

REPORT ON RECONNAISSANCE VISIT INTO THE BURIAL VAULTS

carried out at
**12 – 14 VILLIERS STREET,
SUNDERLAND, SR1 1HA**

Prepared for
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EXECUTIVE SUMMARY

It is understood that it is proposed to demolish the buildings on site and develop the site with a six-storey apartment block.

Previously, a geotechnical desk study was undertaken by Ian Farmer Associates (report no. 3953, Jun 06), ref. 7.8, which recommended the site be subjected to detailed archaeological investigation to enquire into the presence of vaults beneath the site.

Ian Farmer Associates *Archaeological Services* carried out a desk-based assessment (report no. 11005, Jul 06), ref. 7.1, and a photographic survey of surface structures whilst supervising the detailed building recording (report no. 11008, Nov 06), ref. 7.2, and ground penetrating radar (GPR) survey (report no. 11010, Nov 06), ref. 7.3. Each phase led to a greater understanding of the sub-surface structures.

On the instructions of Mario Minchella Architects, acting on behalf of Atlas Homes, a reconnaissance visit into the sub-surface structure was undertaken to explore the vaults' structural integrity and atmospheric regime prior to assessing the archaeological potential aimed to assist in deciding further archaeological strategy.

Due to the unknown nature of the sub-surface structure, a confined spaces team under the supervision of an archaeologist was employed to open the cast-iron gates, remove the rubble blocking the vault entrance, construct an opening to provide safe entry, test the structural stability and gas composition, and investigate the surviving archaeology. This took place over three and a half days during March 2007.

The reconnaissance visit was concluded with the production of digital photographs together with their index sheets and a scale drawing of the vaults. A factual and interpretative report pulled together all findings and made recommendations as to the next archaeological investigation phase.

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1.0 INTRODUCTION

- 1.1 It is understood that it is proposed to demolish the buildings and develop the site with six-storey apartment blocks.
- 1.2 On the instructions of Mario Minchella Architects on behalf of Atlas Homes, a geotechnical desk study was undertaken by Ian Farmer Associates (report no. 3953, Jun 06), ref. 7.8, which recommended the site be subjected to detailed archaeological investigation to enquire into the presence of vaults beneath the site.
- 1.3 Ian Farmer Associates *Archaeological Services* carried out a desk-based assessment (report no. 11005, Jul 06), ref. 7.1, and a photographic survey of surface structures whilst supervising the detailed building recording (report no. 11008, Nov 06), ref. 7.2, and ground penetrating radar (GPR) survey (report no. 11010, Nov 06), ref. 7.3. Each phase led to a greater understanding of the sub-surface structures and is selectively referred to throughout this report.
- 1.4 Following the above preliminary phases, the reconnaissance visit into the sub-surface structure was undertaken by a confined spaces team to explore the vaults' structural integrity and atmospheric regime prior to assessing the archaeological potential aimed to assist in deciding further archaeological strategy.
- 1.5 This report has been prepared for the sole use of the Client for the purpose described and no extended duty of care to any third party is implied or offered. Third parties using any information contained within this report do so at their own risk.
- 1.6 The comments given in this report and the opinions expressed herein are based on the information received and the conditions encountered during site works. However, there may be conditions prevailing at the site which have not been disclosed by the investigation and which have not been taken into account in the report.

2.0 SITE SETTING

2.1 Site Location

- 2.1.1 The site is situated at the former garage at 12 Villiers Street, Sunderland, Tyne and Wear, SR1 1HA, and may be located by National Grid Reference 440080E 557050N.
- 2.1.2 Site location plans are included in Appendix 1, Figure A1.1.

2.2 Site Description

- 2.2.1 The walkover survey found the site to be walled in and to lie between Villiers Street to the east, a commercial plot to the north, a service road to the west, and a further commercial plot to the south.

- 2.2.2 A car park occupies the south of the site with a modern extension to the former garage immediately to the west.
- 2.2.3 The remainder of the former garage occupies the north of the site, comprising a historic building and modern extensions immediately to the north of this building.
- 2.2.4 An understanding of the building history on site, backed up by the GPR survey concludes that the original Bethel Chapel of 1817-18 stood in the car park, and that the chapel extension of 1826 shared its northern wall with what became the southern wall of the subsequent Sunday School.
- 2.2.5 Although chapel and extension have since been demolished the Sunday School persists, and the southern building wall displays construction in fossil-rich limestone.
- 2.2.6 Hence, the historic building still visible within the walls of the former garage is the former Sunday School with a main door leading onto Villiers Street.
- 2.2.7 A site plan is included in Appendix 1, Figure A1.2.
- 2.2.8 A ground floor plan and the result of the GPR survey are included in Appendix 3.

