







Reddish North Primary School Site Completion Report

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## 1. Introduction

Urban Vision Partnership Ltd (UV) have been commissioned by BAM Construction Ltd to carry out verification of remedial works for the development of Reddish North Primary School and Children's Centre

The site is situated approximately 700m to the northeast of Reddish town centre, on land to the east of Harcourt Street and to the south of Mill Lane in North at National Grid Reference 389850 394050 (approx centre of site).

The site is approximately 1.8 hectares at an elevation of approximately 36.3 metres above ordnance datum (m AOD). The site is situated within a residential area.

The report is in support of a planning condition relating to a planning application number ref DC/024357 for the redevelopment of site as a primary school. A copy of the proposed development plan is presented in Appendix A1 (drawing number 7095-53-01-B).

The development comprises a primary school and children's centre with associated outdoor play areas and car parking to the northwest of the site. The majority of the play areas are on a asphalt surface, together with some turf and habitat areas. The remainder of the site comprises a recreation ground and public open space and a new line of tree planting along the southeast boundary of the primary school and children's centre.

Vehicle access to the site is from Mill Lane to the northeast with additional pedestrian access from Harcourt Street to the west and from the fishing pond at the south eastern corner of the site. The development incorporates the re-construction of a footpath from Harcourt Street to the south eastern corner of the site.

A Ground Investigation Report was carried out in 2006 by Greater Manchester Geological Unit (now part of Urban Vision Partnership). The Ground Investigation Report (Ref: UV/000174-01) was revised in October 2009 to ensure the recommendations were in line with current guidance and legislation.

A remediation strategy report (Ref: UV/000174-01) was produced in December 2009 to identify remedial measures necessary to ensure the development of the site is safe and suitable for use.

The verification work has been carried out in line with the recommendations made in the Remediation Strategy and in line with Stockport MBC Environmental Health's additional requirements.

## 2. Review of Previous Reports

#### 2.1 Historical Review of the Site

The site historically comprised a clay pit (associated with a brick works located to the south of the site) which was subsequently in filled. The 1934 map shows the first possible evidence of tipping and by 1958 a refuse tip is shown on the site. Tipping was completed prior to the mid 1980s when the site is shown as a playing field.

#### 2.2 Environmental Settings

British Geological Survey (BGS) digital data maps the drift deposits across the site as glacial till. The solid geology beneath the majority of the site is the Triassic Sherwood Sandstone Group deposits. The northeast corner of the site is underlain by Triassic Manchester Marls.

The Environment Agency Groundwater Vulnerability map (Sheet 17) shows that the majority of the site is underlain by principle classification (Sherwood Sandstones). The northeast corner is underlain by a secondary B classification (the negligibly permeable Manchester Marls).

As the site is in an urban area a worst-case vulnerability classification (HU) is assumed for the soil classification above the principle aquifer. This represents soils with little ability to attenuate diffuse source pollutants and in which non-adsorbed diffuse source pollutants and liquid discharges have the potential to move rapidly to underlying strata or to shallow groundwater.

The nearest surface water feature is the large pond to the southeast of the site. The nearest surface watercourse appears to be over 500m to the east.

#### 2.3 Review of Ground Investigation

#### 2.3.1 Intrusive Investigation

A ground investigation undertaken during December 2005 and January 2006 included excavation of four trial pits and four hand-dug trial holes, drilling of eleven cable percussion boreholes and three in-situ California Bearing Ratio tests. The investigation also included analysis of soil and water samples for contamination, laboratory geotechnical testing and gas and groundwater monitoring.

Made ground was found at thicknesses from 1.3m to 7.0m and comprised clay, sand and gravel in varying proportions. Gravel and cobble fragments frequently included ash, clinker, brick and concrete. Made ground was underlain by stiff to very stiff glacial till.

#### 2.3.2 Risk Assessment

Compared to generic assessment criteria, benzo(a)pyrene was found to be elevated across the site. However, subsequent detailed quantitative risk assessment found that there was no risk to human health from benzo(a)pyrene.

Arsenic and lead across the site were found to be above the generic assessment criteria. Asbestos was also identified during the investigation at one location. Delineating excavations around this location identified no additional asbestos. However, assuming a worst case scenario, recognising the nature of the site as a former landfill, it was considered that isolated fragments could potentially be present within the site.



Limited concentrations of contamination were identified within groundwater and leachability results. However, the concentrations were not considered to present a risk to surface or groundwater.

No significant elevations of hazardous ground gases were identified.

#### 2.4 Summary of Remediation Strategy

The remediation Strategy is presented in detail in UV/000174-01 December 2009. In summary, the remedial measures to be employed at the site comprises a cover system was recommended in all soft landscaping areas which will form a barrier from the made ground to the site users. The following were given as a minimum thickness of cover:

Topsoil minimum thickness 150mm Subsoil minimum thickness 250mm Geotextile membrane or capillary break layer of minimum thickness 100mm

Should there be excess suitable reclaimed topsoil available for use, there is no reason this could not be used instead of subsoil within the cover system as long as the total thickness of clean soils is a minimum of 400mm.

Site won Topsoil intended for re use should be stockpiled during excavations and subjected to verification testing.

The current proposals provided by BAM Construction Ltd (as presented in Appendix A1) are for a asphalt finish on the diverted public footpath, rolled stone path between the school grounds and the surrounding houses, and paving slabs around the car park areas and on internal paths.

The tarmac surface or 300mm of gravel or paving slabs will break the potential pollutant linkages identified. If there is a change to the design and the footpaths are not to be surfaced (i.e. to remain as grass) the cover system detailed for soft landscaping will be required.

#### 2.5 Additional Remedial Measures based on Stockport MBC requirements

The remediation strategy was reviewed by Stockport MBC Environmental Health and they made the following recommendations:

- Due to the new guidance relating to radon protection measures, precautionary gas protection measures should be incorporated into the development which should include a Reinforced concrete cast *in situ* floor slab (suspended, non-suspended or raft) with at least 1200 g DPM<sup>2</sup>. The membrane shall go across any cavity, with all joints and penetrations sealed in accordance with manufactures installation instructions. The installation of this membrane shall be subsequently validated during installation to ensure that the integrating of the membrane has been preserved throughout the slabs construction (validation for the membrane installation, shall be included in verification report for the site).
- Any site won materials intended for reuse on site shall be validated for their suitability, samples shall be screened against PAH derived guidance values and CLEA guidance values.

- Screened material found to suitable for use shall only be used as subsoil.
- All topsoil shall be imported to site and sampled prior to use.
- Throughout the installation of the cover system, soils shall be compacted during deposition in order to prevent settlement. The specification of the installed cover system shall be in accordance with the Remediation Strategy Report UV000174.
- The depth of the cover system shall be validated during installation, (validation of the cover depth shall be included as part of the verification report).
- Analytical documentation for any site won material as well as imported soils shall be included within the verification report for the site.
- The disposal of any contaminated material off site shall be supported with waste transfer documentation and shall be included within the verification report for the site.

## 3. Soil Remedial Targets

The soil remedial targets are based on soil guideline values (SGVs) published by the Environment Agency and generic assessment criteria (GACs) published by CIEH/LQM<sup>1</sup>. The residential with plant uptake assessment criteria were used based on an SOM of 1% sand. The assessment criteria values are shown in Table 3.1.

Contaminant	ontaminant Assessment Crit		Contaminant	Assess	ment Criteria
	(mg/kg)	source		(mg/kg)	source
Arsenic	32	EA SGV	Acenaphthene	480	LQM GAC
Boron	291	LQM GAC	Fluorene	380	LQM GAC
Cadmium	10 / 3	EA SGV/LQM GAC	Phenanthrene	200	LQM GAC
Chromium (hex)	4.3	EA SGV	Anthracene	4900	LQM GAC
Chromium	130	EA SGV	Fluoranthene	460	LQM GAC
Copper	2330	LQM GAC	Pyrene	1000	LQM GAC
Lead	450	EA SGV	Benzo(a)anthracene	4.7	LQM GAC
Mercury	170	EA SGV	Chrysene	8	LQM GAC
Nickel	130	EA SGV	Benzo(b)fluoranthene	6.5	LQM GAC
Selenium	350	EA SGV	Benzo(k)fluoranthene	9.6	LQM GAC
Zinc	3750	LQM GAC	Benzo(a)pyrene	0.94	LQM GAC
Total Phenol	150	CLEA SGV	Indeno(1,2,3-cd)pyrene	3.9	LQM GAC
Naphthalene	3.7	LQM GAC	Dibenz(a,h)anthracene	0.86	LQM GAC
Acenaphthylene	400	LQM GAC	Benzo(ghi)perylene	46	LQM GAC

Table 3.1 Assessment Criteria used as Remedial Targets

In addition to the above, due to the presence of small amounts of asbestos on site, a remedial target has also been considered. Currently no specific asbestos guidance or assessment criteria for human health have been produced for the UK. Screening values available include 0.1% (UK hazardous waste), 0.01% (Netherlands Organisation for applied scientific research (TNO) 2005) and 0.001% (Australian Contaminated Land Consultants Associated Incorporated 2002). As a conservative approach, the 0.001% value will be used an initial remedial target. This has been agreed with Stockport MBC Environmental Health.

These target values have been used to compare all site won material and imported material for use within soft landscaping areas.

<sup>&</sup>lt;sup>1</sup> Land Quality Management Ltd (LQM) /Chartered Institute of Environmental Health (CIEH). The LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment 2<sup>nd</sup> Edition 2009.

## 4. Verification of Site Won Material

As topsoil was to be stripped from the site as part of the development, the most practical use for this would be to re-use the soil on site therefore verification work to ensure the soil was suitable was carried out.

The verification of the site won material was carried out in a number of different stages based on the timings of the bulk excavation.

#### 4.1 Verification of In-situ Soil (North)

Prior to the northern part of the site being stripped, Urban Vision carried out sampling of the topsoil whilst insitu. The sampling was carried out using an approximate 25m<sup>2</sup> grid pattern. This sampling frequency was agreed with Stockport MBC with the proviso that further testing may be required depending on the findings of the results. The date of this sampling was 14<sup>th</sup> June 2010.

A plan showing the sampling locations is presented in Figure 2 within Appendix A. Full logs are presented in Appendix C. A total of 19 samples were taken from this area and referenced C01 to C19. The depth of the topsoil as well as a soil description was given for each location, a summary is given below:

- Approx depth: 0-0.1mbgl
- Soil description: brown slightly gravelly sandy SILT/CLAY to silty/clayey SAND with root fibres. Gravel is angular to rounded, fine to medium natural stone and occasional brick.

The estimated volume of this material is 1200m<sup>3</sup> (area of 12000m<sup>2</sup> and depth of 0.1m), this was smaller than originally anticipated due to the shallow topsoil identified.

At the same time as carrying out the testing in the northern part of the site four samples were also collected from the disused tennis courts. This was with a view to reuse the ground due to ecological importance. The sample locations for these are referenced C20 - C23.

The samples were tested for a standard suite of determinands. Results are provided in Appendix B.1 referenced QTS3124 and Report No. TN19881v0.

The results were compared to the assessment criteria shown in Section 4. Of the samples taken from the northern topsoil, C03 contained slightly elevated benzo(a)pyrene at 1.9mg/kg (LQM GAC 0.94mg/kg) however the mean concentration was 0.65mg/kg which is below the GAC. Given the GAC is overly conservative for this development there is likely to be a negligible risk with regards to the benzo(a)pyrene identified in this soil.

Asbestos was identified in C04 was found to contain asbestos. The asbestos was identified as chysotile bound in cement (See Report No TN19881v0. Appendix B.1). Topsoil from north was stripped and stockpiled, a visual inspection of the stockpile was carried out on (28/06/10). An additional 3 pieces of cement bound chrysotile asbestos were identified on site as well as a fibrous material which was later identified as insulation containing chrysotile and amosite (See Report No. TN20062v0 Appendix B.1).

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#### 4.2 Verification of Stockpiled Material (North and South)

Soil from south stripped and stockpiled with the soil from the north. Additional verification testing was carried out to ensure the soil was suitable for use. It was estimated that approximately 2700t of soil was stockpiled.

Forty-two soil samples (ref TS01 – TS42) were taken from the stockpile and tested for a standard suite of determinands. The results are presented in QTS Environmental Report No. 3891 in Appendix B.1.

The results were compared to the assessment criteria shown in Section 4. Of the forty-two samples, four samples contained slightly elevated benzo(a)pyrene at 0.96-2.30mg/kg (LQM GAC 0.94mg/kg) however, the mean concentration was 0.57mg/kg which is below the GAC. Given the GAC is overly conservative for this development there is likely to be a negligible risk with regards to the benzo(a)pyrene identified in this soil.

No asbestos was identified in any of the soil samples.

#### 4.3 Asbestos Remedial Work Methodology

Due to the presence of small amounts of asbestos identified within the site won material, a remedial plan was proposed and agreed with Stockport MBC Environment Health. The remedial plan was produced by BAM Construction and is summarised below:

#### 4.3.1 Treatment Options and Appraisal

The following options were considered for the de-contamination of the topsoil:

#### • Screening

This was considered unsuitable as it could generate dust problems for the surrounding properties and it could be suggested that wind blown dust might be contaminated. Furthermore, the screening process would not remove pieces smaller than the size of a 10p/50p coin and could not be progressed unless the material was absolutely dry.

- Hand picking from a conveyor belt, fed by an excavator This was considered to be unacceptably slow.
- Hand picking from the material after spreading by Dozer

It is considered that material spread by dozer would be too thick to be effectively picked. In addition a significant proportion of the spread material would be tracked-in behind the blade. Use of the dozer in combination with a hand picking exercise would not be economic solution.

• Hand picking from the material after spreading by excavator Hand picking from material distributed by excavator is considered to provide the greatest control of material depth for effective picking. This methodology was chosen.

#### 4.3.2 Method of Working

An area was prepared using a 360 excavator. And topsoil was spread over the geotextile membrane. Hand picking was undertaken by JC Asbestos (a licensed asbestos removal contractor) with any suspect material recovered bagged for safe disposal.

Segregation was provided between the separate areas occupied by the pickers and the excavator with crowd barrier fencing.

The process was repeated with the topsoil built up in layers to form the sub-soil element of the remediation cover.

#### 4.3.3 Validation of Remedial Work

Once the above picking had been carried out additional testing was undertaken to ensure that the remedial work had been successful. A sampling frequency based on a 20m<sup>2</sup> grid pattern was agreed with Stockport MBC. This allowed for 30 samples to be tested.

A 500g soil sample was collected and sent to WSP Laboratories for analysis. Analysis included a screen for asbestos, if the screen identified asbestos the weight of the asbestos per weight of soil was calculated.

Where unacceptable concentrations of asbestos were identified, the area was re-picked and further testing undertaken.

The work was carried out in two phases (Phase 1 and 2). The phases and sampling locations can be viewed in Figure 3 Appendix A. Sample locations SS01-SS30 are based on the 20m<sup>2</sup> grid pattern. Sample locations SS31-46 are the samples taken following additional remedial work.

#### 4.4 Remediation and Verification Work Phase 1

Phase 1 included the southern area of the site and the eastern area of the football pitch. Following the picking work, samples were collected and screened for asbestos. All the samples tested in the southern area found no asbestos. Sample SS13 from the eastern area contained asbestos therefore additional quantification testing was undertaken. The results of the tests are presented in Report No. 12199785/001 Appendix B.2.

SS13 was found to contain asbestos as shown below. 0.2268g of chrysotile within a 506.56g sample (0.04%). The asbestos formed the paper backing to a floor tile and is summarised below in Table 4.1:

Sample Ref	Asbestos ID	Asbestos Form	Weight Sample (g)	Weight Asbestos (g)	%
SS13	Chrysotile	Paper backing to floor tile	506.56	0.2268	0.04

Table 4.1 Phase 1 quantification testing results

Additional picking was carried out around the area of SS13. Following this additional picking further sampling was carried out, four samples around SS13 (SS31-SS34) and four samples around and randomly selected point (SS35-SS38). No further asbestos was identified within these samples. The laboratory results are presented in Report No. 12199853/001 Appendix B.1

#### 4.5 Remediation and Verification Work Phase 2

Phase 2 included the central area of the site and the western area of the football pitch. Following asbestos picking, samples were taken and screened for asbestos. Asbestos was identified in four samples therefore quantification tests were carried out. Results are presented in Report No. 12199908/001 Appendix B.2 and summarised below in Table 4.2:



Sample Ref	Asbestos ID	Asbestos Form	Weight Sample (g)	Weight Asbestos (g)	%
SS06	Chrysotile	Insulation	466.34	0.0009	0.00019
SS11	Chrysotile	Insulation	505.11	0.0011	0.00022
SS12	Amosite & Chrysotile	Insulating board	490.08	0.19836	0.04048
SS20	Chrysotile	Free fibre & Insulation	477.1	0.0104	0.00218

Table 4.2 Phase 2 quantification testing results

Further picking was carried out due to the identification of the asbestos in the above samples.

#### 4.6 Validation of Phases 1 and 2

After Phase 1 and 2 had undergone further picking eight further samples were collected, four from Phase 1 and four from Phase 2 and screened for asbestos. Asbestos was identified in one sample and therefore a quantification tests was carried out. Results are presented in Report No. 12199908/001 Appendix B.2 and summarised below in Table 4.3:

Sample Ref	Asbestos ID	Asbestos Form	Weight Sample (g)	Weight Asbestos (g)	%
SS43	Chrysotile	Free fibre	486.02	0.0033	0.00068

Table 4.3

#### 4.7 Suitability of Site Won Material

The results of the verification testing show that the site won topsoil is suitable for re-use. Although small amounts of asbestos were identified in the first stage of verification testing, following additional re-picking of the soil only 1 sample contained minor amounts of asbestos. Although there may be small amounts remaining in the soil the concentration is expected to be a negligible risk.

With respect to asbestos, in total 49 validation tests have been undertaken. Of these, 6 samples recorded an asbestos concentration, 4 samples recorded free fibres and 2 samples recorded asbestos as asbestos containing materials (ACM).

To determine a value that may be considered representative of the site won soils taking a conservative average total sample weight of 489g gives a total weight of soil tested of 22491grams with a total recorded asbestos weight of 0.44 grams. Therefore, taking the total weight of asbestos as a percentage of the total weight of soil it may be reasonable to surmise that the site won soils may contain a representative asbestos content of 0.002%w/w.

Examining the proportion of asbestos comprising free fibres and ACM in accordance with the Western Australian Government guidance, when considering the total weight of free fibres and ACM in relation to total sample weight a representative value is calculated of 0.0001% w/w for free fibres and 0.002% w/w for ACM.

In comparison to the available guideline values the site won soils value of 0.002%w/w fall significantly below the UK value for hazardous waste of 0.1% and the Dutch screening value of 0.01% calculated to be protective of human health. In accordance with the Western Australian guidance the calculated concentrations for free fibres and ACM both fall significantly below the guideline values of 0.001% w/w and 0.01% w/w respectively.

Additionally, as part of the remedial strategy an additional amount of soils are required to be imported and placed over the site won soils. In total approximately 1900m<sup>3</sup> of site won soils have been utilised over the southern area of the site. To bring levels up to the agreed depth, approximately 2875m<sup>3</sup> of imported soil are required.

The imported soils will effectively cover the site won soils with an approximate depth of 0.25m, thereby preventing exposure to the small amounts of asbestos within the site won soils.

However, assuming a potential worst case scenario of complete mixing of the site won soils and imported soils it is possible to calculate a worst case percentage of asbestos that may result in the capping layer.

Assuming a bulk density of 1.4g/cm<sup>3</sup> for the soils and a percentage asbestos content for the site won soils of 0.002% and a percentage asbestos content for the imported soils of 0%. On complete mixing the overall percentage asbestos in the upper 400mm of 0.00087% is calculated, significantly below the most conservative screening value of 0.001%.

In addition, once completed the site will be fully vegetated, therefore, the potential for asbestos fibres to be released to atmosphere will be reduced even further.



## 5. Verification of Imported Soils

All the soils analysed from the imported material within the pitches, landscaping and gardens were compared to the above remedial targets. These can be viewed in Appendix D. A plan showing the locations of sampling and depth validation is presented in Figure 4, Appendix A.

#### 5.1 Southern Park Area

In November 2010 a 1000t of soil was brought on to site for use within the southern area of the site. 220t were sourced from a site in Astley and a further 780t from a school in Bolton. Urban Vision had previously carried out an investigation at this school and found the soil to contain no contaminants of concern. The soil lay over natural soils with no made ground encountered.

Two sample loads from Astley were brought on to site for an inspection of the material. The soil was found to be a sandy clay with gravel of brick and ceramics. Two samples were taken (IT1 and IT2) from the stockpiled soil and tested for a standard suite of determinands. When compared to assessment criteria no elevated contaminants were identified.

The material from Astley is brownfield and so a sampling strategy of 1 sample per 50m<sup>3</sup> was under taken and a further 2 samples (IT3 and IT4) were also collected from the stockpile. Given the known source and nature of the soil from the Bolton site, a sampling strategy of 1 sample per 200m<sup>3</sup> was undertaken and 3 samples (IT5-IT7) were taken from the stockpile for laboratory analysis. The soil from Bolton was sandy clay with occasional gravel of brick and sandstone.

After collection the additional 5 samples (IT3-IT7) were tested against a standard suite of determinands. When compared to assessment criteria none were found to be elevated. The soils were deemed suitable for use and were then spread across the southern section of site.

#### 5.1.1 Validation of Depth

Validation of the depth of the subsoil and topsoil was undertaken in August 2011 by hand dug pit (SV20-SV28). The topsoil varied in thickness between 250mm in the centre of area to 150mm on the edges. The subsoil varied between 530mm in the centre of area to 130mm towards the edges and was underlain by a membrane. The total thickness of the imported soil was between 280mm and 780mm with a general thickness of 400mm or greater. The cover complies with the remedial strategy of 400mm and so no further assessment is required.

#### 5.2 Remainder of Site

In July 2011 material was imported for use in the cover system of the football pitch, remaining park area and landscaping. Approximately 1700t of topsoil was imported for use across site and 900t of sand for use in the football pitch to assist in drainage. The topsoil comprised a PAS100 (2005) certified compost mixed with sand. The sand was sourced from a quarry and supplied by Tarmac. The PAS100 certificate is presented in Appendix B.

Sampling and the verification of depth of material was undertaken by means of hand dug pits across the football pitch and areas within the park which had been covered. Samples were also taken from the stockpiled material.

15 samples of topsoil and 8 samples of the sand were taken for laboratory analysis. They were then tested against a standard suite of determinands. When compared to assessment criteria one determinand had a slight elevation of lead in one sample, SV19 at 485.6mg/kg, above the assessment criteria of 450mg/kg. SV19 was taken form a stockpile of the imported topsoil.

Statistical analysis of the results gave an upper confidence limit at the 95<sup>th</sup> percentile for lead of 198.6 mg/kg, well below the assessment criteria. A summary of the statistical analysis is presented in Appendix C.2.

#### 5.2.1 Validation of Depth

Validation of the thickness of subsoil was undertaken during sampling for asbestos analysis of the subsoil post spreading. The thickness of the subsoil varied between 100mm and 450mm but was generally 200mm or greater. The subsoil thinned out on the edges of site where the cover system connected with bordering sites and a gentle gradient was required.

The depth of the topsoil in the football pitch area was validated during sample collection in July 2011 by hand dug pits (SV5-SV17) and generally consisted of 100mm of sand over 200mm of topsoil. The sand was to be mixed in with the topsoil to improve drainage of the pitch area. The depth of the imported material within the pitch area was between 220mm and 310mm.

In August 2011 the depth of imported topsoil was verified within the landscaping of the school (SV29-SV35). The school was built on 300mm of clean imported stone chippings. Within the play areas a membrane was laid and topsoil placed on top. Within the car park landscaping topsoil was placed directly on top of the stone capping layer. The topsoil was between 250mm in small areas of landscaping and 500mm thick in larger north west grassed play area.

The remediation strategy requires a cover system of subsoil and topsoil to a thickness of 400mm. Within the sports pitch area there is an average of 500mm. Within the landscaping there is an average of 300mm topsoil over 300mm of stone. This adequately meets the requirements of the remediation strategy.

Photographs validating the depth of the imported soil are presented in Appendix E.

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## 6. Additional Verification Work

#### 6.1 Gas Protection Measures

As a precautionary measure against potential Radon ingress, the following have been included in accordance with the requirements of SMBC:

- Reinforced concrete cast in situ floor slab
- Visqueen Radon membrane
- All joints, penetrations and service entries overlapped and double tape sealed.

The membrane provides protection against carbon dioxide, radon, acts as a damp proof membrane and has high resistance to puncture. The thickness of the membrane is 500 microns / 2000 gauge. The installation was carried out in accordance with the manufacturer's specifications.

The gas membrane was verified by Urban Vision during the period of 18<sup>th</sup> August to the 29<sup>th</sup> September 2010. Photographs of the membrane and floor slab can be viewed in Appendix E.

#### 6.2 Water Supply Pipes

The water supply pipes were laid within a trench filled with imported gravel. The type of pipe used is protector line.

## 7. Conclusions

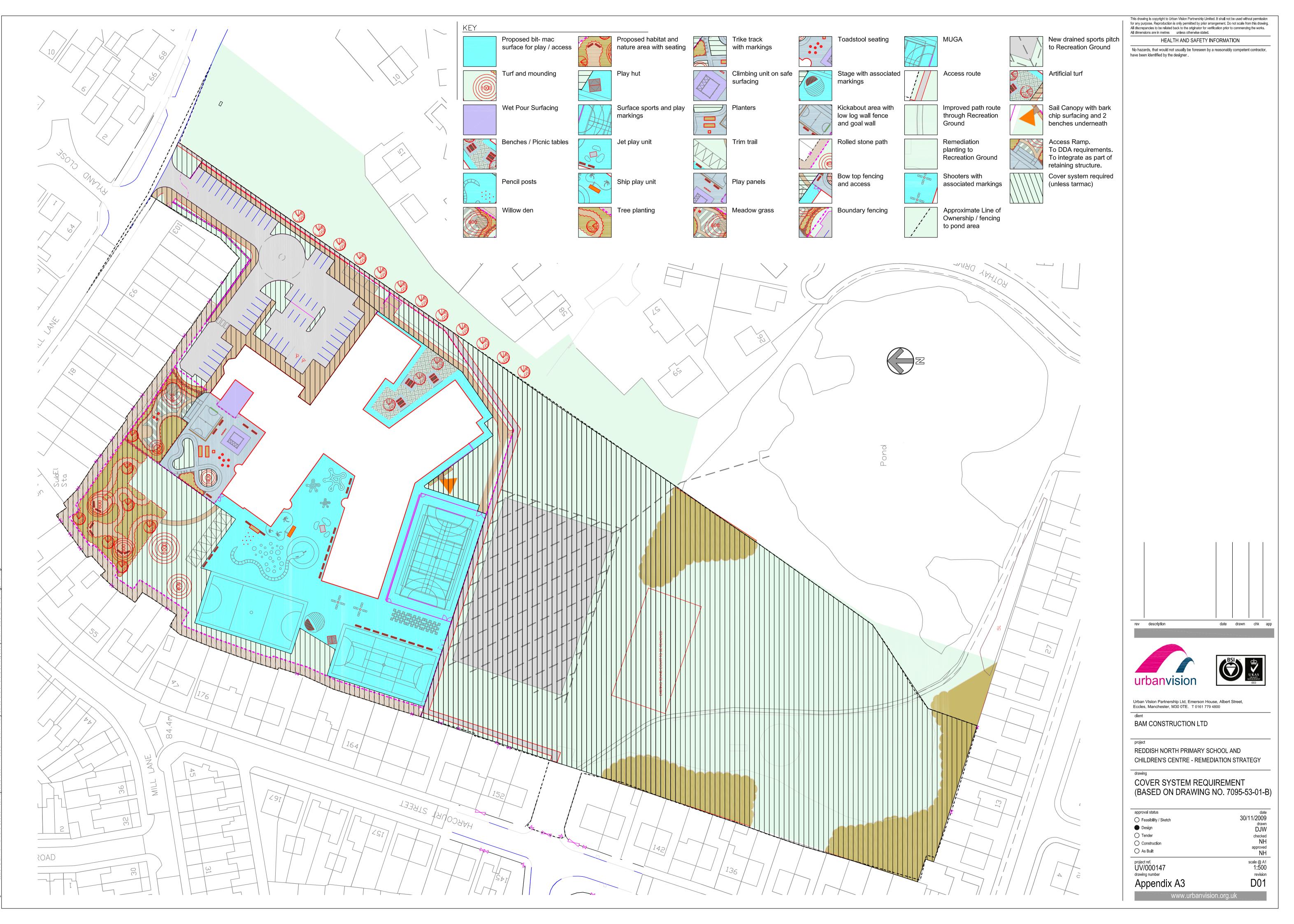
The construction of the new primary school has included remedial work as recommended in the Remediation Strategy and in line with additional recommendations made by Stockport Borough Council Environmental Health Team.

