



Report prepared at

Former Sandgate Nurseries
West End Lane
Henfield
West Sussex
BN5 9RD

On behalf of

Stonegate Homes Limited

Report reference

22-200.02

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Prepared by

Aviron Associates Limited

Report Quality Management			
Project Name	Former Sandgate Nurseries, West End Lane, Henfield, West Sussex, BN5 9RD		
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1.0 PROJECT AND SITE INFORMATION

1.1 APPOINTMENT

Aviron Associates Limited (Aviron) was retained by Littleworth Properties Limited (the “Client”) to prepare a Groundwater Risk Assessment of the following premises:

Former Sandgate Nurseries, West End Lane, Henfield, West Sussex, BN5 9RD (hereafter referred to as the “site”).

A Preliminary Risk Assessment (PRA) has previously been completed by Aviron which is documented within the following report, and summarised in the following sections:

 Aviron, Preliminary Risk Assessment, Version 3 (reference 22-200.01, dated August 2022)

The PRA made reference to a preliminary risk assessment and site investigation completed by RPS Group (RPS) as follows:

 RPS, Phase 1 Preliminary Risk Assessment and Phase 2 Geotechnical and Environmental Site Investigation (reference HLEI35707/001R, dated May 2015)

A recent site investigation including the completion of a borehole by OT Drilling Limited will be used to investigate the relevant pollutant linkages established within the PRA in order to produce suitable data for the preparation of a groundwater risk assessment.

Aviron has relied upon information received from the Client and their agents as accurate, unless contradicted by written documentation or site observations.

1.2 THE SITE

Table 1.2 provides a summary of site details and surrounding area.

Table 1.2: Site Details	
Site Location	The site is located to the south of West End Lane and to the north of Hollands Lane. The site is located on the western edge of the town of Henfield. Figure 1 is presented as the Site Location and Existing Site Layout Plan.
National Grid Ref.	Centred at approximately 520450, 115980.
Current Land Use	The site is a former nursery with glasshouses, remnant polytunnels and a vineyard. Figure 2 is presented as the Site Characterisation Plan. Figures 3 and 4 are enclosed as the Site Photographs, taken in August 2022.

Table 1.2: Site Details

Surrounding Land Use	The site is bound by West End Lane and residential houses to the north, residential housing to the east, Hollands Lane and fields to the south and agricultural land and isolated dwellings to the west.
Proposed Land Use	The proposed development is expected to comprise residential semi-detached homes with private gardens. Figure 5 is enclosed as a Proposed Development Plan.

1.3 SITE WALKOVER SURVEY

A site walkover survey was undertaken in August 2022 and included an inspection of the site and surrounding area, where safe and accessible. The purpose of the survey is to identify any potential on-site or nearby contaminative activities or potential sources of land contamination.

Additionally, as part of the survey any features which may affect site re-development in terms of physical site and ground conditions were noted.

Table 1.3 provides a description of site features observed during the walkover survey and also current Ordnance Survey maps made available at the time of report writing.

Table 1.3: Summary of Site Walkover Survey

Physical Site Characteristics	
Existing Structures	There are two large adjoined glasshouses in the middle of the site. One small shed is located to north of the glasshouses. Remnant polytunnels were also observed.
Basements	None observed.
Visual Topography and Site Surfacing	Site surfacing consists predominantly of flat grass over soil. There is concrete between the shed and glasshouses and there is a concrete path running north-south, through the middle of a site. The site slopes gently downwards (to the west and the south-south-east) to the rear of the glasshouses over a drop of between 2-5 metres (m).
Retaining Structures and Slopes	The site slopes gently downwards to the west and the south-south-east.
Drainage Issues	None observed.
Surface Waters	None observed.
Trees and Hedges	Hedges and mature trees are located around the site's boundary.
Made and Infilled Ground	None observed.

Table 1.3: Summary of Site Walkover Survey

Contaminative Characteristics	
Above or Underground Storage Tanks and Drums	There is an above ground storage tank (AST) outside the north-west corner of the glasshouses. The AST is a metal tank that is supported on breeze blocks and partially covered with brambles, as shown in Photo 4 in Figure 3. Details of the content of the AST could not be obtained but it is speculated that it contained heating oil which would have been used to heat the glasshouses. Given the age of the tank, it is thought to be of single-skin construction with no integral bund. It is not known whether the tank is empty. The vegetation was too dense to determine whether there were any stains to the ground surface underneath the tank.
Fuel Interceptors	None observed.
Waste Storage and Disposal	None observed.
Hazardous Material Storage and Use	None observed.
Asbestos Containing Materials (ACMs)	The roof of the on-site shed is suspected of containing ACMs and review of the RPS report of May 2015 indicated at the time of their inspection fragments of suspected ACMs were in the vicinity of the collapsed storage shed and greenhouse.
Boiler Houses	None observed.
Sub-stations	None observed.
Surface Staining	None observed.
Potentially Contaminative Activities	Aside from the storage of hydrocarbons in the AST, no other potentially contaminative activities were identified.

1.3.1 Summary of Physical Site Characteristics

Aside from the physical features described in table 1.3, an overhead cable was also observed. The cable was orientated in an NNE - SSW direction.

Consideration should be given to the influence of the trees around the boundary of the site on the proposed development buildings.

1.3.2 Summary of Contaminative Site Characteristics

Aside from the potential asbestos in the shed roof, around the shed/greenhouse (RPS) and the fuel storage in the AST, no potentially contaminative characteristics were noted during the site walkover.

2.0 DESK STUDY REVIEW

Historical Ordnance Survey (OS) maps as part of the Aviron PRA were reviewed to determine the historical development of the site. Database information within the PRA, which also includes reference to the hydrogeology and hydrology in the site area, is summarised in the following sections.

2.1 HISTORICAL REVIEW

Historical Ordnance Survey (OS) maps were reviewed, and the historical development of the site and the surrounding land is summarised in the following table.

Table 2.1: History of the Site and Surrounding Land		
Date (scale)	Site History	Surrounding Land History
1876, 1897 (1:2,500) 1879 (1:10,560) 1898-1899 (1:10,560)	The earliest historical mapping shows that the site comprises undeveloped agricultural land.	The settlement of Henfield is located between 400m and one kilometre to the east of the site. The site is bound by roads to the north and south. A gas works is shown 40m to the south-east. A railway station and steam mill (for flour) is shown 100 metres to the east. Other features include a spring 80m to the south and Dears Farm 20m to the west.
1911 (1:2,500) 1912-14 (1:10,560)	No apparent changes from the previous mapping.	The steam mill (for flour) is now disused. The railway station that is adjacent to the former steam mill is associated with small structures labelled as 'cattle pens'.
1938 (1:2,500) 1947-51 (1:10,560)	The western part of the site is shown as being planted with an orchard. The rest of the site remains undeveloped.	Numerous semi-detached residential properties now exist adjacent to the east of the site. The former gas works to the south-east has become disused. Adjacent to the former gas works is a sewage disposal works. To the west, apparent glasshouses labelled as West End Nursery are shown adjacent to the site.
1951(1:10,560) 1956 (1:2500)	No apparent changes from the previous mapping.	The settlement of Henfield has extended towards the site. Former fields to the east have been developed with mainly residential structures. The gasholders and other structures associated with the previous gas works are still present to the east of the site, however the works is noted to be disused.
1876, 1897 (1:2,500) 1879 (1:10,560)	The earliest historical mapping shows that the site comprises undeveloped agricultural land.	The settlement of Henfield is located between 400m and one kilometre to the east of the site. The site is bound by roads to the north and south.

Table 2.1: History of the Site and Surrounding Land

Date (scale)	Site History	Surrounding Land History
1898-1899 (1:10,560)		A gas works is shown 40m to the south-east. A railway station and steam mill (for flour) is shown 100 metres to the east. Other features include a spring 80m to the south and Dears Farm 20m to the west.
1911 (1:2,500) 1912-14 (1:10,560)	No apparent changes from the previous mapping.	The steam mill (for flour) is now disused. The railway station that is adjacent to the former steam mill is associated with small structures labelled as 'cattle pens'.
1938 (1:2,500) 1947-51 (1:10,560)	The western part of the site is shown as being planted with an orchard. The rest of the site remains undeveloped.	Numerous semi-detached residential properties now exist adjacent to the east of the site. The former gas works to the south-east has become disused. Adjacent to the former gas works is a sewage disposal works. To the west, apparent glasshouses labelled as West End Nursery are shown adjacent to the site.
1951(1:10,560) 1956 (1:2500)	No apparent changes from the previous mapping.	The settlement of Henfield has extended towards the site. Former fields to the east have been developed with mainly residential structures. The gasholders and other structures associated with the previous gas works are still present to the east of the site, however the works is noted to be disused.
Note: All distances are approximate.		