3.0 SITE WORK

3.1 Methodology

- 3.1.1 The reconnaissance visit took place between March 5th and 8th, 2007.
- 3.1.2 Due to the unknown nature of the sub-surface structure, a confined spaces team under the supervision of an archaeologist was employed to open the cast-iron gates, remove the rubble blocking the vault entrance, construct an opening to provide safe entry, test the structural stability and gas regime, and investigate the surviving archaeology.

3.2 Day 1 – 05/03/07

- 3.2.1 During his preliminary investigations, Ian Stewart of Ian Farmer Associates *Archaeological Services* had discovered a cast iron door believed to be the point of entry into the vaults. Beyond this point, the GPR survey clearly showed a rectangular sub-surface chamber within the existing building.
- 3.2.2 The next step was to gain entry into the vaults to assess any hazards. Hence, Greg Harris and Frigga Kruse (both Ian Farmer Associates, IFA) visited the site to inspect the cast iron door, and, if possible, open and remove it.

3.2.3 GH and FK were able to pull the door off and place it to one side. Removal over a greater distance was not deemed feasible due to the great weight of the door.

3.2.4 During his site visits, Ian Stewart had removed the concrete from one door, but feeling along the underside of the concrete immediately to the north of the removed door uncovered a second cast iron door. Concrete was broken away until this second door was freed and subsequently removed. The initial oversight caused a lack of photographic evidence of both doors *in-situ*.

3.2.5 Once the doors were placed a safe distance away, the working area was made safe, and air was allowed to enter through the small opening for one and a half days.

3.3 Day 2 – 07/03/07

3.3.1 GH and FK, dressed in the appropriate PPE (hard hats, face masks, latex gloves, hi-vis vests, overalls, safety boots), shifted the concrete rubble from the immediate surroundings of the entrance to a designated area within the building to create a safe working environment, and began to excavate the theoretical stairs leading into the vaults. Sabre escape sets were at hand but would not become necessary till later, and a gas monitor was placed at the opening into the structure.

3.3.2 The gas monitor measures the range of breathable O₂, the presence of CO and CO₂ as well as the flammable range of methane. O₂ was favourable, and none of the other gases were registered.

3.3.3 Excavation with shovel and wheelbarrow was slow. An initial assessment indicated the stairs to be narrow and steep, and as excavation progressed an easier and safer way to remove spoil would have to be sought.

3.3.4 The arrival of James Wilson (IFA) meant the team could excavate into what was defined as a confined space, i.e. anywhere beneath the concrete floor. GH continued to dig while JW and FK pulled buckets of spoil onto the surface to be emptied onto the spoil heap. Progress was a little swifter, and soon a decision was made to break out the concrete floor above the stairs until it was flush with a brick arch lining the vault entrance.

3.3.5 At the end of the shift the entrance into the vault was deemed sufficient for entry by the confined spaces team on the following day.

3.3.6 After final photographs were taken of the day's progress, the entrance into the vaults was made safe using spray paint, barriers, boarding, and safety signs. Tools were tidied away from the work area. The building was locked from the outside, the key left with Temple Security, and access to third parties made impossible.

3.4 Day 3 – 08/03/07

- 3.4.1 At the beginning of the shift, preparations were made for a confined spaces team to enter the vaults. Fred Fountain (IFA) and FK each wore hard hat, head torch, face mask, hi-vis vest, cotton overalls, latex gloves, harness, and safety boots. Each carried a sabre escape set, and FK obtained one of two gas monitors.
- 3.4.2 JW would act as top man at the fresh air base with an eye on the second gas monitor placed at the entrance. In the absence of radios and the necessity to leave mobile phone at the surface (danger of igniting flammable gases), a communication system among the team was agreed.
- 3.4.3 After a complete induction by FF, the team entered the vault at 9.40am and investigated the central chamber and each side passage in turn to check for structural integrity and gas levels.
- 3.4.4 Although a further pile of rubble within the central passage and disturbance of the graves made walking more difficult, the structure was found to be uncompromised, and the oxygen levels varied from 20.9% near the entrance to 20.4% in the most westerly passages. No other gaseous hazards were encountered.
- 3.4.5 Remains of archaeological interest were noted briefly, and the initial visit was concluded at 10.25am.
- 3.4.6 At the surface, FF issued a permit to work within the vaults, and the remaining confined spaces team now comprising GH, JW and FK decided on a strategy to gain the most from the reconnaissance visit.
- 3.4.7 JW and FK went back into the vaults to create a temporary labelling system of the chambers that would need to be checked against archival records.
- 3.4.8 Once labelled, measuring of the structure commenced which took up the rest of the day. Numerous observations were made during the visit, which are detailed in section 4.3.
- 3.4.9 At the end of the shift, the measurements were used to relate sub-surface features to the buildings above. Due to a fault with the camera, no pictures could be downloaded from the day's progress.