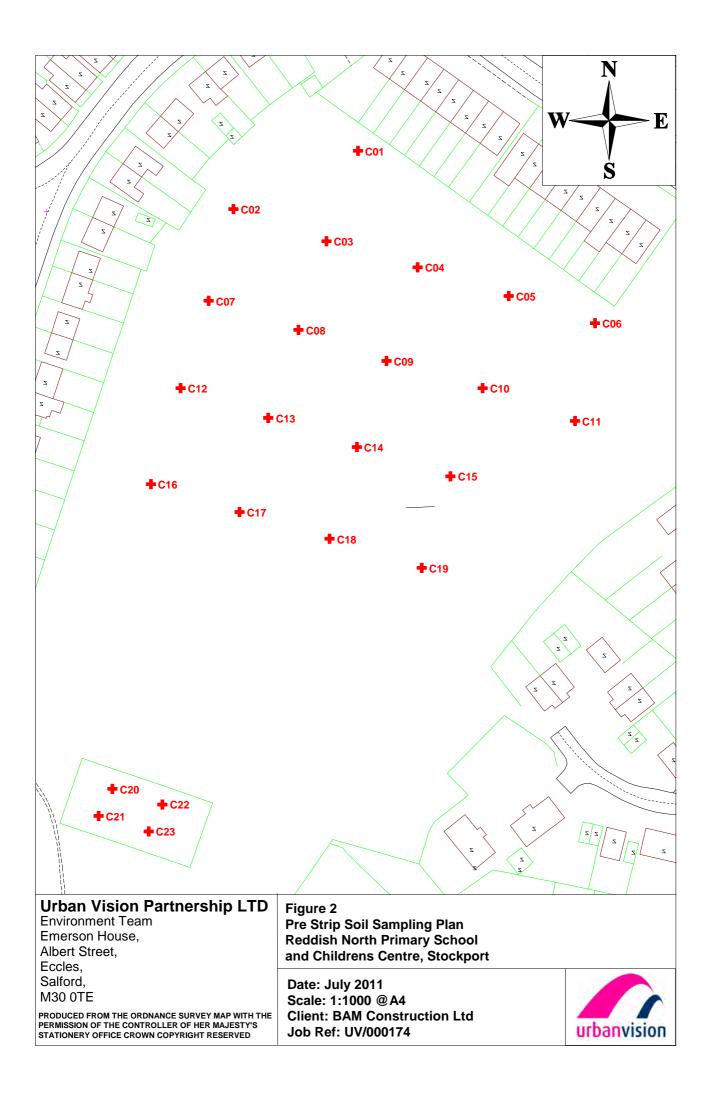
All the remediation work has been verified and has been demonstrated to be in accordance with the agreed remedial strategy.

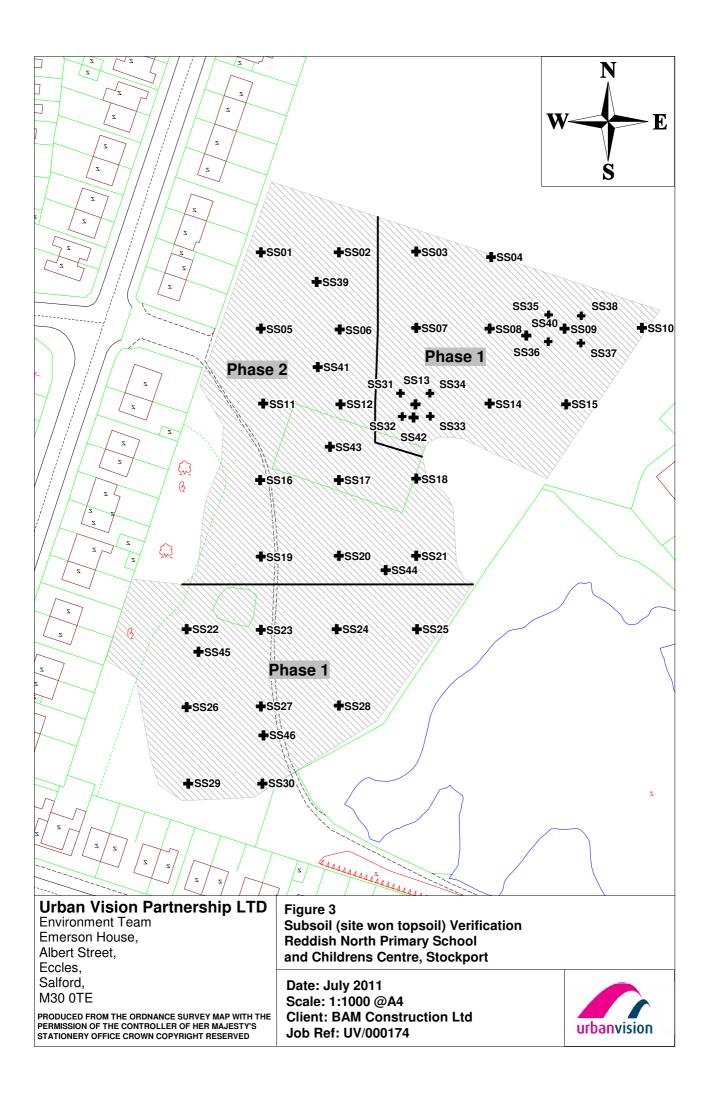


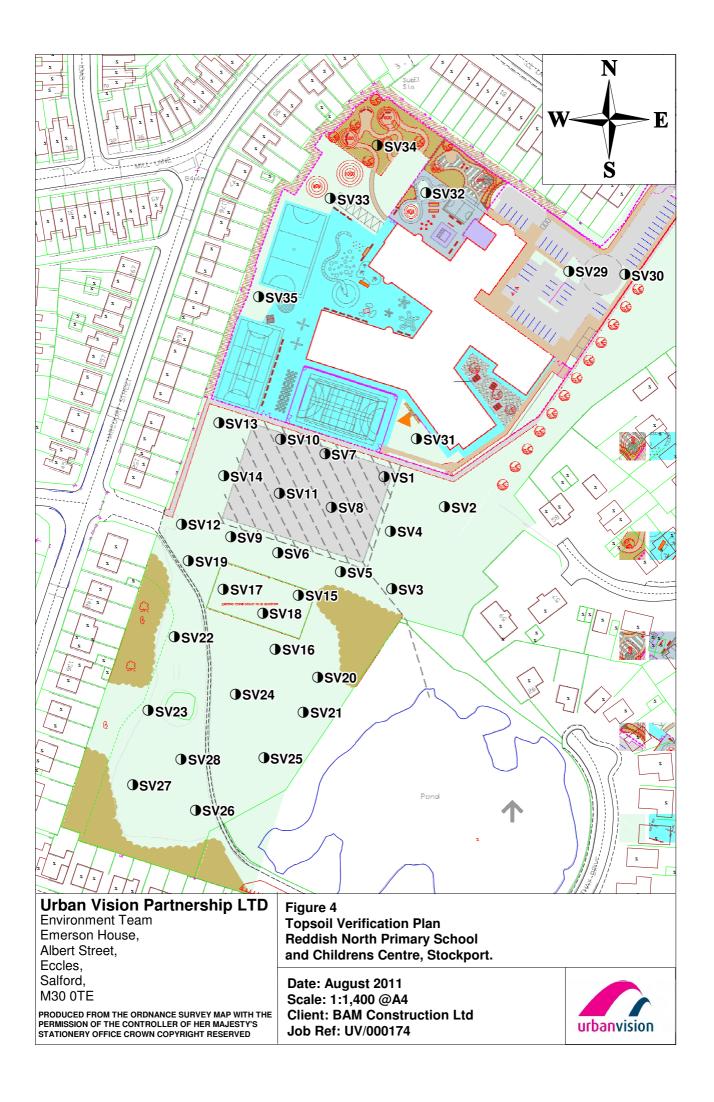
## **Appendix A** Figures

- A.1 Figure 1 Site Remediation Plan
- A.2 Figure 2 Pre Soil Strip Sampling Plan
- A.3 Figure 2 Subsoil Verification Plan
- A.4 Figure 4 Topsoil Verification Plan









## Appendix B Site Won Laboratory Analysis

- B.1 Chemical Testing
- B.2 Asbestos Testing



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### **QTS Environmental Report No: 3124**

Site Reference: Reddish North Primary School

Project / Job Ref: UV/000174.02

**Order No: None Supplied** 

Sample Receipt Date: 15/06/10

Sample Scheduled Date: 15/06/10

**Report Issue Number: 1** 

Reporting Date: 21/06/2010

Authorised by:

Russell Jarvis Director **On behalf of QTS Environmental Ltd**  Authorised by:

Kevin Old Director On behalf of QTS Environmental Ltd





Soil Analysis Certificate						
QTS Environmental Report No: 3124	Date Sampled	14/06/10	14/06/10	14/06/10	14/06/10	14/06/10
Urban Vision Partnership Ltd	Time Sampled	None Supplied				
Site Reference: Reddish North Primary School	TP / BH No	C01	C02	C03	C04	C05
Project / Job Ref: UV/000174.02	Additional Refs	C1	C1	C1	C1	C1
Order No: None Supplied	Depth (m)	GL - 0.20	GL - 0.20	GL - 0.20	GL - 0.20	GL - 0.15
Reporting Date: 21/06/2010	QTSE Sample No	11971	11972	11973	11974	11975

Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	<0.1	66	21.9	<0.1	<0.1
Moisture Content	%	< 0.1	NONE	10.5	4.4	7.9	9.8	10.6
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Positive	Negative

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	7.5	7.2	7.2	7.3	7.2
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	606	323	697	495	671
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	374	<200	320	317	394
Organic Matter	%	< 0.1	NONE	3.4	1.8	0.5	4	5.7
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.020	0.011	0.003	0.023	0.033
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	10	2	7	8	8
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	23	7	17	21	20
Copper (Cu)	mg/kg	<4	MCERTS	52	12	43	44	53
Lead (Pb)	mg/kg	<3	MCERTS	82	25	72	89	100
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	21	6	16	20	19
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	98	29	69	94	130

Analytical results are expressed on a dry weight basis where samples are dried at less than 30 °C Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate										
QTS Environmental Report No: 3124	Date Sampled	14/06/10	14/06/10	14/06/10	14/06/10	14/06/10				
Urban Vision Partnership Ltd	Time Sampled	None Supplied								
Site Reference: Reddish North Primary School	TP / BH No	C06	C07	C08	C09	C10				
Project / Job Ref: UV/000174.02	Additional Refs	C1	C1	C1	C1	C1				
Order No: None Supplied	Depth (m)	GL - 0.10	GL - 0.20	GL - 0.20	GL - 0.50	GL - 0.15				
Reporting Date: 21/06/2010	QTSE Sample No	11976	11977	11978	11979	11980				

Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	24.7	<0.1	<0.1	<0.1	< 0.1
Moisture Content	%	< 0.1	NONE	10.9	10.2	12	11.9	13.4
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negative

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.9	6.8	6.9	6.7	6.9
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	686	570	525	386	699
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	444	353	327	314	420
Organic Matter	%	< 0.1	NONE	4.5	4.3	3.1	3.4	5.4
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.026	0.025	0.018	0.020	0.031
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	6	8	8	8	7
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	16	23	22	20	19
Copper (Cu)	mg/kg	<4	MCERTS	39	47	41	35	45
Lead (Pb)	mg/kg	<3	MCERTS	64	126	108	84	76
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	15	20	27	19	17
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	106	101	90	81	121

Analytical results are expressed on a dry weight basis where samples are dried at less than 30 °C

Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate						
QTS Environmental Report No: 3124	Date Sampled	14/06/10	14/06/10	14/06/10	14/06/10	14/06/10
Urban Vision Partnership Ltd	Time Sampled	None Supplied				
Site Reference: Reddish North Primary School	TP / BH No	C11	C12	C13	C14	C15
Project / Job Ref: UV/000174.02	Additional Refs	C1	C1	C1	C1	C1
Order No: None Supplied	Depth (m)	GL - 0.15	GL - 0.15	GL - 0.20	GL - 0.20	GL - 0.20
Reporting Date: 21/06/2010	QTSE Sample No	11981	11982	11983	11984	11985

Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	<0.1	<0.1
Moisture Content	%	< 0.1	NONE	10.9	12.6	11.1	12.9	15.4
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negative

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.7	6.6	6.7	6.7	6.7
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	662	628	581	470	498
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	414	365	288	311	343
Organic Matter	%	< 0.1	NONE	3.4	3.2	2.7	1.4	4.4
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.020	0.019	0.015	0.008	0.026
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	9	8	8	8	7
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	<0.5	MCERTS	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	23	22	21	19	20
Copper (Cu)	mg/kg	<4	MCERTS	60	52	44	144	40
Lead (Pb)	mg/kg	<3	MCERTS	93	93	92	145	93
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	22	19	18	19	18
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	146	107	87	110	94

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\circ}$ C

Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate						
QTS Environmental Report No: 3124	Date Sampled	14/06/10	14/06/10	14/06/10	14/06/10	14/06/10
Urban Vision Partnership Ltd	Time Sampled	None Supplied				
Site Reference: Reddish North Primary School	TP / BH No	C16	C17	C18	C19	C20
Project / Job Ref: UV/000174.02	Additional Refs	C1	C1	C1	C1	C1
Order No: None Supplied	Depth (m)	GL - 0.15	GL - 0.15	GL - 0.20	GL - 0.10	GL - 0.15
Reporting Date: 21/06/2010	QTSE Sample No	11986	11987	11988	11989	11990

Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	<0.1	< 0.1
Moisture Content	%	< 0.1	NONE	13	11.6	16.2	15	13.8
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negative

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.6	6.5	6.6	6.4	6.6
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	548	351	668	646	1353
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	409	365	404	347	765
Organic Matter	%	< 0.1	NONE	5	3.3	4.4	6.4	4.3
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.029	0.019	0.025	0.037	0.025
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	9	6	7	6	57
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	<0.5	MCERTS	0.5	<0.5	<0.5	<0.5	1.6
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	23	20	18	14	40
Copper (Cu)	mg/kg	<4	MCERTS	97	38	63	71	465
Lead (Pb)	mg/kg	<3	MCERTS	188	110	127	95	1056
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	21	16	17	13	83
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	142	82	118	78	691

Analytical results are expressed on a dry weight basis where samples are dried at less than 30 °C Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate					
QTS Environmental Report No: 3124	Date Sampled	14/06/10	14/06/10	14/06/10	
Urban Vision Partnership Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Reddish North Primary School	TP / BH No	C21	C22	C23	
Project / Job Ref: UV/000174.02	Additional Refs	C1	C1	C1	
Order No: None Supplied	Depth (m)	GL - 0.10	GL - 0.10	GL - 0.10	
Reporting Date: 21/06/2010	QTSE Sample No	11991	11992	11993	

Determinand	Unit	MDL	Accreditation				
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	
Moisture Content	%	< 0.1	NONE	19.2	9.1	16.1	
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	

General Inorganics	Unit	MDL	Accreditation				
pH	pH Units	+ / - 0.1	MCERTS	6.7	6.7	6.6	
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	1493	<200	1470	
Sulphide	mg/kg	<5	NONE	<5	<5	<5	
Total Sulphur	mg/kg	<200	NONE	723	<200	876	
Organic Matter	%	< 0.1	NONE	2.5	0.9	0.2	
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.014	0.005	0.001	
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	

Metals	Unit	MDL	Accreditation				
Arsenic (As)	mg/kg	<2	MCERTS	67	<2	69	
W/S Boron	mg/kg	<1	NONE	<1	<1	1.2	
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	2	<0.5	1.9	
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	
Chromium (Cr)	mg/kg	<2	MCERTS	45	24	41	
Copper (Cu)	mg/kg	<4	MCERTS	578	51	554	
Lead (Pb)	mg/kg	<3	MCERTS	1172	15	964	
Mercury (Hg)	mg/kg	<1	NONE	2.9	<1	1.2	
Nickel (Ni)	mg/kg	<3	MCERTS	102	106	100	
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	
Zinc (Zn)	mg/kg	<3	MCERTS	1055	51	887	

Analytical results are expressed on a dry weight basis where samples are dried at less than 30 °C

Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate - Speciated PAHs										
QTS Environmental Repo	rt No: 3124		Date Sampled	14/06/10	14/06/10	14/06/10	14/06/10	14/06/10		
Urban Vision Partnership	Jrban Vision Partnership Ltd		Time Sampled	None Supplied						
Site Reference: Reddish	Site Reference: Reddish North Primary			C01	C02	C03	C04	C05		
School										
Project / Job Ref: UV/000	0174.02	4	dditional Refs	C1	C1	C1	C1	C1		
Order No: None Supplied			Depth (m)	GL - 0.20	GL - 0.20	GL - 0.20	GL - 0.20	GL - 0.15		
Reporting Date: 21/06/2	010	Q	<b>SE Sample No</b>	11971	11972	11973	11974	11975		
Determinand	Unit		Accreditation							
Naphthalene	mg/kg	< 0.1	ISO17025	0.15	0.16	0.14	<0.1	0.17		
Acenaphthylene	mg/kg	< 0.1	MCERTS	0.12	0.11	0.16	<0.1	0.13		
Acenaphthene	mg/kg	< 0.1	NONE	0.12	0.19	0.26	<0.1	0.11		
Fluorene	mg/kg	< 0.1	MCERTS	0.13	0.17	0.23	<0.1	0.15		
Phenanthrene	mg/kg	< 0.1	MCERTS	0.57	1.01	1.80	0.37	0.73		
Anthracene	mg/kg	< 0.1	NONE	0.28	0.35	0.64	0.22	0.32		
Fluoranthene	mg/kg	< 0.1	MCERTS	0.72	1.23	3.60	0.47	0.98		
Pyrene	mg/kg	< 0.1	MCERTS	0.71	1.07	3.41	0.47	0.95		
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.53	0.68	1.91	0.43	0.61		
Chrysene	mg/kg	< 0.1	MCERTS	0.41	0.58	1.94	0.24	0.46		
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.55	0.67	1.87	0.46	0.62		
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.31	0.31	1.54	<0.1	0.21		
Benzo(a)pyrene	mg/kg	< 0.1	NONE	0.51	0.64	1.90	0.35	0.45		
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.44	0.48	0.98	0.37	0.45		
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	0.57	<0.1	<0.1		
Benzo(ghi)perylene	Benzo(ghi)perylene mg/kg		MCERTS	0.31	0.42	0.97	0.27	0.35		
		1.0		F 07	0.00	21.02	2.67	C 71		
Total EPA-16 PAHs Analytical results are expressed on	3 3			5.87	8.08	21.93	3.67	6.71		

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C





<b>TS Environmental Repor</b>	t No: 3124		Date Sampled	14/06/10	14/06/10	14/06/10	14/06/10	14/06/10
Jrban Vision Partnership Ltd			Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplie
ite Reference: Reddish North Primary			TP / BH No	C06	C07	C08	C09	C1
School								
Project / Job Ref: UV/000	174.02	A	dditional Refs	C1	C1	C1	C1	C
Order No: None Supplied			Depth (m)	GL - 0.10	GL - 0.20	GL - 0.20	GL - 0.50	GL - 0.1
Reporting Date: 21/06/20	010	QT	SE Sample No	11976	11977	11978	11979	1198
Determinand	Unit	MDI	Accreditation					
Naphthalene	mg/kg	< 0.1	ISO17025	0.12	<0.1	<0.1	<0.1	<0.
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.12	0.12	<0.1	<0.1	0.1
Acenaphthene	mg/kg	< 0.1	NONE	<0.1	<0.1	<0.1	<0.1	<0
Fluorene	mg/kg	< 0.1	MCERTS	0.12	0.11	<0.1	< 0.1	0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.58	0.46	0.36	0.36	0.7
Anthracene	mg/kg	< 0.1	NONE	0.27	0.24	0.20	0.21	0.3
Fluoranthene	mg/kg	< 0.1	MCERTS	0.77	0.57	0.38	0.47	0.7
Pyrene	mg/kg	< 0.1	MCERTS	0.74	0.54	0.37	0.47	0.6
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.54	0.47	0.38	0.43	0.4
Chrysene	mg/kg	< 0.1	MCERTS	0.41	0.31	0.19	0.26	0.2
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.54	0.85	0.45	0.46	0.4
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.19	0.35	<0.1	<0.1	0.1
Benzo(a)pyrene	mg/kg	< 0.1	NONE	0.47	0.42	0.34	0.31	0.3
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.41	0.36	0.37	0.39	0.3
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	0.42	<0.1	<0.1	<0
Benzo(ghi)perylene	mg/kg	<0.1	MCERTS	0.34	0.30	0.26	0.29	0.3
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	5.50	5.53	3.29	3.65	5.

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^{\circ}$ C





<b>2TS Environmental Report</b>	No: 3124		Date Sampled	14/06/10	14/06/10	14/06/10	14/06/10	14/06/10
Jrban Vision Partnership Ltd			Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplier
ite Reference: Reddish North Primary			TP / BH No	C11	C12	C13	C14	C1
School	-							
Project / Job Ref: UV/0001	174.02	A	dditional Refs	C1	C1	C1	C1	C
Order No: None Supplied			Depth (m)	GL - 0.15	GL - 0.15	GL - 0.20	GL - 0.20	GL - 0.2
Reporting Date: 21/06/20	10	QT	SE Sample No	11981	11982	11983	11984	1198
Determinand	Unit	MDI	Accreditation					
Naphthalene	mg/kg	<0.1	ISO17025	0.14	<0.1	0.12	<0.1	<0.
Acenaphthylene	mg/kg	< 0.1	MCERTS	0.14	<0.1	0.12	0.12	<u>&lt;0.</u> <0.
Acenaphthene	mg/kg	< 0.1	NONE	0.12	<0.1	0.11	0.12	<0.
Fluorene	mg/kg	< 0.1	MCERTS	0.12	<0.1	0.20	0.11	<0.
Phenanthrene	mg/kg	< 0.1	MCERTS	0.71	0.39	1.23	0.14	0.3
Anthracene	mg/kg	< 0.1	NONE	0.31	0.23	0.43	0.30	0.2
Fluoranthene	mg/kg	< 0.1	MCERTS	1.05	0.23	1.52	0.90	0.3
Pyrene	mg/kg	< 0.1	MCERTS	1.02	0.46	1.36	0.91	0.4
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.68	0.42	0.77	0.60	0.3
Chrysene	mg/kg	< 0.1	MCERTS	0.57	0.23	0.71	0.61	0.2
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.64	0.50	0.69	0.65	0.4
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.37	<0.1	0.40	0.33	<0.
Benzo(a)pyrene	mg/kg	< 0.1	NONE	0.53	0.35	0.70	0.54	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.43	0.38	0.48	0.46	0.3
Dibenz(a,h)anthracene	mg/kg	<0.1	MCERTS	<0.1	<0.1	0.46	<0.1	<0.
Benzo(ghi)perylene			MCERTS	0.35	0.28	0.39	0.42	0.2
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	7.20	3.70	9.85	6.65	3.3

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^\circ$ C





Soil Analysis Certificate - Speciated PAHs											
QTS Environmental Repor	t No: 3124		Date Sampled	14/06/10	14/06/10	14/06/10	14/06/10	14/06/10			
Urban Vision Partnership	Irban Vision Partnership Ltd		Time Sampled	None Supplied							
Site Reference: Reddish N	ite Reference: Reddish North Primary			C16	C17	C18	C19	C20			
School											
Project / Job Ref: UV/000	174.02	A	dditional Refs	C1	C1	C1	C1	C			
Order No: None Supplied			Depth (m)	GL - 0.15	GL - 0.15	GL - 0.20	GL - 0.10	GL - 0.1			
Reporting Date: 21/06/20	010	Q	SE Sample No	11986	11987	11988	11989	11990			
<u> </u>											
Determinand	Unit		Accreditation	0.44	0.4	0.42	0.4	0.00			
Naphthalene	mg/kg	< 0.1	IS017025	0.11	< 0.1	0.12	< 0.1	0.3			
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	0.14			
Acenaphthene	mg/kg	< 0.1	NONE	< 0.1	<0.1	< 0.1	<0.1	<0.			
Fluorene	mg/kg	< 0.1	MCERTS	0.12	<0.1	0.14	<0.1	0.14			
Phenanthrene	mg/kg	< 0.1	MCERTS	0.54	0.29	0.62	0.60	0.73			
Anthracene	mg/kg	< 0.1	NONE	0.26	0.19	0.29	0.28	0.3			
Fluoranthene	mg/kg	< 0.1	MCERTS	0.63	0.28	0.85	0.76	1.0			
Pyrene	mg/kg	< 0.1	MCERTS	0.61	0.28	0.83	0.72	1.0			
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.47	0.33	0.58	0.54	0.73			
Chrysene	mg/kg	<0.1	MCERTS	0.34	0.13	0.45	0.40	0.7			
Benzo(b)fluoranthene	mg/kg	<0.1	MCERTS	0.59	0.41	0.59	0.58	0.72			
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.18	<0.1	0.17	0.16	0.42			
Benzo(a)pyrene	mg/kg	< 0.1	NONE	0.42	0.23	0.52	0.43	0.74			
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.40	<0.1	0.44	0.44	0.5			
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1			
Benzo(ghi)perylene	mg/kg	<0.1	MCERTS	0.29	0.23	0.34	0.30	0.42			
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	4.97	2.39	5.94	5.20	7.9			

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C





Soil Analysis Certificate - S QTS Environmental Report N			Date Sampled	14/06/10	14/06/10	14/06/10	T
				14/06/10	14/06/10	14/06/10	-
Urban Vision Partnership Ltd		Time Sampled		None Supplied		None Supplied	
Site Reference: Reddish Nort	h Primary		TP / BH No	C21	C22	C23	
School				-			
Project / Job Ref: UV/00017	4.02	A	dditional Refs	C1	C1	C1	
Order No: None Supplied			Depth (m)	GL - 0.10	GL - 0.10	GL - 0.10	
Reporting Date: 21/06/2010		Q	SE Sample No	11991	11992	11993	
Determinand	Unit	MDI	Accreditation				
Naphthalene	mg/kg	<0.1	Accreditation ISO17025	0.24	<0.1	0.55	<b>—</b> ——
Acenaphthylene	mg/kg	< 0.1	MCERTS	0.24	<0.1	0.55	-
Acenaphthylene	5, 5	< 0.1	NONE	< 0.13	<0.1	0.23	-
Fluorene	mg/kg mg/kg	< 0.1	MCERTS	<0.1	<0.1	0.29	-
Phenanthrene	mg/kg	< 0.1	MCERTS	0.50	0.16	2.18	4
Anthracene	mg/kg	< 0.1	NONE	0.30	<0.10	0.72	4
Fluoranthene	mg/kg	< 0.1	MCERTS	0.23	<0.1	2.16	4
Pyrene	mg/kg	< 0.1	MCERTS	0.83	<0.1	1.95	-
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.83	<0.1	1.93	-
Chrysene	mg/kg	< 0.1	MCERTS	0.58	<0.1	0.93	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.81	<0.1	0.93	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.01	<0.1	0.46	
Benzo(a)pyrene	mg/kg	< 0.1	NONE	0.72	<0.1	0.40	+
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.51	<0.1	0.57	1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	0.50	<0.1	0.49	1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.30	<0.1	0.49	1
20.120(3)po. / 10110	111g/ Kg	,011			011	51.15	
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	7.54	<1.6	14.22	Т

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^{\circ}$ C





Soil Analysis Certificate - Sample Descriptions	
QTS Environmental Report No: 3124	
Urban Vision Partnership Ltd	
Site Reference: Reddish North Primary School	
Project / Job Ref: UV/000174.02	
Order No: None Supplied	
Reporting Date: 21/06/2010	

QTSE Sample No	TP / BH No	Additional Refs	Depth (m)	Colour	Sample Matrix Description
11971	C01	C1	GL - 0.20		
11972	C02	C1	GL - 0.20	Brown	Loam with stones
11973	C03	C1	GL - 0.20		Loam with stones
11974	C04	C1	GL - 0.20	Brown	
11975	C05	C1	GL - 0.15	Brown	Loam
11976	C06	C1	GL - 0.10	Brown	Loam
11977	C07	C1	GL - 0.20	Brown	Loam
11978	C08	C1	GL - 0.20	Brown	Loam
11979	C09	C1	GL - 0.50		
11980	C10	C1	GL - 0.15	Brown	
11981	C11	C1	GL - 0.15	Brown	
11982	C12	C1	GL - 0.15	Brown	
11983	C13	C1	GL - 0.20	Brown	
11984	C14	C1	GL - 0.20	Brown	
11985	C15	C1	GL - 0.20		
11986	C16	C1	GL - 0.15	Brown	
11987	C17	C1	GL - 0.15	Brown	
11988	C18	C1	GL - 0.20	Brown	
11989	C19	C1	GL - 0.10		
11990	C20	C1	GL - 0.15	Brown	
11991	C21	C1	GL - 0.10		
11992	C22	C1	GL - 0.10		
11993	C23	C1	GL - 0.10	Brown	Loam





Soil Analysis Certificate - Methodology & Misceallaneous Information
QTS Environmental Report No: 3124
Urban Vision Partnership Ltd
Site Reference: Reddish North Primary School
Project / Job Ref: UV/000174.02
Order No: None Supplied
Reporting Date: 21/06/2010

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5	E016
3011	AK		diphenylcarbazide followed by colorimetry	LUIU
Soil	D		Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	AR		Visual screening of samples for fibrous material	E024
Soil	D		Determination of chloride by extraction with water followed by titration using silver nitrate	E021
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by turbidimeter	E020
Soil	D	Fluoride - Water Soluble	Test Kit	E023
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	D	Loss on Ignition @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	D		Determination of phosphorus by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	AR	Sulphide	Determination of sulphide by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia, potassium iodide/iodate followed by ICP- OES	E002
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E009
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E009
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E010
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC- MS	E006
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E009
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	VPH (C6 - C10)	Determination of hydrocarbons C6-C10 by headspace GC-MS	E001
Soil	AR	EPH TEXAS	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	TPH CWG	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	TPH LQM	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	EPH (with florisil cleanup)	Determination of acetone/hexane extractable hydrocarbons with florisil cleanup step by GC-FID	E004
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001

<u>Key</u>

D Dried AR As Received



## CERTIFICATE OF ANALYSIS

Report Number: TN19881v0

Other Ref: Project/Job No: 3124 Report Date: 18/06/2010

Company: QTS Environmental Ltd Site: Reddish North Primary School Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN AMS Sample Ref No Client Sample No Sample Location Material Type

AMS Sample Ref No	Client Sample No	Sample Location	Material Type	Asbestos Type	Content
AMS/AK/87070	11974	Project/ Job No: 3124	Cement Product	Chrysotile	Positive
AMS/AK/87071	11776	Project/ Job No: 3124	Cement Product	Chrysotile	Positive

..... END .....

