watercourse, or recovery for site use (e.g. as boiler make-up water). The capacity of the Proposed Development is approximately 41,000 population equivalent, with a heat output of approximately 0.6 MW, and the area of the Proposed Development is approximately 0.55 ha.

The Proposed Development is not considered to fall under Schedule 1 of the EIA Regulations, as its capacity is well below the Schedule 1 threshold for wastewater treatment plants (150,000 population equivalent) and thermal power stations (300 MW heat output); therefore, EIA is not mandatory.

The Proposed Development could be considered to fall within the following descriptions of development listed under Schedule 2 of the EIA Regulations:

¹ Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment

² Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

- Part 3 (a) - Energy industry - Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1) where the area of the development exceeds 0.5 ha, or
- Part 11 (c) – Other Projects – Waste-water treatment plants where the area of the development exceeds 1,000 square metres.

In support of this request for a Screening Opinion, we include the following information:

- A plan sufficient to identify the land affected by the works in question (as shown in Figure 1);
- A brief description of the nature and purpose of the proposed works; and
- A brief description of the possible effects on the environment of the works.

The Proposed Development

The Proposed Development is located on the existing Molson Coors Brewery Company (MCBC) site, within a plot of land to the north of the main Brewery Site, and to the west of the A511 (Horninglow Street). The location of the development and indicative site layout is shown on the plan in Figure 1 and Appendix A, at approximate grid reference SK 247236.

The area of the Proposed Development is approximately 0.55 ha. The Proposed Development site is currently used as a facility for keg storage, scaffold storage and temporary compound for excavated material. The surrounding area includes the main Brewery Site comprising approximately 30 ha of land. To the west of the site lies the mainline railway and Burton upon Trent railway station.

The Proposed Development includes diversion of trade effluent from six wastewater streams (process, packaging, museum, bright beer, spoilt beer, and keg ullage) to a new anaerobic digester and biogas facility. The anaerobic treatment process uses microbes to break down organic matter and forms methane (biogas) as a by-product, which can be used for the generation of steam and electricity.

The trade effluent will gravitate through pipework to a wet well where it will be pumped to inlet screens. The screened effluent will be transferred to a balancing tank where the effluent quality will be adjusted to meet the required pH and nutrient composition for the anaerobic process. Hydrochloric acid and sodium hydroxide will be used for neutralising pH, and a nutrient blend added to meet the required nitrogen and phosphorus levels.

The anaerobic treatment process will be achieved by an upflow anaerobic sludge blanket (UASB) reactor. Biogas from the reactor will be transferred via gasholder to the CHP to generate approximately 0.7 MW of electricity and 0.6 MW of heat, a portion of which will be used to heat the reactor. A portion of the anaerobically treated effluent will be discharged to sewer under an existing discharge consent.

The remainder of the effluent will undergo a secondary stage of treatment carried out using a membrane bioreactor (an aerobic digestion process) to further reduce the biochemical and chemical oxygen demand (BOD/COD) and solids concentration in the effluent. A portion of the secondary treated effluent will be discharged to Moor Mill Dam under an existing discharge consent.

A final stage of treatment will be carried out on the remaining effluent using reverse osmosis (RO) to reduce the total dissolved solids, and an ultraviolet (UV) system for disinfection. A break tank will be provided to store this water prior to use on site.

The combined anaerobic and aerobic process will produce around 30 tonnes of sludge per day. There are no proposed facilities for further on-site processing of the sludge and it will be removed from site periodically by tanker.

In summary, the Proposed Development consists of:

- a rising main transferring the flow from the wet well to the inlet screens;
- a new wet well (connected to a new drainage pipework from Museum foul water and an existing drainage pipework from the Brook Street process and packaging areas);
- a balance tank (8.8m high and 17.5m diameter);
- a divert tank (8.8m high and 17.5m diameter);
- a pH control system (three chemical storage tanks each measuring 4.5m high and 3.1m diameter);
- an anaerobic reactor (11.2m high and 16m diameter);
- a biogas holder (10.1m high and 13.4m diameter) and flare stack (anticipated to be 3m high);
- an enclosed CHP unit (5m high, 13.5m length and 3.4m width);
- a membrane bioreactor (MBR) with aeration tank (7.1m high and 17.8m diameter);
- anaerobic sludge holding tank (7m high and 7.6m diameter);
- aerobic sludge holding tank (5.6m high and 5.1m diameter);
- a control room building which houses the motor control centre, UV, filtration membranes, RO unit, lab, operator room (23.4m long, 8.6m wide and 3.5m high); and
- an odour control unit (anticipated to be 5m high).