3.5 Day 4 – 09/03/07

- 3.5.1 Work on site commenced at 8.30am. GH manned the fresh air base at the entrance to the vault, and JW and FK entered the central chamber fully equipped to continue the measuring and drawing of the structure.
- 3.5.2 After lunch, JW manned the fresh air base, and GH and FK completed the photographic record. Having kept a detailed record of the gas regime, the use

of the camera flash was deemed safe, as no flammable methane was encountered.

3.5.3 Numerous observations were made during the visit, which are detailed in section 4.4.

3.5.4 Once returned above ground, the team compared the sub-surface measurements with known features before making the site as safe as possible until further archaeological work can commence.

3.6 Reporting

3.6.1 The reconnaissance visit was concluded with the production of digital photographs together with their index sheets and a scale drawing of the vaults. A factual and interpretative report pulled together all findings and made recommendations as to the next archaeological phase.

3.6.2 The digital photography index sheets together with contacts sheets are included in Appendix 2.

3.6.3 The scale drawing of the vaults is included in Appendix 3, which also comprises selected drawings from the building recording and GPR survey. Note that the scale drawing on the tracing paper can be used as an overlay.

4.0 OBSERVATIONS

4.1 Day 1 – 05/03/07

4.1.1 The first part of the **cast iron door** had been discovered beneath a thin layer of concrete and lay slightly inclined in east-west direction. It was 1.80m long by 0.48m wide with a central, partially blocked air vent 1.25m from the eastern bottom edge. After knocking further concrete off from around the edges of the door it was found to lay loosely, any hinges and locks having eroded away.

4.1.2 The first part of the **cast iron door** was seen to have rested on a sandstone frame upon brick walls. Closer inspection uncovered two rusty hinges fastened into the sandstone frame.

4.1.3 The **exposed pit** was only shallow, and where one would have expected steps leading into the vault, there was only what appeared to be **demolition rubble**, a dark brown gravelly fine to medium sand comprising concrete, slag, glass, china, scrap metal and human bone (femur, tibia).

4.1.4 A search with the torch quickly showed that where this rubble had not reached to top edge of the cast iron door, **an opening** existed beyond which the vault was assumed to exist. This opening was seen to have allowed a certain amount of fresh air into at least part of the vault.

- 4.1.5 Immediately to the north of the removed door, a **second cast iron door** with similar dimensions and decoration was discovered.
- 4.1.6 A thin **cast iron plate** approximately 0.88m long by 0.66m wide was found beneath the western top edge of the first door but above the western top edge of the second part, a clear sign of disturbance.
- 4.1.7 Judging by rows of holes along the edges, this **cast iron plate** was believed to have been bolted into place when the vault fell out of use to prevent any unauthorised entry. The bolts had since eroded, and the plate was removed easily.
- 4.1.8 Following the removal of the plate, the second part of the **cast-iron door** was also lifted.

4.2 Day 2 – 07/03/07

- 4.2.1 During the excavation of the rubble, the first couple of **steps** unearthed consisted of single sandstone slabs set on bricks. An initial assessment indicated the **stairs** to be narrow and steep.
- 4.2.2 After the breaking out of concrete to allow for more headroom, the encountered **floor sequence** from ground level downward was reinforced concrete above brick which was held in place by a sheet of corrugated iron beneath which more dark brown sandy gravelly rubble comprised bones and teeth, lying on the brick arch and brick vault roof.
- 4.2.3 Within the rubble blocking the staircase, numerous **bones** of a small infant(s), including one half of a mandible, were found.
- 4.2.4 At the end of the shift, the **entrance into the vault** was 2.50m long by 0.85m wide in plan view and 2.40m deep by 0.85m wide in section.
- 4.2.5 Excluding the concrete floor and brick roof, the **exposed opening** was 1.30m high by 0.85m wide. This was deemed sufficient for entry by the confined spaces team the next day.
- 4.2.6 Once through the aperture, the **cavity** opened up, and the rubble not yet removed formed a downward slope of about 35 degrees.
- 4.2.7 So far five sandstone **steps** had been uncovered; it was decided to leave further excavation to the archaeologists.