2.1.1 Planning History

Refused residential planning application from 2014.

2.1.2 Anecdotal Evidence

No anecdotal evidence was available at the time of reporting.

2.1.3 Summary of Site History

The site was undeveloped until the 1930s. In the 1930s, the western part of the site was planted as an orchard. The first on-site building appeared between the mid-1960s and 1970. Three small structures labelled as Sandgate Nurseries were shown in 1970.

The site continued to be used as horticultural nurseries until 2006. In the 1999 aerial photograph, the south-western part of the site was shown as being covered with apparent glass houses or polytunnels accessed by a long straight path.

Subsequently the mapping indicates that the on-site structures associated with Sandgate Nurseries were removed. The long path is the only feature that is shown in the 2021 mapping edition.

2.1.4 Summary of Surrounding Site History

Development in the surrounding area is mainly residential. Henfield is located to the east of the site, which has gradually expanded its development westwards towards the site over the years. The adjacent residential development to the east appeared in the 1930s. The houses adjacent to the north, beyond West End Lane, were built after 2006.

The following potentially contaminated landuses were observed in the surrounding area: a railway and goods station (100m east), station mill (100m east), a gas works (40m south-east), a sewage disposal works and later refuse tip (50-80m south).

2.2 GEOLOGY, HYDROGEOLOGY AND HYDROLOGY

2.2.1 Anticipated Geology

The British Geological Survey (BGS) sheet 318 (1:50,000 edition) of Brighton and Worthing was reviewed, and presented within table 2.2.1 is the site's anticipated geology.

Table 2.2.1: Anticipated Geology				
Stratum	Age	Possible Thickness (m)	Typical Description	Aquifer Status
Artificial/Made Ground None indicated on site	N/A	N/A	N/A	N/A
Superficial Head – (NW and the SW part of the site only)	Quaternary – Epoch age.	Up to about 15m.	Clay, silt, sand and gravel.	Secondary (undifferentiated) aquifer
Solid Lower Greensand Group	Quaternary – Aptian to Albian.	Up to 250m.	Mainly sands and sandstones (varying from well-sorted fine-grained to poorly sorted medium-to coarse-grained) with silts and clays in some intervals.	Principal aquifer

There are no landslips or fault lines recorded within 250m of the site, and no Made Ground (aside from a historical landfill) or artificial ground noted within 250m of the site.

2.2.2 Ground Conditions - Borehole and Trial Pit Records

There are eight BGS recorded logs for historical drilling or excavation works for premises located within 1000m of the site. A summary of the logs of the nearest recorded boreholes is provided in table 2.2.2 below.

Table 2.2.2: BGS Borehole and Trial Pit Records			
BGS Reference	Distance from Site (Direction)	Geology (Depth to base, below ground level (bgl))	Groundwater Depth (bgl)
TQ11NE6	500m (NW)	Clay to 6.7m Stiff blue clay to 7.9m Hard shaley clay to 12.2m Stiff blue clay with layers of shale to 19.2m Sandstone with hard veins (Hythe Beds) to 30.5m	Groundwater strike at 19.2m Groundwater rest level at 3.0m
TQ21NW2	563m (SE)	Topsoil to 0.35m Sandgate beds (comprising layers of sandy clay, sandy loam, grey sandstone, sandy loam, grey sandstone, greensand, sandstone and sand) to finished depth of 16.3m	7.41m
TQ21NW21	568m (SE)	Brown sandy clay to 3m Grey clay with bands of mudstone to 9m Sandstone to 10m Running sands to 11m Mudstone to 16m	9.0m
TQ21NW1	660m (SE)	Coarse yellow sands to 6.3m Silt, sandy clay to 6.4m Fine silty sand to 7m Sand to 14m Clay to 14.1m Sand to 16.3m	Not recorded
TQ21NW5	748m (SE)	Folkestone Sand (yellow sand, running sand) to 17.4m Sandgate Beds (blue clay intermixed with sand) to 55.8m Hythe Beds (very hard rock) at 55.9m	14.3m

2.2.3 Ground Conditions – RPS Site Investigation

RPS completed a ground investigation between 26 and 27 March 2015 which comprised:

- 🌿 Twelve window sample boreholes (WS1 to WS12) to maximum depths of up to 5.2m below ground level (bgl) with the installation of six groundwater/ground gas monitoring wells at positions WS1, WS3, WS6, WS8, WS11 and WS12.
- 🌿 The machine excavation of four trial pits (TP1 to TP4) to maximum depths of up to 4.2m bgl with infiltration testing within TP1 and TP4.

Ground conditions encountered by RPS are summarised within table 2.2.3.

Table 2.2.3: Summary of RPS Ground Conditions			
Strata	Depth to Top of Strata (bgl)	General Description	Thickness
Topsoil	Ground Level	Sandy, gravelly Clay with rootlets	0.2m - 0.5m
Head Deposits	0.2m – 0.5m	Sandy, gravelly CLAY and sandy CLAY and silty SAND and gravelly SAND	3.3m – >4.5m
Lower Greensand Group	3.7m – 4.9m	Sandy CLAY and clayey SAND	>0.1m - >1.3m

RPS commented that the Head Deposits were unusually thick.

2.3 EXAMINATION OF LAND CONTAMINATION – RPS MAY 2015

2.3.1 Soil Contamination

No visual or olfactory evidence of soil contamination was observed during the RPS investigation.

RPS indicated that chemical analysis was completed upon five samples collected from the overlying Topsoil and eighteen from the underlying Head Deposits.

It is Avron's opinion that the total number of samples is suitable. However, the overlying Topsoil would possess the greatest risk of being contaminated from site use and also has greatest exposure risk to end users. On the basis the overlying Topsoil (if contaminated) would present the greatest exposure risk human health and is also likely to be retained on-site for landscaping an improved human health risk assessment would have been achieved if the balance of soil sampling and testing was targeted to the Topsoil as opposed to the Head Deposits.

Figure 6 is enclosed as a Characterisation and Contamination Plan.

An exceedance of arsenic was recorded within TP3 at 1m bgl at a concentration of 47mg/kg when compared to the S4UL of 32mg/kg. It is likely the arsenic recorded within the Head Deposits is naturally occurring due to mineralisation.

An exceedance of lead was recorded within WS10 at 0.3m bgl at a concentration of 340mg/kg when compared to the C4SL of 200mg/kg. The lead recorded may be an historical lead based paint spillage given the absence of hydrocarbons within the same sample.

All remaining concentrations of determinants including hydrocarbons, volatile organic compounds, pesticides and herbicides were recorded at acceptable concentrations.

Asbestos was not detected within seventeen samples submitted for analysis, however, it is noted no exploratory holes were targeted to the dilapidated shed with RPS observed suspected ACMs upon the ground.

Whilst RPS indicated WS6 was completed in the vicinity of the unbundled AST review of their exploratory hole location plan suggests WS6 is some 20-30m to the west of the AST and thus the results from WS6 can not be considered indicative of the soil chemistry local to the AST.

2.3.2 Groundwater Contamination

A slight sheen was observed on the groundwater sampled from borehole WS3 during subsequent monitoring. It is noted this monitoring wells was not located in close proximity to the unbounded AST.

In relation to WS3 no hydrocarbon or organic groundwater contamination was recorded within the sample submitted for analysis.

RPS completed as single round of groundwater sampling and testing upon the wells installed which generally recorded acceptable groundwater chemistry with only chromium and selenium above the screening values.

Groundwater is not considered to be contaminated.

2.4 HYDROGEOLOGY

The hydrogeology of the site has been determined by the superficial geology of the Head deposits (sand, clay, silt) and the solid geology of the Lower Greensand Formation, which are classified as a secondary (undifferentiated) aquifer and a principal aquifer respectively. The Principal Aquifer that directly underlies most of the site is described as layers of rock or drift deposits that have high intergranular and/or fracture permeability which may support water supply and/or river base flow on a strategic scale.

The RPS site investigation of April 2015 recorded groundwater strikes/seepages within exploratory holes at depths between 1m bgl and 4m bgl. During return monitoring of wells WS1, WS3, WS6, WS11 and WS12 groundwater was recorded between 0.88m bgl and 1.74m bgl. Monitoring well WS8 recorded outlying results of depths between 4.41m bgl and 4.54m bgl.

The Envirocheck report indicates that the groundwater vulnerability is noted beneath the site as 'principal bedrock aquifer - high vulnerability' and 'productive superficial aquifer'.

The Envirocheck report and the ArcGIS website (viewed in April 2025) indicates that the site is not located within an Environment Agency Source Protection Zone.

