



**Phase I Environmental Desk Study.
Newhouse Farm, Great Bromley**



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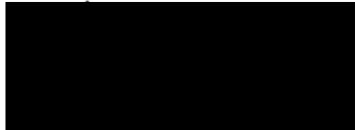
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1. BRIEF

MM-EC Geoenvironmental Ltd was commissioned by Inova (UK) Ltd to undertake a Phase I Desk Study in connection with the proposed re-development of a site identified as Newhouse Farm, Hall Road, Great Bromley, CO7 7TP. The site was located approximately 7km east of Colchester City Centre.

The Phase I investigation included the preparation of an initial desk-based site investigation based on a review of relevant historical and geological mapping, local archive information and site reconnaissance.

This report has been prepared for Inova (UK) Ltd and their advisors for the purpose of assisting them in evaluating the potential geo-environmental risk associated with any ground contamination and ground conditions at the site.

1.1 Methodology & Information Sources

This Phase I report comprises the collation of available documentary and site derived information followed by the development of a Conceptual Site Model (CSM) and assessment of ground conditions and potential risk.

The information presented within this report is based on observations made on site, a review of available historical, geological and hydrogeological information published by the following parties listed in Table 1.1.

Table 1.1: List of Parties Consulted

Organisation
Envirocheck Report, Report Ref. 254061503_1_1, August 24 th , 2020, including a list of statutory consultees
British Geological Survey (BGS)
Environment Agency (EA)
Health Protection Agency (HPA)
Information Provided by Babergh District Council – Environmental Services (EnviroCheck)

2. SITE LOCATION & SURROUNDINGS

2.1 Site Location

The property was centred at National Grid Reference E607210, N227070 and extended to some 1.11 hectares in size. The site was located to the immediate east of Hall Road around 500 meters south east of the small settlement of Bromley Cross. At the time of the walkover survey the site comprised a collection of derelict agricultural and residential buildings surrounded by open areas of grassland/pasture, roadways and hardstanding.

The site was generally level. A site location plan is provided as Figure 1, Appendix A.

2.2 Site Surroundings

A summary of the surrounding land uses at the site is shown in Table 2.1.

Table 2.1 Summary of Surrounding Land Uses

Location	Description
North	A large detached residential property and surrounding gardens with further grazing land present beyond
East	Open grassland and shrubland. Ground surface was uneven.
South	Two semi-detached residential properties bounded the site to the south with agricultural land beyond
West	The B1029 (Hall Road) with predominantly agricultural arable land. A single property with surrounding land was established immediately beyond the B1029 centrally opposite the site

3. SITE HISTORY

A review of historical Ordnance Survey maps obtained in the EnviroCheck Report for the period 1875 to present was undertaken. The historical mapping showed that the earliest available mapping the site comprised agricultural land with evidence of a farm yard occupying the western margins of the site. The site appeared to be used continuous as a farm yard until present times. A summary of relevant information with respect to the site is shown in chronological order in Table 3.1 below.

Table 3.1 Summary of Site History

Source	Scale	Site	Surroundings
1875	1:2,500	The earliest available mapping shows a courtyard configuration of buildings occupying the western margins of the site area which are identified as 'Newhouse'. The eastern portion of the site area is shown to be undeveloped	An unnamed road is present to the immediate west and an assumed residential property and garden is present to the immediate north. The wider surrounding area is shown as undeveloped, assumed agricultural land. A property identified as Bush Farm is established around 200m to the south east and another property identified as Pond House is established around 300m to the north west.
1897	1:2,500	The buildings occupying the site appear to have been altered/ redeveloped but the positions remain generally unchanged. Otherwise the site area is unchanged	There are no significant changes to the surrounding area apart from the construction of a small square structure around 100m to the south east.
1923	1:2,500	The site remains unchanged since the previous mapping	The immediate surrounding area was unchanged.
1960	1:2,500	The main collection of buildings forming an approximate courtyard remains present on the western portion of the site with the eastern portion remaining undeveloped. A footpath is shown established crossing the north eastern portion of the site and running eastwards	The immediate surrounding areas remains generally unchanged with the exception of the establishment of a detached residential property to the immediate south and to the east of Hall Road
1966	1:10,560	The site remained unchanged.	The immediate surrounding area appear unchanged from the previous mapping
1982	1:2,500	At this time 4No new rectangular buildings are shown established on the north eastern portion of the site area	The immediate surrounding area was unchanged.
1999	1:2,500 Aerial mapping	The majority of the central site area is shown occupied by farm type buildings and access roadway. The southern margins and north eastern portion of the site is shown as undeveloped grassland	The surrounding area is shown as predominantly arable land under cultivations. Assumed residential properties are present to the immediate north and south and immediately beyond Hall Road to the west.

2006	1:10,000	There were no significant changes to land use on the site. Some new buildings are shown established on the western site area	There were no significant changes to land use in the immediate vicinity of the site. The property to the immediate north is identified as Great Bromley House and the properties to the immediate south are identified as Newhouse Cottages
2020	1:10,000	The site area appears unchanged since the previous mapping	The immediate surrounding area is generally unchanged apart from the establishment of 2No long rectangular buildings around 100m to the north east and 200m to the south east.

Copies of the EnviroCheck Report including relevant map extracts are included in Appendix B.

4. GEOLOGY

4.1 General Geology & Ground Conditions

The geology and likely geological conditions present beneath site was established following a review of relevant geological mapping for the area at the British Geological Survey and information provided in the EnviroCheck Report. The following sources were therefore consulted.

- British Geological Survey; Sheet No: 224, Colchester.
- EnviroCheck Report, 254061503_1_1, August 24th, 2020.

4.1.1 Solid Geology

The site and immediate surroundings were shown to be underlain by sedimentary bedrock of the Red Crag Formation. These rocks were formed in shallow seas with mainly siliciclastic sediments deposited as mud, silt, sand and gravel.

4.1.2 Drift Geology

The majority of the site and immediate surroundings are shown to be underlain by superficial deposits described as Cover Sand/Coverloam comprised of clay, silt and sand, variable pebbly sandy clay, locally silty and sandy upper part.