4.3 Day 3 – 08/03/07

- 4.3.1 The dark brown **demolition rubble** that blocked the stairs also spilled into much of the passages immediately to the south and the north of the entrance, chambers 2 and 13.

- 4.3.2 **Chamber 2** opened into 2A immediately to the east, which was observed to be brick-walled but to possess sandstone slabs for a roof. 2B was filled almost entirely with limestone cobbles, but brick arches could be made out to the south.
- 4.3.3 The doorway opened into a **central chamber** approximately 8.20m long by 1.90 wide and at most 2.54m high.
- 4.3.4 Further to the rubble in the entrance, there was an **additional pile of rubble** comprising bricks and metal shavings as well as broken glass and other refuse towards the western end of the chamber. It was noted that this rubble was not carried down the stairs and through the chamber, but was dropped through a **breach in the vaulted brick ceiling**.
- 4.3.5 This **breach** was measured to exist approximately 8.00m to the west of the arched doorway, to be roughly 0.30m in diameter, and was found to have been bricked up. Upon investigation at the surface it was seen that the whole lot had subsequently been covered by an uninterrupted layer of concrete.
- 4.3.6 Similarly, a 0.63m wide, circular **air vent** with an iron grate in the west wall of the central chamber had no surface signature in the concrete above.
- 4.3.7 From the central chamber led **twelve passages**, excluding the doorway: five in the south wall, two in the west wall, and five in the north wall.
- 4.3.8 The **arrangement** appeared symmetrical, but the doors in the south wall were rectangular with a sandstone lintel, the brick arches in the west wall were off-set as if miscalculation or rebuilding had occurred, and the openings in the north wall were high brick arches.
- 4.3.9 **Chamber 3** was mapped out to consist firstly of an approximately square chamber, the western extent of which was made of two brick arches. Beyond each arch lay two aligned brick-lined grave plots, creating an arrangement of four separate grave plots, each measuring approximately 2.00m by 0.70m.
- 4.3.10 **Chamber 13**, being a corner unit, was more complex, and a drawing explains the situation best.
- 4.3.11 Numerous **breaches** in the brick walls were noted, namely from chambers 13Aii into 13Aiii, from 13Bii into 13Biii, from 13Ei into 13Eii, and from 13Eii into 13Dii and 13Fiii.
- 4.3.12 **Rock walls** delineate the northern wall of plots 13Aiii and 13Biii, the eastern wall along plots 13Biii, 13Bii and 13Bi, the northern wall along 13C and 13Di and the eastern extent of 13Eii.
- 4.3.13 Plots 13Aiii and 13Biii possessed **sandstone slab roofs** as opposed to the more common vaulted brick roof.

4.3.14 With regards to the **grave fill in chamber 13**, each plot was greatly disturbed and contained grey slightly gravely fine sand, with plenty of disturbed bricks in most bar 13Eii and 13Di. Human bones were seen in 13Di, 13Aiii and 13Aii (adult pelvis).

4.3.15 Above ground, the measurements of chamber 3 were added up and proposed the **southern extent of the vaults** to lie within the former Sunday school building with no surface expression.

4.3.16 The measurements of chamber 13 were added up to suggest the **northern extent** of the vaults to lie immediately beneath the northernmost wall of the building.

4.4 Day 4 – 09/03/07

4.4.1 **Chambers 4 and 5** possessed the same layout as chamber 3. The side walls and vaulted ceiling were made of brick. The back wall to the south was made of rock. Each individual plot was filled with grey fine to medium sand which had been disturbed, and frequently coffins and pieces of coffin wood were encountered. Human bones were rare, with long bones being present in 5Aii.

4.4.2 **Chamber 6** was a corner unit, with plots A and B resembling chambers 3 to 5. Among the sand in 6Aii lay a lid-less coffin, a skull and skeleton and some cloth. Sand and coffin wood with occasional metal fittings were also seen in 6Ai, 6Bii and 6Bi. Plots C, D and E were westward orientated, with C forming a roughly square chamber filled with sand. A breach in a brick wall allow a look into 6Di, where a small passage was brick-lined and sandstone-roofed before opening up into a larger chamber, the contents of which could not be observed safely. Based on information gained from this breach in D, brick walls immediately to the south were assumed to hide plot E, comprising a similar passage and chamber.

4.4.3 **Chamber 7** had an east-west orientation and was made of only a singular line of two plots. Chamber 7 was filled partially with rubble from the central chamber and possessed an oddly leaning southern brick wall. Plot 7Ai was only filled with sand, and the western back wall consisted of rock built up with brick.