The Envirocheck report indicates that the nearest reference to groundwater abstraction are licences for premises 484m to the west of the site. The purposes of the abstractions were for 'horticulture and nurseries: general use (very low loss)'. The licences are dated 1990 and 2005, no permit end date is supplied.

The Envirocheck report indicates that the site is not located in a BGS groundwater flooding susceptibility area. The nearest groundwater flooding susceptibility area is indicated 117m to the south, where there is noted to be 'potential for groundwater flooding to occur'.

2.5 HYDROLOGY AND FLOODING

The nearest surface water feature (pond) is noted approximately 34m to the north-west of the site. A drain and a spring are shown approximately 50m to the south. The nearest land drain joins a larger network of land drains 250m to the south. Despite the numerous drains, no main rivers are shown within 500m of the site.

The Envirocheck report indicates that there are no surface water abstractions within 1000m of the site.

The Envirocheck report indicates that the site is not located in an area of 'extent of flooding or extreme flooding from river without defences'. The site is not located in an area that benefits from flood defences and the site is not in use for flood water storage.

Information from the Envirocheck report and the GOV.UK website (April 2025) indicates that the site is not located in a Flood Zone 2 or a Flood Zone 3. The site is located in a Flood Zone 1, noted as 'land and property in this flood zone have a low probability of flooding'. However, there is indicated to be small areas to the NW and SW that are at 'medium risk' of flooding from surface water.

The Envirocheck report indicates that the site is not located in a 'surface water flood extent'.

3.0 SITE INVESTIGATION WORK

3.1 METHOD STATEMENT AND SITE INVESTIGATION APPROACH

It is assumed for the purposes of this assessment that the site investigation was conducted in accordance with British Standards; BS5930:2015+A1 'Code of Practice for Ground Investigation' and BS10175:2011+A2:2017 'Investigation of Potentially Contaminated sites'.

3.2 SITE INVESTIGATION METHODS

Borehole BH1 was rotary drilled by OT Drilling Limited between 22 July 2024 and 5 August 2024. using 200mm diameter equipment and 219mm casing to a depth of 55.0m below ground level (bgl). The purpose of the borehole was to evaluate ground conditions at a depth suitable to enable the construction of a Groundwater Borehole Well.

The borehole was completed in the north of the site under the advice of the Client's design team to determine ground conditions and enable the construction of a Groundwater Borehole Well, which was installed to 55m bgl with a response zone between 24m bgl and 52.5m bgl.

The Groundwater Borehole Well Location Plan is enclosed as **Figure 7**.

3.3 GROUND CONDITIONS

The borehole log is presented within **Appendix I**. In general, the ground conditions comprise:

-  Topsoil to a depth of 0.3m bgl.
-  Brown sandy CLAY to 4.0m bgl.
-  Angular GRAVEL to 4.5m bgl.
-  Hard Blue CLAY (Sandgate) to 18.0m bgl.
-  Grey SANDSTONE with thin interbedded LIMESTONE horizons (Hythe) to the termination depth of the borehole at 55.0m bgl.

No improved strata descriptions can be provided.

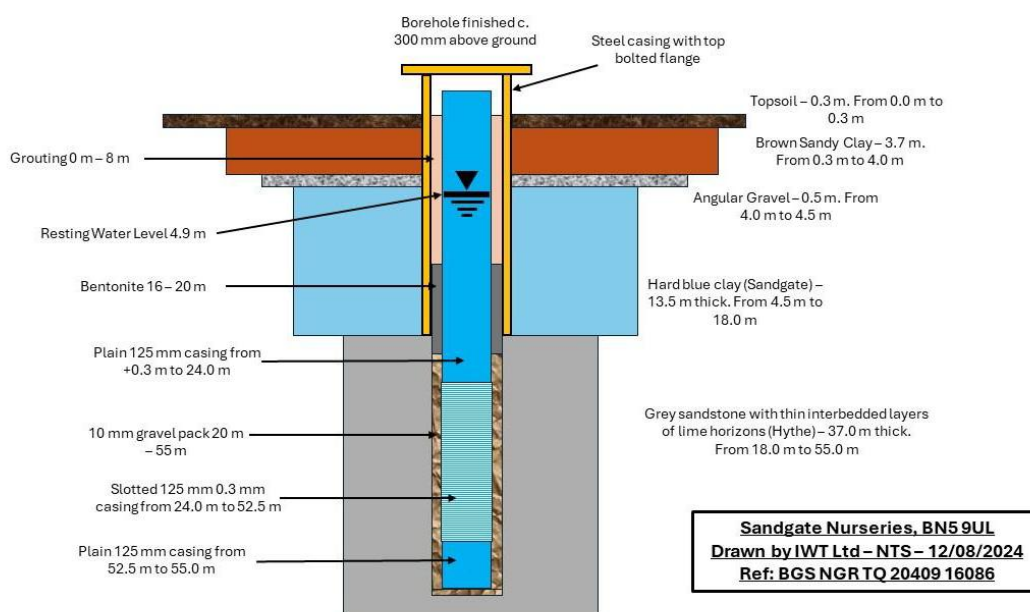
3.4 GROUNDWATER LEVELS

3.4.1 Groundwater Levels: During Drilling Works

Groundwater was encountered during the drilling works at 18m bgl. During a 2-hours (hr) pumping test on 5 August 2023 (suction at 42m bgl) the water level at the start and end of the test was noted at 4.9m. the pumping rate was record as 5.3m³/hr.

3.4.2 Groundwater Borehole Well

The borehole was converted to a groundwater well installed into the 200mm diameter borehole using 125mm diameter UPVC standpipe to 52.5m, assumed on a gravel bed between 52.5m and the base of the borehole at 55.0m. Below is a diagram of the well installation detail.



6.0 LABORATORY ANALYSIS

6.1 SOIL GEOCHEMICAL TESTING

Soil geochemical testing was not completed during the rotary drilling of BH1, however, reference be made to the to the previously completed 'RPS' site investigation summarised in section 2.3.1.

RPS indicated that chemical analysis was completed upon five samples collected from the overlying Topsoil and eighteen from the underlying Head Deposits.

6.2 GROUNDWATER CHEMICAL TESTING

One round of groundwater sampling and testing was completed on 5 August 2024 during the aforementioned pump test. The water sample was analysed for SS-DWREGS suites of analysis. It is understood the analytical suite was chosen to provide a suitable screening for the purposed of determining water quality for potable use.

The groundwater sample for environmental quality analysis was delivered directly to South East Water Scientific Services on the day of sampling.

Table 6.1 details the groundwater sample which was collected and submitted for geochemical analysis.

Table 6.1: Groundwater Geochemical Testing			
Location	Certificate No.	Objective	Analysis
BH1	1287680-4 Final	Groundwater sample to determine baseline concentrations in accordance with Drinking Water Standards	SS-DWREGS

7.0 ENVIRONMENTAL INTERPRETATIVE GUIDANCE

7.1 GENERIC QUANTITATIVE RISK ASSESSMENT

The purpose of a tier 2 GQRA is to determine the suitability of the site for proposed development and end use.

The site investigation shall collect soil samples whereby determinant chemical measured in the soil through laboratory analysis have been compared with guidance values which are appropriate to the receptor under consideration. The guidance values or screening criteria applied shall be industry adopted generic values which following a screening of the laboratory analysis shall determine whether or not a site is contaminated, as defined under Part IIA of the EPA 1990 and specification in regard of the proposed development and identified receptors.

Where exceedances of guidance values or recorded a GQRA is can be used to appraise risk and make recommendations in regard of further investigation, remediation and/or tier 3 Detailed Quantitative Risk Assessment (DQRA).

7.2 GUIDANCE USED FOR ASSESSING SOIL CONTAMINATION

Aviron has followed the technical approach on Land Contamination Risk Management (LCRM), accessed on gov.uk website and other available guidance to assess contaminant concentrations.

Details of the methodology and Aviron's position on the adoption of guidance values is outlined below.

The available chemical data, from soil samples tested, is sorted into appropriate datasets depending on sampling regime and ground conditions. An initial GQRA is completed using the relevant and industry available screening criteria and where appropriate, statistical modelling. Risks to human health shall be initially assessed by comparing soil chemical data against various published screening criteria. These have been sourced from the following and in order of preference:

-  Category 4 Screening Levels (C4SLs) prepared by the Department of Environmental Food and Rural Affairs (DEFRA) and published March 2014.
-  Phase 2 C4SLs prepared by CL:AIRE and published May 2021.
-  Suitable 4 Use Levels (S4ULs) prepared by Land Quality Management/Chartered Institute of Environmental Health (LQM/CEIH) and published December 2014. LQM acknowledgement for use of S4ULs. *"Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3275. All rights reserved"*.