Possible Environmental Effects of the Proposed Development

Air Quality and Odour

The A511 (Horninglow Street) has been declared an Air Quality Management Area (AQMA) for nitrogen dioxide (NO₂) by East Staffordshire Borough Council. This AQMA is known as AQMA 1 and runs through the centre of the Molson Coors Brewery site. There are a number of residential properties which are located within approximately 30m of the Proposed Development, situated along the A511 (Horninglow Street) immediately to the east. There are no ecological receptors within 50m of the Proposed Development.

During the construction phase, the main sources of air pollution are anticipated to result from the combustion emissions associated with construction activities and equipment, dust emissions due to site preparation works, and increase in road traffic as a result of construction vehicles accessing the site. As these impacts are temporary, and can be

managed through application of best practice and construction management, they are not expected to be significant.

During operation, combustion emissions from the CHP have the potential to cause increases in pollutant concentrations in the vicinity of the site where residential reports are located. However, the stack height has been designed to provide adequate dispersion and therefore impacts are not expected to be significant.

There is potential for odour impacts associated with the operation of the anaerobic digester and biogas facility. During operation, the biogas holder will store biogas generated by the anaerobic reactor. The flare stack will burn off excess biogas from the biogas holder, reducing odour and generating minimal combustion products. An odour control unit will be installed as an integral part facility, collecting air from process stages which have the potential for creating odour nuisance, this treatment unit will remove odours materials and results in potential effects not being significant.

Both the anaerobic and aerobic digestion processes produce sludge which will be periodically removed from site for disposal at an appropriate licenced facility. The infrequent removal of sludge will be an enclosed process to minimise potential for odour. Sludge disposal and chemical deliveries will be infrequent and are not expected to increase traffic movements that would affect air quality.

Archaeology and Cultural Heritage

There are no World Heritage Sites, Registered Battlefields or Registered Parks and Gardens within 1km of the Proposed Development. Burton upon Trent Abbey, a Scheduled Monument, is located approximately 0.95km to the south east of the Proposed Development.

There are three Conservation Areas within 1km:

- Burton upon Trent Horninglow Street/Guild Street Conservation Area approximately 80m to the south east;
- Station Street and Borough Road Conservation Area around 300m to the south; and
- Burton upon Trent No. 2 and No. 3 Conservation Area approximately 600m to the east.

There are 34 listed buildings within 500m of the Proposed Development. Four listed buildings are located within 100m:

- 98, 99, and 100, Horninglow Street, Grade II (No. 272990);
- 107-113, Horninglow Street, Grade II (No. 272991);
- 127, Horninglow Street, Grade II (No. 272992); and
- 5 Hawkins Lane, Grade II (No. 272959).

The Proposed Development has limited potential to encounter and impact upon buried archaeological features during ground excavation for construction works, as the site has previously been developed and is now used for storage on the brewery site. It is possible that foundations and features survive below ground that relate to the early brewery industry, which are likely to be of local significance only.

The construction and the operation activities of the Proposed Development, e.g. site compounds, access and haul roads, pumping station, tanks and biogas flare are unlikely to result in significant effects upon the setting of nearby listed buildings, due to the existing nature, location and scale of the main brewery sites located close by. Similarly, no significant construction or operation effects are anticipated on the setting of the Scheduled Monument or Conservation Areas.

Therefore, the Proposed Development is not likely to result in significant effects on archaeology or cultural heritage.

Biodiversity and Nature Conservation

The Proposed Development is located on a plot of land to the north of the main brewery site. The site is of limited ecological value and there are no statutorily designated ecological sites directly affected by the Proposed Development.

The Proposed Development is bound by a tree and hedge line on the eastern perimeter of the site. Following an initial site walkover, the potential impacts that could arise from construction and site clearance activities are limited to disturbance of nesting birds and potential for bat roosts in the tree line and disused site buildings. In addition to maintaining compliance with legislation regarding the protection of habitats and species, appropriate good practice construction management will be employed to manage impacts so that effects are not likely to be significant.

Climate Change and Greenhouse Gases

Potential climate change impacts and risks which may occur during construction include extreme weather events such as flooding which may affect the safety and integrity of the construction site and surrounding areas. These risks will be addressed by best practice in construction management, implementing appropriate measures to mitigate the impacts of extreme weather events and related conditions.

