



**HOUGHTON REGIS TOWN COUNCIL**  
Peel Street, Houghton Regis, Bedfordshire, LU5 5EY

Town Mayor: **Cllr Tracey McMahon**

Tel: 01582 708540

Town Clerk: **Clare Evans**

E-mail: [info@houghtonregis.org.uk](mailto:info@houghtonregis.org.uk)

22<sup>nd</sup> January 2021

**To: Members of the New Cemetery Sub-Committee**

**Cllrs: S Thorne (Chair), J Carroll, Y Farrell, M S Kennedy, R Morgan and Vacancy.**

(Copies to other Councillors for information)

### **Notice of Meeting**

You are hereby summoned to a Meeting of the **New Cemetery Sub-Committee** to be held virtually on **1<sup>st</sup> February 2021 at 6.00pm.**

This meeting is being held virtually via Microsoft Teams. If members of the public would like to attend, please click on the meeting link below and follow the online instructions:

[MEETING LINK<sup>1</sup>](#)

[MEETING GUIDANCE](#)

To assist in the smooth running of the meeting please refer and adhere to the Council's Virtual Meeting Guidance. To view the Virtual Meeting Guidance please click on the link above.

**Clare Evans**  
**Town Clerk**

***THIS MEETING MAY BE  
RECORDED<sup>2</sup>***

### **AGENDA**

This meeting is being held virtually due to Covid-19. To assist in the smooth running of the meeting please refer and adhere to the Council's Virtual Meeting Guidance. Virtual Meeting Guidance can be found on the Houghton Regis Town Council website.

#### **1. APOLOGIES & SUBSTITUTIONS**

<sup>1</sup> If you require a meeting link emailed to you, please contact the Head of Democratic Services at [louise.senior@houghtonregis.org.uk](mailto:louise.senior@houghtonregis.org.uk)

<sup>2</sup> Phones and other equipment may be used to film, audio record, tweet or blog from this meeting by an individual Council member or a member of the public. No part of the meeting room is exempt from public filming unless the meeting resolves to go into exempt session.

*The use of images or recordings arising from this is not under the Council's control.*

**2. QUESTIONS FROM THE PUBLIC**

In accordance with approved Standing Orders 1(e)-1(l) Members of the public may make representations, ask questions and give evidence at a meeting which they are entitled to attend in respect of the business on the agenda.

The total period of time designated for public participation at a meeting shall not exceed 15 minutes and an individual member of the public shall not speak for more than 3 minutes unless directed by the chairman of the meeting.

**3. SPECIFIC DECLARATIONS OF INTEREST & REQUESTS FOR DISPENSATIONS**

Under the Localism Act 2011 (sections 26-37 and Schedule 4) and in accordance with the Council’s Code of Conduct, Members are required to declare any interests which are not currently entered in the member’s register of interests or if he/she has not notified the Monitoring Officer of any such interest.

Members are invited to submit any requests for Dispensations for consideration.

**4. MINUTES**

Pages 3 - 4

To approve the Minutes of the meeting held on 16<sup>th</sup> November 2020.

**Recommendation:** To approve the Minutes of the meeting held on 16<sup>th</sup> November 2020.

**5. NEW CEMETERY PROVISION**

Pages 5 - 32

To provide members with the report from CDS on the trial trenching work completed on Grendall Lane as part of the T2 survey investigations for land for a new cemetery.

**Recommendation:** To note the findings of the interim T2 report and to confirm the completion of the T2 assessment and to seek feedback from the Environment Agency in due course.

**6. FUTURE MEETINGS**

Members are invited to consider when this Sub Committee should meet again, this is dependent upon the decision made in relation to agenda item 5.

0-0

**Houghton Regis Town Council  
New Cemetery Sub-Committee  
16<sup>th</sup> November 2020 at 6.00pm**

Present: Cllrs: S Thorne Chair  
J Carroll  
Y Farrell  
R Morgan

CBC Cllr: S Goodchild

Officers: Clare Evans Town Clerk  
Louise Senior Head of Democratic Services

Also present: Cllrs: D Jones  
T McMahon

Absent: Cllr: M S Kennedy

**NC121 APOLOGIES & SUBSTITUTIONS**

None.

**NC122 SPECIFIC DECLARATIONS OF INTEREST & REQUESTS FOR DISPENSATIONS**

None.

**NC123 MINUTES**

To approve the minutes of the New Cemetery Sub-Committee meeting held on the 14<sup>th</sup> July 2020.

**Resolved: To confirm the Minutes of the New Cemetery Sub-Committee meeting held on the 14<sup>th</sup> July 2020 and for these to be signed by the Chairman.**

**NC124 NEW CEMETERY PROVISION**

Members were provided with options for site investigations for land for a new cemetery.

Members acknowledged that the search for land for a new cemetery provision had continued over many years and that the options offered by Central Bedfordshire Council (CBC) were viable and thanked the Town Clerk for her hard work and efforts resulting in the options offered.

Members were advised that CBC had not confirmed how the land would be passed to HRTC, although it was thought that there would not be a charge. It was thought that ownership would be passed over or that it would be passed over under a long-term lease agreement. It was requested that clarification be sought. It was highlighted that this was a considerable offer from CBC. Had HRTC needed to purchase land privately it may have

made the whole project cost prohibitive.

It was suggested that as Houghton Regis Town Council would be responsible for the cost of preparing the land and layout of the cemetery, it would be prudent to initiate budget provision for this project.