- 🌱 Soil Guidance Values (SGVs) prepared by the Environment Agency (EA)/DEFRA and published 2009.
- 🌱 Soil Generic Assessment Criteria (GAC) prepared by Environment Industries Commission (EIC)/Association of Geotechnical and Geoenvironmental Specialists (AGS)/Contaminated Land: Application In Real Environments (CL:AIRE) and published 2010.

Aviron have adopted the above hierarchy in response to LCRM recommendations.

7.3 GUIDANCE USED FOR THE ASSESSMENT OF CONTROLLED WATERS

In accordance with LCRM guidance, environmental quality standards (EQS) and drinking water standards can be used as generic assessment values for controlled water receptors. These criteria are used by the Environment Agency.

Specifically, to this project the 'Driver' which shall be selected as appropriate to determine the most suitable chemical standard shall be for the protection of aquatic life. Generally, these are the Environmental Quality Standards (EQS) and are 'hardness' related. Where the suitable EQS does not exist, the UK Drinking Water Standard (UK DWS) shall be applied to make a conservative assessment.

Application of these standards shall provide a useful screening tool in the absence of other published guidance or site-specific detailed risk assessment.

The assessment criteria used to assess the quality of groundwater beneath a given site should take into account the nature of the receptors which could be affected by the groundwater. The most sensitive receptors are regarded as abstractions, particularly for drinking water, followed by surface waters and sensitive ecosystems. Water supply services are also considered a receptor and should be considered where the services are likely to be in direct contact.

The most sensitive receptors are the underlying principal aquifer of the lower greensand formation.

Where there are exceedances, the contaminants of concern will be subject to further consideration in a tier 2 assessment using site-specific criteria and the EAs Remedial Target Methodology (RTM) model to further determine risk.

8.0 ASSESSMENT OF RPS GEOCHEMICAL SOIL RESULTS

Soil geochemical testing was not completed during the rotary drilling of BH1, however, reference can be made to the previously completed 'RPS' site investigation summarised in section 2.3.1.

Risk assessment of the geochemical results can be made in terms of potential risks to groundwater (controlled waters):

-  No visual or olfactory evidence of soil contamination was observed during the RPS investigation. Accordingly, a low risk can be applied to groundwater.
-  RPS indicated that chemical analysis was completed upon five samples collected from the overlying Topsoil and eighteen from the underlying Head Deposits. Pertinently the eighteen test results from the underlying Head Deposits would be considered to present the greatest risk to groundwater given the proximity to the aquifer (4.9m) or saturated zone.
-  An exceedance of arsenic was recorded within TP3 at 1m bgl at a concentration of 47mg/kg when compared to the S4UL of 32mg/kg. It is likely the arsenic recorded within the Head Deposits is naturally occurring due to mineralisation. TP3 central to the site and remote from BH1 in the north of the site. Accordingly, the risk from arsenic at TP3 can be dismissed.
-  An exceedance of lead was recorded within WS10 at 0.3m bgl at a concentration of 340mg/kg when compared to the C4SL of 200mg/kg. The lead recorded may be an historical lead based paint spillage given the absence of hydrocarbons within the same sample. WS10 central-east to the site and remote from BH1 in the north of the site. Accordingly, the risk from lead at WS10 can be dismissed.
-  All remaining concentrations of determinants including hydrocarbons, volatile organic compounds, pesticides and herbicides were recorded at acceptable concentrations. Accordingly, a very low risk can be applied to groundwater.

Based on the RPS dataset it is considered potential soil contamination at the site possessed a very low risk to groundwater (controlled waters) and soil contamination is not considered to be a potential source of contamination.

9.0 ASSESSMENT OF GROUNDWATER LABORATORY RESULTS

Laboratory certificates of analysis for the groundwater sample are presented in **Appendix II**.

The hydrogeology of the site has been determined by the underlying principal aquifer of the Lower Greensand Group which rests approximately 4.9m bgl. The site is not within an SPZ.

As previously discussed, a single round of monitoring and testing has been completed upon a sample recorded from borehole during a pump test of 5 August 2024.

The results have been screened against the United Kingdom Drinking Water Standards (DWS) in accordance with The Water Supply (Water Quality) (Amendment) Regulations 2018.

All chemical determinants have been recorded at acceptable concentrations with the exception of a biological exceedance in the form of:

-  Total Coliforms which recorded a concentration of 3mpn (most probably number)/100ml compared to the DWS of 0mpn/100ml.

Interpretation of the results against the DWS is provided within **Appendix II** whereby the 'Result' is recorded along with the 'Limit' which refers to the DWS. Where the 'Flag' column is highlighted, this indicates an issue or exceedance.

It is not considered the absence of Nitrites/Nitrates (0.00mg/l) shall present a risk to the water supply or controlled (ground) waters). It is not considered the absence of an odour, based on qualitative means (olfactory) shall present a risk to the water supply or controlled (ground) waters). The laboratory method Limit of Detection (LOD) for Epichloroethin is 0.10µg/l and a result of <0.1µg/l was recorded, which are identical concentrations save for the expression of decimal places. Epichloroethin is not considered to present a risk to the water supply or controlled (ground) waters).

In order to ensure Total Coliforms are reduced to 0mpn/100ml a water treatment system shall be installed to the borehole which shall remove the biological contamination of coliforms.

A schematic of the water treatment system is enclosed within **Appendix III**.

10.0 GROUNDWATER RISK ASSESSMENT

10.1 SOURCES OF CONTAMINATION

Following completion of the site investigation and interpretation of test results the following sources of contamination are considered to exist.

Table 10.1: Revised Sources	
Source	Description
1. Total Coliforms in groundwater	Total Coliforms recorded at 3mpn/100ml compared to the DWS of 0mpn/100ml.

10.2 CONCEPTUAL SITE MODEL

Following interpretation of the laboratory results, site dynamics and the revision of potential soil contaminants within table 10.1 a revised conceptual model has been prepared and is presented in table 10.2. Where sources of contamination are not no longer consider present (table 10.1) the pollutant linkages examined within the initial conceptual site model shall be omitted from the revised conceptual site model to limit the 'length' of the model.

Table 10.2: Refined Conceptual Site Model (for plausible pollutant linkage pathways)						
Source	Receptor	Pathway	Probability	Consequence	Risk & Justification	Linkage No.
Source 1 Total Coliforms in groundwater	Construction workers	Direct contact	Unlikely	Minor	Very Low Groundwater rests c.4.9m bgl. Construction workers shall not come into contact with the groundwater.	1
	End users	Direct contact	Unlikely	Minor	Very Low Groundwater shall be treated following abstraction and prior to use to remove coliforms.	2
	Adjacent land users	Direct contact via run-off	Unlikely	Minor	Very Low Groundwater rests c.4.9m bgl. Adjacent land uses shall not come into contact with the groundwater, nor shall they directly consume.	3
	Soft landscaping	Root uptake	Unlikely	Unlikely	Minor Groundwater shall be	4

Table 10.2: Refined Conceptual Site Model (for plausible pollutant linkage pathways)

Source	Receptor	Pathway	Probability	Consequence	Risk & Justification	Linkage No.
					treated following abstraction and prior to use to remove coliforms.	
	Water supply pipes	Direct contact	Unlikely	Minor	Very Low Groundwater shall be treated following abstraction and prior to use to remove coliforms.	5
	Buildings & infrastructure	Direct contact	Unlikely	Minor	Very Low Groundwater rests c.4.9m bgl. Buildings and infrastructure unlikely to come into contact with the groundwater. Not withstanding coliforms shall not present a risk.	6
	Groundwater Surface waters Ecology	Migration through hydrogeology Run-off	Unlikely	Minor	Very Low Provided groundwater is not intended for potable use coliforms shall not present a risk. Where groundwater is intended for potable supply a treatment system should be installed prior to consumption. A very low concentration of coliforms shall not present a risk to the natural environment, where coliforms exist naturally due to nature. Low See Note 9.	7 8 9

10.3 RISK COMMENTARY

The construction and use of the groundwater well borehole is not considered to present an environmental risk as defined by the investigative results and the CSM above.

Groundwater shall be protected following installation of the well, by the design of the well.

The statement made by Invicta Water Treatment Limited within their letter to Rosalind Gall is considered to be accordance in regard of protection to controlled waters from the well installation.

'The borehole has been drilled by a reputable and experienced drilling company, OT Drilling (ref competency

statement). The borehole has been sealed against surface water ingress by both a steel casing, extending 18 m into the aquifer, and a bentonite plug with grouting (ref Drill Log and Diagram). This physically protects surface water or contamination from any building work above, as foundations are highly unlikely to reach 18 m depth.