Key to fibre content: Trace = Trace asbestos identified (1 or 2 fibres present) Positive = Asbestos identified (more than 2 fibres present).

Sampled: Externally Number of samples: 2 Date samples received: 18/06/2010 Name of analyst: Alan Kane Date of analysis: 18/06/2010

Quantitive Fibre Content is not covered by our UKAS accreditiation and is not reported. However guidance on the percentages of asbestos used in various products is available in HSG 264. Material types are visually assessed and are outside the scope of UKAS accreditation. The analysis has been performed using the AMS 'In House' method of transmitted/polarised light microscopy and centre stop dispersion staining, based on the HSG 248. AMS do not accept responsibility for any descrepancy or inaccuracy arising from samples labelled or collected by clients or third parties. This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

For and on behalf of AMS Management (GB) LLP

Pete Everard Lab Manager



AMS Management (GB) LLP Unit 1 9, Cannon Lane Tonbridge Kent TN9 1PP Tel: 01732 368359 Email: xxxx.xxxxxx@xxxxxxxxxxxxxxxx



Jonathan Evans Urban Vision Partnership Ltd Environment - 3rd Floor Emerson House Albert Street Eccles Manchester M30 0TE



 QTS Environmental Ltd

 Unit 1

 Rose Lane Industrial Estate

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 Kent

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 russell.jarvis@gtsenvironmental.com

### **QTS Environmental Report No: 3891**

Site Reference: Redish P.S.

Project / Job Ref: UV/000174-04

Order No: ZUV10790

Sample Receipt Date: 23/09/10

Sample Scheduled Date: 23/09/10

**Report Issue Number: 1** 

Reporting Date: 01/10/2010

Authorised by:

Russell Jarvis Director **On behalf of QTS Environmental Ltd**  Authorised by:

Kevin Old Director **On behalf of QTS Environmental Ltd** 



Call Analysis Castifie

### QTS Environmental Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel : 01622 851105



Soil Analysis Certificate								
QTS Environmental Report No: 389	1		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership Ltd	Jrban Vision Partnership Ltd			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Redish P.S.	TP / BH No	TS01	TS02	TS03	TS04	TS05		
Project / Job Ref: UV/000174-04	Project / Job Ref: UV/000174-04 Additional Refs					None Supplied	None Supplied	None Supplied
Order No: ZUV10790			Depth (m)	0.80 - 1.00	0.60 - 0.80	0.60 - 0.80	0.80 - 1.00	0.60 - 0.80
Reporting Date: 01/10/2010		Q	TSE Sample No	15840	15841	15842	15843	15844
-								
Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	8.9	<0.1
				10.0		10.0	22.0	
Moisture Content	%	< 0.1	NONE	21.3	13.2	19.7	19.8	23.9
Moisture Content Asbestos Screen	% Positive / Negative	<0.1 N/a	NONE NONE	21.3 Negative	13.2 Negative	-	19.8 Negative	23.9 Negative

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.9	6.8	6.8	6.8	6.7
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	572	612	835	657	816
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	353	410	404	380	425
Organic Matter	%	< 0.1	NONE	3.6	3.9	4.2	4.4	4.3
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.021	0.023	0.024	0.026	0.025
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	13	11	12	10	11
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	0.6	0.6	0.7	0.7	0.6
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	37	23	25	22	23
Copper (Cu)	mg/kg	<4	MCERTS	55	83	69	104	66
Lead (Pb)	mg/kg	<3	MCERTS	110	119	118	135	124
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	26	22	24	21	21
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	124	127	151	141	143

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\rm o}{\rm C}$  Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate								
QTS Environmental Report No: 389	1		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership Ltd			Time Sampled	None Supplied				
Site Reference: Redish P.S.			TP / BH No	TS06	TS07	TS08	TS09	TS10
Project / Job Ref: UV/000174-04			Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.60 - 0.80	0.80 - 1.00	0.40 - 0.60	0.50 - 0.70	0.40 - 0.60
Reporting Date: 01/10/2010		Q	TSE Sample No	15845	15846	15847	15848	15849
-								
Determinand	Unit	MDL	Accreditation					
Stone Content	%	<0.1	NONE	<0.1	<0.1	<0.1	<0.1	<0.1
Moisture Content	%	<0.1	NONE	11.9	18.2	20	20.5	22.6
Asbestos Screen	N/a	NONE	Negative	Negative	Negative	Negative	Negative	
Asbestos Quantification*	%	< 0.001	ISO17025			< 0.001		

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.6	6.4	6.6	6.6	6.8
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN		<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	704	830	746	648	715
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	421	429	417	331	538
Organic Matter	%	< 0.1	NONE	4.6	5.2	4.5	4	4.3
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.027	0.030	0.026	0.023	0.025
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	11	10	10	11	11
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	0.7	0.6	0.6	0.5	0.6
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	24	22	21	22	24
Copper (Cu)	mg/kg	<4	MCERTS	157	75	78	45	81
Lead (Pb)	mg/kg	<3	MCERTS	164	131	149	84	129
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	22	20	19	20	22
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	167	134	128	115	149

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\rm O}{\rm C}$ 

Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate								
QTS Environmental Report No: 389	1		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership Ltd			Time Sampled	None Supplied				
Site Reference: Redish P.S.			TP / BH No	TS11	TS13	TS14	TS15	TS16
Project / Job Ref: UV/000174-04			Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.60 - 0.80	0.70 - 0.90	0.40 - 0.60	0.50 - 0.70	0.30 - 0.50
Reporting Date: 01/10/2010		Q	TSE Sample No	15850	15851	15852	15853	15854
Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	<0.1	16
Moisture Content	< 0.1	NONE	20.7	14.4	17.3	19.2	19	
Asbestos Screen	N/a	NONE	Negative	Negative	Negative	Negative	Negative	
Asbestos Quantification*	< 0.001	IS017025						

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.8	6.7	6.6	6.7	6.6
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN		<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	670	825	703	620	586
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	385	467	376	352	423
Organic Matter	%	< 0.1	NONE	4.4	3.9	3.7	2.8	3.7
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.026	0.023	0.021	0.016	0.021
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	10	11	11	11	9
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	<0.5	0.6	0.7	0.6	0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	21	23	22	27	17
Copper (Cu)	mg/kg	<4	MCERTS	53	70	79	83	54
Lead (Pb)	mg/kg	<3	MCERTS	96	119	116	106	96
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	18	21	21	24	16
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	110	159	135	125	105

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\rm o}{\rm C}$  Analysis carried out on the dried sample is corrected for the stone content



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### QTS Environmental Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel : 01622 851105



QTS Environmental Report No: 3891			Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership Ltd		Time Sampled		None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Redish P.S.			TP / BH No	TS17	TS18	TS19	TS21	TS22
Project / Job Ref: UV/000174-04			Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: ZUV10790			Depth (m)	0.60 - 0.80	0.30 - 0.50	0.80 - 1.00	0.50 - 0.70	0.50 - 0.70
		Reporting Date: 01/10/2010 QT						
Reporting Date: 01/10/2010		Q	TSE Sample No	15855	15856	15857	15858	15859
		Q	TSE Sample No	15855	15856	15857	15858	15859
	Unit	Q MDL	TSE Sample No Accreditation	15855	15856	15857	15858	15859
Reporting Date: 01/10/2010	Unit %			15855	7.8	<0.1	15858 <0.1	<0.1
Reporting Date: 01/10/2010 Determinand	Unit %	MDL	Accreditation	15855 12 17				
Reporting Date: 01/10/2010 Determinand Stone Content	Unit % % Positive / Negative	MDL <0.1 <0.1	Accreditation NONE	15855 12 17 Negative	7.8	<0.1	<0.1	<0.1

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.4	6.3	6.0	6.1	6.8
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	642	901	825	887	785
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	379	573	405	471	503
Organic Matter	%	< 0.1	NONE	3.5	3.5	4.5	5.4	5.2
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.020	0.020	0.026	0.031	0.030
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	11	11	11	12	13
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	0.5	0.6	0.8	0.7	0.8
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	22	21	22	30	37
Copper (Cu)	mg/kg	<4	MCERTS	47	103	86	95	65
Lead (Pb)	mg/kg	<3	MCERTS	108	116	185	144	107
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	21	19	23	26	24
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	119	209	173	144	158

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\rm o}{\rm C}$  Analysis carried out on the dried sample is corrected for the stone content





QTS Environmental Report No: 389	1		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership Ltd		Time Sampled None Supplied None Supplied None Supplied None Supplied			None Supplied	None Supplied		
Site Reference: Redish P.S.			TP / BH No	TS23	TS24	TS25	TS27	TS28
Project / Job Ref: UV/000174-04			Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)					0.30 - 0.50
Reporting Date: 01/10/2010	QTSE Sample No 15860 15861 15862 15863					15864		
Determinand	Unit	MDL	Accreditation					
Stone Content	%	<0.1	NONE	<0.1	11.8	<0.1	8.9	<0.1
Moisture Content	0/2	< 0.1	NONE	14.9	19.7	14.6	12	17.8
MOISLUIE CONLETIL	-70							
Asbestos Screen	Positive / Negative	-	NONE	Negative	Negative	Negative	Negative	
	Positive / Negative %	-	NONE <b>ISO17025</b>	Negative	Negative	Negative	Negative	
Asbestos Screen	, 5	N/a	-	Negative	Negative	Negative	Negative	
Asbestos Screen	, 5	N/a	-	Negative	Negative	Negative	Negative	Negative

pH	pH Units	+ / - 0.1	MCERTS	5.6	6.8	6.4	6.5	6.6
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	834	502	773	959	319
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	432	318	479	387	<200
Organic Matter	%	< 0.1	NONE	5.9	2.9	5.1	5.3	1.2
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.034	0.017	0.030	0.031	0.007
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	12	10	11	9	8
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	0.6	<0.5	0.5	0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	20	25	22	19	40
Copper (Cu)	mg/kg	<4	MCERTS	63	45	71	117	39
Lead (Pb)	mg/kg	<3	MCERTS	145	64	115	110	34
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	21	24	21	16	43
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	134	109	123	102	76

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\rm o}{\rm C}$  Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate								
QTS Environmental Report No: 389	1		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership Ltd			Time Sampled	None Supplied				
Site Reference: Redish P.S.			TP / BH No	TS29	TS30	TS31	TS32	TS33
Project / Job Ref: UV/000174-04			Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.40 - 0.60	0.60 - 0.80	0.60 - 0.80	0.60 - 0.80	0.50 - 0.70
Reporting Date: 01/10/2010		Q	TSE Sample No	15865	15866	15867	15868	15869
Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	<0.1	10.9	<0.1	18.3	<0.1
Moisture Content	%	< 0.1	NONE	14.1	15.3	8.2	10	20.2
Asbestos Screen	Positive / Negative	N/a NONE		Negative	Negative	Negative	Negative	Negative
Asbestos Ouantification*	0/6	< 0.001	ISO17025					

General Inorganics	Unit	Unit	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.5	6.4	6.5	6.3	6.3
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE		<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	948	684	826	761	858
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	479	414	468	420	
Organic Matter	%	<0.1	NONE	6.8	4.9	5	4.7	7.9
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.040	0.029	0.029	0.028	0.046
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	Unit	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	11	10	11	9	9
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	0.6	0.5	0.6	<0.5	0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	39	22	21	19	16
Copper (Cu)	mg/kg	<4	MCERTS	72	77	83	45	47
Lead (Pb)	mg/kg	<3	MCERTS	131	145	146	105	79
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	31	20	20	17	16
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	128	120	124	108	100

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\rm o}{\rm C}$  Analysis carried out on the dried sample is corrected for the stone content



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Call Analy

### QTS Environmental Ltd Unit 1, Rose Lane Industrial Estate Rose Lane Lenham Heath Maidstone Kent ME17 2JN Tel : 01622 851105



Soil Analysis Certificate								
QTS Environmental Report No: 389	1		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership Ltd			Time Sampled	None Supplied				
Site Reference: Redish P.S.	TP / BH No			TS34	TS35	TS36	TS37	TS38
Project / Job Ref: UV/000174-04			Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.80 - 1.00	0.60 - 0.80	0.70 - 0.90	0.40 - 0.60	0.70 - 0.90
Reporting Date: 01/10/2010	TSE Sample No	15870	15871	15872	15873	1587		
-								
Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	22.2	10.
Moisture Content	%	<0.1	NONE	18.8	15.5	16.2	16.5	13.
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negativ
Asbestos Quantification*	%	< 0.001	IS017025			< 0.001		
Aspesios Quantinication	70	<0.001	13017025			<b>\0.001</b>		
Aspestos Quantification*	70	<0.001	13017025			<0.001		

General Inorganics	Unit	Unit	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS		7.2	7.5	6.5	6.4
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE		<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	993	934	787	652	932
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	521	531	455	327	421
Organic Matter	%	< 0.1	NONE	5.7	5.6	5.2	4.4	3.4
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.033	0.033	0.030	0.025	0.020
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	Unit	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	11	10	10	8	10
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	0.6	0.5	0.6	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	25	21	21	16	21
Copper (Cu)	mg/kg	<4	MCERTS	52	49	50	39	48
Lead (Pb)	mg/kg	<3	MCERTS	95	114	107	76	91
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	22	20	21	16	19
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	120	116	113	89	108

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\rm o}{\rm C}$  Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate								
QTS Environmental Report No: 3891			Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	
Urban Vision Partnership Ltd			Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Redish P.S.			TP / BH No	TS39	TS40	TS41	TS42	
Project / Job Ref: UV/000174-04			Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: ZUV10790			Depth (m)	0.80 - 1.00	0.80 - 1.00	0.80 - 1.00	0.50 - 0.70	
Reporting Date: 01/10/2010		Q	TSE Sample No	15875	15876	15877	15878	
Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	

Stone Content	%	<0.1	NONE	<0.1	<0.1	<0.1	<0.1	
Moisture Content	%	<0.1	NONE	12.4	17.9	20.9	17.9	
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	
Asbestos Quantification*	%	< 0.001	ISO17025					

General Inorganics	Unit	Unit	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	6.5	6.5	6.4	6.1	
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	767	832	847	821	
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	
Total Sulphur	mg/kg	<200	NONE	418	456	420	461	
Organic Matter	%	<0.1	NONE	4.9	4.3	4.4	5.3	
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.028	0.025	0.025	0.031	
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	

Metals	Unit	Unit	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	11	10	15	12	
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	0.6	0.6	0.7	0.6	
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	
Chromium (Cr)	mg/kg	<2	MCERTS	20	22	22	20	
Copper (Cu)	mg/kg	<4	MCERTS	56	55	62	66	
Lead (Pb)	mg/kg	<3	MCERTS	110	96	102	140	
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	
Nickel (Ni)	mg/kg	<3	MCERTS	21	20	23	22	
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	
Zinc (Zn)	mg/kg	<3	MCERTS	123	116	118	116	

Analytical results are expressed on a dry weight basis where samples are dried at less than 30  $^{\rm O}{\rm C}$  Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate	e - Speciated PAHs							
QTS Environmental Repo	rt No: 3891		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership	Ltd		Time Sampled	None Supplied				
Site Reference: Redish P.	S.		TP / BH No	TS01	TS02	TS03	TS04	TS05
Project / Job Ref: UV/00	0174-04	ŀ	Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.80 - 1.00	0.60 - 0.80	0.60 - 0.80	0.80 - 1.00	0.60 - 0.80
Reporting Date: 01/10/2	010	Q	TSE Sample No	15840	15841	15842	15843	15844
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	< 0.1	IS017025	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	< 0.1	<0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	< 0.1	<0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.17	0.59	0.23	0.61	0.22
Anthracene	mg/kg	< 0.1	MCERTS	<0.1	0.11	<0.1	0.13	<0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	0.32	0.75	0.35	0.85	0.38
Pyrene	mg/kg	< 0.1	MCERTS	0.34	0.71	0.34	0.81	0.38
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.17	0.32	0.14	0.40	0.17
Chrysene	mg/kg	< 0.1	MCERTS	0.17	0.35	0.16	0.44	0.19
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	0.22	<0.1	0.20	<0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.17	0.27	0.13	0.44	0.12
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.13	0.22	<0.1	0.32	0.14
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	< 0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	0.13	<0.1
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	<1.6	3.53	<1.6	4.35	1.61
Analytical results are expressed on	a dry weight basis where sa	mples are	e dried at less than 30 <sup>0</sup>	)C				





Soil Analysis Certificate	- Speciated PAHs							
QTS Environmental Repor	rt No: 3891		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership	Ltd		Time Sampled	None Supplied				
Site Reference: Redish P.	S.		TP / BH No	TS06	TS07	TS08	TS09	TS10
Project / Job Ref: UV/000	0174-04	ŀ	Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.60 - 0.80	0.80 - 1.00	0.40 - 0.60	0.50 - 0.70	0.40 - 0.60
Reporting Date: 01/10/2	010	Q	TSE Sample No	15845	15846	15847	15848	15849
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	<0.1	ISO17025	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	0.14	<0.1	0.14	<0.1	<0.1
Fluorene	mg/kg	< 0.1	MCERTS	0.16	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	1.30	0.80	1.00	0.96	0.29
Anthracene	mg/kg	< 0.1	MCERTS	0.23	0.19	0.23	0.20	<0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	1.49	1.67	1.61	1.33	0.56
Pyrene	mg/kg	< 0.1	MCERTS	1.47	1.66	1.52	1.29	0.56
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.73	0.95	0.79	0.60	0.29
Chrysene	mg/kg	< 0.1	MCERTS	0.74	0.95	0.76	0.63	0.33
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.38	0.50	0.54	0.33	0.20
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.62	0.99	0.60	0.51	0.32
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.53	0.96	0.58	0.45	0.25
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.12	0.24	0.12	<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.25	0.34	0.24	0.17	<0.1
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	8.14	9.23	8.13	6.46	2.81
Analytical results are expressed on a	a dry weight basis where sa	mples are	e dried at less than 30 <sup>6</sup>	°C				





Soil Analysis Certificate	- Speciated PAHs							
QTS Environmental Repor	t No: 3891		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership	Ltd		Time Sampled	None Supplied				
Site Reference: Redish P.S	S.		TP / BH No	TS11	TS13	TS14	TS15	TS16
Project / Job Ref: UV/000	174-04	A	Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.60 - 0.80	0.70 - 0.90	0.40 - 0.60	0.50 - 0.70	0.30 - 0.50
Reporting Date: 01/10/20	010	Q	TSE Sample No	15850	15851	15852	15853	15854
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	<0.1	ISO17025	< 0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	< 0.1	<0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	< 0.1	<0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	< 0.1	<0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.51	0.62	0.48	0.43	0.82
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	0.13	<0.1	< 0.1	0.19
Fluoranthene	mg/kg	< 0.1	MCERTS	0.83	1.03	0.84	0.88	1.29
Pyrene	mg/kg	< 0.1	MCERTS	0.83	0.98	0.82	0.89	1.24
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.41	0.53	0.40	0.46	0.61
Chrysene	mg/kg	< 0.1	MCERTS	0.45	0.54	0.46	0.49	0.63
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.22	0.34	0.23	0.25	0.42
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.46	0.55	0.45	0.51	0.50
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.33	0.54	0.35	0.37	0.56
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	0.13	<0.1	< 0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	<0.1	0.21	0.14	0.17	0.20
Total EPA-16 PAHs	mg/kg	<1.6		4.03	5.58	4.18	4.46	6.45
Analytical results are expressed on a	a dry weight basis where sar	mples are	e dried at less than 30 <sup>6</sup>	°C				





Soil Analysis Certificate	- Speciated PAHs							
QTS Environmental Repor	rt No: 3891		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership	Ltd		Time Sampled	None Supplied				
Site Reference: Redish P.	S.		TP / BH No	TS17	TS18	TS19	TS21	TS22
Project / Job Ref: UV/000	)174-04	4	Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.60 - 0.80	0.30 - 0.50	0.80 - 1.00	0.50 - 0.70	0.50 - 0.70
Reporting Date: 01/10/2	010	Q	TSE Sample No	15855	15856	15857	15858	15859
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	<0.1	ISO17025	< 0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	< 0.1	<0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	0.14	< 0.1	<0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	0.16	< 0.1	<0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.53	0.48	1.84	0.65	0.24
Anthracene	mg/kg	<0.1	MCERTS	0.12	<0.1	0.42	0.14	<0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	1.10	0.98	3.74	1.61	0.52
Pyrene	mg/kg	<0.1	MCERTS	1.09	0.96	3.78	1.57	0.54
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.59	0.49	2.41	0.95	0.29
Chrysene	mg/kg	<0.1	MCERTS	0.64	0.53	2.19	0.93	0.32
Benzo(b)fluoranthene	mg/kg	<0.1	MCERTS	0.41	0.31	1.15	0.69	0.25
Benzo(k)fluoranthene	mg/kg	<0.1	MCERTS	0.67	0.49	2.41	1.03	0.32
Benzo(a)pyrene	mg/kg	<0.1	MCERTS	0.63	0.40	2.30	1.03	0.26
Indeno(1,2,3-cd)pyrene	mg/kg	<0.1	MCERTS	0.15	<0.1	0.72	0.28	<0.1
Dibenz(a,h)anthracene	mg/kg	<0.1	MCERTS	<0.1	<0.1	0.20	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.26	0.14	0.89	0.42	<0.1
Total EPA-16 PAHs	mg/kg			6.18	4.78	22.34	9.30	2.76
Analytical results are expressed on a	a dry weight basis where sar	mples are	e dried at less than 30 <sup>6</sup>	C				





Soil Analysis Certificate	- Speciated PAHs							
QTS Environmental Repor	t No: 3891		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership	Ltd		Time Sampled	None Supplied				
Site Reference: Redish P.S	5.		TP / BH No	TS23	TS24	TS25	TS27	TS28
Project / Job Ref: UV/000	174-04	A	dditional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.70 - 0.90	0.40 - 0.60	0.60 - 0.80	0.80 - 1.00	0.30 - 0.50
Reporting Date: 01/10/20	010	Q	<b>FSE Sample No</b>	15860	15861	15862	15863	15864
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	<0.1	ISO17025	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.53	<0.1	0.49	0.63	0.45
Anthracene	mg/kg	< 0.1	MCERTS	0.11	<0.1	<0.1	0.15	<0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	1.31	0.18	0.97	1.30	0.86
Pyrene	mg/kg	< 0.1	MCERTS	1.32	0.18	0.95	1.27	0.85
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.76	<0.1	0.54	0.75	0.48
Chrysene	mg/kg	<0.1	MCERTS	0.80	<0.1	0.58	0.75	0.52
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.62	<0.1	0.33	0.50	0.38
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.79	<0.1	0.61	0.83	0.47
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.80	<0.1	0.45	0.80	0.51
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.21	<0.1	0.13	0.25	<0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.33	<0.1	0.21	0.31	0.21
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	7.59	<1.6	5.26	7.53	4.72
Analytical results are expressed on a	dry weight basis where sar	nples are	e dried at less than 30 <sup>0</sup>	)C				





Soil Analysis Certificate	- Speciated PAHs							
QTS Environmental Repor	t No: 3891		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership	Ltd		Time Sampled	None Supplied				
Site Reference: Redish P.	S.		TP / BH No	TS29	TS30	TS31	TS32	TS33
Project / Job Ref: UV/000	)174-04	A	Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.40 - 0.60	0.60 - 0.80	0.60 - 0.80	0.60 - 0.80	0.50 - 0.70
Reporting Date: 01/10/2	010	Q	TSE Sample No	15865	15866	15867	15868	15869
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	<0.1	ISO17025	< 0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	0.21	<0.1	0.12	<0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	0.16	<0.1	< 0.1	<0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.42	1.72	0.69	1.10	0.60
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	0.39	0.16	0.23	0.13
Fluoranthene	mg/kg	< 0.1	MCERTS	0.84	2.27	1.22	1.67	1.33
Pyrene	mg/kg	< 0.1	MCERTS	0.83	2.13	1.18	1.55	1.33
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.49	1.12	0.69	0.83	0.81
Chrysene	mg/kg	< 0.1	MCERTS	0.49	1.04	0.68	0.80	0.79
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.34	0.59	0.47	0.50	0.54
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.54	0.92	0.61	0.73	0.85
Benzo(a)pyrene	mg/kg	<0.1	MCERTS	0.43	0.92	0.60	0.77	0.81
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.11	0.24	0.17	0.18	0.20
Dibenz(a,h)anthracene	mg/kg	<0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.21	0.33	0.28	0.29	0.29
Total EPA-16 PAHs	mg/kg	<1.6		4.71	12.05	6.75	8.76	7.69
Analytical results are expressed on a	a dry weight basis where sa	mples are	e dried at less than 30 <sup>0</sup>	°C				