It was requested that Anglian Water be contacted for a preliminary view on this proposal as the operator of the adjacent water treatment works. Members were advised that Anglian water would be consulted as a statutory consultee once a planning application had been submitted.

- Resolved:**
- 1. To commission T2 Groundwater Risk Assessment for Land at the end of Grendall Lane and, provided this is supportive, to proceed with the monitoring work and an updated T3 report;**
  - 2. To fund the investigations from EMR 348, Cemetery provision**

#### **NC125 FUTURE MEETINGS**

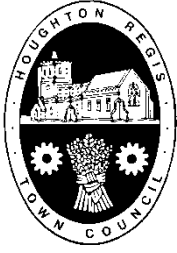
Members were invited to consider when this Sub Committee should meet again.

Members requested the Town Clerk contact Cemetery Development and discuss timescales.

**The Chairman closed the meeting at 7.00pm**

**Dated this          day of**

**Chairman**



**Date:** 1<sup>st</sup> February 2021

**Title:** NEW CEMETERY PROVISION

**Purpose of the Report:** To provide members with the report from CDS on the trial trenching work completed on Grendall Lane as part of the T2 survey investigations for land for a new cemetery.

**Contact Officer:** Clare Evans, Town Clerk

---

### 1. RECOMMENDATION

**To note the findings of the interim T2 report and to confirm the completion of the T2 assessment and to seek feedback from the Environment Agency in due course.**

### 2. BACKGROUND

At the meeting on 16<sup>th</sup> November the following was agreed:

- 1. To commission T2 Groundwater Risk Assessment for Land at the end of Grendall Lane and, provided this is supportive, to proceed with the monitoring work and an updated T3 report;*
- 2. To fund the investigations from EMR 348, Cemetery provision*

### 3. ISSUES FOR CONSIDERATION

Members are advised that the trial trenching investigation took place week commencing 7<sup>th</sup> December 2020. The consultants have prepared the attached report which considers the findings of the investigation, Appendix A. This completes the first stage of the T2 assessment.

As can be seen from the conclusion the consultants have reservations in relation to this site's suitability, namely:

1. Presence of active land drainage on site at depths of between 0.8m to 1.4m BELOW Ground level.
2. Shallow depth to groundwater strikes

Although the full T2 assessment was authorised at the meeting on 16<sup>th</sup> November, this interim T2 report is presented for members to confirm that the remainder of the T2 assessment be completed in light of the reservations expressed.

Members are advised that this stage of the T2 work completed has been billed at £1700. To complete the remainder of the T2 assessment a further £3200 would be incurred. This work would comprise the production of T2 groundwater risk assessment including Flux model and submission of findings to the Environment Agency (EA) for pre application advice.

There is an additional charge for the consideration by EA, based on £100 per hour, the fee is estimated to be £600-£1200 (as reported to Town Council on 14<sup>th</sup> December 2020).

Based on the concerns raised it is thought likely that the EA would require a T3 assessment to be made. As previously advised, this would cover:

Tier 3 (Total £13,750- £16,750)

- Installation of groundwater monitoring wells - £7000 - £10000 (depending on final depth to groundwater and installation depths)
- Baseline groundwater sampling visit - £1350
- 12 months of groundwater monitoring - £350 per visit – 12\*£350 = £4200
- Production of updated T3 report- £1200

Based on the presented findings the consultants have provided the following conclusion:

‘Once the above works have been carried out further detailed correspondence with the EA could be undertaken, however we cannot guarantee that the proposed work would be sufficient to satisfy the EA that the site and proposed development would not impact the underlying groundwater quality. As such there remains a risk that the EA may oppose the development during the planning application phase.

If the site were to be granted planning, then it is likely that further detailed and ongoing groundwater monitoring and sampling would be required and that, as mentioned previously, the land drainage encountered on site would need to be decommissioned which could incur further substantial costs.

Our view is that this site remains as high risk and that serious consideration should be given to reviewing other potentially more suitable sites in the local area.’

To help to understand the report a meeting has been held with the consultants. The following points are made:

- The EA are ideally looking for a water depth of 3m or greater. The report shows that for this site the water depth is variable, between 2.7m and 3.2m. The higher points within the site were dryer. Ground water tends to be at its highest level at April, so it may be found that water depth is higher in the Spring months.
- The land has land drains. The ones observed were flowing freely. The investigations did not confirm where they were flowing too, but they were generally in a north to south direction.

- The EA are concerned over land drains as they act as a conduit for burial contaminants. It is likely that the EA would require them to be decommissioned. The costs involved are variable, deeper drains become a civil engineering process.
- If the site were to be progressed an option would be to zone the site according to water depth i.e. high water table has cremated remains interments only, double burials only provided in areas of low water depth. This would result in higher initial construction costs as the whole site would have to be developed at the outset rather than in the usual phased way.

#### 4. OPTIONS FOR CONSIDERATION

Options:

1. Continue with T2 assessment and seek feedback from EA
2. Give further consideration to Windsor Drive recreation ground or to the land off the Woodside Link
3. Consider areas outside of the parish - Areas of Tebworth, Wingfield and Chalgrave are more favourable geographically. They have a more suitable sub soil with a clay dominated base. It is understood that Dunstable are also looking for a new cemetery site. An option for a combined facility could be explored.