4.4.4 Parallel to 7, **chamber 8** also had an east-west orientation. Rather than being a single plot wide, there existed two plots next to each other, much like chambers 3 to 5, but without extending beyond 8Ai (filled with grey sand and occasional wood) and 8Bi (filled with grey sand and a possible long bone). The eastern back wall was brick.

4.4.5 **Chamber 9** was a corner unit, with east-west orientated chamber 9A giving way to western brick-lined plots 9Bi and 9Ci. Each was filled with disturbed grey sand only. The western brick back wall had no breach. The north-south orientated chamber 9 opened into northern brick-lined plots D and E. Plots

9Di and 9Ei contained grey sand only, while 9Dii housed a skull, long bones, coffin fragments, cloth and a possible body stain. Among the sand in 9Eii was a glass bottle.

- 4.4.6 A possible **mason's mark** (a capital C to the left of a four-line star on top of a horizontal line above a diamond shape to the left of a capital H) was discovered in mortar where the vaulted ceiling meets the top of the southern rock wall in 9A.
- 4.4.7 The northern side walls of 9Ci and 9A as well as the western side walls of 9Di and 9Dii were **rock**, while the southern back wall of 9Dii and 9Eii were brick and unbreached.
- 4.4.8 **Chambers 10, 11 and 12** along the north wall of the central chamber shared a layout. The entrance to each was a high brick arch into a roughly square chamber from which two parallel sets of two plots led northward. The side and back walls were brick. There were no breaches.
- 4.4.9 The entrance to **chamber 10** was filled with grey sand and occasional refuse. 10Ai contained grey sand and a long bone, 10Aii grey sand and occasional fragments of metal, 10Bi grey sand with occasional wood and metal fittings, and 10Bii grey sand with occasional metal fittings and possible bone.
- 4.4.10 The entrance to **chamber 11** was mainly grey sand, but a metal basin and metal kettle (refuse) were found. 11Ai comprised grey sand, a skull, a pelvis, long bones, coffin wood and furnishings as well as a piece of bottle cork, 11Aii grey sand, bones and some wood, 11Bi grey sand, a long bone, some metal and also a piece of cork, 11Bii grey sand, an adult skull, some metal.
- 4.4.11 Much dark brown rubble from the entrance had spilt into **chamber 12**. 12Ai was filled with sand and a pelvis and a vertebra, 12Aii grey sand, coffin pieces and possible skull fragments, 12Bi grey sand, possible bone and occasional brick, 12Bii grey sand.
- 4.4.12 After the drawing was completed, GH traded places with JW, and a quick **photographic survey** with two digital cameras commenced. No light other than the cameras' flash was used; however, this still gives the impression of the vault being much lighter than it is.
- 4.4.13 On many occasion, the **original sand levels** covering burials were noted, which had hence been dramatically lowered.
- 4.4.14 Where not covered by rubble, any **floor space** throughout the vault was blanketed with grey sand. Only in plot 8Bi may the **natural ground**, which is assumed to be glaciofluvial in this part of Sunderland, have been exposed.

4.4.15 Above ground, it was found that the building's north wall was possibly founded on the vaults most **northern extent**, which in turn once formed the cemetery's northern boundary.

4.4.16 The building's east wall was possibly founded on the vault's most **eastern rock wall**.

4.4.17 The very thick **south wall of the central chamber** directly underlay an east-westerly internal wall believed to have been the former Sunday school's outer north wall complete with bricked up windows, sandstone windowsill, and decorative features on its inner south face.

5.0 DISCUSSION

5.1 Previously known

5.1.1 Although already mentioned in the desk-based assessment, it is useful to recall an entry in *Sunderland and District Burial Grounds*, ref. 7.4, which states the following:

'Congregational, Bethel Chapel, Villiers Street. The Chapel was erected by the Independents in 1817 and the building was enlarged in 1826 and at the same time a cemetery was attached on the north side of the chapel. The burial place consisted of a series of underground vaults, long and narrow, with alleyways, and arched over with brickwork. The single entrance was by steps which were covered by an iron plate. The vault covered a large area and extended under the schoolroom which was erected at a later date. In later years when alterations were made to the Institute the entrance to the vaults was walled in with an archway at one side with locked iron gates attached. The burial registers recorded burials numbered 1 to 409 but against some of the entries was written "twins" so the total may be higher. The burial ground was in use from November 1826 to May 1854.