Potential climate change impacts and risks which may occur during operation include those caused by changes in mean climatic conditions as well as extreme weather events such as flooding. These impacts and risks may affect the safety and integrity of the operation of the AD plant. Risks relating to operation and maintenance of the Proposed Development will be addressed in the operation and management plans for the site and climate change will be accounted for in a Flood Risk Assessment following Environment Agency guidance.

Options for reducing greenhouse gas emissions during construction and operation will be explored, for example, by considering designs with fewer raw materials, by incorporating higher recycled contents, or a more efficient logistics strategy for the Proposed Development; however, opportunities are limited due to the small scale and simplicity of the Proposed Development. The flare burns excess biogas only; reducing methane release.

Given the scale and nature of the development, effects of climate change on, and greenhouse gases generated by, the Proposed Development are not likely to be significant and will provide a beneficial effect of reducing overall greenhouse emissions.

Ground Conditions

There are no records of landfill located in close proximity to the Proposed Development. There are no pollution incidents recorded within 100m of the Proposed Development.

Within 250m there are a small number of industrial pollution incidents, related to activity on the main brewery site. The Proposed Development is located within an industrial area with potential for historic contamination.

The nature of the underlying geology comprises superficial deposits of sand, silt, alluvium, peat and associated ground gases (i.e. methane). The underlying solid geology comprises the Triassic Mercia Mudstone.

Given the potential for historic contamination, there is potential for the creation of migration pathways during construction to sensitive receptors, due to the permeable nature of the underlying geology. The Proposed Development will be on hardstanding with secondary containment, limiting the potential for future contamination of the ground. A Preliminary Risk Assessment will be undertaken to inform the design, and standard pollution prevention methods will be employed during construction to prevent pollution of the ground.

The Proposed Development is therefore not considered likely to have any significant effects resulting from current ground conditions or contribute to any deterioration in those conditions.

Human Health

There is potential for short term adverse effects on wellbeing resulting from construction related activities. These effects relate to noise and vibration, and dust and construction traffic affecting nearby communities. The impacts upon health determinants during construction will be short term and are not expected to lead to any long term effects on health and wellbeing.

Measures to control noise and air emissions, traffic management plans, site security and timely communication of construction activities will be agreed and implemented as part of the Proposed Development. These measures will avoid any significant residual construction impacts and are therefore not likely to give rise to significant adverse effects on wellbeing at the community level.

No construction or operation impacts have been identified that have the potential to result in significant adverse effects on health and wellbeing.

Landscape and Visual

The Proposed Development is not situated in what would be considered as a sensitive landscape area, however there are sensitive visual receptors in terms of listed buildings and residential areas within 500m. The existing townscape and visual amenity of the local area are dominated by industrial and commercial buildings associated with the main brewery site.

The site is relatively enclosed by vegetation along the north eastern perimeter, with deciduous trees providing 5-8m of screening. It is expected that visibility into the Proposed Development site will increase during the winter months.

Visibility of the Proposed Development is likely from viewpoints in the surrounding area, given the maximum height of components is 11.2m. However, longer distance visibility will be minimal given the height of the main brewery site located to the south, which is a dominating feature of Burton upon Trent.

External site lighting will be provided to all new buildings and areas, including walkways and entries to buildings. Site lighting during operation is to be designed in accordance with

Molson Coors Brewery Company security requirements, but is expected to be switched off at daybreak. External task lighting may be required for areas which require maintenance during periods of poor light or in poorly lit locations.

Potential impacts of the Proposed Development include winter views into the site from public and sensitive receptors. However, given the existing industrial setting and surrounding development, construction and operation of the Proposed Development is not likely to result in significant effects on landscape and visual receptors.

Major Accidents and Disasters

The Proposed Development is not considered to have a high vulnerability to major accidents and disasters. Although legislation is not explicit, language used in the EIA Regulations 2017 is aimed towards hazardous industries or operations (typically those with a 'high vulnerability' to major accidents).

The potential impacts of major accidents and disasters are considered to be managed through extensive safety management systems implemented during the design, installation and operation of an AD and biogas facility. These legal requirements, codes and standards are namely:

- Health and Safety at Work etc. Act 1974 (HSWA);
- The Management of Health and Safety at Work Regulations (1999);
- Construction (Design and Management) (CDM) 2015 Regulations;
- The Workplace (Health, Safety and Welfare) Regulations 1992.

Noise and Vibration

The Proposed Development is located within an existing industrial area. The main existing sources of noise identified in the area include industrial operations, traffic noise from the existing road network and railway lines in close proximity to the site. Therefore, existing ambient background noise is already elevated.