All manmade surfaces on site will be impermeable, directing runoff to the surface water drains for discharge some distance from the borehole. Likewise, the retention ponds will have impermeable membranes, with overflow water directed off site (ref. P&M Report P05 section 6.1.3; drawings Price & Meyers Below Ground Drainage Layouts 1 & 2; 30512/6000 and 6001). All sewage is piped off site to the Southern Water sewer network. Flooding from sewerage systems, surface water and other sources are negligible (ref. P&M Report P05 Section 4).

These design features more than alleviate the requirements for the EA SPZ criteria (see EA report).

The physical evidence that there is no ingress from potential surface activities or pollution is confirmed by the initial raw samples from the borehole showing no contamination from the requested Group A&B pesticides, herbicides and organics (ref. SEWSS Report 1287680-4 Final). The robust water treatment design includes a multi-barrier approach, with fine particulate filtration, and both UV and chlorine disinfection. This correctly designed, installed, monitored and maintained system, will last many years.'

11.0 CONCLUSIONS AND RECOMMENDATIONS

It is considered the groundwater well does not present an environmental or groundwater risk. No further action in this regard is considered necessary.

12.0 PROJECT INSTRUCTION AND LIMITATIONS

12.1 SCOPE OF WORKS

The following scope of work was undertaken to an agreed brief set out in Aviron's proposal and involves the following:

-  Review client supplied information previously submitted to the Local Planning Authority in order to prepare a suitable Groundwater Risk Assessment.

Aviron has relied upon information received from the Client and their agents as accurate, unless contradicted by written documentation or site observations.

12.2 PUBLISHED GUIDANCE

This report follows the technical approach presented on Land contamination risk management (LCRM), accessed on gov.uk website. The guidance replaced the Contaminated Land Report 11 (CLR11) "Model Procedures for the Management of Land Contamination" prepared by the Environment Agency in 2004. CLR11, which was withdrawn in 2020, provided guidance on the application of management processes when assessing potentially contaminated land.

This project and report have been designed to fulfil the information requirements set out in LCRM.

This report is additionally prepared in accordance with current guidance notes, standards and practices as set out by the Environment Agency and statutory organisations in order to establish potential and significant contaminant linkages as defined in Part IIA of the Environmental Protection Act 1990.

12.3 LIMITATIONS

The information used in this report has been derived from the site investigation, which in turn were based on known current and historical land uses identified at the site and surrounding area, available to Aviron at the time of the investigation.

Intrusive points chosen relate to the data collected and the risk assessment and recommendations will rely on these points only. It therefore follows that some areas of the site will not be examined. It is always possible that some areas not investigated may contain conditions which would be impossible to determine due to lack of evidence or time and budget restrictions.

Should changes in legislation, statutory requirements or industry practices occurred following issue of this

report, this report should be viewed in light of these changes.

Should a notable time period elapse between the date issue of this report and the date of application of this report changes to site dynamics may occur and in particular the site inspection notes may no longer be applicable should any change of use occur to the site in the interim.

13.0 REFERENCES AND OTHER SOURCES OF INFORMATION

Previous Reports

Aviron, Preliminary Risk Assessment, Version 3, reference 22-200.01, dated August 2022

RPS, Phase 1 Preliminary Risk Assessment and Phase 2 Geotechnical and Environmental Site Investigation, reference HLEI35707/001R, dated May 2015

References

British Geological Survey Website. www.bgs.ac.uk

BS5930:2015+A1:2020. British Standards Institute. Code of Practice for Ground Investigations

BS10175:2011+A2:2017. British Standards Institute. Investigation of Potentially Contaminated Land - Code of Practice

DEFRA and Environment Agency, 2004. Model Procedures for the Management of Land Contamination, Contaminated Land Report 11

Environment Agency Website: www.environment-agency.gov.uk

LQM/CIEH: Paul Nathanail, Caroline McCaffrey, Andy Gillett, Richard Ogden and Judith Nathanail. 2014. The LQM/CIEH S4ULs for Human Health Risk Assessment. Land Quality Press, Nottingham. ISBN 978-0-9931084-0-2. "Copyright Land Quality Management Limited reproduced with permission; Publication number S4UL3275. All rights reserved"

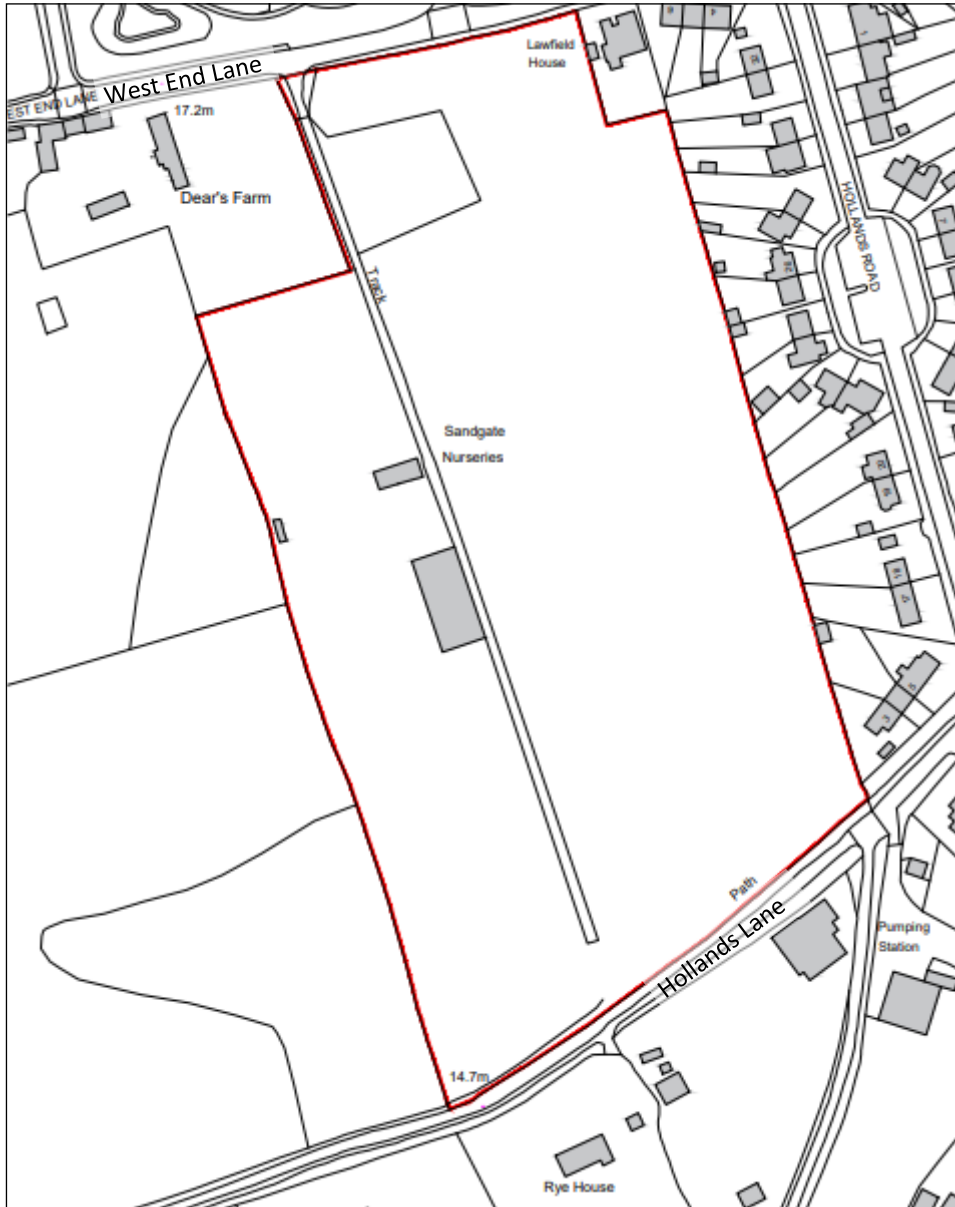
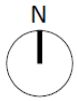
SP1010 - Development of Category 4 Screening Levels for Land Affected by Contamination. Final Project Report (Revision 2). Contaminated Land: Applications In Real Environmental (CL:AIRE). September 2014

SR2: Human health toxicological assessment of contaminants in soil, Science Report SC050021/SR2, Environment Agency, August 2008

SR7: Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values, Science Report SC050021/SR7, Environment Agency, November 2008

Figures

- | | |
|---|---|
| 1 | Site Location Plan |
| 2 | Existing Site Layout Plan |
| 3 | Site Photographs |
| 4 | Site Photographs |
| 5 | Proposed Development Plan |
| 6 | Characterisation and Contamination Plan |
| 7 | Groundwater Borehole Well Location Plan |