'The 1849 report said that the chamber at the bottom of the steps was 10 yards long by 4 yards wide. In the door leading to the vault were apertures for air. On all sides were small compartments 7 feet in length, by 2ft 2 inches in width and 8 ft in height separated from each other by a partition wall half a brick thick. In these compartments the coffins were deposited and covered in 6 inches of sand or loam; the front being built up with bricks to the level of the coffin, and then further coffins and sand were added later. Half of the burials were into these underground vaults, the remainder into graves and there was still room for further 450 burials in the vaults and 200 in the graves.

'Part of this burial ground is underneath the premises currently occupied by a garage.'

5.2 Above ground

- 5.2.1 The above passage coupled with mention of ‘a zealous member of the Bethel Chapel [...] being attached to its Sunday School, which sixty-eight years ago was his garden’, ref. 7.5, and observation that ‘the Registers do not show any burials in the open space so far as can be ascertained’, ref. 7.6, appears to imply that there has never been an above-ground cemetery with graves being dug into soil, and that terms are being used loosely, creating some confusion.
- 5.2.2 During the breaking out of the concrete floor and enlarging of the vault entrance, human remains were found in the enclosed rubble and soil layers, which were initially believed to have come from a surface cemetery.
- 5.2.3 In the light of there not having been a surface cemetery, the human remains possibly became imbedded in this layer after exiting the vault during rebuilding, reburial or grave-robbing.
- 5.2.4 In the light of there not having been a surface cemetery, it is assumed that the sequence of ground level concrete underlain by brick and some rubble and soil above the brick arches continues across the entire area of the vault, and that demolition of this flooring will not encounter additional bodies to those in the vault. However, the possibility of inarticulate remains being caught up in these layers cannot be discounted.

5.3 Entrance gate

- 5.3.1 The gates and walls encountered resemble those described in section 5.1.1.
- 5.3.2 The situation of the southern gate lying loosely above an iron plate with the other gate lying below clearly shows that following the official locking and bolting of the metal plate into place the gates were breached again.
- 5.3.3 The legitimacy of the breach or consecutive breaches is questionable, but since the gates were extremely heavy even a legitimate entry would perhaps not have moved them.
- 5.3.4 The last time the gates were opened was when the rubble heap dumped into the vault entrance had reached its maximum height, almost touching the gates. A closer inspection of the finds recovered may give an indication as to when that was.
- 5.3.5 In addition to modern rubbish, this heap did comprise numerous bones, several from infants, which may have been lost during reburial or dropped during grave robbing.

5.4 Additional breaches into the vault

- 5.4.1 One known breach into the vault includes that made during the construction of the garage’s inspection pit within the walls of the former Sunday School in the

1970s. An examination of the brickwork of the inspection pit to see if this would again form a feasible point of entry into the sub-surface structure showed that it had been blocked of entirely with limestone cobbles.

- 5.4.2 During the inspection pit breach, the police were involved to look into the vaults, and 'excavation work [occurred] in one of the crypts' (Tedder, 1992, ref. 7.7).
- 5.4.3 The cobbles seen from the inspection pit were also found blocking the majority of chamber 2 below. Some labour will be involved in removing these to find possible human remains below.
- 5.4.4 Furthermore, the vault ceiling was breached at the western end of the central chamber. This hole is barely 0.30m in diameter, and it is not thought that people entered through here. However, the hole was used to dump much refuse including concrete, brick, sand and scrap metal into the space below. Once more, removal will be laborious.

5.5 Structural considerations

- 5.5.1 Aforementioned asymmetry, see section 4.3.8, can be explained by taking the building history and vault drawing into consideration. The vault was originally symmetrical around the central chamber, but the building of the Sunday School across a large part of the vault meant that the foundation of the school's northern wall had to be strengthened.
- 5.5.2 The central chamber's south wall is the Sunday School's foundation wall. It was originally a mirror image of the central chamber's north wall (a quick folding over of the tracing will confirm this), but building in sandstone lintels and brick changed the appearance of the doorways and cut into the space of the burial chambers.
- 5.5.3 There may be a possibility of the foundation wall lying above human remains.
- 5.5.4 A question mark hangs over chamber 7, which was clearly divided in half by the strengthening of the west end of the foundation wall.
- 5.5.5 Chamber 2A appears to constitute a large void underneath the east end of the foundation wall, but the builders circumvented that problem by founding on large sandstone flags that support the chamber roof.
- 5.5.6 Similar sandstone flags line the northernmost roofs in plots 13Aiii and 13Biii, presumably also to hold up the wall above.

5.6 Burial remains

- 5.6.1 The majority of grave plots contained grey sand and at first glance little else. In section 5.1.1, this sand is clearly said to have been imported for burial purposes.