A borehole sunk 660m to the north east recorded 2.0m of grey silty CLAY which was in turn underlain by 1.1m of sandy gravelly CLAY and which was in turn underlain by 4.3m of Pebbly SAND. Blue (London) CLAY was recorded at a depth of 8.2m

4.2 Mining, Quarrying & Landfills

Review of the available geological and Ordnance Survey mapping has not identified any quarrying or landfill activities in close proximity to the site.

Reference to the EnviroCheck Report indicates that the closest BGS recorded Mineral Site is Elmstead Gravel Pit located some 505m to the south west. The current status is recorded as ceased. Coal seams are absent from the underlying bedrock and in this respect the site is deemed minerally stable.

Furthermore, there are no Local Authority Recorded Landfill Sites within 1000m of the site.

4.3 Radon Gas

The site was indicated by the Health Protection Agency (HPA) to be located in an area where <1.0% of properties are affected by radon gas above the action level. Reference to the EnviroCheck report indicates that protective measures against the ingress of radon gas are not deemed necessary for any new developments on the site.

5. CONTROLLED WATERS

5.1 Surface Waters

Details of water bodies identified closest in proximity to the site are summarised in Table 5.1.

Table 5.1 Summary of surface water bodies identified in the vicinity of the site

Water Body	Location	Direction of Flow	Quality*		Comment
			Chem.	Eco.	
Tributary of Bromley Brook	165m to east	South East	N/A	N/A	

EA publishes the results of regular surveys of rivers and canals in England & Wales, classified in accordance with the General Quality Assessment (GQA) scheme. This scheme is based on both chemical and biological characteristics of a subject watercourse, monitored at regular sampling points. The chemical classification includes parameters such as chemical and biochemical oxygen demand (COD/BOD), ammonia and dissolved oxygen, whilst biological parameters include species diversity and the abundance of pollution-tolerant or sensitive species.

The nearest surface water body is not currently monitored by the Environment Agency.

5.2 Groundwater

Reference to the EnviroCheck Report indicates that the underlying solid strata in the surrounding area is designated as an unproductive bedrock aquifer, while the superficial deposits are designated as a Secondary Superficial Aquifer-B.

Given the local topography and based on a visual inspection of the site, groundwater flow beneath the site is anticipated to be towards the south east.

5.3 Water Abstractions, Discharge Consents & Pollution Incidents

Reference to the EnviroCheck Report indicates that the nearest recorded Discharge Consent is for No 4 Newhouse Farm Cottage positioned 10m to the south and relating to a treated sewage effluent discharge. The second closest discharge is positioned over 500m to the north west.

The closest registered water abstraction is registered to TW Salmon & Co some 193m to the north east and described as reservoir on Tenpenny Brook. The purpose of the extraction is for general agriculture and spray irrigation. There nearest recorded abstraction identified for domestic purposes is located 633m to the east at Blue Gates Farm.

5.4 Flooding

EA's indicative floodplain map shows that the site is located out with an area of potential risk from river flooding. It should be noted that the mapping does not account for flooding arising from sources such as surface water run-off, surcharged culverts or drainage systems.

6. STATUTORY SUPPLIED INFORMATION

Information made available by the relevant agencies and included in the EnviroCheck Report has been reviewed during the course of this study and is discussed as follows:

- The nearest surface water feature identified is positioned 165m to the east. The nature and status of the water feature is not provided but it assumed to be a small water course.
- The closest Discharge Consent is registered to Mr Derek and Mrs Young Cobbold located at 4 New House Farm Cottage some 10m to the south east of the property for a sewage discharge to freshwater stream/river. The next closest discharge is over 500m to the north west.
- The closest Pollution Incident to Controlled Waters was recorded to have occurred 534m to the north west associated with a septic tank effluent discharge to a freshwater stream/river. The incident severity was Category 3- Minor incident.
- The closest water abstraction for domestic use is recorded 633m to the east and operated by P P Allam.
- The site is underlain by superficial deposits described as a productive aquifer. The underlying bedrock is described as an unproductive Bedrock Aquifer.
- There are no recorded Local Authority landfills, Waste Transfer or Waste Treatment sites within 1000m of the site.
- The closest area of land identified as potentially infilled land (Non-water) was located 500m to the south west. The nearest area of potentially infilled land (non-water) was located 862m to the south. Both areas are identified on mapping dating from 1984.
- There are only 1No Contemporary Trade Directory listings within 1000m of the site, which is for Ace Catering Engineers located 934m to the north. There are a further 2No 'Points of interest' recorded: Greenacre Cattery some 518m to the north and Solar Panel some 711m to the south east.
- The nearest BGS recorded mineral site was Elmstead Gravel Pit located some 505m to the south west.
- The potential hazard risk from collapsible ground on the site was considered to be very low.
- There was no potential hazard risk from compressible ground on the site.
- There was no potential hazard risk from dissolution stability on the site.
- The potential hazard risk from landslide on the site was considered to be very low.
- The potential hazard risk from running sand on the site was considered to be low.
- There was no potential hazard risk from shrinking or swelling clay on the site.
- Concentrations of arsenic, cadmium, total chromium, lead and nickel in soils on the site are anticipated to be in the order of <15mg/kg, <1.8mg/kg, 40-60mg/kg, <100mg/kg and <15mg/kg respectively.
- The site is located within a Nitrate Vulnerable Zone.
- Ancient woodlands are recorded present some 918m and 965m to the north east.

7. SITE WALKOVER

The information detailed below is based on observations made during a site walkover.

7.1 Site Description

The site was irregular in shape and was located to the immediate east of Hall Road.

At the time of the walkover survey the site area was occupied by a collection of farm steading and agricultural barn type buildings of varying ages and condition. A two-storey red brick derelict farm cottage was positioned on the north west portion of the site close to Hall Road and were connected to a stone-built barn which extended eastwards in to the site. To the south of the cottages was a large traditional style timber frame barn structure. To the east were a number of partially open concrete block and possible asbestos roofed livestock buildings/pens. The above buildings essentially forming a courtyard feature occupying a large portion of the western half of the site area.