Direct noise and vibration effects may be caused as a result of construction activities; however, no substantial ground works are proposed as part of the works. Temporary changes to road traffic patterns of the existing road network may result in indirect effects but are temporary and not expected to be significant.

The CHP units will be enclosed in a building designed to achieve acceptable noise shielding, and given the nature and scale of the Proposed Development in comparison to the current main brewery site and background noise environment, is not likely to result in significant noise and vibration effects.

Traffic

Construction traffic will use the existing road network, with access to the Proposed Development via Middle Yard from the A511 (Horninglow Street). The existing brewery site generates a number of vehicle trips, peaking at 20-30 vehicle trips per hour.

During the construction phase there is potential for temporary disruption to existing road traffic. The increased traffic movements along the road network may lead to impacts upon receptors in the vicinity of the Proposed Development, namely residential receptors, however, this is not expected to represent a significant increase to the current commercial and industrial road use in the area.

During operation, the number of HGV movements will be limited to one tanker of solid waste (sludge removal) daily off site and approximately three chemical deliveries per month.

Traffic generated during operation of the Proposed Development is not likely to result in significant effects.

Water Resources

There are no wetlands or coastal zones in the vicinity of the site. The Proposed Development is located approximately 750m west of the River Trent. The Trent and Mersey Canal lies approximately 1km to the west of the main brewery site.

The Proposed Development is situated within a flood plain of the River Trent, and overlies Groundwater Source Protection Zones (GPSZ) I and II. The site is underlain by a Secondary A Aquifer with high vulnerability and Secondary Aquifer B with variable permeability.

There is potential for creation of a pollutant linkage during construction activities leading to pollution of the GPSZ and Aquifer. A Preliminary Risk Assessment will be undertaken to inform the design, and standard pollution prevention methods will be employed during construction to prevent the pollution of groundwater.

A large abstraction borehole lies approximately 500m from the AD and biogas facility, on the existing main brewery site. There is an abstraction borehole within the Proposed Development site (Waggoner's Bore) which is not currently used or licensed for abstraction. A decision has yet to be made whether to retain or close and cap this borehole; however, any proposed works will be undertaken in consultation with the Environment Agency and will be undertaken to appropriate standards to minimise the risk of introducing any pollution pathway to underlying groundwater.

The majority of the Proposed Development site is located within Flood Zone 2, as designated by the Environment Agency (1 in 1,000 annual probability of flooding). In accordance with the East Staffordshire Local Plan (2012-2031) Strategic Policy 11 for the Bargates and Molson Coors Strategic Area, and the Proposed Development's location within Flood Zone 2, the planning application for the Proposed Development will be supported by a Flood Risk Assessment (FRA).

The Proposed Development includes a hardstanding area with secondary containment to house the tanks during operation. Operational management of the facility will minimise the risk of spillage or tank failure and the installed drainage and run-off management design will be developed in line with current standards to prevent any spill from leaving the site and ensure no increase in flood risk.

The Proposed Development is not considered likely to result in significant effects on water resources or surface water flooding.

Conclusion

The Proposed Development of an AD and CHP facility at Molson Coors Brewery Company site in Burton upon Trent will not directly impact upon any designated environmentally sensitive or otherwise valuable sites. Consideration of potential impacts and the receiving environment described above concludes that any potential effects arising from the Proposed Development are localised and can therefore be minimised through appropriate design and mitigation measures throughout construction and operation phases. The Proposed Development is not likely to result in significant adverse effects on the

environment and therefore an Environmental Impact Assessment as defined in the EIA Regulations is not required.

We would be grateful if the planning authority would consider the enclosed information and provided a Screening Opinion in response to this request.