#### 5. COUNCIL VISION

##### Aspirations

- A1 To develop and enhance **partnerships** between HRTC, stakeholders, partners, community groups and residents
- A2 To effectively and proactively **represent** our community
- A4 To develop a new **cemetery**
- A5 To ensure the **council** is fit for purpose and efficient in its delivery of services

##### Objective 4: Our community

- 4.1 To create or enhance community facilities which support community development and cohesion

#### 6. IMPLICATIONS

##### Corporate Implications

- There are no corporate implications arising from the recommendations.

##### Legal Implications

- There are no legal implications arising from the recommendations

##### Financial Implications

- Budget EMR 348 Cemetery provision, total available £78,908

##### Risk Implications

- Reputation – this is a considerable amount of budget to spend should members decide not to proceed with this site due to reasons outside of matters which may be highlighted by the T2 and T3 reports

### **Equalities Implications**

Houghton Regis Town Council has a duty to promote equality of opportunity, eliminate unlawful discrimination, harassment and victimisation and foster good relations in respect of nine protected characteristics; age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation.

This project / issue does not discriminate.

### **Press Contact**

The decision relating to this agenda item will be communicated to the press, via the website and social media.

## **7. CONCLUSION AND NEXT STEPS**

This is a difficult matter to consider. The interim T2 report highlights significant concerns, which may prove costly to overcome. However, it is felt that this site remains the most viable option within Houghton Regis.

## **8. APPENDICES**

**Appendix A: An initial Site Investigation Assessment Report**



C  
D  
S

**An initial Site Investigation Assessment Report for Houghton Regis Town Council**

**Address: Land at Grendall Lane, Houghton Regis, LU6 1RS**

**Date: 18<sup>th</sup> December 2020**

**The CDS Group, Building 51, Wrest Park, Silsoe, Bedfordshire, MK45 4HS  
W: [www.thecdsgroup.co.uk](http://www.thecdsgroup.co.uk)  
T: 01525 864387**



## 1 Introduction and Site Location

The CDS Group have been asked to carry out an initial site screening assessment for a proposed new cemetery. This site will be considered on the basis of groundwater risk and as part of this, an initial intrusive investigation has been undertaken to assess the site's suitability. This is because sites that do not meet the requirements of the Environment Agency should be ruled out at an early stage since the Agency as Primary Consultees are able to prevent any site being developed should the site be deemed to represent too great a risk in respect to water pollution.

The proposed development area is situated at Land at Grendall Lane, Houghton Regis, LU6 1RS as shown in Figure 1 below:



Figure 1. Aerial Image of the site (boundary indicated in red)

## 2 Background

This section sets out the relevant legal and policy advice relevant to the grant of planning permission for new and also the operation of existing cemeteries. New cemetery developments or extensions to existing cemeteries can be very emotive. However, these concerns are often disproportionate to the actual environmental risk.

Whilst the Local Planning Authority is the principal controlling body in determining approval for new sites or site extensions, significant information is required to ensure that the environmental risks are examined and that the Environment Agency's views are considered. Therefore, measures to prevent pollution must be undertaken and reported. Any regulatory decision-making is based on sound scientific knowledge. On this basis, a review of potential pollution from cemeteries was undertaken by the Environment Agency in collaboration with the British Geological Survey.

The aim was to review old and new cemeteries and measure the effects of contamination from viruses, bacteria and other microbiological pathogens and to assess the potential of chemical contaminants affecting groundwater supplies from decomposition processes. Preliminary results showed that the operating cemetery examined in the study (25 years old) did show some evidence of bacterial contaminants in groundwater derived from corpses. However, no viruses were detected and the overall contaminant loading was found to be low. The studies found that degradation and attenuation was occurring indicating that potential risks were low. Whilst the outcome of this research found contaminant risk to be low, it should be reviewed in the context that natural attenuation processes may have been optimum at these sites. Therefore, to optimise natural attenuation and reduce the risk of possible groundwater contamination, a series of guidelines have been drawn up that are directly applicable to cemeteries.

The most up-to-date guidance issued by the Environment Agency is provided in:

- 'The Environment Agency's approach to groundwater protection' (February 2018 Version 1.2), which updated 'Groundwater protection: Principles and practice (GP3) (2013)'; and
- 'Cemeteries and burials: prevent groundwater pollution' which was published in March 2017 and updated in February 2018. The purpose of the guidance is to help those operating cemeteries to understand how to manage cemeteries and burial of human and animal remains, to prevent or limit groundwater pollution.

Failure to manage and reduce any environmental risk to a minimum may result in action being taken under the Environmental Permitting (England and Wales) Regulations 2016, the Water Resources Act 1991 and the Anti-pollution Works Notice Regulations 1999.

## **2.1 Groundwater Protection Policy**

Initial risk screening starts with the tools contained in the 'The Environment Agency's approach to groundwater protection' (previously Principles and Practice for the groundwater protection), Section L: Cemetery developments GP3.

Tools include Groundwater Vulnerability and Source Protection Zone (SPZs) maps. These maps highlight where there are likely to be particular risks posed to groundwater from surface activities. Groundwater Vulnerability (GWV) Maps show the damage from pollution to groundwater and the relative importance of the aquifer to water supplies. Risk assessment is made with reference to soil leaching potential and the levels of water tables above major and minor aquifers.

Source Protection Zones are delineated areas around groundwater abstractions used for public consumption and defined by travel, time of biological or chemical contaminants.