Soil Analysis Certificate	e - Speciated PAHs							
QTS Environmental Repo	rt No: 3891		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	22/09/10
Urban Vision Partnership	Ltd		Time Sampled	None Supplied				
Site Reference: Redish P.	S.		TP / BH No	TS34	TS35	TS36	TS37	TS38
Project / Job Ref: UV/00	0174-04	ŀ	Additional Refs	None Supplied				
Order No: ZUV10790			Depth (m)	0.80 - 1.00	0.60 - 0.80	0.70 - 0.90	0.40 - 0.60	0.70 - 0.90
Reporting Date: 01/10/2	010	Q	TSE Sample No	15870	15871	15872	15873	15874
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	<0.1	ISO17025	<0.1	<0.1	0.15	<0.1	<0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	0.22	<0.1	<0.1
Fluorene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	0.17	<0.1	<0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.49	0.53	2.17	0.31	0.38
Anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	0.38	<0.1	<0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	1.02	1.01	2.86	0.65	0.74
Pyrene	mg/kg	< 0.1	MCERTS	0.97	0.97	2.61	0.62	0.75
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.53	0.49	1.28	0.33	0.40
Chrysene	mg/kg	< 0.1	MCERTS	0.57	0.54	1.22	0.42	0.41
Benzo(b)fluoranthene	5, 5	< 0.1	MCERTS	0.37	0.44	0.73	0.30	0.26
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.55	0.54	1.09	0.36	0.41
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.45	0.62	1.09	0.40	0.33
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	<0.1	0.15	0.23	<0.1	< 0.1
Dibenz(a,h)anthracene		< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.21	0.25	0.34	0.16	0.15
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	5.17	5.55	14.56	3.55	3.83
Analytical results are expressed on	a dry weight basis where sa	mples are	e dried at less than 30 <sup>0</sup>	°C				





Soil Analysis Certificate - S	Speciated PAHs							
QTS Environmental Report N	o: 3891		Date Sampled	22/09/10	22/09/10	22/09/10	22/09/10	
Urban Vision Partnership Ltd			Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Redish P.S.			TP / BH No	TS39	TS40	TS41	TS42	
Project / Job Ref: UV/00017	4-04	A	Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	
Order No: ZUV10790			Depth (m)	0.80 - 1.00	0.80 - 1.00	0.80 - 1.00	0.50 - 0.70	
Reporting Date: 01/10/2010		Q	<b>FSE Sample No</b>	15875	15876	15877	15878	
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	< 0.1	ISO17025	< 0.1	<0.1	<0.1	<0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	0.15	
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	
Phenanthrene	mg/kg	< 0.1	MCERTS	0.91	0.67	0.63	1.08	
Anthracene	mg/kg	< 0.1	MCERTS	0.19	0.15	0.15	0.24	
Fluoranthene	mg/kg	< 0.1	MCERTS	1.46	1.24	1.68	1.76	
Pyrene	mg/kg	< 0.1	MCERTS	1.37	1.17	1.69	1.59	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.72	0.61	1.04	0.77	
Chrysene	mg/kg	< 0.1	MCERTS	0.75	0.64	1.02	0.74	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.47	0.45	0.80	0.40	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.70	0.55	1.03	0.67	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.74	0.50	0.94	0.53	
Indeno(1,2,3-cd)pyrene	mg/kg	<0.1	MCERTS	0.18	0.14	0.28	0.13	
Dibenz(a,h)anthracene	mg/kg	<0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.28	0.21	0.42	0.21	
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	7.78	6.33	9.67	8.28	





Soil Analysis Certificate - Sample Descriptions	
QTS Environmental Report No: 3891	
Urban Vision Partnership Ltd	
Site Reference: Redish P.S.	
Project / Job Ref: UV/000174-04	
Order No: ZUV10790	
Reporting Date: 01/10/2010	

QTSE Sample No	TP / BH No	Additional Refs	Depth (m)	Colour	Sample Matrix Description
15840	TS01	None Supplied	0.80 - 1.00	Brown	Clayey loam with roots
15841	TS02	None Supplied	0.60 - 0.80		Sandy loam with roots
15842	TS03	None Supplied	0.60 - 0.80	Brown	Clayey loam
15843	TS04	None Supplied	0.80 - 1.00		Sandy loam with roots
15844	TS05	None Supplied	0.60 - 0.80	Brown	Clayey loam with roots
15845	TS06	None Supplied	0.60 - 0.80		Sandy loam with roots
15846	TS07	None Supplied	0.80 - 1.00	Brown	Sandy loam with roots
15847	TS08	None Supplied	0.40 - 0.60		Clayey loam with roots
15848	TS09	None Supplied	0.50 - 0.70	Brown	Clayey loam with roots
15849	TS10	None Supplied	0.40 - 0.60	Brown	Clayey loam with roots
15850	TS11	None Supplied	0.60 - 0.80	Brown	Clayey loam with roots
15851	TS13	None Supplied	0.70 - 0.90	Brown	Sandy loam with roots
15852	TS14	None Supplied	0.40 - 0.60	Brown	Clayey loam with roots
15853	TS15	None Supplied	0.50 - 0.70		Clayey loam with roots
15854	TS16	None Supplied	0.30 - 0.50		Clayey loam with roots
15855	TS17	None Supplied	0.60 - 0.80	Brown	Clayey loam with roots
15856	TS18	None Supplied	0.30 - 0.50		Clayey loam with roots
15857	TS19	None Supplied	0.80 - 1.00		Sandy loam with roots
15858	TS21	None Supplied	0.50 - 0.70		Sandy loam with roots
15859	TS22	None Supplied	0.50 - 0.70		Clayey loam with roots
15860	TS23	None Supplied	0.70 - 0.90		Sandy loam with roots
15861	TS24	None Supplied	0.40 - 0.60		Clayey loam with roots
15862	TS25	None Supplied	0.60 - 0.80		Sandy loam with roots
15863	TS27	None Supplied	0.80 - 1.00		Sandy loam with roots
15864	TS28	None Supplied	0.30 - 0.50		Clayey loam with roots
15865	TS29	None Supplied	0.40 - 0.60	-	Sandy loam with roots
15866	TS30	None Supplied	0.60 - 0.80	-	Sandy loam with roots and stones
15867	TS31	None Supplied	0.60 - 0.80	-	Sandy loam with roots
15868	TS32	None Supplied	0.60 - 0.80	-	Sandy loam with roots
15869	TS33	None Supplied	0.50 - 0.70	-	Sandy loam with roots
15870	TS34	None Supplied	0.80 - 1.00	-	Sandy loam with roots
15871	TS35	None Supplied	0.60 - 0.80		Clayey loam with roots
15872	TS36	None Supplied	0.70 - 0.90	-	Clayey loam with roots
15873	TS37	None Supplied	0.40 - 0.60	-	Sandy loam with roots and stones
15874 15875	TS38 TS39	None Supplied	0.70 - 0.90	-	Sandy loam with roots
15875	TS39 TS40	None Supplied	0.80 - 1.00	-	Sandy loam with roots
15876	TS40 TS41	None Supplied	0.80 - 1.00 0.80 - 1.00		Sandy loam with roots Sandy loam with roots
	-	None Supplied	0.80 - 1.00		
15878	TS42	None Supplied	0.50 - 0.70	Brown	Sandy loam with roots





Soil Analysis Certificate - Methodology & Misceallaneous Information
QTS Environmental Report No: 3891
Urban Vision Partnership Ltd
Site Reference: Redish P.S.
Project / Job Ref: UV/000174-04
Order No: ZUV10790
Reporting Date: 01/10/2010

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	AR		Visual screening of samples for fibrous material	E024
Soil	D		Determination of chloride by extraction with water followed by titration using silver nitrate	E021
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	D		Determination of elemental sulphur by solvent extraction followed by turbidimeter	E020
Soil	D	Fluoride - Water Soluble		E023
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	D	Loss on Ignition @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	D		Determination of phosphorus by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	AR	Sulphide	Determination of sulphide by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia, potassium iodide/iodate followed by ICP- OES	E002
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D		Gravimetrically determined through extraction with cyclohexane	E009
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR		Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E009
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E010
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC- MS	E006
Soil	D		Gravimetrically determined through extraction with toluene	E009
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of hydrocarbons C6-C10 by headspace GC-MS	E001
Soil Soil	AR AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004 E004
Soil	AR	TPH LQM	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	EPH (with florisil cleanup)	Determination of acetone/hexane extractable hydrocarbons with florisil cleanup step by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001

<u>Key</u>

D Dried AR As Received



### **CERTIFICATE OF ANALYSIS**

AMS Management (GB) LLP Unit 1 9, Cannon Lane Tonbridge Kent TN9 1PP Tel: 01732 368359 Email: xxxx.xxxxxx@xxxxxxxxxxxxxxxx

Report Number: TN20062v0

Other Ref: UV000174

Report Date: 30/06/2010

Site: Reddish North Primary School, Top Soil Strip

Company: QTS Environmental Ltd Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN

AMS Sample Ref No	Client Sample No	Sample Location	Material Type	Asbestos Type	Content
AMS/PE/87708	S1/12497	Top Soil Strip, Project/Job No UV 000174	Insulation	Amosite	Positive
				Chrysotile	Positive

..... END .....

Key to fibre content: Trace = Trace asbestos identified (1 or 2 fibres present) Positive = Asbestos identified (more than 2 fibres present).

Sampled: Externally Number of samples: 1 Date samples received: 30/06/2006 Name of analyst: Pete Everard Date of analysis: 30/06/2010

Quantitive Fibre Content is not covered by our UKAS accreditiation and is not reported. However guidance on the percentages of asbestos used in various products is available in HSG 264. Material types are visually assessed and are outside the scope of UKAS accreditation. The analysis has been performed using the AMS 'In House' method of transmitted/polarised light microscopy and centre stop dispersion staining, based on the HSG 248. AMS do not accept responsibility for any descrepancy or inaccuracy arising from samples labelled or collected by clients or third parties. This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

For and on behalf of AMS Management (GB) LLP

Pete Everard Lab Manager



## CERTIFICATE OF ANALYSIS

Report Number: TN19881v0

Other Ref: Project/Job No: 3124 Report Date: 18/06/2010

Company: QTS Environmental Ltd Site: Reddish North Primary School Unit 1 Rose Lane Industrial Estate Rose Lane Lenham Heath Kent ME17 2JN AMS Sample Ref No Client Sample No Sample Location Material Type

AMS Sample Ref No	Client Sample No	Sample Location	Material Type	Asbestos Type	Content
AMS/AK/87070	11974	Project/ Job No: 3124	Cement Product	Chrysotile	Positive
AMS/AK/87071	11776	Project/ Job No: 3124	Cement Product	Chrysotile	Positive

..... END .....

Key to fibre content: Trace = Trace asbestos identified (1 or 2 fibres present) Positive = Asbestos identified (more than 2 fibres present).

Sampled: Externally Number of samples: 2 Date samples received: 18/06/2010 Name of analyst: Alan Kane Date of analysis: 18/06/2010

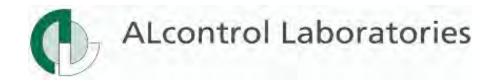
Quantitive Fibre Content is not covered by our UKAS accreditiation and is not reported. However guidance on the percentages of asbestos used in various products is available in HSG 264. Material types are visually assessed and are outside the scope of UKAS accreditation. The analysis has been performed using the AMS 'In House' method of transmitted/polarised light microscopy and centre stop dispersion staining, based on the HSG 248. AMS do not accept responsibility for any descrepancy or inaccuracy arising from samples labelled or collected by clients or third parties. This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

For and on behalf of AMS Management (GB) LLP

Pete Everard Lab Manager



AMS Management (GB) LLP Unit 1 9, Cannon Lane Tonbridge Kent TN9 1PP Tel: 01732 368359 Email: xxxx.xxxxxx@xxxxxxxxxxxxxxxx



Project No.	22191031/001	ALcontrol Laboratories
Job No.	11-21357	The Laboratory
Location	Reddish Primary School	Lakeview Drive
Customer	URBAN	Sherwood
Contact	Jonathan Evans	Nottingham NG15 0ED
Date sampled	40576	t: +44 (0)1623 886 800
Date of receipt	10/03/2011	
Date of analysis	10/03/2011 to 17/03/2011	

Lab Reference	Sample Location	Sample Description	Asbestos Identification	Comments	
231018	SS39 0.3	Soil	No Asbestos Detected	None	
231019	SS40 0.4	Soil	No Asbestos Detected	None	
231020	SS41 0.35	Soil	No Asbestos Detected	None	
231021	SS42 0.3	Soil	No Asbestos Detected	None	
231022	SS43 0.3	Soil	No Asbestos Detected	None	
231023	SS44 0.3	Soil	Chrysotile	Free Fibre	
231024	SS45 0.35	Soil	No Asbestos Detected	None	
231025	SS46 0.3	Soil	No Asbestos Detected	None	

Authorised by Signature

Paul Gribble

Position Date of issue Technical Development Manager 17 March 2011

Analyst Signature

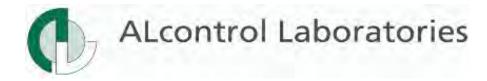
Adam Taylor



Registered Office: ALcontrol Laboratories Units 7 & 8 Hawarden Business Park Off Manor Lane Hawarden CH5 3US Registered Number: 4057291

### The above samples were submitted by the client.

Analysis is in accordance with in-house technical procedures - AID, based upon HSE guidance note HSG 248 "Asbestos: The Analysts' Guide For Sampling, Analysis and Clearance Procedures". The information above has been supplied by the customer. ALcontrol are not responsible for sampling errors. Sample/material descriptions, opinions, comments and interpretation expressed herein are outside the scope of UKAS accreditation. Information supplied by e-mail may be subject to error during transfer.



## Certificate of Asbestos in Soil Quantification & Identification

Project No.	22191031/001				Alcontrol Laboratories
Job No.	11-21357				The Laboratory
Location	Reddish Primary School				Lakeview Drive
Customer	URBAN				Sherwood
Contact	Jonathan Evans				Nottingham NG15 0ED
Date sampled	40576				t: +44 (0)1623 886 800
Date of receipt	10/03/2011				
Date of analysis	10/03/2011 to 17/03/2011				
Lab Reference	Sample Location	Description	Asbestos Identification	Containing Material	Quantification (%)
231023	SS44 0.3	Soil	Chrysotile	Free Fibre	< 0.01

Authorised by Signature

Paul Gribble

Position Date of issue **Technical Development Manager** 17 March 2011

### The above samples were submitted by the client.

Analysis is in accordance with in-house Asbestos Technical Procedures - BULK ID, based upon HSE guidance note HSG 248 "Asbestos: The Analysis' Guide For Sampling, Analysis and Clearance Procedures", and quantification of Asbestos in Soil (QAS). The information above is supplied by the customer. ALcontrol is not responsible for sampling errors where the sample is taken by others. If taken by a third party, ALcontrol cannot be held responsible for any incorrect information submitted. Opinions and interpretations expressed herein, such as the material type, amount of asbestos fibre, and type of non-asbestos fibre, are outside the scope of UKAS accreditation. The amount of asbestos (w/w) within the sample is determined by in-house Asbestos Technical procedure QAS. Samples with an asbestos content of above 0.1% are classified as Hazardous Waste in England & Wales, & Special Waste in Scotland. Limits of detection & accuracy depends on initial sample mass. The minimum mass that can be practically weighed is 0.001g & the optimum mass of 500g gives a limit of detection of (0.001/500)x100 = 0.0002%. To give confidence in the results, a minimum mass of 100g is used (giving a limit of detection of 0.01%). Around the reporting level of 0.1% the uncertainty of measurement equals 0.012%. Inform

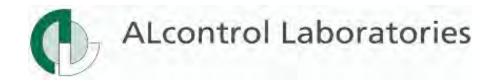
Analyst Signature

Adam Tavlor





Registered Office: ALcontrol Laboratories Units 7 & 8 Hawarden Business Park Off Manor Lane Hawarden CH5 3US Registered Number: 4057291



Project No.	12199908/001	ALcontrol Laboratories
Job No.	10-19347	The Laboratory
Location	Reddish Primary School	Lakeview Drive
Customer	URBAN	Sherwood
Contact	Catherine O'Donnell	Nottingham NG15 0ED
Date sampled	30/11/2010	t: +44 (0)1623 886 800
Date of receipt	01 December 2010	
Date of analysis	02/12/2010 to 15/12/2010	

Lab Reference	Sample Location	Sample Description	Asbestos Identification	Comments
211795	SS01 0.15	Soil	No Asbestos Detected	None
211796	SS02 0.2	Soil	No Asbestos Detected	None
211797	SS05 0.25	Soil	No Asbestos Detected	None
211798	SS06 0.25	Soil	Chrysotile	Insulation
211799	SS11 0.15	Soil	Chrysotile	Insulation
211800	SS12 0.1	Soil	Amosite & Chrysotile	Insulating Board
211801	SS16 0.25	Soil	No Asbestos Detected	None
211802	SS17 0.2	Soil	No Asbestos Detected	None
211803	SS18 0.2	Soil	No Asbestos Detected	None
211804	SS19 0.25	Soil	No Asbestos Detected	None
Authorised by	Andrew Clissold		Analyst Nina Harriman	

Signature

Position Date of issue Sample Preparation Manager 15 December 2010

Signature

Registered Office: ALcontrol Laboratories

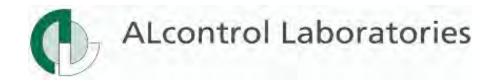
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Units 7 & 8 Hawarden Business Park Off Manor Lane Hawarden CH5 3US Registered Number:

### The above samples were submitted by the client.

Analysis is in accordance with in-house technical procedures - AID, based upon HSE guidance note HSG 248 "Asbestos: The Analysis' Guide For Sampling, Analysis and Clearance Procedures". The information above has been supplied by the customer. ALcontrol are not responsible for sampling errors. Sample/material descriptions, opinions, comments and interpretation expressed herein are outside the scope of UKAS accreditation. Information supplied by e-mail may be subject to error during transfer.



Project No.	12199908/001	ALcontrol Laboratories
Job No.	10-19347	The Laboratory
Location	Reddish Primary School	Lakeview Drive
Customer	URBAN	Sherwood
Contact	Catherine O'Donnell	Nottingham NG15 0ED
Date sampled	30/11/2010	t: +44 (0)1623 886 800
Date of receipt	01 December 2010	
Date of analysis	02/12/2010 to 15/12/2010	

Lab Reference	Sample Location	Sample Description	Asbestos Identification	Comments
211805	SS20 0.45	Soil	Chrysotile	Free Fibre & Insulation
211806	SS21 0.45	Soil	No Asbestos Detected	None

Authorised by Signature

Andrew Clissold

Position Date of issue Sample Preparation Manager 15 December 2010 Analyst Signature Nina Harriman

Registered Office: ALcontrol Laboratories

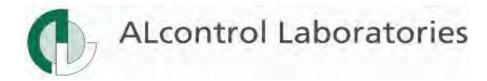
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Units 7 & 8 Hawarden Business Park Off Manor Lane Hawarden CH5 3US *Registered Number:* 

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## Certificate of Asbestos in Soil Quantification & Identification

Project No.	12199908/001	Alcontrol Laboratories
Job No.	10-19347	The Laboratory
Location	Reddish Primary School	Lakeview Drive
Customer	URBAN	Sherwood
Contact	Catherine O'Donnell	Nottingham NG15 0ED
Date sampled	30/11/2010	t: +44 (0)1623 886 800
Date of receipt	01 December 2010	
Date of analysis	02/12/2010 to 15/12/2010	

Lab Reference	Sample Location	Description	Asbestos Identification	Containing Material	Quantification (%)	
211798	SS06 0.25	Soil	Chrysotile	Insulation	< 0.01	
211799	SS11 0.15	Soil	Chrysotile	Insulation	< 0.01	
211800	SS12 0.1	Soil	Amosite & Chrysotile	Insulating Board	0.04	
211805	SS20 0.45	Soil	Chrysotile	Free Fibre & Insulation	< 0.01	

Authorised by Signature

Andrew Clissold

Position Date of issue Sample Preparation Manager 15 December 2010

Analyst Signature

Adam Tavlor

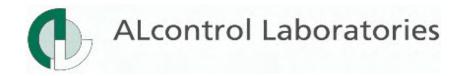
Registered Office: ALcontrol Laboratories



Units 7 & 8 Hawarden Business Park Off Manor Lane Hawarden CH5 3US

The above samples were submitted by the client.

Analysis is in accordance with in-house Asbestos Technical Procedures - BULK ID, based upon HSE guidance note HSG 248 "Asbestos: The Analysis' Guide For Sampling, Analysis and Clearance Procedures", and quantification of Asbestos in Soil (QAS). The information above is supplied by the customer. ALcontrol is not responsible for sampling errors where the sample is taken by others. If taken by a third party, ALcontrol cannot be held responsible for any incorrect information submitted. Opinions and interpretations expressed herein, such as the material type, amount of asbestos fibre, and type of non-asbestos fibre, are outside the scope of UKAS accreditation. The amount of asbestos (w/w) within the sample is determined by in-house Asbestos Technical procedure QAS. Samples with an asbestos content of above 0.1% are classified as Hazardous Waste in England & Wales, & Special Waste in Scotland. Limits of detection & accuracy depends on initial sample mass. The minimum mass that can be practically weighed is 0.001g & the optimum mass of 500g gives a limit of detection of (0.001/500)x100 = 0.0002%. To give confidence in the results, a minimum mass of 100g is used (giving a limit of detection of 0.01%). Around the reporting level of 0.1% the uncertainty of measurement equals 0.012%. Inform



Project No. Job No. Location Customer Contact Date sampled Date of receipt Date of analysis	12199853/001 10-18834 Reddish Primary School, Red URBAN Catherine O'Donnell 40432 10/11/2010 10/11/2010 to 19/11/2010	ddish, Stockport			ALcontrol Laboratories The Laboratory Lakeview Drive Sherwood Nottingham NG15 0ED t: +44 (0)1623 886 800
Lab Reference	Sample Location	Sample Description	Asbestos Identification	Comments	
206036	SS31 0-0.1	Soil	No Asbestos Detected	None	
206037	SS32 0-0.1	Soil	No Asbestos Detected	None	
206038	SS33 0-0.1	Soil	No Asbestos Detected	None	
206039	SS34 0-0.1	Soil	No Asbestos Detected	None	
206040	SS35 0-0.1	Soil	No Asbestos Detected	None	
206041	SS36 0-0.1	Soil	No Asbestos Detected	None	
206042	SS37 0-0.1	Soil	No Asbestos Detected	None	
206043	SS38 0-0.1	Soil	No Asbestos Detected	None	

Authorised by Signature

Andrew Clissold

Position Date of issue Sample Preparation Manager 22 November 2010

Analyst Signature Adam Taylor

Registered Office: ALcontrol Laboratories Units 7 & 8 Hawarden Business Park Off Manor Lane Hawarden CH5 3US Registered Number: 4057291

0206

#### The above samples were submitted by the client.

Analysis is in accordance with in-house technical procedures - AID, based upon HSE guidance note HSG 248 "Asbestos: The Analysts' Guide For Sampling, Analysis and Clearance Procedures". The information above has been supplied by the customer. ALcontrol are not responsible for sampling errors. Sample/material descriptions, opinions, comments and interpretation expressed herein are outside the scope of UKAS accreditation. Information supplied by e-mail may be subject to error during transfer.

Project No.	12199785/001
Job No.	10-18027
Location	Redish Primary School
Customer	Urban Vision
Contact	Catherine O'Donnell
Date sampled	13/10/2010
Date of receipt	14/10/2010
Date of analysis	20/10/2010



WSP The Laboratory Lakeview Drive Sherwood Nottingham NG15 0ED

t: +44 (0)1623 886 800

Lab Reference	Sample Location	Sample Description	Asbestos Identification	Comments
198443	SS03 0-0.25	Soil	No Asbestos Detected	None
198444	SS04 0-0.2	Soil	No Asbestos Detected	None
198445	SS07 0-0.25	Soil	No Asbestos Detected	None
198446	SS08 0-0.25	Soil	No Asbestos Detected	None
198447	SS09 0-0.3	Soil	No Asbestos Detected	None
198448	SS10 0-0.3	Soil	No Asbestos Detected	None
198449	SS13 0-0.3	Soil	Chrysotile	Paper backing to Floor Covering
198450	SS14 0-0.3	Soil	No Asbestos Detected	None
198451	SS15 0-0.3	Soil	No Asbestos Detected	None
198452	SS22 0-0.15	Soil	No Asbestos Detected	None

Authorised by

Joanne O'Sullivan

Signature

Kame OSIL

Position Date of issue Analysis Manager 21 October 2010 Analyst

Signature

Adam Taylor



Page 1 of 3

WSP Environmental Risk Management Services Division

Registered Office: WSP House 70 Chancery Lane London WC2A 1AF

Registered Number 1152332 England

The above samples were submitted by the client.

Analysis is in accordance with in-house technical procedures - AID, based upon HSE guidance note HSG 248 "Asbestos: The Analysts' Guide For Sampling, Analysis and Clearance Procedures". Sampling by WSP RMS is in accordance with in - house technical procedures - SSA. Where the sample was not taken by WSP RMS, the information above is that which is supplied by the client. WSP are not responsible for sampling errors where the sample is taken by others. Sample/material descriptions, opinions, comments and interpretation expressed herein are outside the scope of UKAS accreditation. Information supplied by e-mail may be subject to error during transfer.

Project No.	12199785/001
Job No.	10-18027
Location	Redish Primary Schoo
Customer	Urban Vision
Contact	Catherine O'Donnell
Date sampled	13/10/2010
Date of receipt	14/10/2010
Date of analysis	20/10/2010

Lab Reference	Sample Location	Sample Description	Asbestos Identification	Comments	
198453	SS23 0-0.3	Soil	No Asbestos Detected	None	
198454	SS24 0-0.3	Soil	No Asbestos Detected	None	
198455	SS25 0-0.1	Soil	No Asbestos Detected	None	
198456	SS26 0-0.15	Soil	No Asbestos Detected	None	
198457	SS27 0-0.45	Soil	No Asbestos Detected	None	
198458	SS28 0-0.2	Soil	No Asbestos Detected	None	
198459	SS29 0-0.1	Soil	No Asbestos Detected	None	
198460	SS30 0-0.15	Soil	No Asbestos Detected	None	

Authorised by Signature

Joanne O'Sullivan

Came Osle

Position Date of issue

Analysis Manager 21 October 2010

Analyst

Adam Taylor

Signature





**WSP Environmental Risk Management Services** Division

**Registered Office:** WSP House 70 Chancery Lane London WC2A 1AF

**Registered Number** 1152332 England Page 2 of 3

The above samples were submitted by the client.

Analysis is in accordance with in-house technical procedures - AID, based upon HSE guidance note HSG 248 "Asbestos: The Analysis' Guide For Sampling, Analysis and Clearance Procedures". Sampling by WSP RMS is in accordance with in - house technical procedures - SSA. Where the sample was not taken by WSP RMS, the information above is that which is supplied by the client. WSP are not responsible for sampling errors where the sample is taken by others. Sample/material descriptions, opinions, comments and interpretation expressed herein are outside the scope of UKAS accreditation. Information supplied by e-mail may be subject to error during transfer.





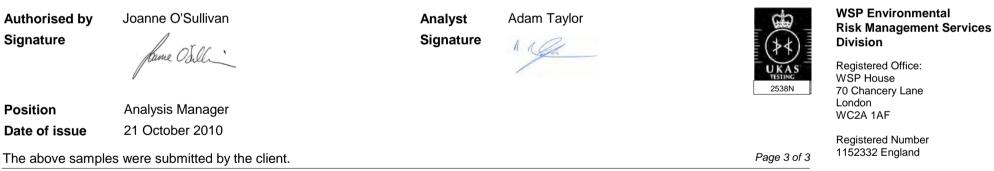
WSP The Laboratory Lakeview Drive Sherwood Nottingham NG15 0ED

t: +44 (0)1623 886 800

# **Certificate of Asbestos in Soil Quantification & Identification**

Project No.	12199785/001
Job No.	10-18027
Location	Redish Primary School
Customer	Urban Vision
Contact	Catherine O'Donnell
Date sampled	13/10/2010
Date of receipt	14/10/2010
Date of analysis	20/10/2010

Lab Ref	Sample Location	Sample Description	Asbestos Id	Asbestos containing material	Quantification
198449	SS13 0-0.3	Soil	Chrysotile	Paper backing to Floor Covering	0.04%



Analysis is in accordance with in-house Asbestos Technical Procedures - BULK ID, based upon HSE guidance note HSG 248 "Asbestos: The Analysts' Guide For Sampling, Analysis and Clearance Procedures", and quantification of Asbestos in Soil (QAS). Sampling by WSP RMS is in accordance with Asbestos Technical Procedures - Bulk Sampling. Where the sample was not taken by WSP RMS, the information above is that which is supplied by the client. WSP is not responsible for sampling errors where the sample is taken by others. If taken by a third party, WSP RMS cannot be held responsible for any incorrect information submitted. Opinions and interpretations expressed herein, such as the material type, amount of asbestos fibre, and type of non-asbestos fibre, are outside the scope of UKAS accreditation. The amount of asbestos (w/w) within the sample is determined by in-house Asbestos Technical procedure QAS. Samples with an asbestos content of above 0.1% are classified as special waste.