Beyond the courtyard to the east were a collection of 4No relatively modern farm buildings constructed as concrete/steel framed structures which were utilised for the storage of straw and undercover bedding areas for livestock. The roofing panels on these buildings were identified as potentially asbestos cement materials. A more rundown prefabricated type building potentially finished with asbestos cement sheeting occupied a position to the north east of the other agricultural buildings.

Rough ground generally surfaced with overgrown grassland occupied the north east and southern margins of the site. Some stockpile mounds of unknown soil materials were observed in these areas.

The western site boundary adjoining Hall Road was defined by a red brick wall and hedging. The southern boundary was defined by hedging and an open ditch feature containing surface water with the residential cottages and gardens beyond. The eastern boundary was defined by timber and wire fencing with tall grass and shrub ground beyond. The northern boundary was defined by post and wire fencing with a tree hedgerow. The north west boundary adjoining Great Bromley House and was defined by a mix of hedging and stone walls.

7.2 Existing Services

An overhead BT and electrical cables were observed within the site boundaries.

7.3 Vegetation & Invasive Species

No invasive species were noted on the site.

7.4 Buried Obstructions, Structures & Foundations

As discussed, many agricultural buildings remain present on site and therefore the foundations associated with these structures will remain. No evidence of former structures and/or buried foundations were observed.

7.5 Hazardous Material Storage

No hazardous material storage was noted at the time of the current study. Agricultural materials including straw and some implements were noted.

7.6 Polychlorinated Biphenyls (PCB's)

No equipment that may potentially contain PCB's was observed on or in the immediate vicinity of the site.

7.7 Waste Storage

No waste storage was noted during the site inspections.

7.8 Drainage Issues

No drainage survey plans were available for review during the site visit.

7.9 Asbestos & Asbestos Containing Materials (ACM)

During the site walkover some of the cladding and roofing materials were considered to potentially consist of asbestos cement sheeting. A full asbestos survey and the recovery and testing of suspect materials was out with the scope of this study.

8. PRELIMINARY CONCEPTUAL MODEL

In accordance with existing legislation and available guidance, a Tier 1 Qualitative Risk Assessment has been undertaken for the site. The assessment has been based on preferential risks to future site residents, future site users, construction workers undertaking any proposed development, local residents, and members of the general public and the water environment.

This part of the investigation and assessment process has been completed prior to any intrusive investigation and is used to identify potential sources of contamination in order to target the intrusive investigation towards confirming or discounting certain risks.

As previously stated, it is understood that the site is being considered for re-development.

The findings of the assessment are discussed in the following section.

8.1 Qualitative Risk Assessment

The qualitative risk assessment criteria for each element (source, pathway, receptor) and the likelihood of an event occurring have been assessed as low, low to moderate, moderate, moderate to high or high based on the following system:

Low	Based on available information there are unlikely to be significant contaminated land liabilities associated with site.
Low to Moderate	Based on available information there are unlikely to be significant contaminated land liabilities associated with the site with regard to the proposed redevelopment. However, minor issues may require further consideration.
Moderate	Based on available information some potential contaminated land liabilities are likely to affect the site as a result of historical and / or current activities. Redevelopment of the site will likely require further investigation.
Moderate to High	Based on available information some potentially significant contaminated land liabilities have been identified at the site that requires further assessment including intrusive ground investigations.
High	Based on available information significant potential contaminated land liabilities have been identified at the site. Further assessment including intrusive ground investigation will be required to determine to level of risk and associated liability.

8.2 Potential Sources of Contamination

Potential contaminative land uses associated with the site were considered to be generally low as the site appears to have operated as a farm yard for most of its life. A review of historical mapping has shown that the site was operated as a farm yard with various barns and farm worker cottages established on the site area. During the walkover some raised mounds of assumed unknown soils, most likely considered to be site excavated soils were observed locally on the site area. Some made ground should therefore be anticipated present on the site areas associated

with the previous development and site use. The made ground is anticipated to comprise reworked natural soils with some agricultural wastes. The risk of significant contamination of the soils is considered to represent a generally low risk.

8.3 Potential Pathways

With respect to site re-development there are a number of potential pathways by which contaminant sources, if present, could cause a risk to a receptor (future site residents / users, construction workers undertaking the proposed development, site staff, and members of the general public and the water environment). These include:

- **Dermal Contact:** Potential may exist for dermal contact with contaminated spoil.
- **Inhalation:** Potential may exist for inhalation of elevated levels of soil gas and/or hydrocarbon vapours. Potential may also exist for inhalation of contaminated dust from air-borne contaminated soil surface and organic vapours.
- **Ingestion:** Potential may exist for the ingestion of contaminated soil, dust or soil by construction staff, maintenance personnel
- **Soil Leaching:** The potential may exist for leaching of contaminants from contaminated soil to groundwater via surface water infiltration through the site.
- **Groundwater / Leachate Migration:** There is potential for contaminants to migrate laterally / vertically within leachate or groundwater to surface waters and deeper groundwater aquifers.

8.4 Potential Receptors

Receptors, which may be affected by contamination via the pathways previously described, are:

- **Human Health:** Future site users, site staff, off-site receptors (neighbours & members of the general public), construction and maintenance personnel.
- **Water Environment:** On-site and off-site groundwater
- **Property:** Foundations and structures including any services.

8.5 Preliminary Conceptual Site Model (CSM)

Potential sources of contamination and pathways by which there may be potential pollutant linkage by which receptors could be at risk are listed in further detail in the following table. A risk rating (Low, Low to Moderate, Moderate, Moderate to High or High) for each of these is also given.