The zones are classified in three groups:

- Zone 1 High risk**
- Zone 2 Intermediate to high risk**
- Zone 3 Intermediate risk**

In its Position Statement L1 (p109 of 'The Environment Agency's approach to groundwater protection') the Agency advises that it will object to the grant of planning permission for any new cemetery, or the extension of an existing cemetery, within Zone 1 of an SPZ or 250 metres from a well, borehole or spring used to supply water that is used for human consumption, whichever is the greater distance. Position Statement L3 advises on the protection of groundwater in highly sensitive locations. The Agency advises that it will apply a risk-based approach to assessing the suitability of sites outside of the zones noted in position statements L1 and L2 (concerning mass casualty emergencies). It will place a high priority on protecting groundwater within principal aquifers and groundwater catchments for drinking water supply; and seek to avoid new cemetery developments for greater than 100 graves in these high vulnerability areas except where the thickness and nature of the unsaturated zone, or the impermeable formations beneath the site protect groundwater, or the long-term risk is mitigated by appropriate engineering methods. It advises that all cemetery developments and burials must maintain an unsaturated zone below the level of the base of the grave(s) and that the Agency will work with the local authorities to identify alternative options where necessary. Whilst groundwater is a major part of policy concerns, other water point sources are also considered as requiring an evaluation of risk. These sources include surface water in the form of ditches, spring lines and surface run-off.

The factors influencing the risk of groundwater vulnerability include:

- Soil nature and type
  - Physical, mechanical and chemical properties
- Geomorphology
  - Depth to water table and or height above aquifers
  - Groundwater flow mechanisms
  - Aquifer type
- Abstractions
- SPZs
- Proximity to water courses, ditches and drains

Therefore, prior to any consent being given by the Environment Agency, an assessment of risk should be undertaken. The degree of assessment is measured through a series of stages namely:

- Hazard identification
- Identification of consequences
- Magnitude of consequences
- Probability of consequences
- Significance of risk

## **2.2 Tiered risk assessment**

There are 3 Tiers of Risk assessment. The associated size and position of the site will in-part determine which Tier is appropriate.



Tier 1

Desktop study of all appropriate documentation including GWV and SPZ maps, topographical, hydrological and geomorphologic maps. After adopting a systematic approach to the assessment of risk, a weighting can be given which is assessed as low, medium or high. If the overall risk is low, the proposal may be accepted by the Agency without further detailed assessment. However, the following practical guidelines would be recommended as appropriate controls to minimise pollution risk:

- 250 m distance from groundwater supply
- 30 m minimum distance from a watercourse or spring
- 10 m distance from field drains
- No burials in standing water

Tier 2

Should the risks not be clearly defined by the Tier 1 desktop study then further “ground truthing” might need to be undertaken. This will include the excavation of trial pits or boreholes on site to assess the nature of the ground conditions on site and whether either perched water or groundwater is encountered.

On further assessment of the ground model the risk assessment for the site can be re-assessed which may indicate the requirement for a pollutant flux model to be carried out to assess the impact of the modelled pollutants on the underlying groundwater and nearest compliance point.

Tier 3

If the risk is considered high, i.e. the number of yearly burials exceeds 1,000; a full groundwater audit will be required. This would include, but not be limited to, a detailed site investigation including installation of a minimum number of three boreholes, back groundwater quality analysis and ongoing monthly monitoring and sampling.

**2.3 Water Resources Act 1991 – S161A Anti-Pollution Works Notices**

The EA has powers under s161A of the Water Resources Act 1991 and the Anti-Pollution Works Regulations 1999, allowing Works Notices to be served to require specified steps to be taken to prevent or remedy pollution of controlled waters.

**2.4 Environmental Permitting (England & Wales) Regulations 2016**

Burial of human corpses can result in discharge of hazardous substances and non-hazardous pollutants to groundwater. They are, therefore, covered by the requirements of the EU Groundwater Daughter Directive, issued under the Water Framework Directive 2006 and now transposed in England and Wales by the Environmental Permitting (England & Wales) Regulations 2016 (EPR 2016). It is an offence to cause or knowingly permit pollution of controlled waters other than under and in accordance with an environmental permit.

### 3 Site Assessment

The following table summarises the site-specific information used to provide the initial preliminary risk assessment for the site:

Risk	Assessment (High, Moderate, Low)	Comment
Site Area	Moderate to High	The estimated burial area is greater than 2.7 ha
Burials per Annum	Low	Unknown at this stage but have been estimated between 30-40 burials a year.
Source Protection Zones	Low	The site is not situated within a source protection zone. The nearest is mapped approximately 2.5km south east of the site and is an SPZ II (Outer Zone).
Flood Risk	Low	The site is within a flood zone 1 and thus at very low risk of flooding.
Superficial Aquifer	Low	There are no superficial aquifers mapped on the site.
Superficial Geology	High	There are no mapped superficial deposits on the site. This is considered a high risk as burial contaminants can freely migrate down into the underlying aquifer.
Bedrock Aquifer	High	The site is mapped on a principal bedrock aquifer.
Bedrock Geology	High	Mapped on the West Melbury Marly Chalk Formation, which forms part of the Grey Chalk Subgroup, previously known as the Lower Chalk. These soils are generally less fractured than the Upper and Middle Chalk subgroups and are potentially less sensitive to burial pollutants due to a higher silt and clay content.
Groundwater Depth	High	Local borehole records suggest the depth to groundwater in the surrounding area is in excess of 15-20m bgl.
Water courses and Drains	Low	A sewage works is mapped to the east, which discharges into a stream which is mapped further to the north of the site.
Topography	Low	The site slopes down from the south to the north, with an elevation change of approximately 10m. The hummocky and uneven nature of the site could make the site difficult to develop in some areas.
Mining	Low	Disused quarry to the south, partially infilled.