Yours sincerely

Senior Environmental Scientist

Enclosed:
Figure 1 Location Map
Appendix A Site Layout Plan

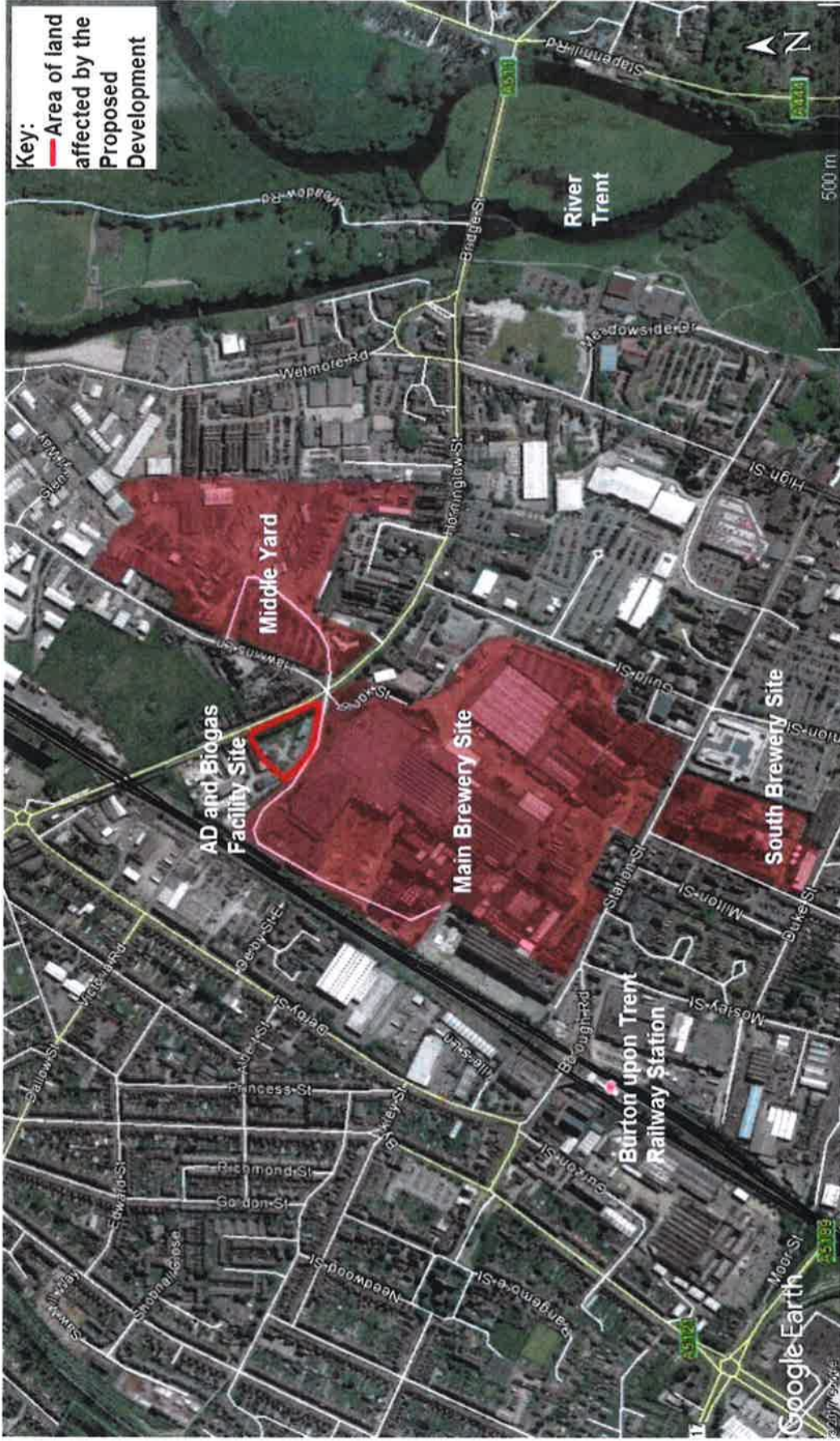
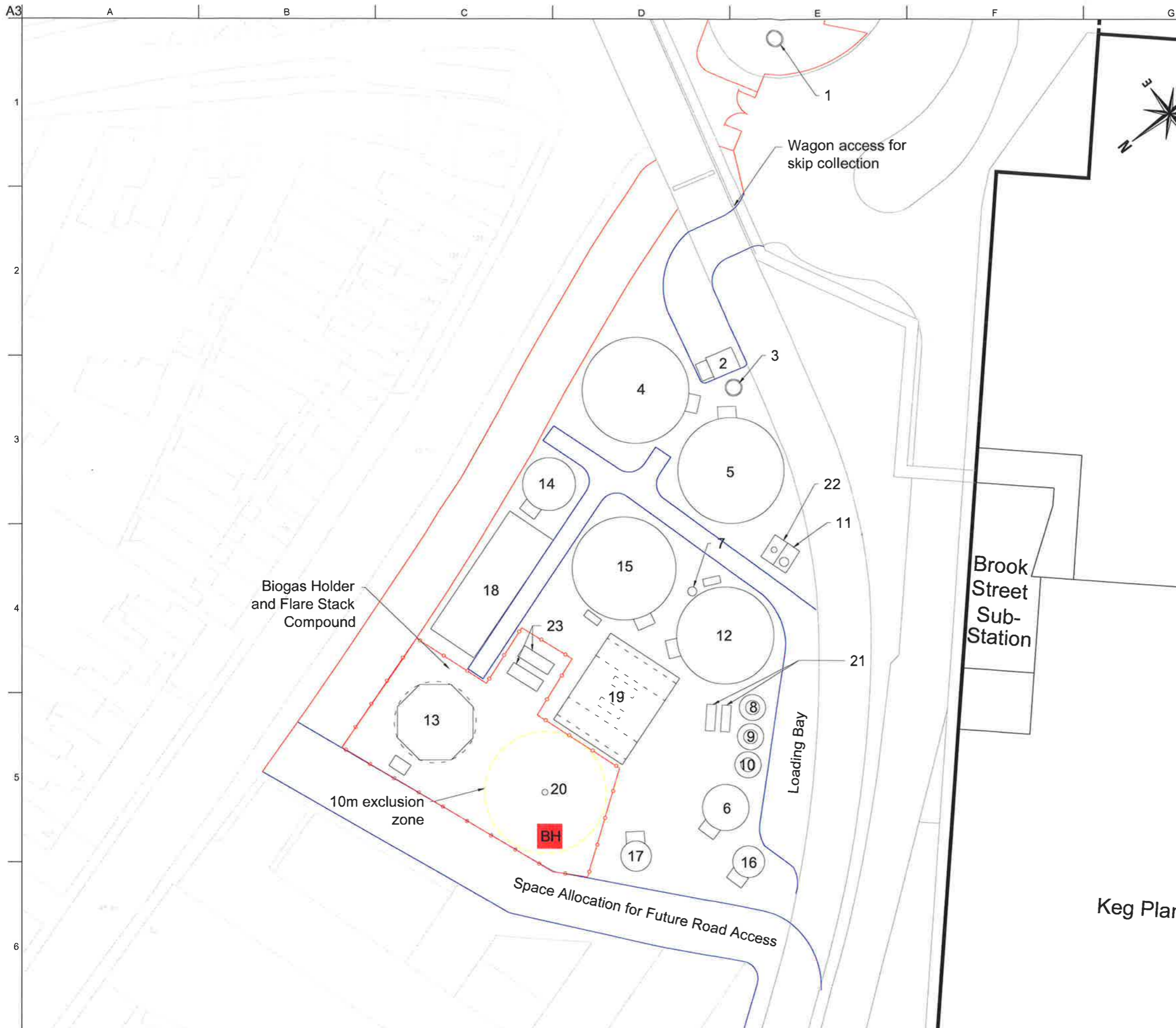