- 5.6.2 Several plots, especially the southern ones, comprised coffin furniture ranging from a few splinters of wood to whole, albeit open coffins.
- 5.6.3 Few plots house human remains, largely in the form of inarticulate bones, and occasionally a skull.
- 5.6.4 There has been no mention of the remains having been exhumed and reburied elsewhere when the vault fell out of use, so prior to the reconnaissance visit the assumption had been had that 409+ internments would still be in place. Clearly, they are not.
- 5.6.5 Some of the remains must have been removed, since there simply isn't enough skeletal material in the vaults to make up the number, but it is uncertain by whom and for what purpose.
- 5.6.6 If the remains were destined for Christian reburial, they would have been dug up systematically, and all of them would have been taken away.
- 5.6.7 If the remains were simply robbed of their belongings, grave robbers would have caused more havoc.
- 5.6.8 The state of some of the coffins indeed suggests a state of disarray, but the absence of inarticulate bones leads to the assumption that perhaps they had been mercifully gathered after any grave robbing had occurred and were taken to charnel houses.
- 5.6.9 Fact is, that the graves were disturbed on several occasions by people with varying intentions and that some human remains can still be found in the vault. These need to be properly excavated and removed for reburial.

5.7 Breaches into the brick walls

- 5.7.1 Frequent breaches into brick walls were observed across the vault. That these brick walls served to divide burial plots can be gathered from section 5.1.1.
- 5.7.2 Therefore, it is safe to assume that the breaches were made to get at the burial beyond, and since they are not very large and often accompanied by bricks strewn into burial plots, they were most likely not carried out by personnel of the vault.
- 5.7.3 These breaches are believed to have been the result of illegal grave robbing. Curiously, there was a breach in plot 13Di that was bricked up again. Perhaps grave robbing took place while the vault was only covered by a metal plate that could not be locked.
- 5.7.4 The breaches clearly showed that brick back walls were not to be seen as the full extent of any grave plot. The final length and width of the graves was assumed to have been found where a rock wall was encountered.

5.7.5 However, the rock walls enclosed roughly square areas to the north-east, north-west and south-west, with the south-east being blocked by limestone cobbles, giving the vault a cross-shaped appearance, and the nature of the interior of these corners remains a mystery.

5.7.6 The existence of enclosed grave plots has serious implication for future archaeological work. The structural integrity and gas regime behind the brick walls can be very different and dangerous.

5.8 Vault floor

5.8.1 Although there is evidence for the top of the graves having been higher, there has not been much evidence as to the total depths below ground level of the graves nor the vault.

5.8.2 Where not covered by rubble, the floor space throughout the vault was blanketed with grey sand. Only in plot 8Bi may the natural ground have been encountered.

5.8.3 The geotechnical desk study states the superficial deposits in this region to be undifferentiated glaciofluvial deposits of the Devensian. The material is expected to comprise sand and gravel, ref. 7.8.

6.0 RECOMMENDATIONS IN RELATION TO PROPOSED ARCHAEOLOGICAL EXCAVATION

6.1 Immediate steps

6.1.1 The reconnaissance visit lasted three and a half days during which much information concerning the vaults was collected.

6.1.2 Firstly, it is imperative to continue to treat the vaults as a confined space and to observe all legislation and health and safety regulations in regards to confined spaces. Thus, all personnel employed to carry out any work in or around the structure MUST possess or obtain a confined spaces ticket and understand the archaeological nature of the site.

6.1.3 The vault may not be visited by third parties, and any activity around the site should cease for the duration of the archaeological investigation, including public parking in the car park to the south. Since the staff of Temple Lockhart Security is adequately informed about the sensitivity of the site, their vehicles need not be excluded from use of the car park.

6.1.4 It is suggested that while this interim report is being scrutinised, research into the site history should continue with the burial registers for the vaults being requested from the National Archives. The burial records should shed light on 'the number, name, number of vault, date of death, age, date of interment,

place of abode, occupation or profession, name of minister performing the ceremony' (Hodges, 1925, 38).

- 6.1.5 Furthermore, the building records for the site should be obtained from the Local Authority. The building records should provide the detailed building history of the site, listing the construction and enlargement of the chapel, the construction of the cemetery, the construction of the Sunday School, the falling out of use and demolition of the chapel and the construction of the modern garage.