## 4 Intrusive Investigation

### 4.1 General Site Description

The site comprises an open plot of land which at the time of our investigation was left as overgrown grass, weeds and self-seeded shrubs. The site is bounded by a recently constructed council depot to the north, by a sewage treatment works to the east, by residential/commercial properties to the west and by further open land to the south, beyond which is a large former chalk quarry.

The site slopes from the southern boundary to the northern boundary, with slight cross fall from west to east. In the north eastern corner of the site, adjacent to the proposed access route, several water related services were observed include a fire hydrant, stopcock, water meter and large drainage covers with pipes running towards the sewage treatment plant to the east. A dry ditch was also observed here, which runs to the north along the route of the recently constructed access road.

The site at the time of our investigation was solid underfoot, with no evidence of surface water flooding or ponding observed.



Figure 2. Exploratory Hole Location Plan

## 4.2 Site Investigation

An intrusive site investigation was undertaken on the 7<sup>th</sup> December 2020, with a total of thirteen trial pits excavated across the site to provide an assessment of the ground conditions and to assess whether any shallow groundwater is encountered on site. The trial pits were excavated at the approximate locations shown in Figure 2 above, to maximum depths of 3.6m. The trial pits were distributed across the entire site to assess soil variability and depth to groundwater.

## 4.3 Soils as Found

In general, the soil sequence across the site comprised a shallow covering of silty clayey Topsoil overlying highly weathered and variable Chalk which had broken down into a silty gravelly Clay. Beneath the weathered Chalk, a water bearing chalk gravel/fractured bedrock chalk was encountered.

The following table provides a general summary of the soils as found on site. Detailed soil logs can be found in Appendix A.

**Table 1. Soils as Found**

Depth m bgl (Top to Base)	Soil Type	Description
GL to 0.15m/0.4m	Topsoil	Grass over brown silty clayey TOPSOIL.
0.2m to 1.4m/1.8m	Silty Sand	Firm, orange-brown mottled grey and white silty CLAY with frequent fine to coarse chalk gravel.
1.8m to 3.2m/3.6m	Clay	Firm, greenish grey mottled white and orange silty CLAY with occasional lenses of fine chalk gravel.
2.6m/3.2m to 3.6m	Chalk	Off white silty fine to coarse subangular CHALK gravel in an off white silty matrix.
3.1/3.2m to 3.4m+	Chalk	Very weak, closely fractured, thinly bedded, off white CHALK.

At the locations of TP110 and TP113 bedrock chalk was encountered from shallow depths of between 0.1m to 0.25m bgl to the base of each hole.

## 4.4 Land Drainage

Evidence of old and modern agricultural land drains were encountered at the locations of TP102, TP103, TP104 and TP105 at depths ranging between 0.8m bgl to 1.4m bgl. These drains were found to be freely flowing, with moderate to fast water ingress. There is a potential risk that these drains may potentially be actively draining a spring line, given that the weather preceding our investigation was not particularly wet.

These land drains could potentially act as a conduit for the migration of burial contaminants and would require decommissioning prior to the site being used for burials. Given the depth of some of the drains the works would require significant excavations to achieve the decommissioning. Once the drains are decommissioned a new drain would need to be installed to redirect the flow of water and a new outfall constructed.



## 4.5 Groundwater

The table below summarises the detail of the observed waterstrikes.

Groundwater may well have been encountered in TP102, 103, 104 and 105, however the significant ingress of water from the land drains encountered would have masked any further water ingress at depth.

**Table 3. Groundwater Encountered on Site**

Location	Recorded Water Level (m bgl)
TP101	3.2m bgl
TP107	3.2m bgl
TP108	3.1m bgl
TP109	2.7m bgl

Groundwater protection is a statutory requirement for all cemetery sites under the Water Resources Act. The Environment Agency have also laid down strict guidelines for the development of new cemeteries and operation of all existing cemeteries with active burial and reopens, which include but are not limited to the following:

- Graves should not hold any standing water when dug.
- There should be at least 1 metre between base of grave and water table; more if the soil has high infiltration rates.
- Graves should be at least 250m away from wells and potable water supplies.
- Pumping out of graves and discharging “grey” water directly or indirectly into surface or groundwater sources if found to be polluted is an offence under the Groundwater Regulations 1998.
- No burials within 10 meters of land drains.

Given that the site has been found to contain active land drains, and that the depth to groundwater beneath the site is potentially too high to allow double depth burials, it is unlikely that the EA would consider this site suitable for burials without significant further assessment and remedial work.