Legend



Approximate Site Boundary

Notes

Plan provided by the Client

Figure 1

Drawing Title

Site Location and Existing Site Layout Plan

Project Number 22-200.02

Project Title

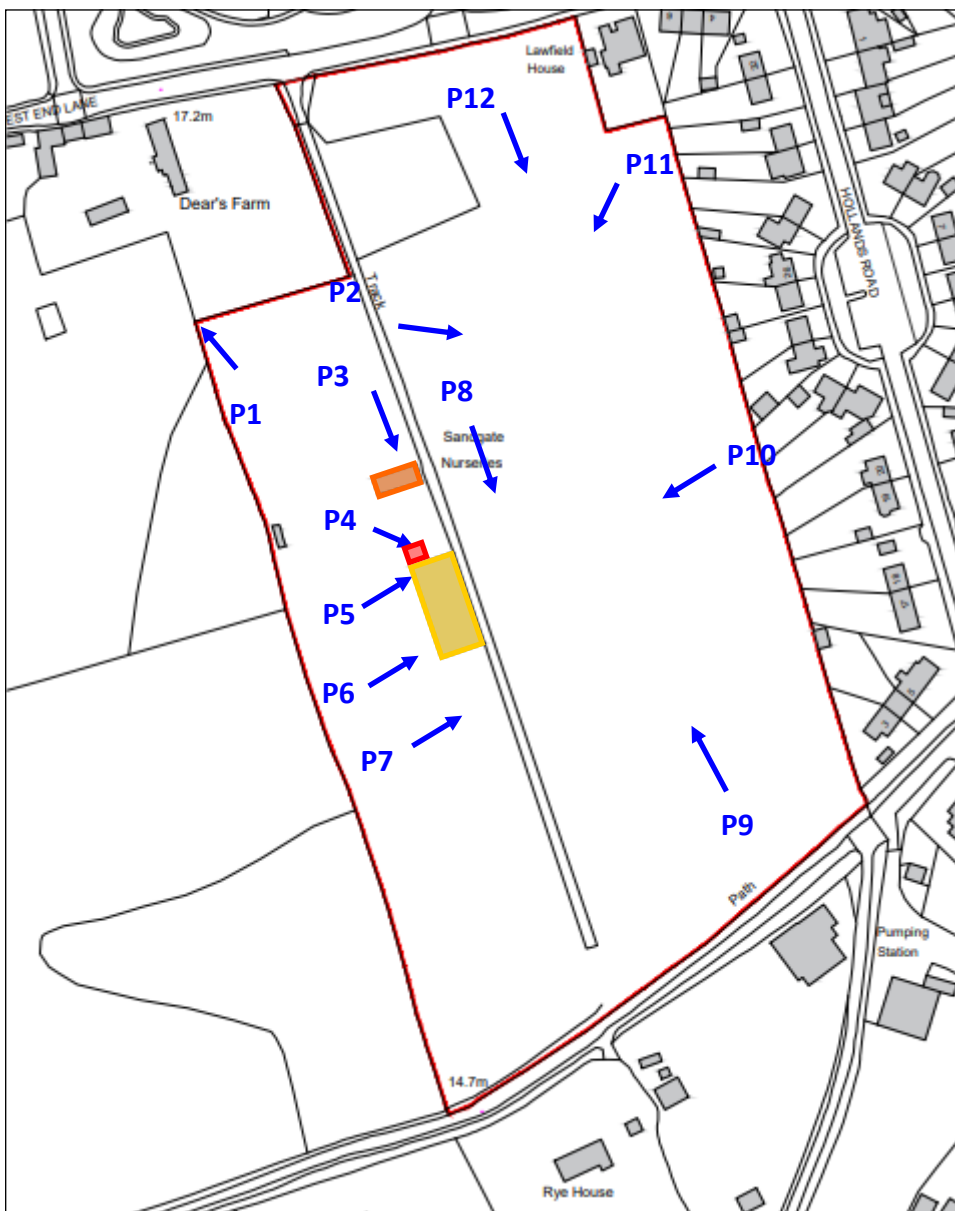
Former Sandgate Nursery, West End Lane,
Henfield, West Sussex, BN5 9RD

Drawn by VB

Checked by JB

Scale NTS





Legend

-  Approximate Site Boundary
-  Photo direction
-  AST
-  Shed
-  Glasshouse

Notes

Plan provided by the Client

Figure 2

Drawing Title

Site Characterisation Plan

Project Number 22-200.02

Project Title

Former Sandgate Nursery, West End Lane,
Henfield, West Sussex, BN5 9RD

Drawn by VB

Checked by JB

Scale NTS





Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6

Legend

Notes

Figure 3

Drawing Title

Site Photographs

Project Number 22-200.02

Project Title

Former Sandgate Nursery, West End Lane,
Henfield, West Sussex, BN5 9RD

Drawn by VB

Checked by JB

Scale





Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12

Legend

Notes

Figure 4

Drawing Title

Site Photographs

Project Number 22-200.02

Project Title

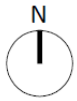
Former Sandgate Nursery, West End Lane, Henfield, West Sussex, BN5 9RD

Drawn by VB

Checked by JB

Scale





Legend



Approximate Site Boundary

Notes

Plan provided by the Client

Figure 5

Drawing Title

Feasibility Site Plan

Project Number 22-200.02

Project Title

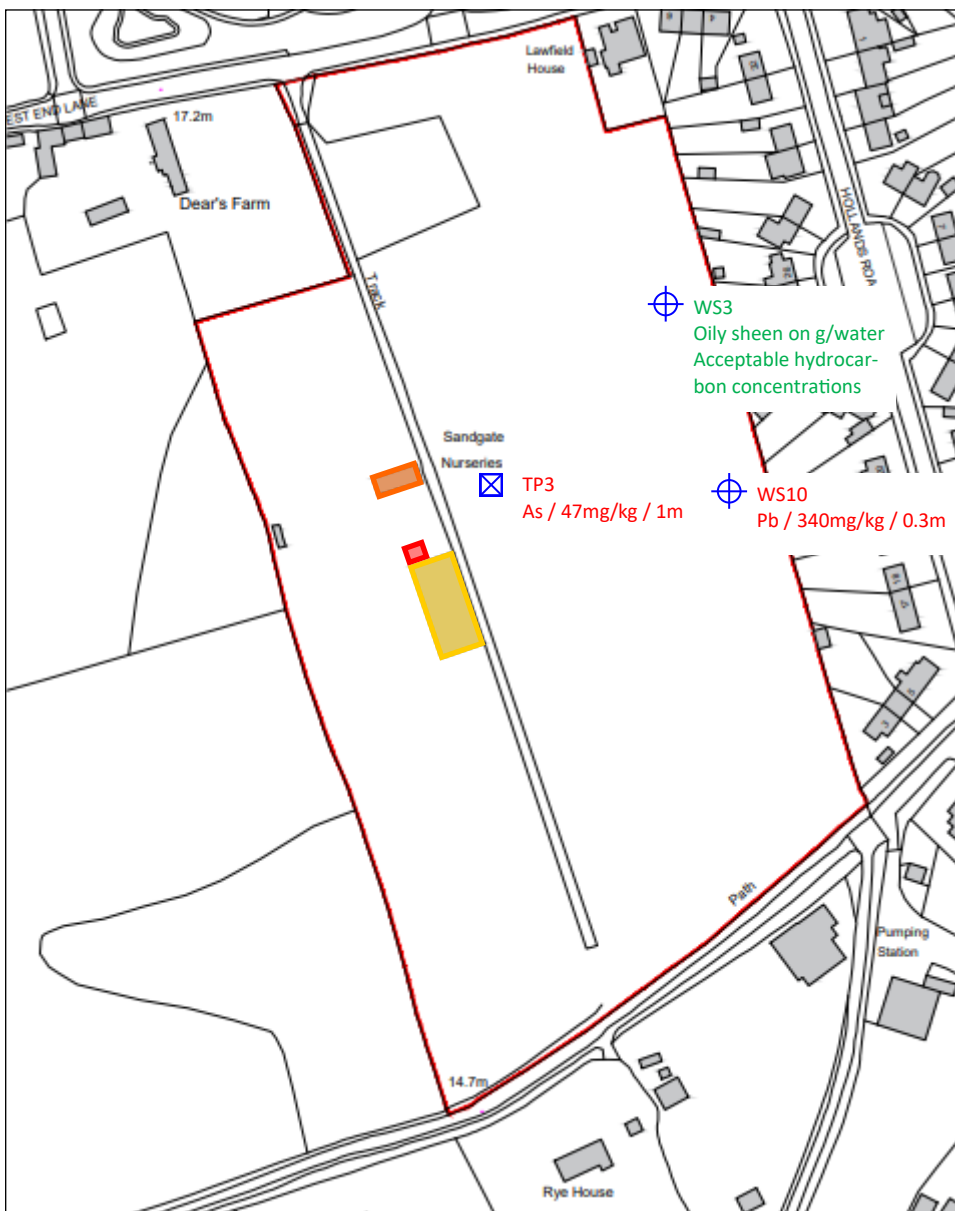
Former Sandgate Nursery, West End Lane,
Henfield, West Sussex, BN5 9RD

Drawn by VB

Checked by JB

Scale NTS





Legend

-  RPS Trial Pit
-  RPS Window Sample
-  AST
-  Shed
-  Glasshouse

Notes

Plan provided by the Client

RPS locations are approximate.