Table 8.1 Contamination Assessment Summary

Receptor	Potential Sources	Pathways	Risk	Justification/Mitigation
Human Health				
Future Site Users	Potential Disturbed / Made Ground & Groundwater	Dermal Contact, Inhalation of Dust and vapours and Ingestion of contaminated soil	Low to Moderate	The potential risk for disturbed / made ground, natural soils and shallow groundwater on the site to be contaminated by inorganic and organic contaminants and capable of generating significant levels of gas/soil vapours is considered to be Low. However some made ground including spoil mounds were observed and therefore due to the unknown nature of these mounds the risk will locally rise to Moderate
General Public	Disturbed / Made Ground	Inhalation of Dust	Low	The potential risk to site neighbours and general public from soil contamination is considered low.
Construction workers	Disturbed / Made Ground & Groundwater	Dermal Contact, Inhalation of Dust, Ingestion of contaminated soil	Low to Moderate	The potential for soils and shallow groundwater on the site to be contaminated by inorganic and organic contaminants and capable of generating significant levels of gas vapours is considered to be low. Asbestos material may remain within the current buildings and some made ground is anticipated present and in this regard the risk rises to Moderate
Property				
On site structures	Disturbed / Made Ground & Groundwater	Sulphate and attack on concrete structures	Low	The potential risk for disturbed / made ground, natural soils and shallow groundwater on the site to be contaminated by inorganic and organic contaminants is considered to be Low. The sulphate risk to buried concrete is considered low.
Buried Services	Disturbed / Made Ground & Groundwater	Hydrocarbon attack on buried services. Soil contamination risk to utility personnel	Low to Moderate	The potential risk for disturbed / made ground, natural soils and shallow groundwater on the site to be contaminated by inorganic and organic contaminants is considered to be Low to Moderate as agricultural vehicles have operated on the site area and may have leaked oils and fuels. The risk to buried water supply pipes is deemed low to moderate and will require assessment.
Water Environment				

Receptor	Potential Sources	Pathways	Risk	Justification/Mitigation
Groundwater/ Surface Water	Disturbed / Made Ground & soil leachates	Soil leaching & groundwater flow	Low	There is no evidence of any soil and groundwater contamination sources impacting on the site. The risk to groundwater underlying the site is considered to be low due to anticipated low risk from contaminant sources on the site.

9. CONCLUSIONS & RECOMMENDATIONS

The desk study for the site shows that the site at the time of the earliest available mapping was developed with buildings forming part of a farm courtyard. Further agricultural buildings have been established on the site area, although the use has remained agricultural in nature.

The potential for ground contamination on the site is therefore considered to be generally low, rising to moderate where spoil mounds indicate the presence of made ground deposits of unknown composition. It is therefore considered that a targeted investigation of the site should investigate the areas of made ground to confirm the depth, nature and chemical composition of such materials

Any investigation should allow for a contamination risk assessment, inclusive of soil gas monitoring to confirm if any remedial works are required to facilitate the redevelopment of the site area

Appendices

Appendix A	Figures 1 Site Location Plan (Fig. 1)
Appendix B	EnviroCheck Report

Appendix A

Figures 1

Site Location Plan (Fig. 1)



PROJECT MM12343: NEWHOUSE FARM, GREAT BROMLEY

FIGURE 1: SITE LOCATION PLAN

Appendix B EnviroCheck Report

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

254061503_1_1

Customer Reference:

MM12343 Newhouse Farm, Great Bromley

National Grid Reference:

607210, 227070

Slice:

A

Site Area (Ha):

1.11

Search Buffer (m):

1000

Site Details:

Site at 607220, 227040

Client Details:

Mr S McGregor

MM-EC Geoenvironmental Ltd

11 Westerhill

Perth

PH1 1DH

Report Section	Page Number
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Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1			Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		1		15
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 5		Yes		
Pollution Incidents to Controlled Waters	pg 5				3
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 5		5	3	10 (*46)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 21	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 22	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 22	Yes	n/a	n/a	n/a
Source Protection Zones	pg 22	1			
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 22		3	4	29

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 27	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 27			1	1
Potentially Infilled Land (Water)					
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 28	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 28	Yes			Yes
BGS Recorded Mineral Sites	pg 28				2
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 28	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 29	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 29	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 29		Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 30				1
Fuel Station Entries					
Points of Interest - Commercial Services					
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 30				2
Points of Interest - Public Infrastructure					
Points of Interest - Recreational and Environmental					
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 31				2
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 31	2			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (NW)	288	1	607050 227400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NW (S)	488	1	607200 226500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	492	1	607150 226500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A7NE (SW)	494	1	606800 226700
1	Discharge Consents Operator: Mr Derek And Mrs Yvonne Cobbold Property Type: Domestic Property (Single) Location: 4 New House Farm Cottage Hall Road, Great Bromley, Colchester, Essex, Co7 7tp Authority: Environment Agency, Anglian Region Catchment Area: Colne Estuary Tributaries / Ardleigh Reference: Eprcp3425xs Permit Version: 1 Effective Date: 2nd July 2010 Issued Date: 2nd July 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tenpenny Brook Status: New issued under EPR 2010 Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	10	2	607288 227026
2	Discharge Consents Operator: Mr M L & Dr J E Beauchamp Property Type: Domestic Property (Single) Location: The Beeches Colchester Road, Great Bromley, Nr. Colchester, Essex, Co7 7tn Authority: Environment Agency, Anglian Region Catchment Area: Lower River Colne (Colchester) Reference: Prenf13777 Permit Version: 1 Effective Date: 6th September 2001 Issued Date: 6th September 2001 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of Tenpenney River Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	552	2	606682 227405
2	Discharge Consents Operator: Mr W Harvey Property Type: Domestic Property (Single) Location: Meyricks Colchester Road, Great Bromley, Colchester, Essex, Co7 7tn Authority: Environment Agency, Anglian Region Catchment Area: Colne Estuary Tributaries / Ardleigh Reference: Prenf16113 Permit Version: 1 Effective Date: 13th November 2003 Issued Date: 13th November 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of Tenpenny Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	564	2	606690 227440