## 5 Conclusion

Based on the results of the intrusive investigation works carried out on site to date, there are two issues which have potential serious implications on the development of the site:

1. Presence of active land drainage on site at depths of between 0.8m to 1.4m bgl.
2. Shallow depth to groundwater strikes

In order to address the issues highlighted above the following work would need to be undertaken:

- Production of T2 groundwater risk assessment inc. Flux model - £3200.00
- Installation of groundwater monitoring wells - £7000.00 - £10000.00 (depending on final depth to groundwater and installation depths)
- Baseline groundwater sampling visit - £1350.00
- 12 months of groundwater monitoring - £350.00 per visit – 12\*£350 = £4200.00
- Production of updated T3 report- £1200.00 exc VAT

Once the above works have been carried out further detailed correspondence with the EA could be undertaken, however we cannot guarantee that the proposed work would be sufficient to satisfy the EA that the site and proposed development would not impact the underlying groundwater quality. As such there remains a risk that the EA may oppose the development during the planning application phase.

If the site were to be granted planning, then it is likely that further detailed and ongoing groundwater monitoring and sampling would be required and that, as mentioned previously, the land drainage encountered on site would need to be decommissioned which could incur further substantial costs.

Our view is that this site remains as high risk and that serious consideration should be given to reviewing other potentially more suitable sites in the local area.

---


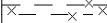
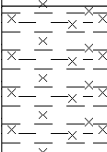
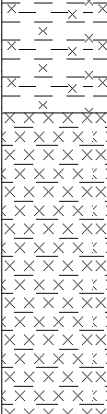
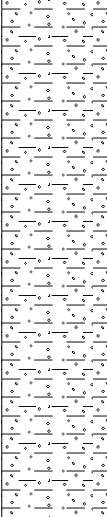
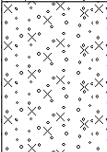
## **6 Reporting Details**

Report Author: Darryl Kelly MGeol FGS

Date: 18<sup>th</sup> December 2020

**APPENDIX A**  
**SOIL LOGS**

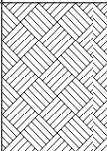
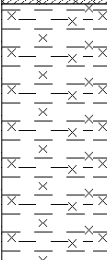
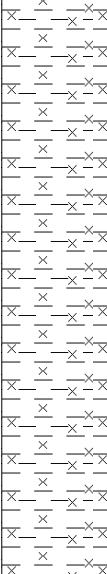
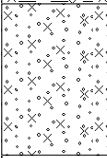

<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP101</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.20		(0.20m)		Grass over pale grey brown mottled silty clayey TOPSOIL with frequent fine roots.	
	0.30		(0.10m)		Firm, pale orangish brown silty CLAY.	
			(0.70m)		Firm, pale grey mottled white silty CLAY with pockets of coarse to cobble sized weak to moderately strong chalk gravel.	0.5
	1.00		(0.80m)		Firm, pale grey mottled white SILT/CLAY with pockets of coarse to cobble sized weak to moderately strong chalk gravel.	1.0
	1.80		(1.40m)		Firm, greenish grey mottled white and orange silty CLAY with occasional lenses of fine chalk gravel.	2.0
			(0.40m)		Wet, off white silty fine to medium, subangular chalk GRAVEL in a silty matrix.	3.0
	3.20					3.5
	3.60				<b>End of Trial Pit at 3.600m</b>	

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Waterstrike at 3.2m bgl, fast ingress.

<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP102</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1


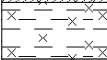
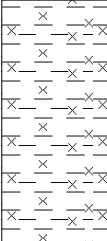
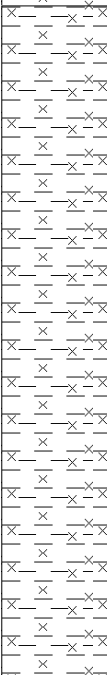
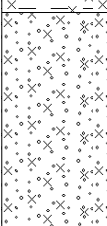
Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.40		(0.40m)		Grass over greyish brown silty clayey TOPSOIL with frequent fine roots.	0.5
					Firm, grey brown mottled white silty CLAY with rare fine to medium chalk gravel.	1.0
			(2.20m)		Clay land drain encountered at 1.1m bgl, ~60mm diameter, rapid influx of water.	1.5
	2.60				Recovered as weak, medium to coarse, subangular, greyish white chalk GRAVEL in an off white silty matrix.	2.0
	3.00		(0.40m)			2.5
					<b>End of Trial Pit at 3.000m</b>	3.0
						3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Unstable	None		

**Remarks**  
Land drain encountered at 1.1m bgl, rapid water ingress. Side wall collapse after 1 minute.



<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP103</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.20		(0.20m)		Grass over pale grey brown mottled silty clayey TOPSOIL with frequent fine roots.	
	0.35		(0.15m)		Firm, pale orangish brown silty CLAY.	
	1.00		(0.65m)		Firm to stiff, greyish white mottled orange silty CLAY with occasional fine to medium chalk gravel.	0.5
			(1.80m)		Stiff, pale grey silty CLAY with rare chalk gravel.  <i>Clay land drain encountered at 1.3m bgl, ~60mm diameter, rapid influx of water.</i>  <i>Becoming soft to firm and easier to excavate, soils damp and dilating.</i>  <i>Occasional chalk gravel laminations</i>	1.0 1.5 2.0 2.5
	2.80		(0.60m)		Recovered as weak, medium to coarse, subangular, greyish white chalk GRAVEL in an off white silty matrix.	3.0
	3.40				<b>End of Trial Pit at 3.400m</b>	3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable.	None		

Remarks  
Land drain encountered at 1.3m bgl, rapid water ingress.