Figure 6

Drawing Title

Characterisation and Contamination Plan

Project Number 22-200.02

Project Title

Former Sandgate Nursery, West End Lane,
Henfield, West Sussex, BN5 9RD

Drawn by VB

Checked by JB

Scale NTS





Legend

 Groundwater Borehole Well

Notes

Plan provided by the Client

Figure 7

Drawing Title

Groundwater Borehole Well Location Plan

Project Number 22-200.02

Project Title

Former Sandgate Nursery, West End Lane,
Henfield, West Sussex, BN5 9RD

Drawn by VB

Checked by JB

Scale NTS



Appendices

- I Groundwater Borehole Well Log
- II Groundwater Contamination Results
- III Schematic of Water Treatment System

Appendix

I	Groundwater Borehole Well Log
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Percussion Drilling Log

Project Name: Former Sandgate Nursery		Client: Littleworth Properties Ltd		Date: 22/07/2024 - 05/08/2024	
Location: West End Lane, Henfield, West Sussex, BN5 9RD		Contractor: OT Drilling Ltd		Co-ords: E20409.00 N16086.00	
Project No. : 22-200.02		Crew Name:		Drilling Equipment:	
Borehole Number BH1	Hole Type CP	Level		Logged By	Scale 1:50
					Page Number Sheet 6 of 6

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					55.00			Grey SANDSTONE with thin interbedded LIMESTONE horizons	51
									52
									53
									54
								End of Borehole at 55.000m	55
									56
									57
									58
									59
									60

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
55.00	200										

Remarks 125mm diameter casing installed to 55.0m. Response zone from 20m to 52.5m.	
---	--

Appendix

II Groundwater Contamination Results

ANALYTICAL REPORT

Invicta Water Treatment
89 Castle Drive
Horley
Surrey
RH6 9DD
Date Received: 05/08/2024

Certificate Number: 1287680-4 Final
Supersedes report 1287680-3
Order Number: IWT 2724
Date Reported: 12/09/2024

Lab Ref.	Sample Details	Method	Test	Result	Units	Limit	Flag
4824855	Desc: SANDGATE NURSERIES RAW BOREHOLE BN5 9UL Order No: IWT 2724 Received Date: 05/08/2024 Tested Date: 05/08/2024 Sampling Date: 05/08/2024 15:30 Sample Type: GW : Ground Water Product: SS-DWREGS	255	Ammonium (Ammonia and Ammonium Ions)	0.081	mg/l	<0.500	
		215	Chloride	33.50	mg/l	<250.00	
		245	Nitrate	<0.9	mg/l	<50.0	
		225	Nitrite	<0.004	mg/l	<0.500	
		calc	Nitrite/Nitrate	0.000	mg/l	<1.000	*
		305	Sulphate	77.2	mg/l	<250.0	
		205	Total Hardness	107.3	mg/l		
		230	Odour - Qualitative	None			*
		230	Odour - Quantitative	0			
		430	Colony Count 3 Days at 22°C	>300	cfu/ml		
		400	E coli	0	mpn/100ml	0	
		400	Total Coliforms	3	mpn/100ml	0	F
		660	Colour	<2	mg/l Pt/Co	<20	
		660	Conductivity	569	uS/cm		
		660	Hydrogen Ion (pH)	7.5	pH_unit	6.5 to 9.5	
		660	Turbidity	2.770	NTU	<4.000	
		ext	Acrylamide	<0.006	µg / l	<0.100	
		ext	Epichloroydrin	<0.1	µg / l	<0.10	*
		ext	Vinyl Chloride	<0.113	µg / l	<0.500	
		3401	Bromate	<0.8	µg / l	<10.0	
		390	Enterococci	0	cfu/100ml	0	
		5413	Total Cyanide	<4.1	µg / l	<50.0	
		765	Mercury	<0.04	µg / l	<1.00	
		745	Antimony	<0.2	µg / l	<5.0	
		745	Arsenic	<1.0	µg / l	<10.0	
		745	Selenium	1.5	µg / l	<10.0	
		740	Boron	<0.040	mg/l	<1.000	
		740	Calcium	105.3	mg/l		
		740	Magnesium	4.8	mg/l		
		740	Sodium	18.7	mg/l	<200.0	
		3371	Fluoride	0.121	mg/l	<1.500	
		3545	2,4,5-T	<0.007	µg / l	<0.100	
		3545	2,4-D	<0.007	µg / l	<0.100	

Disclaimers:

Unless otherwise stated, all results apply to the sample as received. Information provided by the customer (includes Date, Time, Sample Matrix & Sample Description) can affect the validity of the result.
Opinions and interpretations expressed in this report are outside the scope of UKAS accreditation.
Details of Uncertainty of Measurement and Analytical Quality Control are available on request.
Where a statement of conformity to a Regulatory Standard or customer limit is provided, the uncertainty of measurement is not taken into account unless shown on the certificate.
* - denotes non UKAS accredited test
A result of 0 cfu denotes none found in volume analysed
F - Result Exceeds The Maximum Pcv As Defined In The Water Supply (Water Quality) (Amendment) Regulations 2018
doc - individually documented method, details available on request
ext - Analysis subcontracted to an external laboratory



Certificate Number: 1287680-4 Final
 Supercedes report
 1287680-3
Order Number: IWT 2724

Lab Ref.	Sample Details	Method	Test	Result	Units	Limit	Flag
4824855	Continued from Page 1	3545	Bentazone	<0.007	µg / l	<0.100	
		3545	Bromoxynil	<0.007	µg / l	<0.100	
		3545	Dicamba	<0.020	µg / l	<0.100	
		3545	Dichlorprop	<0.003	µg / l	<0.100	
		3545	Fluroxypyr	<0.008	µg / l	<0.100	
		3545	MCPA	<0.008	µg / l	<0.100	
		3545	MCPB	<0.008	µg / l	<0.100	
		3545	Mecoprop (MCPB)	<0.005	µg / l	<0.100	
		3545	Triclopyr	<0.015	µg / l	<0.100	
		2587	Atrazine	<0.002	µg / l	<0.100	
		2587	Carbendazim	<0.001	µg / l	<0.100	
		2587	Carbetamide	<0.002	µg / l	<0.100	
		2587	Chlortoluron	<0.003	µg / l	<0.100	
		2587	Diuron	<0.004	µg / l	<0.100	
		2587	Epoxiconazole	<0.003	µg / l	<0.100	
		2587	Flutriafol	<0.003	µg / l	<0.100	
		2587	Isoproturon	<0.003	µg / l	<0.100	
		2587	Linuron	<0.003	µg / l	<0.100	
		2587	Oxadixyl	<0.003	µg / l	<0.100	
		2587	Pendimethalin	<0.007	µg / l	<0.100	
		2587	Prometryn	<0.002	µg / l	<0.100	
		2587	Propazine	<0.002	µg / l	<0.100	
		2587	Simazine	<0.003	µg / l	<0.100	
		2587	Terbutryn	<0.002	µg / l	<0.100	
		2587	Trietazine	<0.004	µg / l	<0.100	
		480	Benzo (a) pyrene	<0.003	µg / l	<0.010	
		480	Benzo(1,12)perylene	<0.003	µg / l		
		480	Benzo(11,12)fluoranthene	<0.003	µg / l		
		480	Benzo(3,4)fluoranthene	<0.003	µg / l		
		480	Indeno(1,2,3-cd)pyrene	<0.003	µg / l		
		calc	PAH Total	0.000	ug/l	<0.100	*
		775	1,1,1 Trichloroethane	<0.60	µg / l		
		775	1,2-Dichloroethane	<0.12	µg / l	<3.00	
		775	Benzene	<0.02	µg / l	<1.00	
		775	Dibromochloromethane	<0.50	µg / l		
		775	Dichlorobromomethane	<0.43	µg / l		
		775	Tetrachloroethene	<0.15	µg / l	<10.00	
		calc	Tetrachloroethene/Trichloroethene- Sum	0.00	µg / l		*
		775	Tetrachloromethane	<0.11	µg / l	<3.00	
		calc	Total Trihalomethanes	0.00	µg / l	<100.00	*
		775	Tribromomethane	<0.60	µg / l		
		775	Trichloroethene	<0.10	µg / l	<10.00	
		775	Trichloromethane	<0.50	µg / l		
		730	Aluminium	<6.1	µg / l	<200.0	
		730	Copper	<0.009	mg/l	<2.000	