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	<p>Discharge Consents</p> <p>Operator: Mr Michael Barrett Property Type: Domestic Property (Single) Location: Glebe Cottage, Lilleys Lane, Great Bromley, Essex, Co7 7xa Authority: Environment Agency, Anglian Region Catchment Area: Colne Estuary Tributaries / Ardleigh Reference: Npswd006140 Permit Version: 1 Effective Date: 12th January 2009 Issued Date: 12th January 2009 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of Tenpenny Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A18SE (NE)	614	2	607483 227697
4	<p>Discharge Consents</p> <p>Operator: D P Embling Property Type: Domestic Property (Single) Location: Rose Lea Ardleigh Road, Great Bromley, Colchester, Essex, Co7 7tl Authority: Environment Agency, Anglian Region Catchment Area: Lower River Colne (Colchester) Reference: Prenf15295 Permit Version: 1 Effective Date: 23rd July 2002 Issued Date: 15th August 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of Tenpenny Brook Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 10m</p>	A17SE (NW)	618	2	606750 227590
5	<p>Discharge Consents</p> <p>Operator: Ms J L Runnels-Cross & Mr P Crosby Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Colchester Road Great Bromley, Colchester, Colchester, Essex, Co7 7tn Authority: Environment Agency, Anglian Region Catchment Area: Colne Estuary Tributaries / Ardleigh Reference: Prenf15905 Permit Version: 1 Effective Date: 22nd August 2003 Issued Date: 22nd August 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Of Bromley Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A12NE (NW)	628	2	606580 227370
5	<p>Discharge Consents</p> <p>Operator: Mr L N & Mrs A M Grainger Property Type: Domestic Property (Single) Location: Morants Cottage Colchester Road, Great Bromley, Colchester, Essex, Co7 7tn Authority: Environment Agency, Anglian Region Catchment Area: Lower River Colne (Colchester) Reference: Prenf13525 Permit Version: 1 Effective Date: 16th March 2001 Issued Date: 11th April 2001 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Tenpenny Brook Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 10m</p>	A12NW (W)	655	2	606540 227340

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	<p>Discharge Consents</p> <p>Operator: Mr Jm Craddock & Miss Lj Broadbent Property Type: Domestic Property (Single) Location: South View Ardleigh Road, Great Bromley, Colchester, Essex, Co7 7tl Authority: Environment Agency, Anglian Region Catchment Area: Lower River Colne (Colchester) Reference: Prenf15294 Permit Version: 1 Effective Date: 23rd July 2002 Issued Date: 21st August 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of Tenpenny Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A17SE (NW)	648	2	606757 227635
6	<p>Discharge Consents</p> <p>Operator: Lee Tyler Property Type: Domestic Property (Single) Location: Burnt Heath Methodist Chapel Ardleigh Road, Great Bromley, Colchester, Essex, Co7 7tl Authority: Environment Agency, Anglian Region Catchment Area: Lower River Colne (Colchester) Reference: Prenf13044 Permit Version: 1 Effective Date: 24th March 2000 Issued Date: 31st March 2000 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Bromley Brook (River Colne) Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A17SE (NW)	663	2	606743 227643
7	<p>Discharge Consents</p> <p>Operator: Mr J Smith Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Coppice View Carrington Road, Great Bromley, Colchester, Essex, Co7 7xa Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prenf11804 Permit Version: 1 Effective Date: 14th September 1999 Issued Date: 12th October 1999 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of Tenpenny Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m</p>	A14NE (NE)	758	2	607950 227390
8	<p>Discharge Consents</p> <p>Operator: Mr Philip Allum Property Type: Domestic Property (Single) Location: Barn Conversion, Blue Gates Farm Carringtons Road, Great Bromley, Colchester, Essex, Co7 7uz Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Eprfb3190ey Permit Version: 1 Effective Date: 2nd November 2016 Issued Date: 2nd November 2016 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Of Tenpenny Brook Status: New issued under EPR 2010 Positional Accuracy: Located by supplier to within 10m</p>	A14NE (E)	765	2	608040 227130

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	<p>Discharge Consents</p> <p>Operator: Mr & Mrs M Sutherland Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Roseland Colchester Road, Great Bromley, Colchester, Essex, Co7 7tn Authority: Environment Agency, Anglian Region Catchment Area: Lower River Stour (Stratford) Reference: Prenf13374 Permit Version: 1 Effective Date: 27th October 2000 Issued Date: 6th November 2000 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Tenpenny Brook Status: New Consent, by Application (Water Resources Act 1991, Section 88) Positional Accuracy: Located by supplier to within 10m</p>	A17SE (NW)	767	2	606580 227630
10	<p>Discharge Consents</p> <p>Operator: Mr D Mylam Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Premises At Mill House Mill Lane, Burnt Heath, Ardleigh, Essex Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Pr2nf722 Permit Version: 1 Effective Date: 4th December 1987 Issued Date: 4th December 1987 Revocation Date: 19th April 1994 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Tenpenny Brook Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989 Positional Accuracy: Located by supplier to within 100m</p>	A18NW (N)	804	2	606900 227900
11	<p>Discharge Consents</p> <p>Operator: Robert Fryer Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Holly Lodge Colchester Road, Great Bromley, Great Bromley, Essex, Co7 7tn Authority: Environment Agency, Anglian Region Catchment Area: Catchment 29 Unknown Detail Reference: Prenf15735 Permit Version: 1 Effective Date: 12th June 2003 Issued Date: 12th June 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Ditch Trib Of Bromley Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A12NW (W)	926	2	606250 227300
12	<p>Discharge Consents</p> <p>Operator: Mr S Rendell/ Ms K Hayward Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Fir Tree Cottage, Great Bromley, Colchester, Co7 7uz Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prenf08821 Permit Version: 1 Effective Date: 21st June 1994 Issued Date: 21st June 1994 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Tributary Tenpenny Brook Status: Post National Rivers Authority Legislation where issue date > 31/08/1989 Positional Accuracy: Located by supplier to within 100m</p>	A15SW (E)	969	2	608250 227030