Cemeteries & Crematoria

<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP104</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.20		(0.20m)		Grass over pale grey brown mottled silty clayey TOPSOIL with frequent fine roots.	
	0.30		(0.10m)		Firm, pale orangish brown silty CLAY.	
					Firm, friable, pale greyish white silty CLAY with frequent fine to coarse and cobble sized chalk gravel.	0.5
			(1.10m)		<u>blue plastic land drain encountered at 0.8m bgl, ~80mm diameter, moderate influx of water.</u>	1.0
	1.40				Firm to stiff, greyish white mottled orange silty CLAY with occasional fine to medium chalk gravel.	1.5
					<u>Becoming soft to firm and easier to excavate, soils damp and dilating.</u>	2.0
			(2.20m)			2.5
						3.0
						3.5
	3.60				<b>End of Trial Pit at 3.600m</b>	

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Unstable	None		

Remarks  
Blue plastic perforated pipe enountered at 0.8m bgl, moderate water inflow. Side wall collapse after 5 minutes





Cemeteries & Crematoria

<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP105</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.25		(0.25m)		Grass over pale grey brown mottled silty clayey TOPSOIL with frequent fine roots.	
					Firm to stiff, greyish white mottled orange silty CLAY with occasional fine to medium chalk gravel.	0.5
					<i>Below 1.0m bgl, occasional orange mottling and becoming more clayey.</i>	1.0
					<i>Clay land drain encountered at 1.1m bgl, ~60mm diameter, rapid influx of water.</i>	
						1.5
			(3.15m)		<i>Occasional chalk gravel laminations</i>	2.0
						2.5
						3.0
	3.40				<b>End of Trial Pit at 3.400m</b>	3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Water ingress from land drain at 1.0m bgl.







Cemeteries & Crematoria

<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP106</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1


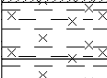
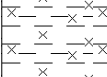
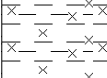
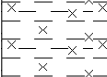
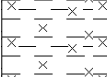
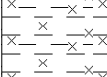
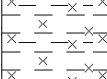
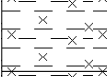
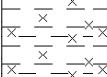
Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.15		(0.15m)		Grass over greyish brown silty clayey TOPSOIL with frequent fine roots.	
			(0.85m)		Firm friable whitish grey silty CLAY.	0.5
	1.00				Firm, damp, dilating, grey-white mottled orange brown silty CLAY with rare fine chalky gravel.	1.0
			(2.20m)		<i>Becoming more silty with slight sand content.</i>	1.5
	3.20		(0.20m)		Very weak, thinly laminated, closely fissured, grey SILTSTONE with silt infill along fractures	2.0
	3.40				<b>End of Trial Pit at 3.400m</b>	2.5
						3.0
						3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Dry.



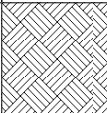
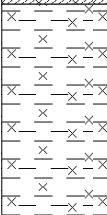
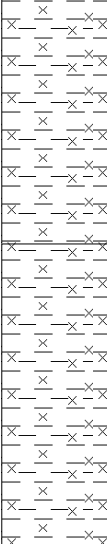
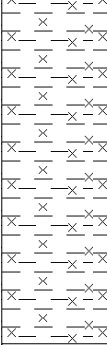
<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP107</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.20		(0.20m)		Grass over brown silty clayey TOPSOIL with rare fine roots.	
	0.35		(0.15m)		Firm, pale orangish brown silty CLAY.	
					Firm, friable, greyish white silty CLAY with occasional fine chalk gravel.	0.5
			(1.45m)		<i>Becoming less friable.</i>	1.0
	1.80				Firm, greyish white silty CLAY.	1.5
			(1.30m)			2.0
						2.5
	3.10					3.0
			(0.30m)		Very weak, thinly laminated, closely fissured, grey SILTSTONE with silt infill along fractures	
	3.40				<i>Fast water strike at base of pit.</i>	
					<b>End of Trial Pit at 3.400m</b>	3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Waterstrike at 3.2m bgl, fast ingress.

<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP108</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	LP
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.30		(0.30m)		Grass over greyish brown silty clay TOPSOIL with occasional fine roots.	
			(1.20m)		Firm, friable, greyish white silty CLAY with occasional chalk gravel.	0.5
	1.50		(1.70m)		Firm, damp, dilating, grey-white mottled orange brown silty CLAY with rare fine chalky gravel.	1.0 1.5 2.0
	3.20				<i>Slow to moderate water strike at base of pit.</i>	2.5 3.0
					<b>End of Trial Pit at 3.200m</b>	3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Waterstrike at 3.1m bgl, slow to moerate ingress.





Cemeteries & Crematoria

<b>Project Name:</b>	Proposed Cemetery
<b>Project Location:</b>	Grendall Lane, Houghton Regis
<b>Client:</b>	Houghton Regis Town Council

<b>Trial Pit Log</b>		<b>Hole ID:</b>	TP109
		<b>Hole Type:</b>	TP
		<b>Level:</b>	
<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	LP
<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

<b>Hole ID:</b>	TP109
<b>Hole Type:</b>	TP
<b>Level:</b>	
<b>Logged By:</b>	LP
<b>Scale:</b>	1:20
<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.25		(0.25m)		Grass over pale greyish brown silty clay TOPSOIL with occasional fine roots and flint gravel.	
			(2.45m)		Firm, friable, greyish white silty CLAY with occasional fine to medium chalk gravel.	0.5 1.0 1.5 2.0 2.5
	2.70		(0.80m)		Firm, damp, dilating, grey-white silty CLAY with rare fine chalky gravel. <i>Fast water strike.</i>	3.0 3.5
	3.50				<b>End of Trial Pit at 3.600m</b>	

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Waterstrike at 2.7m bgl, slow to moderate ingress.