Limits of detection & accuracy depends on initial sample mass. The minimum mass that can be practically weighed is 0.001g & the optimum mass of 500g gives a limit of detection of (0.001/500)x100 = 0.0002%. To give confidence in the results, a minimum mass of 100g is used (giving a limit of detection of 0.01%). Around the reporting level of 0.1% the uncertainty of measurement equals 0.012%.

Information supplied by e-mail may be subject to error during transfer.

WSP Group plc Offices throughout the UK and worldwide



WSP The Laboratory Lakeview Drive Sherwood Nottingham NG15 0ED

t: +44 (0)1623 886 800

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## Appendix C Imported Soils Laboratory Analysis

- C.1 Laboratory Analysis
- C.2 Statistical Analysis



Jonathan Evans Urban Vision Partnership Ltd Environment - 3rd Floor Emerson House Albert Street Eccles Manchester M30 0TE



 QTS Environmental Ltd

 Unit 1

 Rose Lane Industrial Estate

 Rose Lane

 Lenham Heath

 Kent

 ME17 2JN

 t: 01622 851105

 russell.jarvis@gtsenvironmental.com

### **QTS Environmental Report No: 6641**

Site Reference: Reddish North Primary School

Project / Job Ref: UV/000174-04

Order No: ZUVI 0929

Sample Receipt Date: 20/07/2011

Sample Scheduled Date: 20/07/2011

**Report Issue Number: 1** 

Reporting Date: 22/07/2011

Authorised by:

Russell Jarvis Director **On behalf of QTS Environmental Ltd**  Authorised by:

Kevin Old Director **On behalf of QTS Environmental Ltd** 





1		Date Sampled	19/07/11	19/07/11	19/07/11	19/07/11	19/07/11		
		Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied		
nary School		TP / BH No	SV4	SV4	SV5	SV6	SVE		
		Additional Refs	C1	C2	C1	C1	C2		
		Depth (m)	0.05	0.20	0.20	0.10	0.20		
	Q	TSE Sample No	29426	29427	29428	29429	29430		
%	< 0.1		<0.1	<0.1	<0.1	<0.1	<0.1		
Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negative		
General Inorganics Unit MDL Accreditation									
	= =			T					
	+ / - 0.1		6.8	7.0	7.3	7.8	7.0		
mg/kg	<2	-	<2	<2	<2	<2	<		
5 5							<		
	-		-	.0	-	-	<		
mg/kg							512		
mg/kg	-		-	-	-	-	</td		
					-		242		
70	-			-			4.3		
							0.025		
mg/kg	<2	NONE	<2	<2	<2	<2	<2		
11	MDI	A							
	MDL		-2	-2	-2	-2			
nig/kg	<۷		۲۷	۲۷	۲2	<2	<		
mg/kg	<1	NONE	<1	<1	<1	<1	· · · · · · · · · · · · · · · · · · ·		
	nary School Unit % Positive / Negative Unit pH Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg % Value mg/kg % Unit mg/kg	Mary School         Q           Unit         MDL           %         <0.1	Time Sampled       nary School     TP / BH No       Additional Refs     Depth (m)       QTSE Sample No     QTSE Sample No       Unit     MDL     Accreditation       %     <0.1	Time Sampled         None Supplied           nary School         TP / BH No         SV4           Additional Refs         C1           Depth (m)         0.05           QTSE Sample No         29426           Unit         MDL         Accreditation           %         <0.1	Time Sampled         None Supplied         None Supplied           nary School         TP / BH No         SV4         SV4           Additional Refs         C1         C2           Depth (m)         0.05         0.20           QTSE Sample No         29426         29427           Unit         MDL         Accreditation            %         <0.1	Time Sampled         None Supplied         None Supplied         None Supplied           nary School         TP / BH No         SV4         SV4         SV5           Additional Refs         C1         C2         C1           Depth (m)         0.05         0.20         0.20           QTSE Sample No         29426         29427         29428           Unit         MDL         Accreditation	Time Sampled         None Supplied         None Supplied         None Supplied         None Supplied         None Supplied           nary School         TP / BH No         SV4         SV4         SV5         SV6           Additional Refs         C1         C2         C1         C1           Depth (m)         0.05         0.20         0.20         0.10           QTSE Sample No         29426         29427         29428         29429           Unit         MDL         Accreditation		

W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	<0.5	MCERTS	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	11	6	5	8	6
Copper (Cu)	mg/kg	<4	MCERTS	<4	11	9	<4	13
Lead (Pb)	mg/kg	<3	MCERTS	7	24	16	5	23
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	7	6	5	7	6
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	18	37	24	17	33

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^{\circ}$ C Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate										
QTS Environmental Report No: 664	<b>1</b> 1		Date Sampled	19/07/11	19/07/11	19/07/11	19/07/11	19/07/11		
Urban Vision Partnership Ltd			Time Sampled	None Supplied						
Site Reference: Reddish North Prin	nary School		TP / BH No	SV7	SV8	SV9	SV10	SV10		
Project / Job Ref: UV/000174-04			Additional Refs	C1	C1	C1	C1	C2		
Order No: ZUVI 0929			Depth (m)	0.20	0.10	0.20	0.05	0.20		
Reporting Date: 22/07/2011		Q	TSE Sample No	29431	29432	29433	29434	29435		
Determinand	Unit			T						
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	<0.1	<0.1		
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negative		
General Inorganics	Unit	MDL								
pH	pH Units		MCERTS	7.3	7.8	7.8	7.8	7.3		
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2		
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2		
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3		
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	525	<200	468	246	392		
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5		
Total Sulphur	mg/kg	<200	NONE	<200	<200	244	<200	212		
Organic Matter	%	<0.1	NONE	1.8	1.6	2.2	0.3	2.1		
Fraction Organic Carbon (FOC)	Value		NONE	0.011	0.009	0.013	0.001	0.012		
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2		
Metals	Unit		Accreditation	-		-				
Arsenic (As)	mg/kg	<2	MCERTS	<2	<2	<2	<2	<2		
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1		

	iiig/ kg			ļ	-	ļ	,	
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	5	9	4	9	6
Copper (Cu)	mg/kg	<4	MCERTS	7	<4	7	<4	10
Lead (Pb)	mg/kg	<3	MCERTS	12	6	12	6	20
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	1.5
Nickel (Ni)	mg/kg	<3	MCERTS	4	7	4	7	5
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	21	17	22	18	28

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate											
QTS Environmental Report No: 664	11		Date Sampled	19/07/11	19/07/11	19/07/11	19/07/11	19/07/11			
Urban Vision Partnership Ltd			Time Sampled	None Supplied							
Site Reference: Reddish North Prin	nary School		TP / BH No	SV11	SV11	SV12	SV12	SV13			
Project / Job Ref: UV/000174-04			Additional Refs	C1	C2	C1	C2	C1			
Order No: ZUVI 0929			Depth (m)	0.05	0.20	0.05	0.20	0.20			
Reporting Date: 22/07/2011		Q	TSE Sample No	29436	29437	29438	29439	29440			
Determinand	Unit	MDL	Accreditation								
Stone Content	%	< 0.1	NONE	<0.1	<0.1	< 0.1	<0.1	<0.1			
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negative			
General Inorganics	Unit	MDL	Accreditation								
pH	pH Units	+ / - 0.1	MCERTS	7.7	7.3	7.2	7.4	7.4			
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2			
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2			
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3			
Total Sulphate as SO₄	mg/kg	<200	NONE	<200	552	<200	569	431			
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5			
Total Sulphur	mg/kg	<200	NONE	<200	261	<200	208	222			
Organic Matter	%	< 0.1	NONE	1.1	3.3	1.3	0.3	1.5			
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.006	0.019	0.007	0.002	0.009			
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2			
	-	-									
Metals	Unit	MDL									
Arsenic (As)	mg/kg	<2	MCERTS	<2	<2	<2	<2	<2			
W//C Deven	ma///a	- 1		. 4	. 4	. 1	. 4	. 4			

Metals		PIDE	Accieutation					
Arsenic (As)	mg/kg	<2	MCERTS	<2	<2	<2	<2	<2
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	9	6	9	6	5
Copper (Cu)	mg/kg	<4	MCERTS	4	11	4	10	10
Lead (Pb)	mg/kg	<3	MCERTS	6	22	7	17	15
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	7	6	7	5	5
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	19	33	18	35	25

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate										
QTS Environmental Report No: 664	1		Date Sampled	19/07/11	19/07/11	19/07/11	19/07/11	19/07/11		
Urban Vision Partnership Ltd			Time Sampled	None Supplied						
Site Reference: Reddish North Prin	nary School		TP / BH No	SV14	SV14	SV16	SV18	SV19		
Project / Job Ref: UV/000174-04		1	Additional Refs	C1	C2	C1	C1	C1		
Order No: ZUVI 0929			Depth (m)	0.05	0.20	0.10	0.40	0.40		
Reporting Date: 22/07/2011		Q	TSE Sample No	29441	29442	29443	29444	29445		
Determinand	Unit	MDL	Accreditation							
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	<0.1	<0.1		
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negative		
General Inorganics	Unit	MDL	Accreditation							
pH	pH Units	+ / - 0.1	MCERTS	7.6	7.2	7.1	7.0	7.1		
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2		
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2		
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3		
Total Sulphate as SO₄	mg/kg	<200	NONE	<200	437	558	588	656		
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5		
Total Sulphur	mg/kg	<200	NONE	<200	223	235	250	224		
Organic Matter	%	< 0.1	NONE	1.1	2.4	3.1	3.5	2		
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.006	0.014	0.018	0.021	0.012		
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2		
Metals	Unit	MDL	Accreditation	-	-	- 1	-			
Arsenic (As)	mg/kg	<2	MCERTS	<2	<2	2	2	<2		

Metals	Unic	PIDL	ACCIEUILALIOII					
Arsenic (As)	mg/kg	<2	MCERTS	<2	<2	2	2	<2
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	9	5	7	7	6
Copper (Cu)	mg/kg	<4	MCERTS	<4	10	19	13	11
Lead (Pb)	mg/kg	<3	MCERTS	4	25	28	42	486
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	6	5	6	6	6
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	18	31	36	39	34

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^{\circ}$ C Analysis carried out on the dried sample is corrected for the stone content





Soil Analysis Certificate	- Speciated PAHs									
QTS Environmental Repo	rt No: 6641		Date Sampled	19/07/11	19/07/11	19/07/11	19/07/11	19/07/11		
<b>Urban Vision Partnership</b>	Ltd		Time Sampled	None Supplied						
Site Reference: Reddish N	North Primary		TP / BH No	SV4	SV4	SV5	SV6	SV6		
School										
Project / Job Ref: UV/000	0174-04	A	dditional Refs	C1	C2	C1	C1	C2		
Order No: ZUVI 0929			Depth (m)	0.05	0.20	0.20	0.10	0.20		
Reporting Date: 22/07/2	011	Q	SE Sample No	29426	29427	29428	29429	29430		
Determinand	Unit		Accreditation							
Naphthalene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Fluorene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Phenanthrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	0.20	<0.1	<0.1	<0.1		
Pyrene	mg/kg	< 0.1	MCERTS	<0.1	0.17	<0.1	<0.1	<0.1		
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Chrysene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	0.17	<0.1	<0.1	<0.1		
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Benzo(ghi)perylene	mg/kg	<0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	<1.6	<1.6	<1.6	<1.6	<1.6		

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C





Soil Analysis Certificate	- Speciated PAHs									
QTS Environmental Repor	t No: 6641		Date Sampled	19/07/11	19/07/11	19/07/11	19/07/11	19/07/11		
Urban Vision Partnership	Ltd		Time Sampled	None Supplied						
Site Reference: Reddish N	lorth Primary		TP / BH No	SV7	SV8	SV9	SV10	SV10		
School										
Project / Job Ref: UV/000	0174-04	A	dditional Refs	C1	C1	C1	C1	C2		
Order No: ZUVI 0929			Depth (m)	0.20	0.10	0.20	0.05	0.20		
Reporting Date: 22/07/2	011	Q	SE Sample No	29431	29432	29433	29434	29435		
Determinand	Unit		Accreditation	1.0.	.0.1	.0.1	.0.1	.0.		
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	<0.		
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.		
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.		
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	<0.1		
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.14		
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	<0.1		
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.4		
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	<0.1	< 0.1	0.3		
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.1		
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.1		
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	0.1		
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	<0.1		
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	<0.1		
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	<0.		
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0. <0.		
Benzo(ghi)perylene	mg/kg	<0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.		
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	<1.6	<1.6	<1.6	<1.6	<1.0		

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^\circ$ C





Soil Analysis Certificate	- Speciated PAHs								
QTS Environmental Report	t No: 6641		Date Sampled	19/07/11	19/07/11	19/07/11	19/07/11	19/07/11	
Urban Vision Partnership	Ltd		Time Sampled	None Supplied					
Site Reference: Reddish N	lorth Primary		TP / BH No	SV11	SV11	SV12	SV12	SV13	
School	-								
Project / Job Ref: UV/000	)174-04	A	dditional Refs	C1	C2	C1	C2	C	
Order No: ZUVI 0929			Depth (m)	0.05	0.20	0.05	0.20	0.20	
Reporting Date: 22/07/2	011	SE Sample No	29436	29437	29438	29439	2944		
Determinand Unit MDL Accreditation									
Determinand Naphthalene	Unit	<0.1	ACCREDITATION MCERTS	-0.1	-0.1	-0.1	-0.1	<0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.	
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.	
Fluorene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<u>&lt;0.</u> <0.	
Phenanthrene	mg/kg mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.	
Anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<u>&lt;0.</u> <0.	
Fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	0.14	<0.1	<0.1	0.1	
Priorantierie Pyrene	mg/kg	< 0.1	MCERTS	<0.1	0.14	<0.1	<0.1	0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.14	<0.1	<0.1	<0.1	
Chrvsene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	<0.1	< 0.1	< 0.1	<0.1	<0.	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	< 0.1	<0.1	<0.	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	< 0.1	<0.1	<0.	
Benzo(ghi)perylene	mg/kg	<0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.	
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	<1.6	<1.6	<1.6	<1.6	<1.	

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^{\circ}$ C





Soil Analysis Certificate	- Speciated PAHs									
QTS Environmental Report	t No: 6641		Date Sampled	19/07/11	19/07/11	19/07/11	19/07/11	19/07/11		
Urban Vision Partnership I	Ltd		Time Sampled	None Supplied						
Site Reference: Reddish N	orth Primary		TP / BH No	SV14	SV14	SV16	SV18	SV19		
School										
Project / Job Ref: UV/000	174-04	A	dditional Refs	C1	C2	C1	C1	C1		
Order No: ZUVI 0929			Depth (m)	0.05	0.20	0.10	0.40	0.40		
Reporting Date: 22/07/20	teporting Date: 22/07/2011 QTSE Sample				29442	29443	29444	29445		
Determinand	Unit		Accreditation							
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	<0.1		
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Fluorene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Phenanthrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	0.15	<0.1	0.22	0.24		
Pyrene	mg/kg	< 0.1	MCERTS	<0.1	0.14	<0.1	0.21	0.21		
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Chrysene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	0.11	0.12		
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	0.12	0.13		
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	<0.1		
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	<0.1		
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	<0.1	<0.1		
Dibenz(a,h)anthracene	mg/kg	<0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Benzo(ghi)perylene	mg/kg	<0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1		
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	<1.6	<1.6	<1.6	<1.6	<1.6		

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C





Soil Analysis Certificate - Sample Descriptions						
QTS Environmental Report No: 6641						
Urban Vision Partnership Ltd						
Site Reference: Reddish North Primary School						
Project / Job Ref: UV/000174-04						
Order No: ZUVI 0929						
Reporting Date: 22/07/2011						

QTSE Sample No	TP / BH No	Additional Refs	Depth (m)	Content (%)	Sample Matrix Description
29426	SV4	C1	0.05		Red
29427	SV4	C2	0.20	14.7	Brown with brick
29428	SV5	C1	0.20	14.9	Brown sandy loam
29429	SV6	C1	0.10	12.2	Red sandy loam
29430	SV6	C2	0.20	15.8	Brown sandy loam with brick
29431	SV7	C1	0.20	13.1	Brown sandy loam with brick
29432	SV8	C1	0.10	11.6	Red sandy loam
29433	SV9	C1	0.20	12.7	Brown sandy loam with brick
29434	SV10	C1	0.05		Red sandy loam
29435	SV10	C2	0.20	13.3	Brown sandy loam
29436	SV11	C1	0.05		Red sandy loam
29437	SV11	C2	0.20		Brown sandy loam
29438	SV12	C1	0.05		Red clayey sand
29439	SV12	C2	0.20		Brown clayey sand
29440	SV13	C1	0.20		Brown sandy loam
29441	SV14	C1	0.05		Red sandy loam
29442	SV14	C2	0.20		Brown sandy loam
29443	SV16	C1	0.10		Brown clayey sand
29444	SV18	C1	0.40		Brown sandy loam
29445	SV19	C1	0.40	10.6	Brown sandy loam





Soil Analysis Certificate - Methodology & Misceallaneous Information
QTS Environmental Report No: 6641
Urban Vision Partnership Ltd
Site Reference: Reddish North Primary School
Project / Job Ref: UV/000174-04
Order No: ZUVI 0929
Reporting Date: 22/07/2011

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	D		Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	AR		Visual screening of samples for fibrous material	E024
Soil	D		Determination of chloride by extraction with water followed by titration using silver nitrate	E021
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil Soil	AR AR		Determination of complex cyanide by distillation followed by colorimetry Determination of free cyanide by distillation followed by colorimetry	E015 E015
			Determination of electrical conductivity by addition of saturated calcium sulphate followed by	
Soil	AR	Electrical Conductivity	electrometric measurement	E022
Soil	D		Determination of elemental sulphur by solvent extraction followed by turbidimeter	E020
Soil	D	Fluoride - Water Soluble	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration	E023
Soil	D	FOC (Fraction Organic Carbon)	with iron (II) sulphate	E011
Soil	D	Loss on Ignition @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR		Determination of pH by addition of water followed by electrometric measurement	E007
Soil	D		Determination of phosphorus by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	AR	Sulphide	Determination of sulphide by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia, potassium iodide/iodate followed by ICP- OES	E002
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D		Gravimetrically determined through extraction with cyclohexane	E009
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR		Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E009
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E010
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	D		Gravimetrically determined through extraction with toluene	E009
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of hydrocarbons C6-C10 by headspace GC-MS	E001
Soil Soil	AR AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004 E004
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR		Determination of acetone/hexane extractable hydrocarbons with florisil cleanup step by GC-FID	E004
Soil	AR	EDH Droduct ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
3011	AR		Determination of volatile organic compounds by headspace GC-MS	E004

<u>Key</u>

D Dried AR As Received



Jonathan Evans Urban Vision Partnership Ltd Environment - 3rd Floor Emerson House Albert Street Eccles Manchester M30 0TE



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### **QTS Environmental Report No: 6493**

Site Reference: Reddish North Primary School

Project / Job Ref: UV/00174-04

Order No: ZUVI 0920

Sample Receipt Date: 07/07/2011

Sample Scheduled Date: 07/07/2011

**Report Issue Number: 1** 

Reporting Date: 11/07/2011

Authorised by:

Russell Jarvis Director On behalf of QTS Environmental Ltd Authorised by:

Kevin Old Director **On behalf of QTS Environmental Ltd** 





Soil Analysis Certificate							
QTS Environmental Report No: 649	93		Date Sampled	04/07/11	04/07/11	04/07/11	
Urban Vision Partnership Ltd			Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Reddish North Prin	nary School		TP / BH No	SV1	SV2	SV3	
Project / Job Ref: UV/00174-04			Additional Refs	C1	C2	C2	
Order No: ZUVI 0920			Depth (m)	0.05	0.20	0.20	
Reporting Date: 11/07/2011			TSE Sample No	28695	28696	28697	
Determinand	Unit	MDL	Accreditation				
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	

Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	
General Inorganics	Unit	MDL	Accreditation				
pH	pH Units	+ / - 0.1	MCERTS	7.0	7.4	7.5	
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	
Total Sulphate as SO₄	mg/kg	<200	NONE	247	683	356	
Sulphide	mg/kg	<5	NONE	<5	<5	<5	
Total Sulphur	mg/kg	<200	NONE	<200	242	225	
Organic Matter	%	< 0.1	NONE	1	2.9	3.3	
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.006	0.017	0.019	
Total Phenols (monohydric)	ma/ka	<2	NONE	<2	<2	<2	

Metals	Unit	MDL	Accreditation				
Arsenic (As)	mg/kg	<2	MCERTS	<2	<2	<2	
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	<0.5	<0.5	<0.5	
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	
Chromium (Cr)	mg/kg	<2	MCERTS	8	6	6	
Copper (Cu)	mg/kg	<4	MCERTS	<4	10	10	
Lead (Pb)	mg/kg	<3	MCERTS	4	18	15	
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	
Nickel (Ni)	mg/kg	<3	MCERTS	7	5	5	
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	
Zinc (Zn)	mg/kg	<3	MCERTS	18	32	29	

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^{\circ}$ C Analysis carried out on the dried sample is corrected for the stone content





QTS Environmental Repor	t No: 6493		Date Sampled	04/07/11	04/07/11	04/07/11	
Urban Vision Partnership			Time Sampled	None Supplied	None Supplied	None Supplied	
Site Reference: Reddish N	lorth Primary		TP / BH No	SV1	SV2	SV3	
School							
Project / Job Ref: UV/001	174-04	A	dditional Refs	C1	C2	C2	
Order No: ZUVI 0920			Depth (m)	0.05	0.20	0.20	
Reporting Date: 11/07/2	011	Q	SE Sample No	28695	28696	28697	
Determinand	Unit	MDI	Accreditation				
Naphthalene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	 
Fluorene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	 
Phenanthrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	
Anthracene	mg/kg	<0.1	MCERTS	<0.1	<0.1	<0.1	
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	<0.1	
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	<0.1	
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	<0.1	<0.1	
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	
Benzo(ghi)perylene	mg/kg	<0.1	MCERTS	<0.1	<0.1	<0.1	
		.1.0	MOEDTO	<1.6	<1.6	<1.6	 
Total EPA-16 PAHs Analytical results are expressed on a	mg/kg	<1.6		-	<1.0	<1.0	

Analytical results are expressed on a dry weight basis where samples are dried at less than 30°C





Soil Analysis Certificate - Sample Descriptions	
QTS Environmental Report No: 6493	
Urban Vision Partnership Ltd	
Site Reference: Reddish North Primary School	
Project / Job Ref: UV/00174-04	
Order No: ZUVI 0920	
Reporting Date: 11/07/2011	

QTSE Sample No		Additional Refs			
28695	SV1	C1	0.05	6.9	Red sandy loam
28696	SV2	C2	0.20	10.8	Brown sandy loam
28697	SV3	C2	0.20	10.7	Brown sandy loam





Soil Analysis Certificate - Methodology & Misceallaneous Information
QTS Environmental Report No: 6493
Urban Vision Partnership Ltd
Site Reference: Reddish North Primary School
Project / Job Ref: UV/00174-04
Order No: ZUVI 0920
Reporting Date: 11/07/2011

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	AR		Visual screening of samples for fibrous material	E024
Soil	D		Determination of chloride by extraction with water followed by titration using silver nitrate	E021
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by turbidimeter	E020
Soil	D	Fluoride - Water Soluble	Test Kit	E023
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	D	Loss on Ignition @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	D		Determination of phosphorus by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	AR	Sulphide	Determination of sulphide by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia, potassium iodide/iodate followed by ICP- OES	E002
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E009
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E009
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E010
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	D		Gravimetrically determined through extraction with toluene	E009
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of hydrocarbons C6-C10 by headspace GC-MS	E001
Soil Soil	AR AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004 E004
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-TD fractionating with SPE cartridge Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
		-		
Soil	AR AR	· · · · · · · · · · · · · · · · · · ·	Determination of acetone/hexane extractable hydrocarbons with florisil cleanup step by GC-FID Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004 E004
Soil			Determination of accioncy includic charactable nyarocal D015 Dy GC-11D	LUUT

<u>Key</u>

D Dried AR As Received



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### **QTS Environmental Report No: 4452**

Site Reference: Redish P.S.

Project / Job Ref: UV/000174-04

Order No: ZUVI 0815

Sample Receipt Date: 23/11/10

Sample Scheduled Date: 23/11/10

**Report Issue Number: 1** 

Reporting Date: 29/11/2010

Authorised by:

Russell Jarvis Director On behalf of QTS Environmental Ltd Authorised by:

Kevin Old Director **On behalf of QTS Environmental Ltd** 





Soil Analysis Certificate						
QTS Environmental Report No: 4452	Date Sampled	22/11/10	22/11/10	22/11/10	22/11/10	22/11/10
Urban Vision Partnership Ltd	Time Sampled	None Supplied				
Site Reference: Redish P.S.	TP / BH No	IT03	IT04	IT05	IT06	IT07
Project / Job Ref: UV/000174-04	Additional Refs	C1	C1	C1	C1	C1
Order No: ZUVI 0815	Depth (m)	0.20	0.30	0.30	0.30	0.30
Reporting Date: 29/11/2010	QTSE Sample No	18571	18572	18573	18574	18575

Determinand	Unit	MDL	Accreditation					
Stone Content	%	< 0.1	NONE	<0.1	<0.1	<0.1	<0.1	<0.1
Moisture Content	%	< 0.1	NONE	28.1	28.6	27.9	30.2	30.5
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative	Negative	Negative	Negative

General Inorganics	Unit	MDL	Accreditation					
pH	pH Units	+ / - 0.1	MCERTS	7.2	6.1	6.3	6.2	6.4
Total Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Free Cyanide	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Total Sulphate as SO <sub>4</sub>	mg/kg	<200	NONE	505	505	450	439	432
Sulphide	mg/kg	<5	NONE	<5	<5	<5	<5	<5
Total Sulphur	mg/kg	<200	NONE	483	451	398	436	454
Organic Matter	%	< 0.1	NONE	4.6	4.9	7.2	5.3	9.5
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.026	0.028	0.042	0.031	0.055
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2	<2	<2	<2

Metals	Unit	MDL	Accreditation					
Arsenic (As)	mg/kg	<2	MCERTS	13	13	14	12	13
W/S Boron	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2	<2	<2	<2
Chromium (Cr)	mg/kg	<2	MCERTS	18	19	17	17	21
Copper (Cu)	mg/kg	<4	MCERTS	38	32	28	28	34
Lead (Pb)	mg/kg	<3	MCERTS	184	78	73	72	79
Mercury (Hg)	mg/kg	<1	NONE	<1	<1	<1	<1	<1
Nickel (Ni)	mg/kg	<3	MCERTS	14	13	13	12	13
Selenium (Se)	mg/kg	<3	NONE	<3	<3	<3	<3	<3
Zinc (Zn)	mg/kg	<3	MCERTS	91	82	73	75	80

Analytical results are expressed on a dry weight basis where samples are dried at less than 30 °C Analysis carried out on the dried sample is corrected for the stone content

Screening data for asbestos provided only refers to the health & safety issues associated with the safe handling of samples & is not conclusive as to the presence or otherwise of asbestos in any test sample





Soil Analysis Certificate	e - Speciated PAHs							
QTS Environmental Repo	rt No: 4452		Date Sampled	22/11/10	22/11/10	22/11/10	22/11/10	22/11/10
Urban Vision Partnership	Ltd		Time Sampled	None Supplied				
Site Reference: Redish P.	S.		TP / BH No	IT03	IT04	IT05	IT06	IT07
Project / Job Ref: UV/00	0174-04	1	Additional Refs	C1	C1	C1	C1	C1
Order No: ZUVI 0815			Depth (m)	0.20	0.30	0.30	0.30	0.30
Reporting Date: 29/11/2	010	Q	TSE Sample No	18571	18572	18573	18574	18575
Determinand	Unit	MDL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	< 0.1	<0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	< 0.1	<0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	< 0.1	<0.1
Fluorene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	< 0.1	<0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.31	<0.1	<0.1	0.18	0.14
Anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	< 0.1	<0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	0.47	0.17	0.19	0.20	0.21
Pyrene	mg/kg	< 0.1	MCERTS	0.44	0.14	0.18	0.18	0.18
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.18	<0.1	<0.1	< 0.1	<0.1
Chrysene	mg/kg	< 0.1	MCERTS	0.21	<0.1	<0.1	< 0.1	<0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.13	<0.1	<0.1	< 0.1	<0.1
Benzo(k)fluoranthene		< 0.1	MCERTS	0.15	<0.1	<0.1	< 0.1	<0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.14	<0.1	<0.1	< 0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.21	0.17	<0.1	<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1	<0.1	<0.1	<0.1
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	2.23	<1.6	<1.6	<1.6	<1.6
Analytical results are expressed on	a dry weight basis where sa	mples are	e dried at less than 30	°C				





Soil Analysis Certificate - Sample Descriptions	
QTS Environmental Report No: 4452	
Urban Vision Partnership Ltd	
Site Reference: Redish P.S.	
Project / Job Ref: UV/000174-04	
Order No: ZUVI 0815	
Reporting Date: 29/11/2010	

QTSE Sample No	TP / BH No	Additional Refs	Depth (m)	Sample Matrix Description
18571	IT03	C1	0.20	Brown loamy clay with vegetation
18572	IT04	C1	0.30	Brown loamy clay with vegetation
18573		C1	0.30	Brown loamy clay with vegetation
18574	IT06	C1	0.30	Brown loamy clay with vegetation
18575	IT07	C1	0.30	Brown loamy clay with vegetation





Soil Analysis Certificate - Methodology & Misceallaneous Information
QTS Environmental Report No: 4452
Urban Vision Partnership Ltd
Site Reference: Redish P.S.
Project / Job Ref: UV/000174-04
Order No: ZUVI 0815
Reporting Date: 29/11/2010

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	Chromium - Hexavalent	diphenylcarbazide followed by colorimetry	E016
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	AR		Visual screening of samples for fibrous material	E024
Soil	D		Determination of chloride by extraction with water followed by titration using silver nitrate	E021
Soil	AR		Determination of total cyanide by distillation followed by colorimetry	E015
Soil	AR		Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Electrical Conductivity	electrometric measurement	E022
Soil	D		Determination of elemental sulphur by solvent extraction followed by turbidimeter	E020
Soil	D	Fluoride - Water Soluble		E023
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	D	Loss on Ignition @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	D	Phosphorus	Determination of phosphorus by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	AR	Sulphide	Determination of sulphide by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	E018
Soil	D	Sulphur - Total	UES	E002
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E009
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E009
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E010
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E009
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of hydrocarbons C6-C10 by headspace GC-MS	E001
Soil	AR	EPH TEXAS	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	TPH CWG	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	TPH LQM	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	EPH (with florisil cleanup)	Determination of acetone/hexane extractable hydrocarbons with florisil cleanup step by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of volatile organic compounds by headspace GC-MS	E001

<u>Key</u>

D Dried AR As Received



Catherine O'Donnell Urban Vision Partnership Ltd Environment - 3rd Floor Emerson House Albert Street Eccles Manchester M30 0TE



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### **QTS Environmental Report No: 4332**

Site Reference: Redish P.S.