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	<p>Discharge Consents</p> <p>Operator: Mr P E Francis Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Burnt Heath House Frating Road, Ardleigh, Colchester, Essex, Co7 7sy Authority: Environment Agency, Anglian Region Catchment Area: Colne Estuary Tributaries / Ardleigh Reference: Prenf16338 Permit Version: 1 Effective Date: 26th March 2004 Issued Date: 26th March 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge: Freshwater Stream/River Environment: Receiving Water: Trib Of Tenpenny Brook Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 10m</p>	A17NW (NW)	988	2	606520 227880
	<p>Nearest Surface Water Feature</p>	A13NE (E)	165	-	607427 227112
14	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Domestic/Residential Location: Kelvedon District, GREAT BROMLEY Authority: Environment Agency, Anglian Region Pollutant: Sewage - Septic Tank Effluent Note: Tenpenny Brook Tributary Incident Date: 15th February 1999 Incident Reference: 3693 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Inadequate Construction Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A12NE (NW)	534	2	606700 227400
15	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Domestic/Residential Location: Kelvedon District Authority: Environment Agency, Anglian Region Pollutant: Sewage - Septic Tank Effluent Note: Ditch Tributary Tenpenny Brook Incident Date: 12th May 1997 Incident Reference: 3108 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Other Cause Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A12NE (W)	584	2	606600 227295
15	<p>Pollution Incidents to Controlled Waters</p> <p>Property Type: Domestic/Residential Location: GREAT BROMLEY Authority: Environment Agency, Anglian Region Pollutant: Sewage - Septic Tank Effluent Note: Tributary Of Tenpenny Brook Incident Date: 12th May 1997 Incident Reference: 3108 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Other Cause Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m</p>	A12NE (W)	585	2	606600 227300
16	<p>Water Abstractions</p> <p>Operator: T W Salmon & Co Licence Number: 8/37/25*/S/0197 Permit Version: 104 Location: Reservoir On Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 August Permit Start Date: 17th October 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A13NE (NE)	193	2	607400 227200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	<p>Water Abstractions</p> <p>Operator: R & D Kynaston Licence Number: 8/37/25/*S/0197 Permit Version: 102 Location: Reservoir On Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 August Permit Start Date: 19th November 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A13NE (NE)	193	2	607400 227200
16	<p>Water Abstractions</p> <p>Operator: R & D Kynaston Licence Number: 8/37/25/*S/0197 Permit Version: 103 Location: Reservoir On Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 August Permit Start Date: 19th November 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A13NE (NE)	193	2	607400 227200
16	<p>Water Abstractions</p> <p>Operator: R & D Kynaston Licence Number: 8/37/25/*S/0197 Permit Version: 101 Location: Reservoir On Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 August Permit Start Date: 8th May 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A13NE (NE)	193	2	607400 227200
16	<p>Water Abstractions</p> <p>Operator: R & D Kynaston Licence Number: 8/37/25/*S/0197 Permit Version: 100 Location: Reservoir On Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 April Authorised End: 31 August Permit Start Date: 1st April 1997 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A13NE (NE)	193	2	607400 227200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
17	<p>Water Abstractions</p> <p>Operator: J G A & S C Lyon Licence Number: 8/37/25/*G/0108 Permit Version: 102 Location: Well At Morants Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Morants Farm, Ardleigh, Essex Authorised Start: 01 March Authorised End: 30 September Permit Start Date: 28th March 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A12SE (W)	381	2	606800 226900
17	<p>Water Abstractions</p> <p>Operator: J G A & S C Lyon Licence Number: 8/37/25/*G/0108 Permit Version: 101 Location: Well At Morants Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Morants Farm, Ardleigh, Essex Authorised Start: 01 March Authorised End: 30 September Permit Start Date: 8th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A12SE (W)	381	2	606800 226900
17	<p>Water Abstractions</p> <p>Operator: Collierswood Farm Licence Number: 8/37/25/*G/0108 Permit Version: 100 Location: Morants Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Fluvial Sand and Gravel; Status: Perpetuity Authorised Start: 01 March Authorised End: 30 September Permit Start Date: 1st June 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A12SE (W)	381	2	606800 226900
18	<p>Water Abstractions</p> <p>Operator: G F Kempster Licence Number: 8/37/25/*S/0076 Permit Version: 100 Location: Newhouse Farm, Gt. Bromley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st April 1979 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A8NW (SW)	580	2	606900 226500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	<p>Water Abstractions</p> <p>Operator: G.F. Kempster Esq Licence Number: 8/37/25/*s/076 Permit Version: Not Supplied Location: Newhouse Farm, GREAT BROMLEY Authority: Environment Agency, Anglian Region Abstraction: Impounding Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 5 Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A8NW (SW)	584	2	606900 226495
19	<p>Water Abstractions</p> <p>Operator: P P Allam Licence Number: 8/37/25/*G/0153 Permit Version: 100 Location: Blue Gates Farm, Gt. Bromley Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A14SE (E)	633	2	607900 226900
20	<p>Water Abstractions</p> <p>Operator: T W Salmon & Co Licence Number: 8/37/25/*S/0186 Permit Version: 101 Location: Res On Trib Of Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 13th November 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A14SE (E)	662	2	607900 226800
20	<p>Water Abstractions</p> <p>Operator: D & S Salmon Licence Number: 8/37/25/*S/0186 Permit Version: 100 Location: Res On Trib Of Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st December 1997 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A14SE (E)	662	2	607900 226800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	<p>Water Abstractions</p> <p>Operator: Dw & Je Salmon Licence Number: 8/37/25/*s/186 Permit Version: Not Supplied Location: Bluegates Farm, GREAT BROMLEY Authority: Environment Agency, Anglian Region Abstraction: Impounding Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 5 Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A14SE (E)	663	2	607900 226795
21	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*S/0178 Permit Version: 102 Location: Bromley Brook At Elmstead Hall Farm Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Elmstead Hall Farm, Colchester Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 10th April 2017 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A8SW (S)	797	2	606946 226237
22	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*S/0178 Permit Version: 101 Location: The Hall, Elmstead Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Elmstead Hall Farm, Colchester Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 8th December 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A8SW (S)	848	2	606900 226200
22	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*S/0178 Permit Version: 100 Location: The Hall, Elmstead Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st January 1979 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A8SW (S)	848	2	606900 226200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	<p>Water Abstractions</p> <p>Operator: Messrs R.W. Mitchell & Sons Licence Number: 8/37/25/*s/178 Permit Version: Not Supplied Location: The Hall, ELMSTEAD Authority: Environment Agency, Anglian Region Abstraction: Impounding Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 15 Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A8SW (S)	853	2	606900 226195
	<p>Water Abstractions</p> <p>Operator: Messrs M. & J.H. Rowe, Licence Number: 8/37/25/*g/165 Permit Version: Not Supplied Location: Carringtons Farm, GREAT BROMLEY Authority: Environment Agency, Anglian Region Abstraction: Agriculture (General) Abstraction Type: Not Supplied Source: Well And Borehole Daily Rate (m3): 2 Yearly Rate (m3): 136000 Details: Glacial Sand and Gravel; Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A15NW (E)	1032	2	608300 227200
	<p>Water Abstractions</p> <p>Operator: Messrs M. & J.H. Rowe, Licence Number: 8/37/25/*g/165 Permit Version: Not Supplied Location: Carringtons Farm, GREAT BROMLEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Well And Borehole Daily Rate (m3): 2 Yearly Rate (m3): 136000 Details: Glacial Sand and Gravel; Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A15NW (E)	1032	2	608300 227195
	<p>Water Abstractions</p> <p>Operator: A Lochore & Son Licence Number: 8/37/25/*S/0234 Permit Version: 102 Location: Hollies Field, Gt. Bromley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 19th January 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A11NE (W)	1062	2	606100 227200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: J Fryer & Sons Licence Number: 8/37/25/*S/0234 Permit Version: 100 Location: Hollies Field, Gt. Bromley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Storage Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 November Authorised End: 31 March Permit Start Date: 1st August 1982 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A11NE (W)	1062	2	606100 227200
	<p>Water Abstractions</p> <p>Operator: Chancery Farm Ltd Licence Number: 8/37/25/*G/0116 Permit Version: 100 Location: Chancery Farm, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: E chalk; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A16NE (NW)	1172	2	606200 227800
	<p>Water Abstractions</p> <p>Operator: C J Pirie Licence Number: 8/37/25/*G/0101 Permit Version: 100 Location: Hall Farm, Great Bromley Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A9SE (SE)	1175	2	608200 226300
	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*G/0224 Permit Version: 104 Location: Elmstead Hall, Elmstead Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Elmstead Colchester Essex Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 28th March 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A7SW (SW)	1235	2	606300 226150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*G/0224 Permit Version: 103 Location: Elmstead Hall, Elmstead Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Elmstead Colchester Essex Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 8th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A7SW (SW)	1235	2	606300 226150
	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*G/0224 Permit Version: 102 Location: Elmstead Hall, Elmstead Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Elmstead Colchester Essex Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 5th February 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A7SW (SW)	1271	2	606300 226100
	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*G/0224 Permit Version: 101 Location: Elmstead Hall, Elmstead Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Elmstead Colchester Essex Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 23rd January 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A7SW (SW)	1271	2	606300 226100
	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*G/0224 Permit Version: 100 Location: Elmstead Hall, Elmstead Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st April 1979 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A7SW (SW)	1271	2	606300 226100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: R W Mitchell & Sons Licence Number: 8/37/25/*G/0097 Permit Version: 100 Location: The Hall, Elmstead Market Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st May 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A2NW (SW)	1279	2	606400 226000
	<p>Water Abstractions</p> <p>Operator: D C Williamson Ltd Licence Number: 8/37/25/*G/0143 Permit Version: 101 Location: Old Shields Farm 2, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Anti Frost Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 9th July 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A23NW (N)	1379	2	606900 228500
	<p>Water Abstractions</p> <p>Operator: D C Williamson Ltd Licence Number: 8/37/25/*G/0143 Permit Version: 101 Location: Old Shields Farm 2, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 9th July 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A23NW (N)	1379	2	606900 228500
	<p>Water Abstractions</p> <p>Operator: A E Marshall Licence Number: 8/37/25/*G/0143 Permit Version: 100 Location: Old Shields Farm 2, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 1st March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A23NW (N)	1379	2	606900 228500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: A E Marshall Licence Number: 8/37/25/*G/0143 Permit Version: 100 Location: Old Shields Farm 2, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Anti Frost Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 1st March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A23NW (N)	1379	2	606900 228500
	<p>Water Abstractions</p> <p>Operator: T & R Fairley Farms Partnership Licence Number: 8/37/25/*G/0172 Permit Version: 101 Location: Norman/Cattsgreen Fms, Mistley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 May Authorised End: 30 September Permit Start Date: 1st April 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A24SE (NE)	1399	2	608000 228300
	<p>Water Abstractions</p> <p>Operator: T & R Fairley Farms Partnership Licence Number: 8/37/25/*G/0172 Permit Version: 101 Location: Normans/Cattsgreen Fms, Mistley Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 May Authorised End: 30 September Permit Start Date: 1st April 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A24SE (NE)	1431	2	607900 228400
	<p>Water Abstractions</p> <p>Operator: Collierswood Farm Licence Number: 8/37/25/*G/0117 Permit Version: 100 Location: Collierswood Farm, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st May 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A11NW (W)	1452	2	605700 227100