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A result of 0 cfu denotes none found in volume analysed

F - Result Exceeds The Maximum Pcv As Defined In The Water Supply (Water Quality) (Amendment) Regulations 2018

doc - individually documented method, details available on request

ext - Analysis subcontracted to an external laboratory



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Certificate Number: 1287680-4 Final
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1287680-3
Order Number: IWT 2724

Lab Ref.	Sample Details	Method	Test	Result	Units	Limit	Flag
4824855	Continued from Page 2	730	Iron	325.5	µg / l	<200.0	F
		730	Lead	<0.9	µg / l	<10.0	
		730	Manganese	41.1	µg / l	<50.0	
		735	Cadmium	<0.12	µg / l	<5.00	
		735	Chromium	0.8	µg / l	<50.0	
		730	First Draw Copper	<0.009	mg/l	<2.000	
		730	First Draw Lead	<0.9	µg / l	<10.0	
		730	First Draw Nickel	4.3	µg / l	<20.0	
		360	Clostridium perfringens (including spore	0	cfu/100ml	0	
		calc	Pesticides - Total Substances	0.000	ug/l		*
		5823	Aldrin	<0.007	µg / l	<0.030	
		5823	Dichlobenil	<0.004	µg / l	<0.100	
		5823	Dieldrin	<0.006	µg / l	<0.030	
		5823	Heptachlor	<0.009	µg / l	<0.030	
		5823	Heptachlor Epoxide	<0.005	µg / l	<0.030	
		5823	Propyzamide	<0.005	µg / l	<0.100	
		5823	Tri-allate	<0.005	µg / l	<0.100	
		430	Colony Count 2 Days at 37°C	>300	cfu/ml		
		410	Pseudomonas aeruginosa	Competing growth, indicative count 0	cfu/100ml		
		285	Silica	8.79	mg/l		
		310	Suspended Solids	6.4	mg/l		*
		doc	Alkalinity	257.0	mg/l		*
		calc	Bicarbonate Alkalinity	256.17	mg/l		*
		calc	% Transmission	92.7			*
		doc	UV Abs (10mm) @ 254nm Unfiltered	0.033	abs_unit		*
		calc	Total Phosphate	178	µg / l		*
		250	Total Organic Carbon	1.2	mg/l		
		730	Iron (Free)	<7.3	µg / l		
		730	Nickel	4.1	µg / l	<20.0	
		730	Aluminium (Free)	<6.1	µg / l		
			Findings	Filtered Turbidity result of 0.0053 NTU			*
			Indicative Results	See #1 below			*

The sample has exceeded its maximum stability time and as a result the test result(s) may be invalid.

Disclaimers:

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* - denotes non UKAS accredited test

A result of 0 cfu denotes none found in volume analysed

F - Result Exceeds The Maximum Pcv As Defined In The Water Supply (Water Quality) (Amendment) Regulations 2018

doc - individually documented method, details available on request

ext - Analysis subcontracted to an external laboratory

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Certificate Number: 1287680-4 Final
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Order Number: IWT 2724

#1 - Due to Quality Control failures an indicative result of <0.010 µg/L for Gamma-HCH (Lindane) has been provided



Richard Brown
Laboratory Manager

Disclaimers:

Unless otherwise stated, all results apply to the sample as received. Information provided by the customer (includes Date, Time, Sample Matrix & Sample Description) can affect the validity of the result.
Opinions and interpretations expressed in this report are outside the scope of UKAS accreditation.
Details of Uncertainty of Measurement and Analytical Quality Control are available on request.
Where a statement of conformity to a Regulatory Standard or customer limit is provided, the uncertainty of measurement is not taken into account unless shown on the certificate.

* - denotes non UKAS accredited test

A result of 0 cfu denotes none found in volume analysed

F - Result Exceeds The Maximum Pcv As Defined In The Water Supply (Water Quality) (Amendment) Regulations 2018

doc - individually documented method, details available on request

ext - Analysis subcontracted to an external laboratory

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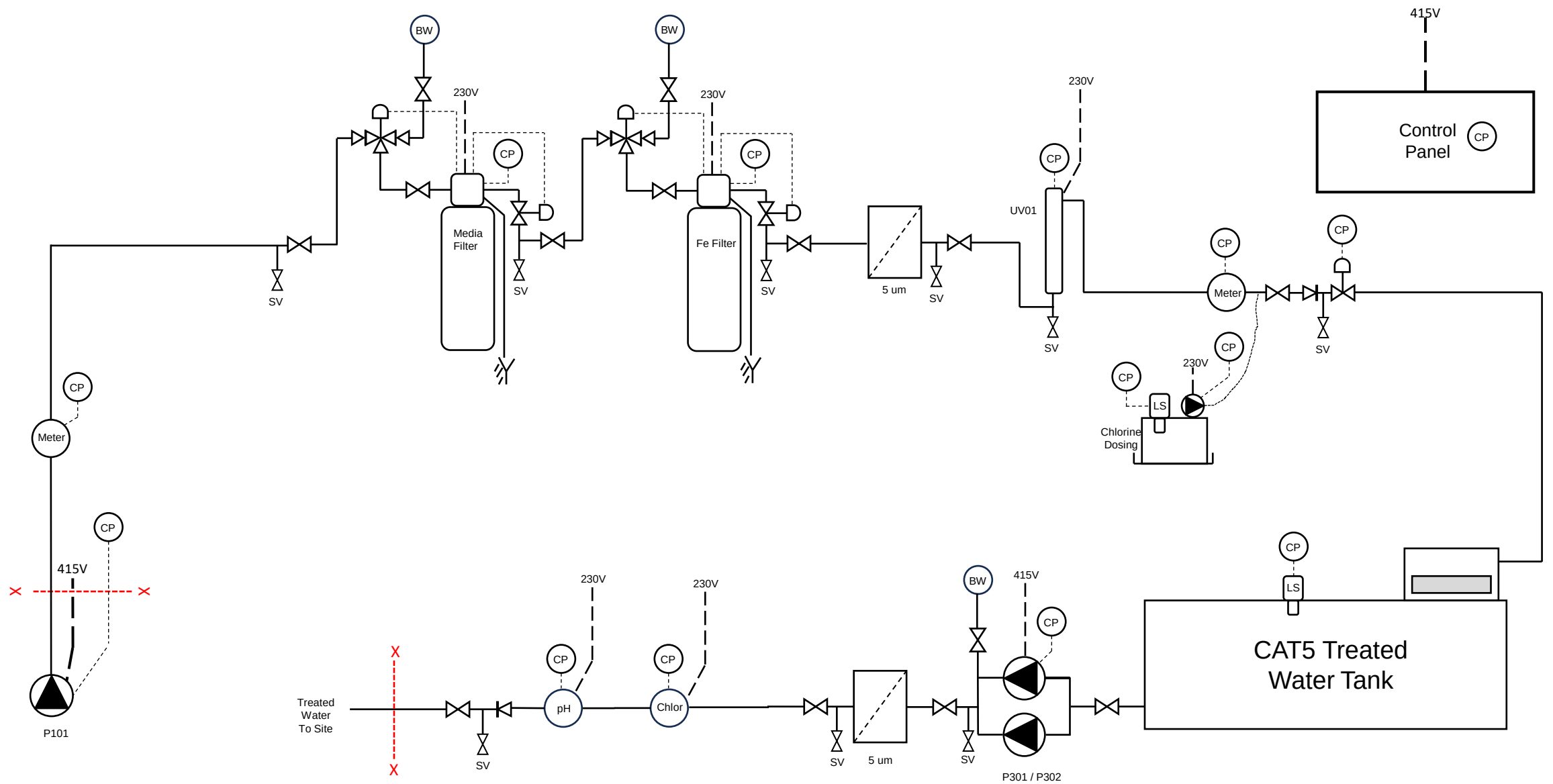
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Appendix

III Schematic of Water Treatment System



Sandgate Nurseries PWS Water Treatment
PFD – Invicta Water Treatment Ltd – NTS –
24/10/24

AVIRON ASSOCIATES LIMITED

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