Project / Job Ref: UV/00174-04

Order No: ZUV10811

Sample Receipt Date: 11/11/10

Sample Scheduled Date: 11/11/10

**Report Issue Number: 1** 

Reporting Date: 17/11/2010

Authorised by:

Russell Jarvis Director On behalf of QTS Environmental Ltd Authorised by:

Kevin Old Director **On behalf of QTS Environmental Ltd** 





Soil Analysis Certificate									
Date Sampled	09/11/10	09/11/10							
Time Sampled	None Supplied	None Supplied							
TP / BH No	Imported Topsoil	Imported Topsoil							
Additional Refs	IT1	IT2							
Depth (m)	None Supplied	None Supplied							
QTSE Sample No	17964	17965							
	Time Sampled TP / BH No Additional Refs Depth (m)	Time Sampled         None Supplied           TP / BH No         Imported Topsoil           Additional Refs         IT1           Depth (m)         None Supplied	Time Sampled         None Supplied         None Supplied           TP / BH No         Imported Topsoil         Imported Topsoil           Additional Refs         IT1         IT2           Depth (m)         None Supplied         None Supplied	Time Sampled         None Supplied         None Supplied           TP / BH No         Imported Topsoil         Imported Topsoil           Additional Refs         IT1         IT2           Depth (m)         None Supplied         None Supplied	Time Sampled         None Supplied         None Supplied           TP / BH No         Imported Topsoil         Imported Topsoil           Additional Refs         IT1         IT2           Depth (m)         None Supplied         None Supplied				

Determinand	Unit	MDL	Accreditation				
Stone Content	%	< 0.1	NONE	<0.1	<0.1		
Moisture Content	%	< 0.1	NONE	34.6	32.7		
Asbestos Screen	Positive / Negative	N/a	NONE	Negative	Negative		

General Inorganics	Unit	MDL	Accreditation				
pH	pH Units	+ / - 0.1	MCERTS	6.4	6.3		
Total Cyanide	mg/kg	<2	NONE	<2	<2		
Free Cyanide	mg/kg	<2	NONE	<2	<2		
Thiocyanate as SCN	mg/kg	<3	NONE	<3	<3		
Total Sulphate as SO₄	mg/kg	<200	NONE	1121	1407		
Sulphide	mg/kg	<5	NONE	<5	<5		
Total Sulphur	mg/kg	<200	NONE	766	729		
Organic Matter	%	< 0.1	NONE	11	11.1		
Fraction Organic Carbon (FOC)	Value	< 0.001	NONE	0.064	0.064		
Total Phenols (monohydric)	mg/kg	<2	NONE	<2	<2		

Metals	Unit	MDL	Accreditation				
Arsenic (As)	mg/kg	<2	MCERTS	29	27		
W/S Boron	mg/kg	<1	NONE	<1	<1		
Cadmium (Cd)	mg/kg	< 0.5	MCERTS	0.8	0.8		
Chromium (hexavalent)	mg/kg	<2	NONE	<2	<2		
Chromium (Cr)	mg/kg	<2	MCERTS	27	27		
Copper (Cu)	mg/kg	<4	MCERTS	76	74		
Lead (Pb)	mg/kg	<3	MCERTS	164	175		
Mercury (Hg)	mg/kg	<1	NONE	<1	<1		
Nickel (Ni)	mg/kg	<3	MCERTS	31	31		
Selenium (Se)	mg/kg	<3	NONE	<3	<3		
Zinc (Zn)	mg/kg	<3	MCERTS	149	151		

Analytical results are expressed on a dry weight basis where samples are dried at less than 30 °C Analysis carried out on the dried sample is corrected for the stone content

Screening data for asbestos provided only refers to the health & safety issues associated with the safe handling of samples & is not conclusive as to the presence or otherwise of asbestos in any test sample





QTS Environmental Repo	rt No: 4332		Date Sampled	09/11/10	09/11/10		
Urban Vision Partnership	Ltd		Time Sampled	None Supplied	None Supplied		
Site Reference: Redish P.	S.		TP / BH No	Imported Topsoil	Imported Topsoil		
Project / Job Ref: UV/00	174-04		Additional Refs	IT1	IT2		
Order No: ZUV10811			Depth (m)	None Supplied	None Supplied		
Reporting Date: 17/11/2	010	Q	TSE Sample No	17964	17965		
Determinand	Unit	MDL	Accreditation				
Naphthalene	mg/kg	< 0.1	MCERTS	<0.1	<0.1		
Acenaphthylene	mg/kg	< 0.1	MCERTS	<0.1	<0.1		
Acenaphthene	mg/kg	< 0.1	MCERTS	<0.1	<0.1		
Fluorene	mg/kg	< 0.1	MCERTS	<0.1	<0.1		
Phenanthrene	mg/kg	< 0.1	MCERTS	0.98	0.86		
Anthracene	mg/kg	< 0.1	MCERTS	0.20	0.19		
Fluoranthene	mg/kg	< 0.1	MCERTS	1.40	1.22		
Pyrene	mg/kg	< 0.1	MCERTS	1.35	1.14		
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.47	0.42		
Chrysene	mg/kg	< 0.1	MCERTS	0.57	0.49		
Benzo(b)fluoranthene		< 0.1	MCERTS	0.28			
Benzo(k)fluoranthene		< 0.1	MCERTS	0.34	0.40		
Benzo(a)pyrene	5,5	< 0.1	MCERTS	0.34	0.28		
Indeno(1,2,3-cd)pyrene	5, 5	< 0.1	MCERTS	0.40			
Dibenz(a,h)anthracene		< 0.1	MCERTS	<0.1	<0.1		
Benzo(ghi)perylene mg/kg		<0.1	MCERTS	<0.1	<0.1		
						 r	
Total EPA-16 PAHs	mg/kg	<1.6	MCERTS	6.32	5.63		

Analytical results are expressed on a dry weight basis where samples are dried at less than  $30^{\circ}C$ 





Soil Analysis Certificate - Sample Descriptions	
QTS Environmental Report No: 4332	
Urban Vision Partnership Ltd	
Site Reference: Redish P.S.	
Project / Job Ref: UV/00174-04	
Order No: ZUV10811	
Reporting Date: 17/11/2010	

QTSE Sample No	TP / BH No	Additional Refs	Depth (m)	Sample Matrix Description
17964	Imported Topsoil Imported Topsoil	IT1	None Supplied	Brown loamy clay with vegetation
17965	Imported Topsoil	IT2	None Supplied	Brown loamy clay with vegetation
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Soil Analysis Certificate - Methodology & Misceallaneous Information
QTS Environmental Report No: 4332
Urban Vision Partnership Ltd
Site Reference: Redish P.S.
Project / Job Ref: UV/00174-04
Order No: ZUV10811
Reporting Date: 17/11/2010

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of cations in soil by agua-regia digestion followed by ICP-OES	E002
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	AR		Visual screening of samples for fibrous material	E024
Soil	D		Determination of chloride by extraction with water followed by titration using silver nitrate	E021
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by turbidimeter	E020
Soil	D	Fluoride - Water Soluble		E023
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	D	Loss on Ignition @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	D	Phosphorus	Determination of phosphorus by aqua-regia digestion followed by ICP-OES	E002
Soil	D		Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	AR	Sulphide	Determination of sulphide by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia, potassium iodide/iodate followed by ICP- OES	E002
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E011
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D		Gravimetrically determined through extraction with cyclohexane	E009
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D		Gravimetrically determined through extraction with petroleum ether	E009
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E010
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC- MS	E006
Soil	D		Gravimetrically determined through extraction with toluene	E009
Soil	AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR		Determination of hydrocarbons C6-C10 by headspace GC-MS	E001
Soil Soil	AR AR		Determination of acetone/hexane extractable hydrocarbons by GC-FID Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004 E004
Soil	AR		Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	EPH (with florisil cleanup)	Determination of acetone/hexane extractable hydrocarbons with florisil cleanup step by GC-FID	E004
Soil	AR	FPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
	7.43		Determination of volatile organic compounds by headspace GC-MS	E001

<u>Key</u>

D Dried AR As Received

## G.Q.R.A.

### Reddish North Primary School

## Soils

Summary of Statistics

Geology: Imported soils Site End Use: Residential With Plant Uptake Soil Type: Sand - 1% SOM

Project Number UV/000174-04 Client: BAM

	GAC	No.	Range of values	No. exceed-	N	No.	<b>T</b>	UCL <sub>95%</sub> (of the true	Test Description
Compound	(mg/kg)	Samples	(mg/kg)	ing GAC	Normality	Outliers	Test	population mean)	Test Result
Metals Arsenic SGV	32	14	2 - 2.364	0	Not Normal			2.1	PASS
Boron	291	14 14	2 - 2.304	0	not normal	1	С	2.1	PASS
Cadmium SGV									
	10	14	0.5 - 0.5	0					
Chromium VI	4.3	14	2 - 2	0	N	News			<b>DA</b> O O
Copper	2330	14	6.887 - 13.41	0	Normal	None	t	11.1	PASS
Lead	450	14	11.88 - 485.6	1	Not Normal	2	С	198.6	PASS
Mercury SGV	170	14	1 - 1.48	0	Not Normal	1	С	1.2	PASS
Nickel SGV	130	14	4.312 - 6.434	0	Normal	None	t	5.6	PASS
Selenium SGV	350	14	3 - 3	0					
Vanadium	200	0	01.01.00.0	•					<b>D4</b> 00
Zinc	3750	14	21.04 - 38.9	0	Normal	None	t	32.9	PASS
Non-Metals									
Inorganic Cyanide	780	0							
TPH Aliabatic OF 0	. –	_							
Aliphatic C5-6	17	0							
Aliphatic C6-8	33								
Aliphatic C8-10	7.8	0							
Aliphatic C10-12	44	0							
Aliphatic C12-16	210	0							
Aliphatic C16-21	N/A	0							
Aliphatic C21-35	N/A	0							
Aliphatic C16-35	17000								
Aromatic C8-10	11	0							
Aromatic C10-12	35	0							
Aromatic C12-16	91	0							
Aromatic C16-21	200	0							
Aromatic C21-35	790	0							
VOCs									
Benzene SGV	0.054								
Chloroethene	0.00024	0							
1,2-Dichloroethane	0.0022	0							
Ethylbenzene SGV	42	0							
Naphthalene	5.5	0							
Tetrachloroethanes	0.41	0							
Tetrachloroethene	0.53	0							
Tetrachloromethane	0.0077	0							
Toluene SGV	92	0							
1,1,1-Trichloroethane	2.6	0							
Trichloroethene	0.045								
Xylenes SGV	20	0							
SVOCs									
Benz[a]anthracene	4.7	14	0.1 - 0.147	0	Not Normal	1	С	0.1	PASS
Benzo[a]pyrene	0.94		0.1 - 0.1	0		_		<b>a</b> :	DAGG
Benzo[b]fluoranthene	6.5		0.1 - 0.172	0	Not Normal	4	С	0.1	PASS
Benzo[ghi]perylene	46	14	0.1 - 0.1	0					
Benzo[k]fluoranthene	9.6		0.1 - 0.1	0					<b>B</b> 4
Chrysene	8		0.1 - 0.181	0	Not Normal	3	С	0.1	PASS
Dibenz[ah]anthracene	0.86		0.1 - 0.1	0					
Fluoranthene	460	14	0.1 - 0.408	0	Not Normal	1	С	0.3	PASS
Indeno[123-cd]pyrene	3.9		0.1 - 0.1	0					
Naphthalene	3.7		0.1 - 0.1	0					
Phenol SGV	150								
Pyrene	1000	0							

## **CAPITA SYMONDS**

# **Certificate of Compliance**

with the British Standards Institution's Publicly Available Specification for Composted Materials (PAS 100:2005) and the Quality Compost Protocol (2007)





**Issued 7<sup>th</sup> February 2011** 

Expires 31<sup>st</sup> January 2012



This certificate is issued on behalf of the Composting Association by Organic Farmers & Growers Ltd. The Old Estate Yard, Shrewsbury Rd, Albrighton, Shrewsbury, SY4 3AG Tel: 01939 291800 / 0845 330 5122 This certificate remains the property of the issuer and is returnable whilst valid in the event of suspension or withdrawal from the certification scheme of one or more of the above certified composts

## Appendix D Logs

Unbanylsion         Mag offer         Sheel 1 of 1           Project Name         Project No.         Co-ords: -         14/06/2010           Location:         Reddish, Stockport         Depth         Scale           Olient:         BAM Construction         Depth         Scale           Samples & In Situ Testing         Orth         Incode         Depth         Incode           Output         Testing         Orth         Incode         Scale         Scale           Output         Testing         Orth         Incode         Scale         Scale         Scale           Output         Testing         Orth         Incode         Incode         Scale		1		1 A	Irban Vision Enviro 0th Floor Emerson Ibert Street, Eccle	House,		Trialpit No <b>C01</b>
Project Name         Project No.         Co-rds: -         Date           Reddish North Primary School and Children US00001 Schockport         Level: -         14/06/2010           Location:         Reddish, Stockport         Dimensions:         14/06/2010           Client:         BAM Construction         Depth         0.20m         Used School and Children US00001 School and School and Children US00001 School and School a		urbanvision		N	130 OTE			
Location:     Reddish, Stockport     Dimensions:		Name	ol and Chil	Proj	ect No.			
Client:         BAM Construction         Logged By J Evans           Depth (m)         Type         Results         0.0         Stratum Description         Image: Construction         Im					<u> </u>	Dimensions:	-	Scale
Segmetry         A Bitu Testing         Depth         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           0.00 0.20         E5         0.20         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           0.00 0.20         E5         0.20         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           0.00 0.20         E5         0.20         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           0.00 0.20         E5         0.20         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           0.00 0.20         E5         0.20         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           0.00 0.20         E5         0.20         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description           Image: Comparison of the Stratum Description         Image: Comparison of the Stratum Description	Client:	BAM Construction	n					Logged By
0.00-0.20         ES         0.20         CACW EGROUND- Toppolition soff brown singler yeardy CACW Mithegenet roles, and screen is not in more single provide and screen is not in the screen is not screen in the screen in the screen in the screen is not screen in the screen is not s			Depth Leve			Stratum [	Description	
	Depth (m)	Type Results	(m) (m AC	D) Legend	plastic fragment (1	Topsoil comprising firm t t roolets. Gravel is fine t ck, sandstone, occasion ).	to stiff brown slightly gravelly sar to medium, angular to rounded al quartzite, ash and rare	
								AGS

		Urban Vision Envir 10th Floor Emersor	n House,		Trialpit No
urbanvision		Albert Street, Eccle M30 0TE			<b>C02</b> Sheet 1 of 1
Project Name		M30 0TE Project No.			Date
Reddish North Primary Scho	ool and Childro		Co-ords: - Level: -		14/06/2010
Location: Reddish, Stockp			Dimensions:	-	Scale 1:10
Client: BAM Construction	<u></u>		Depth 0.25m		Logged By
Samples & In Situ Testing	,				J Evans
Depth (m) Type Results	Depth Level (m) (m AOD)				Ormut
0.00-0.20 ES	0.25	MADE GROUND: consists of sandst fragments (1). (MG)	Brown silty sandy mediu one, occasional quartzite		Gravel
					-
Remarks: None Groundwater: None					AGS

Alter Circles     Observed       Project Name     Project No.     Date       Reddish North Primary School and Children SCReither Slockoor     David::::::::::::::::::::::::::::::::::::				10	rban Vision Enviro 0th Floor Emerson	House,		Trialpit No
Project Name     Project No.     Co-ords: -     Date       Reddish North Primary School and Childrer (JJ0000/15tockport     Level: -     14/06/2010       Location:     Reddish, Stockport     Dimensions:     Depth       Client:     BAM Construction     0.20m     Used (11)       Simple Fail Strature School and Childrer (JJ0000/15tockport     Strature Description     Used (11)       Condoc:     Depth     0.20m     Used (11)       Outon:     Type (Revula: 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,		urhanvision		M	130 OTE	S		C03 Sheet 1 of 1
Reddish North Primary School and Children USWebber Blockport       Diremations:       14/06/2010         Location:       Reddish, Stockport       Diremations:       0.20         Client:       BAM Construction       0.20       Diremations:       0.20         Service Reddish, Stockport       0.20       Diremations:       0.20       Diremations:       0.20         Service Reddish, Stockport       0.20       Statum Description       Statum Description       0.20         Service Reddish, Stockport       0.20       Mode CRCURC: Firm to alignly and yogramy CLY with request modes of and and the notation of and the not	Project N					Co-ords:		
Location:     Reddish, Stockport     Dimensions:     Scale       Olient:     BAM Construction     Dimensions:     Dimensions:       Simple & In Stu Testing     Orght Involution     Stratum Description     Longed By J Evans       0.00-0.20     ES     Dimensions:     Dimensions:     Dimensions:     Dimensions:       0.00-0.20     ES     Dimensions:     Dimensions:     Dimensions: <td< td=""><td></td><td></td><td>ol and Chil</td><td></td><td></td><td></td><td></td><td></td></td<>			ol and Chil					
Client:         BAM Construction         0.20m         Logged By J Evans           Semples & In Situ Teeling         Teph Involt         Logged By J Evans         J Evans         I           0.00-020         ES         Teph Involt         Logged By Involt         Stratum Description         I           0.00-020         ES         I <td></td> <td></td> <td></td> <td></td> <td></td> <td>Dimensions:</td> <td>-</td> <td></td>						Dimensions:	-	
Semplex 4 In Stu Testing         Deptity (n)         Upper (n	Client:	BAM Construction	n					Logged By
Remarks:         None			Depth Leve			Stratum [	Description	
	Depth (m)	Type Results	(m) (m AC	<u>D</u>	<ul> <li>sandstone, occasio</li> </ul>	Firm to stiff brown slight ine to medium, angular anal quartzite, brick, rare	y sandy gravelly CLAY with freq to rounded and consists of concrete and ash.	
								AGS

	1		10 Al M	rban Vision Envirc 0th Floor Emerson Ibert Street, Eccle I30 0TE	House,		Trialpit No <b>C04</b>
Dural di	urbanvision		M	30 0TE			Sheet 1 of 1
Project Reddisl	Name n North Primary Scho	ol and Child		ect No. Mana 1754 ocknort	Co-ords: - Level: -		Date 14/06/2010
Location				www.www.www.	Dimensions: Depth	Scale 1:10	
Client:	BAM Construction				0.20m		Logged By J Evans
Samp Depth (m)	es & In Situ Testing Type Results	Depth Level (m) (m AOD	Legend		Stratum	Description	
Depth (m)	ES	(m) (m AOD		CLAY with frequen	Topsoil comprising firm t rootlets. Gravel is fine ndstone, brick, ash and	to stiff brown slightly gravelly sai to medium, angular to rounded	ndy
Remarks Groundw			<u> </u>				AGS

urbanvision		Urban Vision Envir 10th Floor Emerso Albert Street, Ecc M30 0TE	n House,		Trialpit No <b>C05</b> Sheet 1 of 1
Project Name	F	M30 0TE Project No.	Co-ords: -		Date
Reddish North Primary Scho					14/06/2010
Location: Reddish, Stockp		·	Dimensions:	-	Scale 1:10
Client: BAM Construction	, <u>, , , , , , , , , , , , , , , , , , </u>		0.15m		Logged By J Evans
Samples & In Situ Testing           Depth (m)         Type           Results	Depth Level (m) (m AOD) Leg	end	Stratum Descripti	on	
Depth (m) Type Results 0.00-0.15 ES	0.15	MADE GROUND	Topsoil comprising firm to stiff bro ont rootlets. Gravel is fine to coarse andstone, brick, rare ash, ceramics Trialpit Complete at 0.15	own slightly gravelly sar e, angular to rounded b (3), and glass (1).	ndy
Remarks: None Groundwater: None	· · ·				AGS

Urban Vision Environment Team 10th Floor Emerson House,							Trialpit No
Albert Street, Eccles Urbanvision M30 0TE						<b>C06</b>	
	M30 0TE			-	Sheet 1 of 1		
Project Name Project No. Reddish North Primary School and Children <b>SJO/600@17St</b> ockpo				Co-ords: - rt Level: -		Date 14/06/2010	
Location: Reddish, Stockport				Dimensions:	-	Scale 1:10	
Client: BAM Construction				0.10m		Logged By J Evans	
	In Situ Testing	Depth Leve (m) (m AO	D) Legend		Stratum [	Description	
Depth (m) Type 0.00-0.10 ES	e Results	(m) (m AO)		rare ceramics (2).		o stiff brown slightly gravelly sar to medium, angular to ck, occasional quartzite, ash and	ndy d 
Remarks: None							
Groundwater: None							

Urban Vision Environment Team 10th Floor Emerson House, Albert Street, Eccles							Trialpit No <b>C07</b>
urbanvision M30 OTE M30 OTE			30 0 TE			Sheet 1 of 1	
Project Name Project No. Reddish North Primary School and Children SUV#000@1754000			ect No.	Co-ords: - Level: -		Date 14/06/2010	
Location: Reddish, Stockport				Dimensions: Depth	-	Scale 1:10	
Client: BAM Construction				0.20m		Logged By J Evans	
	Samples & In Situ Testing         Depth         Level           Depth (m)         Type         Results         (m)         Legend			Stratum I	Description		
Depth (m) Tyr		(m) (n 0.20	n AOD) Legend	CLAY with frequen	Topsoil comprising stiff t trootlets. Gravel is fine	o firm brown slightly gravelly sar to coarse, angular to rounded k quartzite, rare ceramics (2)	idy
Remarks: Groundwate	r: None						AGS

Urban Vision Environment Team 10th Floor Emerson House, Albert Street, Eccles						
urbanvision	5		<b>C08</b> Sheet 1 of 1			
Project Name	P	M30 0TE Project No.	Co-ords: -	Date		
Reddish North Primary Sch			14/06/2010			
Location: Reddish, Stock	Dimensions: Depth	-	Scale 1:10			
Client: BAM Constructi	0.20m		Logged By J Evans			
Samples & In Situ Testing	Depth Level (m) (m AOD) Lege	end	Stratum I	Description		
Depth (m) Type Results 0.00-0.20 ES	(m)         (m AOD)         Lege           0.20	MADE GROUND: CLAY with frequen	Topsoil comprising stiff t trootlets. Gravel is fine ndstone, brick and occas	o firm brown slightly gravelly sar to medium, angular to rounded sional concrete, quartzite and	ndy	
Remarks: None Groundwater: None					AGS	

urbanvision	10th Floor Albert Stro M30 0TE M30 0TE	ion Environment Team Emerson House, eet, Eccles	Trialpit No C09 Sheet 1 of 1
Project Name Reddish North Primary Sc	Project No. hool and Children (178هه) hool and Children (178هه)		Date 14/06/2010
Location: Reddish, Stoc		Dimensions: - Depth	Scale 1:10
Client: BAM Construe		0.15m	Logged By J Evans
Samples & In Situ Testing           Depth (m)         Type         Results	Depth Level (m) (m AOD) Legend	Stratum Description	
D.00-0.15 ES	0.15	GROUND: Topsoil comprising firm to stiff brown sandy t rootlets and occasional garvel of fine angular brick, s a plastic (1). Trialpit Complete at 0.15 m	sandstone
			-
Remarks: None Groundwater: None			AGS

			10	rban Vision Envirc 0th Floor Emerson	House,		Trialpit No
	urbanuicion		A M	lbert Street, Eccle I30 0TE	es		C10
Project	urbanvision			ect No.			Sheet 1 of 1 Date
	Name North Primary Scho	ol and Child			Co-ords: - Level: -		14/06/2010
Locatior				· •	Dimensions:	-	Scale 1:10
Client:	BAM Construction	on			Depth 0.15m		Logged By J Evans
	es & In Situ Testing	Depth Level	Leaend		Stratum		
	ES	0.15 Level (m AOD	) Legend	MADE GROUND: rootlets and rare g sandstone, ash an (MG)		Description to stiff brown sandy CLAY freque angular to rounded brick, lete at 0.15 m	ent
	Need						
Remarks: Groundwa							AGS

	1		10	rban Vision Enviro 0th Floor Emerson bert Street, Eccle	House,		Trialpit No <b>C11</b>
	urbanvision		M	30 0TE 30 0TE	~		Sheet 1 of 1
Project I				ect No.	Co-ords: -		Date
	North Primary Scho	ol and Child					14/06/2010
Location	n: Reddish, Stockp	ort			Dimensions: Depth	-	Scale 1:10
Client:	BAM Construction	on			0.15m		Logged By J Evans
	es & In Situ Testing	Depth Level (m) (m AOD	Legend		Stratum I	Description	
	Type Results ES	0.15	) Legend	MADE GROUND: rootlets and occasi sandstone, quartzi (MG)			ent
Remarks:	None						
Groundwa	ater: None						AGS