Figure 1. Location map sufficient to identify the land affected by the Proposed Development.

Appendix A

Site Layout



Key	Description	Tag No.
1	Brook Street Pump Sump	TK0101
2	Inlet Screens	SC0201A/B
3	Balancing Tank Pump Sump	TK0201
4	Divert Tank	TK0502
5	Balancing Tank	TK0503
6	Anaerobic Sludge Tank	TK0504
7	Re-aeration Tank	TK0601
8	Hydrochloric Acid Storage Tank	TK0302
9	Causic Soda Storage Tank	TK0401
10	Nutrient Storage Tank	TK0801
11	Hydrochloric Acid Fume Scrubber	TK0301
12	Anaerobic Reactor	RT0601
13	Biogas Holder	GS0901
14	Anoxic Tank	TK0701
15	Aeration Tank	TK0702
16	Aerobic Sludge Tank	TK0707
17	Final Water Tank	TK0706
18	Main Building	N/A
19	CHP Plant	N/A
20	Flare Stack	N/A
21	Heat Exchangers	HX0601 / 02
22	Odour Control Unit	TK1101
23	Biogas Boosters	GB1001A/B

BH	Abandoned Borehole			
P02	17/08/17	DH	DH	VG
P01	19/07/17	LH	DH	VG
Issue	Date	By	Chkd	Appd

ARUP
 Admiral House, Rose Wharf,
 76 East Street, Leeds, LS9 8EE
 Tel +44(0)113 242 8498 Fax +44(0)113 242 8573
 www.arup.com

Client
Molson Coors Brewing Company

Job Title
MCBC AD Plant

Drawing Title
Molson Coors Site Layout

Scale at A3 1:625

Discipline Process

Job No **253583** Drawing Status **WIP**

Drawing No **253583-ARP-DWG001** Issue **P02**