Cemeteries & Crematoria

<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP110</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	LP
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

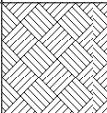
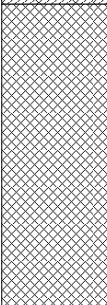

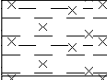
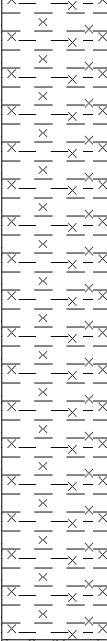
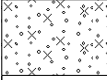
Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.25		(0.25m)		Grass over greyish white silty clayey TOPSOIL.	
					Recovered as weak, medium to coarse, subangular, greyish white chalk GRAVEL in an off white silty matrix.	0.5
					<i>Shell impressions within chalk gravels.</i>	1.0
					<i>Some darker grey clay bands noted.</i>	1.5
			(3.05m)		<i>Occasional black speckling.</i>	2.0
						2.5
						3.0
	3.30				<b>End of Trial Pit at 3.300m</b>	3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Dry.



<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP111</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.30		(0.30m)		Grass over greyish white silty clayey TOPSOIL.	
			(0.80m)		Reworked greyish white silty CLAY with fine to coarse chalk gravel.	0.5
	1.10		(0.20m)		Firm dark brown organic CLAY (Former Topsoil)	1.0
	1.30		(0.20m)		Firm orange brown silty CLAY with frequent fine shell fragments.	1.5
	1.50		(1.70m)		Firm, friable, greyish white silty CLAY with occasional fine to medium chalk gravel.	2.0
	3.20		(0.20m)		Recovered as weak, medium to coarse, subangular, greyish white chalk GRAVEL in an off white silty matrix.	2.5
	3.40				<b>End of Trial Pit at 3.400m</b>	3.0
						3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Dry.





Cemeteries & Crematoria

<b>Project Name:</b>	<b>Trial Pit Log</b>						
Proposed Cemetery							
<b>Project Location:</b>							
Grendall Lane, Houghton Regis	<table border="1"> <tr> <td><b>Project ID:</b></td> <td>CDS-HRGL-20</td> </tr> <tr> <td><b>Contractor:</b></td> <td>The CDS Group</td> </tr> <tr> <td><b>Date:</b></td> <td>07/12/2020</td> </tr> </table>	<b>Project ID:</b>	CDS-HRGL-20	<b>Contractor:</b>	The CDS Group	<b>Date:</b>	07/12/2020
<b>Project ID:</b>	CDS-HRGL-20						
<b>Contractor:</b>	The CDS Group						
<b>Date:</b>	07/12/2020						
<b>Client:</b>	Houghton Regis Town Council						

<b>Hole ID:</b>	<b>TP112</b>
<b>Hole Type:</b>	TP
<b>Level:</b>	
<b>Logged By:</b>	DK
<b>Scale:</b>	1:20
<b>Page No:</b>	Sheet 1 of 1


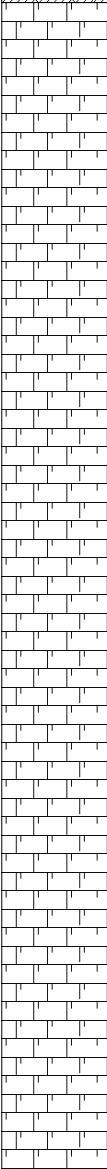
Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.25		(0.25m)		Grass over pale whitish grey silty clayey TOPSOIL with occasional fine brick and glass fragments.	
			(2.15m)		Firm, pale greyish white silty CLAY with occasional fine to medium subangular chalk gravel.	0.5 1.0 1.5 2.0
	2.40		(1.20m)		Recovered as weak, medium to coarse, subangular, greyish white chalk GRAVEL in an off white silty matrix.	2.5 3.0 3.5
	3.60				<b>End of Trial Pit at 3.600m</b>	

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Dry.



<b>Project Name:</b>		<b>Trial Pit Log</b>		<b>Hole ID:</b>	<b>TP113</b>
Proposed Cemetery				<b>Hole Type:</b>	TP
<b>Project Location:</b>				<b>Level:</b>	
Grendall Lane, Houghton Regis		<b>Project ID:</b>	CDS-HRGL-20	<b>Logged By:</b>	DK
<b>Client:</b>		<b>Contractor:</b>	The CDS Group	<b>Scale:</b>	1:20
Houghton Regis Town Council		<b>Date:</b>	07/12/2020	<b>Page No:</b>	Sheet 1 of 1

Water Strikes	Depth (m)	Level (m)	Thickness (m)	Legend	Stratum Description	Vertical Scale
	0.10		(0.10m)		Grass over greyish white silty clayey TOPSOIL.	
					Recovered as weak, medium to coarse, subangular, greyish white chalk GRAVEL in an off white silty matrix.	0.5 1.0 1.5 2.0 2.5 3.0
	3.20		(3.10m)		<b>End of Trial Pit at 3.200m</b>	3.5

Dimensions		Trial Pit Support and Stability			Groundwater Strikes
Pit Length (m)	Pit Width (m)	Pit Stability	Shoring Used	Remarks	Remarks
2.20	0.45	Stable	None		

Remarks  
Dry.