Image: Mission       M30 0TE       Sheet 1 of 1         Project Name       Project No.       Co-ords: -       Date         Reddish North Primary School and Childrer       JU/#00000175tockport       Level: -       14/06/2010         Location:       Reddish, Stockport       Dimensions:       -       Scale         Location:       Reddish, Stockport       Dimensions:       -       Scale         Client:       BAM Construction       0.15m       Logged By       J Evans         Samples & In Situ Testing       Depth (m AOD)       Legend       Stratum Description       Logged requent         Depth (m)       Type       Results       MADE GROUND: Topsoil comprising firm to stiff brown sandy CLAY frequent       rootlets and occasional gravel of fine to medium, angular to rounded brick,       Image: Content of the tor medium, angular to rounded brick,		Urban Vision Envi 10th Floor Emerso Albert Street, Eco M30 0TE	on House,	Trialpit No <b>C12</b>
Reddish North Primary School and Children L9980001 (Stockport       Diremestions:       14/06/2010         Location:       Reddish, Stockport       Diremestions:       11/0         Client:       BAM Construction       Diremestions:       11/0         Statum Description       0.15       Statum Description       10/0         Depth im to port       Results       Teleph description       1         000-015       ES       0.15       Mode Conclusional general fine to attraction and clux's required mandation, angular to manded base, and and the statum description       Teleph description         000-015       ES       0.15       Difference       None         None       None       None       None       None		M30 0TE		
Location:     Reddish, Stockport     Dimensions:     Scale       Client:     BAM Construction     Dimensions:     Dipph       Stratum Description     Using a data of the training of the set tool and CLAY frequent model clarge and crassing grant of the set model, and CLAY frequent model.     Note	hool and Childr			
Client:         BAM Construction         0.15m         Logged By J Evans           Semples & In Situ Testing Depth (m)         Depth         Level (m)         Le			Dimensions: -	Scale
Depth (m)         Type         Results         (m)         (m)         (m)         Statum Description         Statum Description         (m)	tion			
0.00015         ES         0.015         ES         ES         0.015         ES         ES         0.015         ES         ES<	Depth Level (m) (m AOD)	Legend	Stratum Description	
ACS	0.15	Sandstone, and a	ash.	
DOUD IN THE REAL PROPERTY OF THE REAL PROPERTY				AGS

Urban Vision Environment Team 10th Floor Emerson House,							
urbanvision		Albert Street, Eccle M30 0TE	es		<b>C13</b> Sheet 1 of 1		
Project Name	Di	M30 0TE roject No.	Co-ords: -		Date		
Reddish North Primary Scho			Level: -		14/06/2010		
Location: Reddish, Stockp		, <u> </u>	Dimensions:	-	Scale 1:10		
Client: BAM Construction	on		Depth , 0.20m		Logged By J Evans		
Samples & In Situ Testing	Depth Level	nd	Stratum				
Samples & In Situ Testing         Depth (m)       Type       Results         0.00-0.20       ES          0.01-0.20       Image: second sec	Depth (m)       Level (m AOD)       Leger         0.20	ban -	Topsoil comprising firm	Description to stiff brown sandy CLAY freque edium, angular to rounded brick, lete at 0.20 m			
					-		
Remarks: None Groundwater: None					AGS		

	Urban Vision Environment Team 10th Floor Emerson House,							
	urbanvision		M	Ibert Street, Eccle	S		<b>C14</b> Sheet 1 of 1	
Project		C		I30 OTE ect No.	Co-ords: -		Date	
	h North Primary S	School and C			Level: -		14/06/2010	
Locatio				, <del></del>	Dimensions:	-	Scale 1:10	
Client:	BAM Constr	uction			Depth 0.20m		Logged By J Evans	
	les & In Situ Testing	Depth L			Stratum			
Samp Depth (m) 0.00-0.20	Ites & in Situ Testing         Type       Results         ES	Depth (m)	Level AOD Legend	MADE GROUND: rootlets and occasi sandstone, ash, pla (MG)			ent 1	
Remarks	: None						AGS	
Groundw	ater: None						AUD	

Urban Vision Environment Team 10th Floor Emerson House,							
urbanvision		Albert Street, Eccl M30 0TE M30 0TE	es		<b>C15</b> Sheet 1 of 1		
Project Name		Project No.	Co-ords: -		Date		
Reddish North Primary Scho	ool and Childre				14/06/2010		
Location: Reddish, Stockp	ort		Dimensions: Depth	-	Scale 1:10		
Client: BAM Construction	on		0.20m		Logged By J Evans		
Samples & In Situ Testing	Depth Level (m) (m AOD)	_egend	Stratum	Description			
Depth (m) Type Results 0.00-0.20 ES	0.20 (m AOD) (	MADE GROUND: rootlets and occa	Topsoil comprising firm sional gravel of fine to me tite and ceramics (1).	Description to stiff brown sandy CLAY freque edium, angular to rounded brick, lete at 0.20 m	ent		
Remarks: None Groundwater: None	· · · · ·	l			AGS		

			1(	rban Vision Enviro 0th Floor Emerson	House,		Trialpit No
	urbanvision		M	Ibert Street, Eccle I30 0TE	S		<b>C16</b> Sheet 1 of 1
Project				BODTE Ect No.	Colordou		Date
	North Primary Scho	ol and Child			Co-ords: - Level: -		14/06/2010
Locatior					Dimensions:	-	Scale 1:10
Client:	BAM Construction	on			Depth 0.15m		Logged By J Evans
	es & In Situ Testing	Depth Level (m) (m AOD	Legend		Stratum [	Description	
	Type Results ES	0.15	) Legend	MADE GROUND: rootlets and occas sandstone, ash an (MG)	Topsoil comprising firm to not fine to me	Description to stiff brown sandy CLAY freque adium, angular to rounded brick, lete at 0.15 m	ent - 1
Remarks:	None						البيل ا
Groundwa	ater: None						AGS

Image: Name         Project Name         Sheet 1 of 1           Project Name         Project No.         Co-ords: -         140662010           Location:         Reddsh. Stockport         Depth         -         Scale           Client:         BAM Construction         Depth         -         Scale           Service & in Stur texing         Depth         -         -         Scale           Open (n)         Type         Results         Statum Description         -         -           0.00.15         ES         0.15         Scale (SCUMD)         -			Urban Vision Environment Team 10th Floor Emerson House, Albert Street, Eccles							
Project Name     Project No.     Co-ords: -     Date       Reddish North Primary School and Children USe0091 Tokokport     Level: -     14/06/2010       Location:     Reddish, Stockport     Dimensions:     Scale       Client:     BAM Construction     0.15m     Use of the scale	urbanvision		M30 0TE			<b>C17</b> Sheet 1 of 1				
Reddish North Primary School and Children J.00001         Dimensions:         14/06/2010           Location:         Reddish, Stockpot         Dimensions:         11/0           Client:         BAM Construction         Depth         Depth         11/0           Depth Im         Type         Reades         Oth         Stratum Description         Image: Stratum Description         Image: Stratum Description           00:0:15         ES         Reades         Oth         Image: Stratum Description         Image: Stratum Description <td< td=""><td>Project Name</td><td>Pro</td><td>oject No.</td><td>Co-ords: -</td><td></td><td></td></td<>	Project Name	Pro	oject No.	Co-ords: -						
Depth         Depth <th< td=""><td></td><td></td><td>/e0100e1,7Stockport</td><td>Level: -</td><td></td><td></td></th<>			/e0100e1,7Stockport	Level: -						
Client:       BAM Construction       0.15m       Logged By J Evans         Simplex & In Sim Terming Depin (in Type       Results       In order (in the results)       In or	Location: Reddish, Stock	port		Depth	-					
Depth (m)         Type         Results         (m)         (m AOD, 16996         Stratum Description         Stratum Description           0.00-0.15         ES         ES         0.15         Image: Complete stratum Description         Image: Complete str		ion								
Remarks:         None         MADE GROUND: Togoal comprising firm to stiff brown sandy CLAY frequent: sandburd, and cocasional growth fire to maduum, angluit to rounded brick, sincher, san and glass (1).         MADE GROUND: Togoal comprising firm to stiff brown sandy CLAY frequent: sandburd, and cocasional growth fire to maduum, angluit to rounded brick, sincher, san and glass (1).         MADE GROUND: Togoal comprising firm to stiff brown sandy CLAY frequent: sandburd, and glass (1).         MADE GROUND: Togoal comprising firm to stiff brown sandy CLAY frequent: sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandy CLAY frequent: sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandy CLAY frequent: sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandy CLAY frequent: sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandy CLAY frequent: sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and glass (1).         Made GROUND: Togoal comprising firm to stiff brown sandburd, and tom tog		Depth Level (m) (m AOD) Legend	E	Stratum I	Description					
		(m) (m AOD) Legen	MADE GROUND: rootlets and occas sandstone, ash an	Topsoil comprising firm to onal gravel of fine to me diglass (1).	to stiff brown sandy CLAY freque adium, angular to rounded brick,					
	Remarks: None Groundwater: None					AGS				

	1	Urban Vision Environment Team 10th Floor Emerson House,							
urbanvision	Ν	Albert Street, Eccle M30 0TE	S		<b>C18</b> Sheet 1 of 1				
Project Name		iect No.	Co-ords: -		Date				
Reddish North Primary Scho					14/06/2010				
Location: Reddish, Stockp		· •	Dimensions:	-	Scale 1:10				
Client: BAM Construction	on		Depth 0.20m		Logged By J Evans				
Samples & In Situ Testing	Depth Level (m) (m AOD) Legend		Stratum I	Description					
Depth (m) Type Results 0.00-0.20 ES	• (m)         (m AOD)         Legend           0.20         • • • • • • • • • • • • • • • • • • •	MADE GROUND: rootlets and occasi sandstone, ash an (MG)		to stiff brown sandy CLAY freque edium, angular to rounded brick,	ent				
Remarks: None Groundwater: None					AGS				

			Urb	ban Vision Envirc th Floor Emerson	nment Team		Trialpit No
			Alb	pert Street, Eccle 30 0TE	s		C19
	urbanvision		M3	30 OTE			Sheet 1 of 1
Project Reddis	Name h North Primary Scho	ool and Child		ctNo. 1000e1,7534:ockport	Co-ords: - Level: -		Date 14/06/2010
Locatio					Dimensions:	-	Scale
					Depth		1:10 Logged By
Client:	BAM Construction		,		0.10m		J Evans
Samp Depth (m)	Ies & In Situ Testing           Type         Results	Depth Level (m) (m AOD)				Description	
0.00-0.10	ES	0.10		rootlets and rare of	Topsoil comprising firm i ravel of fine to medium, te and ceramics (1). Trialpit Comp	to stiff brown sandy CLAY freque angular to rounded brick, lete at 0.10 m	ent
Remarks							AGS
Groundw	ater: None						

Location: Client: Samples	North Primary Scho	ol and Chil	N	130 OTE 130 OTE			
Reddish Location: Client: Samples	North Primary Scho	ol and Chil	Proi	4.8.1			Sheet 1 of 1
Location: Client: Samples				ectNo. 0000e17S4tockpor	Co-ords: - Level: -		Date 14/06/2010
Samples				, <b></b> ,,,,,,, .	Dimensions:	-	Scale 1:10
Samples	BAM Construction	on			Depth 0.15m		Logged By
	s & In Situ Testing		4				J Evans
1	Type Results	Depth Leve (m) (m AC	D) Legend		Stratum Descrip		actly ach
0.00-0.15	ES	0.15		and cinders. Grave cinders. (MG)	Black slightly gravelly medium to el is fine to medium, angular and Trialpit Complete at 0.1		
Remarks: Groundwat	None ter: None						AGS

			10	rban Vision Enviro )th Floor Emerson	House,		Trialpit No
	urbanvision		M	bert Street, Eccle 30 0TE	S		<b>C21</b> Sheet 1 of 1
Project				30 OTE ect No.	Calandar		Date
	h North Primary Scho	ool and Child			Co-ords: - Level: -		14/06/2010
Locatio					Dimensions:	-	Scale 1:10
Client:	BAM Constructi	on			Depth 0.10m		Logged By J Evans
Samp Depth (m)	les & In Situ Testing Type Results	Depth Level (m) (m AOD	Legend		Stratum	Description	
0.00-0.10	Type Results ES	0.10		MADE GROUND: I and cinders. Grave cinders. (MG)	Black slightly gravelly m l is fine to medium, ang Trialpit Comp	edium to coarse SAND predomin ular and consists of ash and ete at 0.10 m	natly ash
Remarks	: None						AGS
Groundw	rater: None						AGS

			1	Jrban Vision Enviro	n House,		Trialpit No <b>C22</b>
	urbanvision		Ν	Albert Street, Eccle M30 0TE	5		Sheet 1 of 1
Project				M30 0TE ject No.	Co-ords: -		Date
	h North Primary Scho	ol and Child					14/06/2010
Locatio				· ·	Dimensions:	-	Scale 1:10
Client:	BAM Construction	n			Depth , 0.10m		Logged By J Evans
Samp Depth (m)	Ies & In Situ Testing Type Results	Depth Level (m) (m AOI	Legend		Otracture [	Description	
0.00-0.10	ES	0.10		(MG)	Black slightly gravelig fri	edium to coarse SAND predomi ular and consists of ash and ete at 0.10 m	
							-1
Remarks Groundw							AGS

	10th F	n Vision Environment Team Floor Emerson House, A Strack – Facha	Trialpit No <b>C23</b>
urbanvision	M30 (	t Street, Eccles DTE	Sheet 1 of 1
Project Name	M30 0 Project		Date
Reddish North Primary Scho			14/06/2010
Location: Reddish, Stockp		Dimensions: -	Scale 1:10
Client: BAM Construction	on	Depth , 0.10m	Logged By J Evans
Samples & In Situ Testing	Depth Level	Stratum Decoription	
Depth (m)     Type     Results       0.00-0.10     ES	(m) (m AOD) Legend MA an	Stratum Description ADE GROUND: Black slightly gravelly medium to coarse SAND do cinders. Gravel is fine to medium, angular and consists of as iders. (G) Trialpit Complete at 0.10 m	D predominatly ash the and the and the and the and the angle of the an
Remarks: None Groundwater: None			AGS

	1		3r Al Ec	d Floor Emers bert Street, ccles	vironment Team on House,	Location SN	/1
	urbanvision		M	30 0TE			1 of 1
Project Reddis	Name h North Primary Sch	ool		ect No. 000174	Co-ords: -	Hole H	Туре А
Locatio	n: Reddish, Stock	port			Level: -		ale 10
Client:	BAM Construct	ion			Dates: 04/07/2011	Logg J Eva	ed By ans
Sampl	es & In Situ Testing Type Results	Depth I (m) (m	Level n AOD) Legend	0.	Stratum Description	Wate	er Well
0.05	Type Results ES	0.10		sandstone.	ND: Red medium SAND with rare fine, rounded grave ND: Brown grey silty fine to medium SAND with otlets and rare gravel of sandstone.		
0.20	ES	0.25		occasional roo	Dtlets and rare gravel of sandstone.		
Remark	Type Results S:						
Remark							AGS

	10	0				Jrban Vision Enviro			Lc	cation	
	1				А	Ind Floor Emerson	TOUSE,			SV2	
		anvision			N	ccles 130 0TE				heet 1	
Project						ect No.	Co-ords: -				/pe
Locatio		h Primary Scho eddish, Stockp			00/	000174				HA Scal	
LUCATIO	11. N		on				Level: -			1:10	
Client:	В	AM Constructio	on				Dates: 04/07/20	011		ogged	
		Situ Testing	-					511		J Evan	
Depth (m)	Туре	Results	Depth (m)	Level (m AOD)	Legend		Stratum Descripti			Water Strikes	Well
0.05	ES		0.10			sandstone.	Red fine to medium SAND v				
0.20	ES		0.10			MADE GROUND occasional rootlet	Brown/grey silty fine to med s and rare gravel of sandstor	ium SAND with ne.	-		
			0.30		~~~~~		End of Borehole at 0.30 m				
									-		
									-		
									-		
									-		
									- 1		
									-		
									-		
									-		
									-		
	Туре	Results							-		
Remark	S:									A	GS

	urbanvision			31 A E M	rban Vision Envi rd Floor Emerson Ibert Street, ccles I30 0TE	ronment Team n House,	S	ocatior SV3	<b>3</b> of 1
Project Na					ect No.	Co-ords: -		Hole T	
	North Primary Sch			UV/(	000174			HA	
Location:	Reddish, Stock	port				Level: -		Sca 1:10	
								Logged	
Client:	BAM Constructi					Dates: 04/07/2011		J Evar	าร
Samples Depth (m) T	S & In Situ Testing           Type         Results	Depth (m)	Level (m AOD)	Legend		Stratum Description		Water Strikes	Well
	ES				MADE GROUN sandstone.	D: Red fine to medium SAND with rare gravel of			
		0.10			MADE GROUN occasional root	D: Brown/grey silty fine to medium SAND with ets and roots and rare gravel of sandstone.			
0.20 E	ES	0.20	10.1	~~~~~		End of Borehole at 0.30 m			
							-1		
	ype Results	-					-		
Remarks:								A	GS

	urbanvision		3r Al Ec	d Floor Emerso bert Street, ccles	rironment Team on House,		ocatior <b>SV4</b> Sheet 1	4
Project N				30 OTE ect No.			Hole T	
	North Primary Sch	ool		)00174	Co-ords: -		HA	
Location			00/0	00174			Sca	
		JUIT			Level: -		5ca 1:10	
							Logged	
Client:	BAM Constructi	on			Dates: 19/07/2011		J Evar	
Sample	s & In Situ Testing	Depth I e	evel .			I	Water	Well
epth (m)	Type Results	Depth Le (m) (m	evel AOD) Legend		Stratum Description		Strikes	vveil
	ES	0.10		sandstone.	ND: Red fine to medium SAND with rare gravel of ND: Brown/grey silty fine to medium SAND with tlets and roots and rare gravel of sandstone.			
						- 1		
Remarks	Type Results							GS

	urbanvision		31 A E	rban Vision Env rd Floor Emerso Ibert Street, ccles			ocatior. <b>SV</b> Sheet 1	5
Project				30 0TE ect No.		'	Hole T	
	h North Primary Sch	lool		000174	Co-ords: -		HA	
_ocatio							Sca	le
					Level: -		1:10	)
Client:	BAM Construct	ion			Dates: 19/07/2011		Loggeo J Evar	
Sampl epth (m)	es & In Situ Testing Type Results	Depth Le (m) (m A	Vel AOD) Legend		Stratum Description		Water Strikes	Wall
		0.10		sandstone.	ID: Red fine to medium SAND with rare gravel of ID: Brown/grey silty fine to medium SAND with tlets and roots and rare gravel of sandstone.			
0.20	ES	0.25			End of Borehole at 0.25 m			
	Type Results					ŀ		
Remark						I	A	GS

	urbanvision		3r Al Ec	rban Vision En rd Floor Emerse Ibert Street, ccles 30 0TE	vironment Team on House,		ocatior <b>SV(</b> Sheet 1	6
Project Na				ect No.			Hole T	
	North Primary Scho	ool	-	000174	Co-ords: -		HA	
Location:					Level: -		Sca 1:10	le
Client:	BAM Construction	on			Dates: 19/07/2011		Loggeo J Evar	
Samples	& In Situ Testing	Depth Lev (m) (m A0	(el (DD) Legend		Stratum Description		Water Strikes	Well
	ype Results			MADE GROU	NDMADE GROUND: Red fine to medium SAND with	rare	Strikes	
0.20 E	ES	0.12		MADE GROU	ND: Brown/grey silty fine to medium SAND with tets and rare gravel of sandstone.			
Τ	ype Results					-1		
Remarks:								
							A	GS

	2	3 A	Jrban Vision Env Brd Floor Emerso Albert Street,			ocation SV7	
urbany	ision	E	Eccles //30 0TE			heet 1	
Project Name			ject No.	Colordor		Hole T	
Reddish North Pri	mary School	UV/	000174	Co-ords: -		HA	
Location: Reddi	sh, Stockport			Level: -		Sca 1:10	
Client: BAM	Construction			Dates: 19/07/2011		.oggeo J Evai	
Samples & In Situ	Testing Depth Results (m) (	Level (m AOD) Legend		Stratum Description		Water	Well
epth (m) Type	Results (m) (	(m AOD) Legend	MADE GROUN	ND: Red fine to medium SAND with rare gravel of		Strikes	
	0.08		sandstone.	ND: Brown/grey silty fine to medium SAND with tlets and rare gravel of sandstone.			
0.20 ES			occasional roo	uers and fare graver of sandstone.	-		
	0.28	^^^^		End of Borehole at 0.28 m			211032110
					-		
					-		
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					-		
					-		
					- 1		
					10		
					-		
					-		
					F		
					-		
					-		
Туре	Results				F	1	1

Location No <b>SV8</b> Sheet 1 of 1
Hole Type
HA
Scale
1:10
Logged By J Evans
Water We Strikes
e gravel of
ND with stone.

	urb	anvision			3 A E	Irban Vision Environment Team rd Floor Emerson House, Ibert Street, ccles 130 0TE		ocation SVS heet 1	•
Project						ect No.		Hole T	
-		h Primary Sch	nool			Co-ords: -		HA	
Locatio		Reddish, Stock				Level: -		Sca	
							<u> </u>	1:10	
Client:	В	AM Construct	ion			Dates: 19/07/2011		.oggec J Evar	
Samp	les & In	n Situ Testing	Depth (m)	Level (m AOD)	Legend	Stratum Description		Water Strikes	Well
epth (m)	Туре	Results	(m)	(m AOD)	XXXXXX	MADE GROUND: Red fine to medium SAND with rare gravel of	_	Strikes	
						sandstone.			
0.20	ES		0.10			MADE GROUND: Brown/grey silty fine to medium SAND with occasional rootlets and roots and rare gravel of sandstone.			
			0.00			End of Borehole at 0.30 m			
							-		
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	Туре	Results	_				-		
Remark		roouno							
								A	GS

	urb	anvision			3 A E	rban Vision Environment Team rd Floor Emerson House, Ibert Street, ccles	5	ation No. <b>SV10</b> eet 1 of 1
Project						30 OTE		ole Type
-		, h Primary Sch	ool			000174 Co-ords: -		HA
Locatio		eddish, Stock				Level: -		Scale 1:10
Client:		AM Construct				Dates: 19/07/2011	J	gged By Evans
Samp	les & In Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description		Water Strikes Well
0.05	ES		0.10			MADE GROUND: Red fine to medium SAND with rare gravel of sandstone.		
0.20	ES					MADE GROUND: Brown/grey silty fine to medium SAND with occasional rootlets and rare gravel of sandstone.	-	
			0.30		~~~~	End of Borehole at 0.30 m		
							-	
							-	
							- 1	
							-	
							-	
	Туре	Results	_					
Remark	5.							AGS

			3 A	Irban Vision Env rd Floor Emersc Ibert Street, Eccles	n House,		ocation SV1	1			
urbanvision			N	130 OTE	1		heet 1				
Project Name			-	ect No.	Co-ords: -	Hole Type					
Reddish North Primary So			UV/	000174			HA				
ocation: Reddish, Stoc	kport				Level: -		Scale 1:10				
Client: BAM Construe	ction	tion			Dates: 19/07/2011		Logged By J Evans				
Samples & In Situ Testing	Depth (m)	Level (m AOD)	Legend		Stratum Description		Water Strikes	Well			
pth (m) Type Results	(11)	(	*****	MADE GROUN	D: Red fine to medium SAND with rare gravel of		Cuntoo				
0.05 ES	0.08			sandstone. MADE GROUN occasional root	ID: Brown/grey silty fine to medium SAND with lets and rare gravels of sandstone and tarmac.						
0.20 ES						-					
	0.28		*****		End of Borehole at 0.28 m						
						10					
						~					
						-					
						-					
						-					
						-					
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	-			Urban Vision Envi 3rd Floor Emerson		L	ocatior SV1	
	urbanvision			Albert Street, Eccles			Sheet 1	
Droject N				M30 OTE			Hole T	
Project N Reddish	North Primary Sch			Project No. UV/000174	Co-ords: -		HA	
Location				0 1/000174			Sca	
Location		pon			Level: -		1:10	
							Logged	
Client:	BAM Construct	ion			Dates: 19/07/2011		J Evar	
Samples	s & In Situ Testing	Depth	Level				Water Strikes	
epth (m)	Type Results	Depth (m) (r	m AOD) Leg	to the second	Stratum Description		Strikes	VVEI
0.05	ES	0.05		sandstone.	D: Red fine to medium SAND with rare gravel of			
	ES				D: Brown/grey silty fine to medium SAND with ets and roots and rare gravel of sandstone.	-		
		0.27		***	End of Borehole at 0.27 m			
						-1		
						-		
Remarks	Type Results					-		GS

	urbanvision		3r Al Ec	rd Floor Emerso Ibert Street, ccles	vironment Team on House,	SV	on No. <b>13</b> 1 of 1
Project Deddial	Name		Proje	30 0TE ect No.	Co-ords: -	Hole	Туре
Locatio	h North Primary Sch n: Reddish, Stock		UV/(	000174	Level: -	HA Scale 1:10	
Client:	BAM Construct	ion			Dates: 19/07/2011	Logg J Ev	ed By ans
Sample Depth (m)	es & In Situ Testing Type Results	Depth I (m) (m	Level n AOD) Legend		Stratum Description	Wate Strik	er we
0.20	ES	0.10 0.28		sandstone.	ND: Red fine to medium SAND with rare gravel of ND: Brown/grey silty fine to medium SAND with thetes and rare gravel of sandstone. End of Borehole at 0.28 m		
	Type Results	-					
Remark						1	AGS

urbanvision		Urban Vision E 3rd Floor Emer Albert Street, Eccles M30 0TE	nvironment Team rson House,		cation SV14 neet 1	4		
Project Name		Project No.	Ou and		lole Ty			
Reddish North Primary Sc		UV/000174	Co-ords: -		HA			
Location: Reddish, Stoc	port		Level: -	Scale 1:10				
Client: BAM Construct	lion	Dates: 19/07/2011			Logged By J Evans			
Samples & In Situ TestingDepth (m)TypeResults	Depth Level (m) (m AOD)	Legend	Stratum Description		Water Strikes	Well		
0.05 ES	16	MADE GRC sandstone.	UND: Red fine to medium SAND with rare gravel of					
0.20 ES	0.10	MADE GRC occasional r	UND: Brown/grey silty fine to medium SAND with ootlets and roots and rare gravel of sandstone.					
				- 1				
Type Results Remarks:						cs		