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: D C Williamson Ltd Licence Number: 8/37/25/*G/0143 Permit Version: 101 Location: Old Shields Farm 1, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Anti Frost Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 9th July 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A23NW (N)	1477	2	606900 228600
	<p>Water Abstractions</p> <p>Operator: D C Williamson Ltd Licence Number: 8/37/25/*G/0143 Permit Version: 101 Location: Old Shields Farm 1, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 9th July 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A23NW (N)	1477	2	606900 228600
	<p>Water Abstractions</p> <p>Operator: A E Marshall Licence Number: 8/37/25/*G/0143 Permit Version: 100 Location: Old Shields Farm 1, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 1st March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A23NW (N)	1477	2	606900 228600
	<p>Water Abstractions</p> <p>Operator: A E Marshall Licence Number: 8/37/25/*G/0143 Permit Version: 100 Location: Old Shields Farm 1, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Anti Frost Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 1st March 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A23NW (N)	1477	2	606900 228600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: M G Sabini Licence Number: 8/37/25*/G/0036 Permit Version: 101 Location: Morrow Lane Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A22NW (NW)	1565	2	606400 228500
	<p>Water Abstractions</p> <p>Operator: Mr & Mrs E Sabini Licence Number: 8/37/25*/G/0036 Permit Version: 100 Location: Morrow Lane Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st November 1967 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A22NW (NW)	1565	2	606400 228500
	<p>Water Abstractions</p> <p>Operator: J G A & S C Lyon Licence Number: 8/37/25*/G/0284 Permit Version: 102 Location: Jetwells At Collierswood Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Collierswood Farm, Ardleigh, Essex Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 28th March 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A6NW (W)	1645	2	605600 226500
	<p>Water Abstractions</p> <p>Operator: J G A & S C Lyon Licence Number: 8/37/25*/G/0284 Permit Version: 101 Location: Jetwells At Collierswood Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Collierswood Farm, Ardleigh, Essex Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 8th December 2013 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A6NW (W)	1645	2	605600 226500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: Collierswood Farm Licence Number: 8/37/25/*G/0284 Permit Version: 100 Location: Collierswood Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st April 1992 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A6NW (W)	1645	2	605600 226500
	<p>Water Abstractions</p> <p>Operator: K W Robinson Licence Number: 8/37/25/*S/0045 Permit Version: 101 Location: Badley Hall, Reservoir Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Badley Hall Great Bromley Colchester Essex Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 25th May 2004 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A10NE (SE)	1646	2	608800 226400
	<p>Water Abstractions</p> <p>Operator: R & K Robinson Licence Number: 8/37/25/*S/0045 Permit Version: 100 Location: Badley Hall, Reservoir Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st March 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A10NE (SE)	1646	2	608800 226400
	<p>Water Abstractions</p> <p>Operator: A.E. Marshall Esq., Licence Number: 8/37/25/*g/210 Permit Version: Not Supplied Location: Morrow Lane Farm, ARDLEIGH Authority: Environment Agency, Anglian Region Abstraction: Unspecified Abstraction Type: Not Supplied Source: Well And Borehole Daily Rate (m3): 23 Yearly Rate (m3): 864000 Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A21SE (NW)	1649	2	606105 228395

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: Boxford (Suffolk) Farms Ltd Licence Number: 8/37/25/*G/0210 Permit Version: 101 Location: Morrow Lane Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Anti Frost Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 25th July 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A21SE (NW)	1656	2	606100 228400
	<p>Water Abstractions</p> <p>Operator: Boxford (Suffolk) Farms Ltd Licence Number: 8/37/25/*G/0210 Permit Version: 101 Location: Morrow Lane Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 25th July 2012 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	A21SE (NW)	1656	2	606100 228400
	<p>Water Abstractions</p> <p>Operator: A E Marshall Licence Number: 8/37/25/*G/0210 Permit Version: 100 Location: Morrow Lane Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 1st April 1978 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A21SE (NW)	1656	2	606100 228400
	<p>Water Abstractions</p> <p>Operator: A E Marshall Licence Number: 8/37/25/*G/0210 Permit Version: 100 Location: Morrow Lane Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Anti Frost Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 February Authorised End: 31 October Permit Start Date: 1st April 1978 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A21SE (NW)	1656	2	606100 228400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: K W Robinson Licence Number: 8/37/25/*S/0045 Permit Version: 101 Location: Badley Hall, Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Badley Hall Great Bromley Colchester Essex Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 25th May 2004 Permit End Date: Not Supplied Positional Accuracy: Approximate location provided by supplier</p>	(E)	1719	2	609000 227000
	<p>Water Abstractions</p> <p>Operator: R & K Robinson Licence Number: 8/37/25/*S/0045 Permit Version: 100 Location: Badley Hall, Tenpenny Brook Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Status: Perpetuity Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 1st March 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(E)	1719	2	609000 227000
	<p>Water Abstractions</p> <p>Operator: R M Robinson Licence Number: 8/37/25/*G/0146 Permit Version: 100 Location: Badley Hall, Great Bromley Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(E)	1724	2	609000 226900
	<p>Water Abstractions</p> <p>Operator: R M Robinson Licence Number: 8/37/25/*G/0146 Permit Version: 100 Location: Badley Hall, Great Bromley Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st June 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(E)	1735	2	609000 226800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: R.M. Robinson, Esq., Licence Number: 8/37/25/*g/215 Permit Version: Not Supplied Location: Badley Hall, GREAT BROMLEY Authority: Environment Agency, Anglian Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Groundwater Fed Reservoir Daily Rate (m3): 23 Yearly Rate (m3): 605000 Details: Glacial Sand and Gravel; Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m</p>	(E)	1739	2	609000 227300
	<p>Water Abstractions</p> <p>Operator: Moorhouse Farms Ltd Licence Number: 8/37/25/*G/0064 Permit Version: 100 Location: Badley Hall Farm, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(N)	1747	2	607200 228900
	<p>Water Abstractions</p> <p>Operator: Moorhouse Farms Ltd Licence Number: 8/37/25/*G/0064 Permit Version: 100 Location: Badley Hall Farm, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(N)	1749	2	607100 228900
	<p>Water Abstractions</p> <p>Operator: P Moorhouse Licence Number: 8/37/25/*G/0191 Permit Version: 101 Location: 2 B/Hs, Badley Hall, Ardeleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 March Authorised End: 30 September Permit Start Date: 22nd September 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(N)	1758	2	607000 228900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p>Water Abstractions</p> <p>Operator: W & V Mckinlay Licence Number: 8/37/25/*G/0058 Permit Version: 100 Location: Ardleigh Park, Colchester Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st October 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(W)	1780	2	605400 227400
	<p>Water Abstractions</p> <p>Operator: D W Hunter Licence Number: 8/37/25/*G/0135 Permit Version: 100 Location: Allens Farm, Elmstead Authority: Environment Agency, Anglian Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 1986 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	A1SE (SW)	1800	2	606200 225500
	<p>Water Abstractions</p> <p>Operator: Mr & MrsMr & Mrs E & J Halsall Licence Number: 8/37/25/*G/0283 Permit Version: 102 Location: Park Farm, Ardleigh Authority: Environment Agency, Anglian Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Glacial Sand and Gravel; Status: Perpetuity Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 23rd May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m</p>	(NW)	1924	2	605500 228100
	<p>Groundwater Vulnerability Map</p> <p>Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Mixed Dilution: <300 mm/year Baseflow Index: >70% Superficial: >90% Patchiness: Superficial Thickness: 3-10m Superficial Recharge: Low</p>	A13SW (S)	0	3	607210 227000