M30 0TE       Sneet 1 of         Project Name       Project No.         Reddish North Primary School       UV/000174         Location:       Reddish, Stockport         Location:       Reddish, Stockport         Level:       -         Client:       BAM Construction         Samples & In Situ Testing       Depth         Level       -         Level       -         Level       -         Level       -         Level       -         BAM Construction       Dates:         19/07/2011       Logged By         J Evans       J Evans	1		Urban Vision En 3rd Floor Emerso Albert Street, Eccles	vironment Team on House,		ocatior SV1	
Project Name     Project No.     UV/000174     Co-ords: -     Hole Type       Reddish North Primary School     UV/000174     Co-ords: -     HA       Jocation:     Reddish, Stockport     Level: -     Scale       1:10     Dates:     19/07/2011     JEvans       Samples & In Situ Testing     Deph     Level     Stratum Description     Water       Iph (m)     Type     Results     Immoviewed of sandstone.     MADE GROUND: Brown/grey sity fine to medium SAND with occasional rootlets and roots and rare gravel of sandstone.     Immoviewed of sandstone.       0.15     0.15     End of Borehole at 0.15 m     Immoviewed of sandstone.     Immoviewed of sandstone.	urbanvision		Eccles M30 0TE		s	heet 1	of 1
Reddish North Primary School         UV/000174         Co-ords: -         HA           Location:         Reddish, Stockport         Level: -         Scale           Lint:         BAM Construction         Dates:         19/07/2011         Logged B; J Evans           Samples & In Situ Testing pth (m)         Oppth         Level (m AOD)         Legend         Stratum Description         Verter         Verter<		F					
cocation:     Reddish, Stockport     Level: -     Scale       Dient:     BAM Construction     Dates:     19/07/2011     Logged B;       Samples & In Situ Testing     Depth     Level     Stratum Description     Vater       yth (m)     Type     Results     0     MADE GROUND: Brown/grey sitly fine to medium SAND with occasional rootlets and roots and rare gravel of sandstone.     0.15     Image: Construction of Borehold at 0.15 m				Co-ords: -			
Level: -     1:10       Dient: BAM Construction     Dates: 19/07/2011     Logged By J Evans       Samples & In Situ Testing pth (m) Type Results     Depth (m AOD) Legend (m AOD) Legend roots and rare gravel of sandstone.     Vater water						Sca	le
Stent:     BAM Construction     Dates:     19/07/2011     J Evans       Samples & In Situ Testing pth (m)     Depth Type     Level Results     Depth (m)     Level (m)     Level (m)     Level (m)     MADE GROUND: Brown/grey silty fine to medium SAND with occasional rootlets and roots and rare gravel of sandstone.     Water Strikes     W       0.15     0.15     0.15     End of Borehole at 0.15 m     Image: Construction in the strike in the stri				Levei: -			
Samples & In Situ Testing pth (m)     Depth (m)     Level (m ADD)     Level (m ADD)     Stratum Description     Water Water       MADE GROUND: Brown/grey silty fine to medium SAND with occasional rootlets and roots and rare gravel of sandstone.     0.15     0.15		tion		Dates: 10/07/2011			
pith (m)       Type       Results       (m)       (m AOD)       Legend       Stratum Description       Strikes       Strikes         pith (m)       Type       Results       (m)       (m AOD)       Legend       Stratum Description       Strikes       Strikes       Strikes       Strikes         pith (m)       Type       Results       (m)       (m AOD)       Legend       Stratum Description       Strikes				Dates. 19/01/2011			าร
0.15 MADE GROUND: Brown/grey silty fine to medium SAND with occasional rootlets and roots and rare gravel of sandstone.	Samples & In Situ Testing	Depth Level Lege	end	Stratum Description		Water Strikes	Well
	pth (m) Type Results		2000	ND: Brown/grey silty fine to medium SAND with tlets and roots and rare gravel of sandstone.		Water Strikes	Well
Type Results	Type Results						

urbanvision roject Name reddish North Primary So ocation: Reddish, Stoc		M3			V16
eddish North Primary So			OTE		et 1 of 1
		Projec		HC	le Type
ocation: Reddish, Stoc		UV/00	0174		HA
	kport		Level: -		Scale 1:10
lient: BAM Constru	tion		Dates: 19/07/2	2011	ged By
				JI	vans
Samples & In Situ Testing	Depth Level (m) (m AOD)	Legend	Stratum Descrip	tion S	/ater Wel
oth (m)     Type     Results       0.10     ES	0.15	Legend	End of Borehole at 0.18	dium SAND with of sandstone.	
Type Results					

		3rd F	n Vision Environment T loor Emerson House, t Street,	eam		ocation SV1	
urbanvision		Eccle	S			Sheet 1	
Project Name		M30 (				Hole T	
Reddish North Primary Sc	hool	Project UV/000		ords: -		HA	,he
ocation: Reddish, Stoc		0 0/000	174			Scal	
	кроп		Leve	el: -		1:10	
						Logged	
Client: BAM Construct	tion		Date	es: 19/07/2011		J Evan	
Samples & In Situ Testing	Depth Level					Water	
pth (m) Type Results	Depth Level (m) (m AOD)			Stratum Description		Strikes	Well
	0.28		ccasional rootlets and rar	rey silty fine to medium SAND e gravel of sandstone.			
Type Results					-		
emarks:							
						A	GS

	urbanvision		Eccles M30 0TE	et,	<b>SV18</b> Sheet 1 of 1
roject N	Name		Project No	Co. order	Hole Type
	n North Primary Sch		UV/00017	Co-ords: -	HA
_ocation	n: Reddish, Stock	oort		Level: -	Scale 1:10
					Logged By
Client:	BAM Constructi	on		Dates: 19/07/2011	J Evans
	es & In Situ Testing Type Results	Depth Level (m) (m AOD)	Legend	Stratum Description	Water Strikes Well
0.40	ES	0.50	MAD occas	SROUND: Brown/grey silty fine to medium SAND w nal rootlets and rare gravel of sandstone.	vith

		3rd Alb	Floor Emers	vironment Team on House,		ocation No.
urbanvision		Ecc M3	cles 0 0TE			heet 1 of 1
roject Name		Projec				Hole Type
eddish North Primary Scho	loc	UV/00	00174	Co-ords: -		HA
ocation: Reddish, Stockp		I				Scale
				Level: -		1:10
				D / 40/07/0044	1	ogged By
lient: BAM Construction	on			Dates: 19/07/2011		J Evans
Samples & In Situ Testing	Depth Level (m) (m AOD)	Legend		Stratum Description		Water Strikes
oth (m) Type Results	(m) (m AOD)	XXXXX	MADE GROU	ND: Brown/grey silty fine to medium SAND with		Sunkes
0.40 ES	0.50			End of Borehole at 0.50 m		
Type Results					-	

U	rbanvision		3i A E	rban Vision En d Floor Emers lbert Street, ccles 30 0TE	vironment Team on House,		ocation No. <b>SV20</b> Sheet 1 of 1
Project Nar				ect No.			Hole Type
	orth Primary Sch		UV/(	000174	Co-ords: -		HA
ocation:	Reddish, Stock	port			Level: -		Scale 1:10
Client:	BAM Construct	ion			Dates: 02/08/2011		Logged By J Evans
Samples &	a In Situ Testing e Results	Depth L (m) (m	evel AOD) Legend		Stratum Description		Water Strikes Well
		0.20		to medium SA	ND: Topsoil comprising brown/grey slightly silty ND. ND: Soft brown snady CLAY with occasional gra	-	
<b>.</b>	Deputte	4				ŀ	
Type emarks:	e Results	1					

		3 A	Irban Vision En rd Floor Emerse Ibert Street, ccles			SV2	1
urbanvision		N	130 OTE			heet 1	
Project Name	1		ect No.	Co-ords: -		Hole T	
Reddish North Primary Sch		UV/	000174			HA	
ocation: Reddish, Stock	port			Level: -		Sca 1:10	)
Client: BAM Construct	ction			Dates: 02/08/2011		₋oggeo J Evar	
Samples & In Situ Testing	Depth Leve (m) (m AC			Stratum Description	I	Water	Well
pth (m) Type Results	0.15 0.28	D Legend	with frequent r	ND: Firm brown snady CLAY with occasional gra	-	Strikes	vvell
					-		

	urbanvision		3i A E M	rd Floor Emerse Ibert Street, ccles I30 0TE	vironment Team on House,	S	ocation SV2 Sheet 1	<b>22</b> 1 of 1
Project N				ect No. 000174	Co-ords: -		Hole T HA	
Location	North Primary Scho Reddish, Stockp		00/0	00174	Level: -		Sca 1:10	le
Client:	BAM Construction	on			Dates: 02/08/2011		Logge J Eva	d By
	s & In Situ Testing	Depth Level (m) (m AOD)	Legend		Stratum Description		Water Strikes	Well
				MADE GROU frequernt root wood.	ND: Soft to firm brown slightly sandy CLAY with ets and occasional gravel of sandstone, brick and			
		0.20		MADE GROU	ND: Soft brown sandy CLAY with rare cobble of brick ivel of sandstone concrete and brick.	and -		
		0.49			End of Borehole at 0.49 m			
						- 1		
Remarks	Гуре Results					1		GS

eddish North Primary School     UV/000174     Co-ords: -     HA       location:     Reddish, Stockport     Level: -     1:10       ient:     BAM Construction     Dates:     0/00/02/2011     Logged By Usans       Simples & In Situ Testing     Optim     Image     Machine     Stratum Description     Stratum Description       In Intro     Type     Reading     Optim     Image     Mathe GROUND: Topal comparising firm path brown to brown standy     View Mather       0.20     U.20     Mather GROUND: Sett brown standy     U.20     Mather GROUND: Sett brown standy     Image     Image       0.20     U.20     Mather GROUND: Sett brown standy     U.20     Image     Exact Mather Description     Image       0.20     U.20     Mather GROUND: Sett brown standy     Image     Image     Image       0.20     U.20     Image     Image     Image     Image     Image       0.20     Image     Image     Image     Image     Image     Image       0.20     Image     Image     Image     Image     Image     Image       0.20     Image     Image     Image     Image     Image     Image       Image     Image     Image     Image     Image     Image     Image	urbanvision	1	Urban Vision En 3rd Floor Emers Albert Street, Eccles M30 0TE	vironment Team on House,	Location SV2 Sheet 1	<b>3</b> of 1
Exclusion:     Reddish, Stockport     Level:     .     Scale       ient:     BAM Construction     Dates:     02/08/2011     Logged By J Evans       Samples & In Stu Testing Intrim     Optim     Level:     .     .       MADE GROUND:     Trace of the composing free plat brown to brown sandy CUX with occasional gravel of brok, concosts and composing free plat brown to brown sandy     .     .       0.20     0.20     .     .     .     .       MADE GROUND: Self brown sandy CLAY with occasional gravel of brok, concosts and committies.     .     .       0.50     .     .     .     .       0.50     .     .     .     .	Project Name			Co-ords: -		
Level: - 1:10 Leged By JExans Samples & In Situ Testing (n) Type Results 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.2			UV/000174			
Ident:     BAM Construction     Dates:     02/08/2011     J Evens       Samples & In Situ Testing in min     Depint Results     Image: Construction     Material M		ιοσκροπ		Level: -		
Samples & In Shu Testing       Depin       Levels       Levels       Stratum Description       Values       Well         In min       Type       Results       0.20       MADE GROUND: Toppol compring film pale brown to brown sandy       OLEV with occasional gravel of bios.       MADE GROUND: Soft brown sandy CLAY with occasional gravel of bios.       Image: CLAY with occasional gravel of bios.       Image: CLAY with occasional gravel of bios.         0.20       0.20       0.20       MADE GROUND: Soft brown sandy CLAY with occasional gravel of bick, concrete and centralise.       Image: CLAY with occasional gravel of bick, concrete and centralise.         0.50       0.50       Image: CLAY with occasional gravel of bick, concrete and centralise.       Image: CLAY with occasional gravel of bick, concrete and centralise.         Image: CLAY with occasional gravel of bick.       0.50       Image: CLAY with occasional gravel of bick.       Image: CLAY with occasional gravel of bick.         Image: CLAY with occasional gravel of bick.       0.50       Image: CLAY with occasional gravel of bick.       Image: CLAY with occasional gravel of bick.       Image: CLAY with occasional gravel of bick.         Image: CLAY with occasional gravel of bick.       Image: CLAY with occasional gravel of bick.       Image: CLAY with occasional gravel of bick.       Image: CLAY with occasional gravel of bick.         Image: CLAY with occasional gravel of bick.       Image: CLAY with occasional gravel of bick.       Image: CLAY with occas				D / 00/00/0011		
In (m)     Type     Results     (m)     (m, ACD)     Capulation     Stratum Lescription     Stratum Lescription       MADE     GROUND     Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription     Stratum Lescription       MADE     GROUND     Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription       MADE     GROUND     Software     CLAY with consistent gravel of biox.     Image: Stratum Lescription     Image: Stratum Lescription       Image: Stratum Lescription     G.20     Image: Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription       Image: Stratum Lescription     G.20     Image: Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription       Image: Stratum Lescription     G.20     Image: Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription       Image: Stratum Lescription     G.20     Image: Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription       Image: Stratum Lescription     G.20     Image: Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription       Image: Stratum Lescription     G.20     Image: Stratum Lescription     Image: Stratum Lescription     Image: Stratum Lescription       Image: Stratum Les			I	Dates: 02/08/2011		าร
Type     Results	Samples & In Situ Testi           pth (m)         Type         Results	19 Depth Level (m) (m AOD) L	_egend	Stratum Description	Water Strikes	Well
VALUE GROUNDUS Soft drown same CLAY with occessions growel of bird, concrete and concrete and concrete and concrete and concrete and concrete and concrete at 0.50 m           0.50         End of borehole at 0.50 m			CLAY with oc	casional gravel of brick.		
Type Results			MADE GROU brick, concrete	ND: Soft brown sandy CLAY with occasional gravel of and ceramics.	-	
Type Results		0.50	×××			
Type Results				End of Borehole at 0.50 m		
					- 1	
AGS	emarks:					
					A	GS

	urbanvision			3 A E N	Irban Vision Envir rd Floor Emerson Ibert Street, ccles 130 0TE	onment Team House,	5	ocation SV2 Sheet 1	<b>24</b> 1 of 1
Project					ect No.	Co-ords: -		Hole T	
Locatio	n North Primary Son: Reddish, Stoo			00/0	000174			HA Sca	
						Level: -		1:10	
Client:	BAM Constru	ction				Dates: 02/08/2011		Logge J Evai	
	es & In Situ Testing	Depth (m)	Level (m AOD)	egend		Stratum Description		Water Strikes	1
Depth (m)	Type Results				MADE GROUND rootlets and occa	Firm pale brown to brown sandy CLAY with free sional gravel of sandstone and brick.	equent -		
		0.20			MADE GROUND sandstone and o	Soft brown sandy CLAY with rare gravel of bri ramics.	ck,		
	Type Results								
Remark		I	<u> </u>				1	A	GS

Project NameProject No.Hole TypeReddish North Primary SchoolUV/000174HA	urbanvision	3 A E	rban Vision Environment Team rd Floor Emerson House, Ibert Street, ccles 130 0TE	Location No <b>SV25</b> Sheet 1 of
Location:     Reddish, Stockport     114       Location:     Reddish, Stockport     Level: -       Samples & In Stur Testing     Depth       Digit (n)     Type       Reading     0.15       0.15     MADE GROUND: Firm gale troom to room gand; CLV with request room	Project Name	Proje	ect No.	
Client:     BAM Construction     Dates:     02/08/2011     Logged By J Evans       samples & In Situ Testing opth (m)     Drop     Level     ABE GROUND: Fimple brown brown sandy CLAY with request module and occasional gravel of sampler, bick ore ash and glass.     MADE GROUND: Set from analy CLAY with request module and occasional gravel of sampler, bick ore ash and glass.     MADE GROUND: Set from sandy CLAY with occasional gravel of sampler, bick ore ash and glass.     Image Gravity and classion gravel of sampler and bick.     Image Gravity and classion gravel of sampler and glass.       Uppe     Beautis     0.30     Image Gravity and classion gravel of sampler and glass.     Image Gravity and glass.     Image Gravity and glass.	Reddish North Primary Sch	nool UV/0	000174 Co-ords: -	HA
Samples & In Situ Testing     Orthin     Indeers     Dates:     02/02/2011     J Evans       Samples & In Situ Testing     Orthin     Indeers     Statum Description     Weil       Mode OROUND: Finple troop to bran sandy CLAY with request     0.15     Mode OROUND: Finple troop to bran sandy CLAY with request     Weil       0.15     Integration     0.15     Integration     Statum Description     Weil       0.15     Integration     0.15     Integration     Statum Description     Integration       0.15     Integration     Integration     Statum Description     Integration       0.15     Integration     Integration     Integration     Integration       0.15     Integration     Integration     Integration     Integration       0.15     Integration     Integration     Integration     Integration       Integration     Integration     Integration     Integration     Integration	Location: Reddish, Stock	port	Level: -	
Samples & In Situ Testing     Orthin     Indeers     Dates:     02/02/2011     J Evans       Samples & In Situ Testing     Orthin     Indeers     Statum Description     Weil       Mode OROUND: Finple troop to bran sandy CLAY with request     0.15     Mode OROUND: Finple troop to bran sandy CLAY with request     Weil       0.15     Integration     0.15     Integration     Statum Description     Weil       0.15     Integration     0.15     Integration     Statum Description     Integration       0.15     Integration     Integration     Statum Description     Integration       0.15     Integration     Integration     Integration     Integration       0.15     Integration     Integration     Integration     Integration       0.15     Integration     Integration     Integration     Integration       Integration     Integration     Integration     Integration     Integration				Logged By
open (m)     Type     Results     (m)     (m ACD)     Open (M CD)     Stratum Description     Stratum Description       0.15     0.15     0.15     MADE GROUND: Firm paids from to two analy CLAY with request     Image: Clay open (M CD)			Dates: 02/08/2011	J Evans
ADE GROUND: Firm pale brown bandy CLAY with request rodets and occasional gravel of sandbalane and brids. 0.15 0.30 0.30 End d Breated at 0.30 m 1 1	Samples & In Situ Testing epth (m) Type Results	Depth Level (m) (m AOD) Legend	Stratum Description	Water Strikes
		0.15	MADE GROUND: Soft brown sandy CLAY with occasiona sandstone, brick rare ash and glass.	with frequent

	urbanvision		3 A E N	rd Floor Emers Ibert Street, ccles 130 0TE	vironment Team on House,	S	ocation No. <b>SV26</b> Sheet 1 of 1
Project		haal		ect No. 000174	Co-ords: -		Hole Type HA
Locatio	h North Primary So n: Reddish, Stoc			000174	Level: -		Scale 1:10
Client:	BAM Construc	tion			Dates: 02/08/2011		Logged By J Evans
Samp Depth (m)	Type Results	Depth Lev (m) (m A0	el Legend (ر		Stratum Description		Water Strikes Well
20pur (III)		0.18		snady CLAY v sandstone.	ND: Topsoil comprising pale brown to brown slightly with frequent rootlets and rare gravel of brick and		
	Type Results					-	
Remark	S:						AGS

	urbanvision		Т	3rd Flo Albert S Eccles M30 01		S	ocation SV2	2 <b>7</b> 1 of 1
Project		Sahaal		Project N UV/0001	Coordor		Hole T HA	
Locatio	h North Primary S n: Reddish, Sto			0 0/0001	Level: -		Sca 1:10	le
Client:	BAM Constr	uction			Dates: 02/08/2011		Logge J Eva	d By
Sampl Depth (m)	es & In Situ Testing Type Results	Depth (m)	Level (m AOD)	gend	Stratum Description		Water Strikes	Well
<u> </u>				MA slig of t	E GROUND: Topsoil comprising firm pale brown to brown y sandy CLAY with frequent rootlets and occasional gravel ck and wood.	-		
		0.20		MA sar	E GROUND: Soft brown sandy CLAY with rare gravel of brick tone and ash.			
		0.40	202	2000	End of Borehole at 0.40 m			
						-		
						- 1		
						-		
						-		
						-		
						-		
	_							
Remark	Type Results S:	I		I				GS

	urbanvision			3rd All Ec M	ban Vision Envir d Floor Emerson bert Street, ccles 30 0TE			S	ocatio SV2	<b>28</b> 1 of 1
Project					ect No.	Co-ords: -	-		Hole 7	
Locatio	h North Primary Sc n: Reddish, Stoc			00/0	00174				HA Sca	
						Level:	-		1:1	
Client:	BAM Construc	tion				Dates: (	02/08/2011		_ogge J Eva	
	es & In Situ Testing	Depth	Level (m AOD)	gend		Stratum	Description	<u> </u>	Water Strikes	-
Depth (m)	Type Results	0.25 0.78			slightly sandy CL brick and sandsto	: Topsoil comprisin AY with frequent ro one. : Soft brown sandy	Description of firm pale brown to brown ootlets and rare gravel of / CLAY with rare gravel of brick and nole at 0.78 m	-1	Strikes	
	Type Results	_						-		
Remark	s:								A	GS

		Urban Vision Envir 3rd Floor Emersor Albert Street,	house,		ocation SV2	
urbanvision		Eccles M30 0TE		5	Sheet 1	
Project Name		Project No.			Hole T	
Reddish North Primary Sch	ool	UV/000174	Co-ords: -		HA	
Location: Reddish, Stock			Level: -		Sca 1:1(	
Client: BAM Construct	ion		Dates: 02/08/2011		Loggeo J Evai	d By
Samples & In Situ Testing	Depth Level (m) (m AOD) Le	gend	Stratum Description		Water Strikes	
epth (m) Type Results	(m) (m AOD) (***	MADE GROUNI	2: Topsoil comprising brown/grey silty fine to medium gravel of sandstone. End of Borehole at 0.30 m		Strikes	
				- 1		
				-		

url Project Nam	banvision				or Emerson I Street, E	nment Team House,			She	V3	<b>0</b> of 1
	rth Primary Scho	ol		UV/00017		Co-ords:	: -			HA	урс
	Reddish, Stockp			0 1/00011	1-					Scal	e
						Level:	-			1:10	
											Ву
Client: I	BAM Construction	on				Dates:	02/08/2011			van	
Samples & I	In Situ Testing	Depth Le (m) (m A	vel							/ater rikes	Well
epth (m) Type	Results	(m) (m A	OD) Le	egend			Im Description	<u> </u>	St	rikes	
		0.30			DE GROUND: ND with rare g	avel of sandsto	ising brown/grey silt one	y fine to medium			
											1
Туре	Results										
emarks:										A	GS

			3	rban Vision Environment Team rd Floor Emerson House,	Location	
			A	lbert Street, ccles	SV3	
	urbanvision		N	30 0TE	Sheet 1	
Project			-	ect No. Co-ords: -	Hole T	
	h North Primary Sch		00/0	000174	HA	
Locatio	n: Reddish, Stock	ποσ		Level: -	Scal 1:10	)
Client:	BAM Constructi	on		Dates: 02/08/2011	Logged	
Sampl	les & In Situ Testing	Depth Leve (m) (m AO	Logond		J Evar Water Strikes	
epth (m)	Type Results	(m) (m AO	D) Legend	Stratum Description MADE GROUND: Topsoil comprising brown/grey silty fine to medium	Strikes	wei
		0.25		SAND with rare gravel of sandstone.		
					-	
	Type Results				-	
Remark					A	GS

		Urban Vision Envir 3rd Floor Emersor		Location	
		Albert Street, Eccles		SV3	
urbanvision		M30 OTE		Sheet 1	
Project Name	aal	Project No.	Co-ords: -	Hole T	
Reddish North Primary Sch		UV/000174		HA	
ocation: Reddish, Stock	роп		Level: -	Sca 1:10	)
Client: BAM Construct	ion		Dates: 02/08/2011	Logged J Eva	
Samples & In Situ Testing           pth (m)         Type         Results	Depth Level (m) (m AOD)	egend	Stratum Description	Water Strikes	
	0.25	MADE GROUNE SAND with rare	2: Topsoil comprising brown/grey silty fine to mediu gravel of sandstone.		

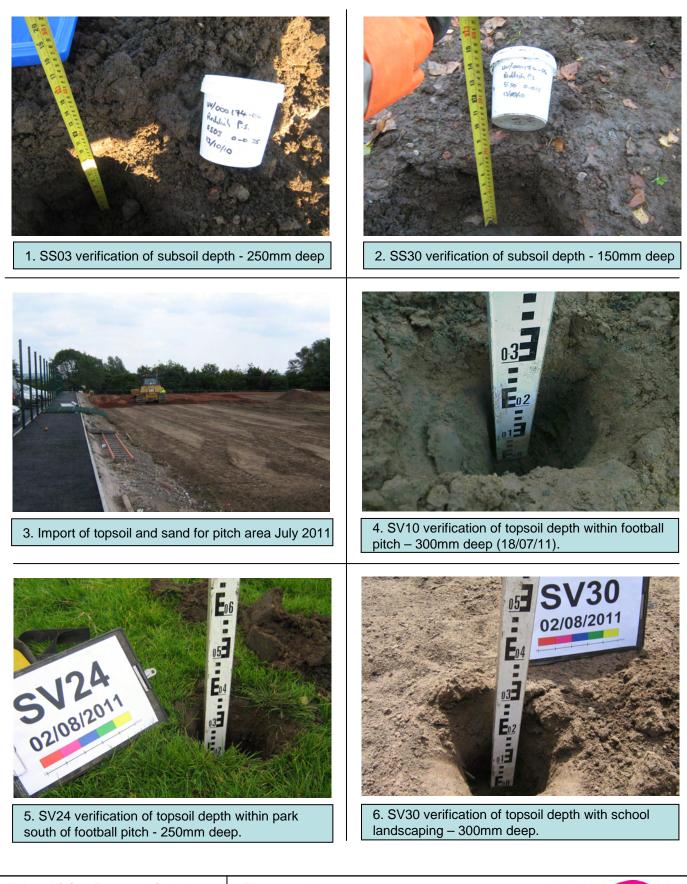
		3rd Floor Em Albert Street, Eccles	Environment Team erson House,	Location No. SV33 Sheet 1 of 1
roject Name		M30 OTE Project No.		Hole Type
Reddish North Primary Sch	lool	UV/000174	Co-ords: -	HA
ocation: Reddish, Stock			Level: -	Scale 1:10
				Logged By
Client: BAM Construct	ion		Dates: 25/08/2011	J Evans
Samples & In Situ Testingoth (m)TypeResults	Depth Level (m) (m AOD)	Legend	Stratum Description	Water Strikes
	0.50	MADE GR gravel of s	OUND: Brown/grey silty fine to medium SAND wandstone.	ith rare

	urbanvision		3 A E	Urban Vision Environment Team 3rd Floor Emerson House, Albert Street, Eccles M30 0TE			Location No. SV34 Sheet 1 of 1			
roject N	ame		Proj	ect No.	Colordo:		Hole Type			
	North Primary Sch		UV/	000174	Co-ords: -		HA			
Location: Reddish, Stockport					Level: -		Scale 1:10			
							Logged By			
Client:	BAM Constructi				Dates: 25/08/2011		J Evans			
Samples	& In Situ Testing           ype         Results	Depth Level (m) (m AOE	) Legend		Stratum Description		Water Strikes	Well		
	VDE Results	0.45		MADE GROUND gravel of sandsto	: Brown/grey silty fine to medium SAND with rar ne. End of Borehole at 0.45 m	e				
	ype Results	1								
emarks:							A	GS		

Urban Vision Environment Team 3rd Floor Emerson House, Albert Street,							
Urbanvision Eccles M30 OTE							
	Project No.	Colorda:					
	UV/000174	Co-oras: -			HA		
(port		Level: -			Scale 1:10		
		Dates: 25/08/2	011	Logged By J Evans			
Depth Level (m) (m AOD)	egend	Stratum Descripti	ion		Water Strikes	Well	
0.35	MADE GROUNI gravel of sandst	one.					
				- 1			
				-			
k		tion	3rd Floor Emerson House, Albert Street, Eccles M30 0TE         hool       Project No. UV/000174       Co-ords: -         kport       Level: -         tion       Dates: 25/08/2         Openh (m)       Legend (m AOD)       Stratum Descripti GROUND: Brown/grey silty fine to med gravel of sandstone.	3rd Floor Emerson House, Albert Street, Eccles M30 0TE         Mool       Project No. UV/000174         kport       Level: -         tion       Dates: 25/08/2011	3rd Floor Emerson House, Albert Street, Eccles M30 0TE     S       hool     Project No. UV/000174     Co-ords: -       kport     Level: -       tion     Dates: 25/08/2011        MADE GROUND: Brown/grey silty fine to medium SAND with rare gravel of sandstone.	3rd Floor Emerson House, Albert Street, Eccles M30 0TE     SV3 Sheet 1       Project No. UV/000174     Co-ords: -     Hole T HA       kport     Level: -     1:10       tion     Dates: 25/08/2011     Logged J Evar        Depth (m AOD)     Legend     Stratum Description        MADE GROUND: Brown/grey silty fine to medium SAND with rare gravel of sandstone.     Water Strikes	



## Appendix E Photos



Urban Vision Partnership Ltd Emerson House Albert Street, Eccles, Salford, M30 0TE

# Photographs1-6Site:Reddish North Primary SchoolAddressLand East of Harcourt StreetReddishStockport



Date: August 2011 Job No: UV/000174 Client: BAM Construction



7. SV33 taken in the northwest corner of site -500mm deep.



8. Landscaping within the car park.



9. Landscaping in the west of site, membrane visible



10. Football pitch south of school.



11. Landscaping south of school building.

Albert Street,

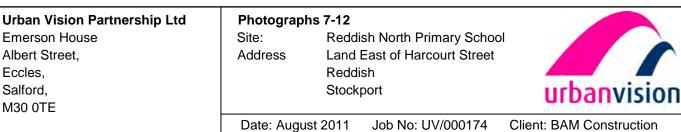
Eccles,

Salford,

M30 0TE



12. Playground on west side of school.



### Reddish North Primary School and Children's Centre

### Gas Membrane Photographs





Gas Membrane (yellow sheet) with joint sealed Gas Membrane Insulation above membrane (left of photo) Slip Sheet above insulation (right of photo) Preparation for concrete pour showing reinforcement (far right of photo)





### Reddish North Primary School and Children's Centre

### Gas Membrane Photographs





Post concrete pour

Gas Membrane Products: Membrane

Jointing Tape