6.2 Vault entrance and structural considerations

- 6.2.1 Although the entrance to the vault lies within a building with a lockable gate (to which Temple Lockhart Security hold the key), the entrance to the vaults itself is as of yet a gaping hole in the ground, albeit secured with plenty of tape, barriers, wooden boards, yellow paint and warning signs. For the safety of all persons and for the safety of the structure, it would be advisable to install a lockable door, a key for which should be kept by the archaeological site supervisor. This door does not need to be built with a confined spaces ticket.
- 6.2.2 To put a door in place, the rubble heap on the stairs would have to be removed. This heap is of no archaeological importance, but removal would make any further entry absolutely safe. The heap largely obstructs chambers 2 and 13, and part of the central chamber floor. Archaeological excavations cannot be carried out with it in place.
- 6.2.3 On the note of rubble, the heap in the middle of the central chamber would also need to be cleared entirely, because it presents no secure foothold, contains large amounts of broken glass and other hazardous material, and obstructs chamber 6, 7, 8 and 9 as well as the central chamber floor.
- 6.2.4 Hence, it is recommended that removal of both rubble heaps be carried out by a confined spaces team, under the supervision of an archaeologist, to enable safe and unobstructed working conditions for subsequent archaeological excavation. The use of a winch system near the entrance may be useful to ease labour.
- 6.2.5 The vault roof was breached before to get the second rubble heap in, it may be possible to breach it again to get the rubble out. A structural engineer should be consulted before the vault roof can be breached to ease excavation.

6.3 Burial remains

- 6.3.1 It is suggested that while this interim report is being scrutinised, an Application Form for a Department for Constitutional Affairs Archaeological Investigation License Regarding the Disturbance of Human Remains be send

to the coroner, who will issue a S25 license, a copy of which will be send to the Environmental Health Officer for the site.

- 6.3.2 Once safe and unobstructed, a full-scale archaeological excavation of the vaults would be necessary to discern the history of the structure and remove all human remains prior to demolition and re-development.
- 6.3.3 Excavation and detailed recording should be carried out by a team of experienced archaeologists who will need confined spaces tickets and the correct PPE whilst working underground and with human remains.
- 6.3.4 Working conditions will be less than ideal, and individual areas in the vaults should be dealt with in an order that will allow least disturbance to already disturbed graves.
- 6.3.5 Recording, drawing and photography must be in detail.
- 6.3.6 Human remains must not be removed until their safe passage to the facility to rebury or cremate them can be guaranteed.
- 6.3.7 Spoil from around the graves is potentially contaminated, and it is suggested that spoil from each plot be kept separate on plastic sheeting, and samples be sent off for biological testing to assist in the decision on how to best dispose of the spoil.

6.4 Specialist involvement

- 6.4.1 As mentioned throughout, the vault is a confined space, and all personnel must be specially trained to work around and in the vault.
- 6.4.2 An osteologist (human bone specialist) should be consulted to study all skeletal material and satisfy research interests on so local a community over buried over such a short period of time.
- 6.4.3 There may be an interest in coffin furniture and textiles.
- 6.4.4 Microbiologists should be consulted with regards to the spoil from the graves.

6.5 Building recording

- 6.5.1 A building surveyor should be employed to carry out the building recording once the full extent of the currently exposed structure is known.
- 6.5.2 The building survey should be complemented by a detailed photographic survey of the structure.

6.6 Breaches into the brick walls

- 6.6.1 Once excavation and recording of the burials and the structure are complete, thought should be given to opening those plots still bricked up.
- 6.6.2 Breaching the brick walls will be very risky from a confined spaces point of view, since an entirely different structural and gaseous regime may exist behind.
- 6.6.3 From an archaeological point of view, the state of decomposition of any inhumations behind the walls is unknown, and pathogens may survive. Any human remains must, of course, be excavated.
- 6.6.4 For now, this aspect of the vaults is treated as a completely different phase.

6.7 Publicity

- 6.7.1 As of yet the current owner of the site wishes no media involvement. However, the discovery of the vaults is thought to be of much local, possibly regional interest, and ought to be reported once archaeological excavation starts.
- 6.7.2 Upon reporting people may come forward to shed light on the chapel's and vault's history and on the identity of the buried.
- 6.7.3 A media strategy ought to be discussed.

7.0 REFERENCES

- 7.1 Stewart, I., 2006, *Archaeological desk-based assessment for Villiers Street, Sunderland*, Report no. 11005, Ian Farmer Associates, Gateshead (unpublished)
- 7.2 Stewart, I., 2006, *Archaeological building survey for Villiers Street, Sunderland*, Report no. 11008, Ian Farmer Associates, Gateshead (unpublished)
- 7.3 Stewart, I., 2006, *Ground Penetrating Radar survey at Villiers Street, Sunderland*, Report no. 11010, Ian Farmer Associates, Gateshead (unpublished)
- 7.4 Vicker, A., *Sunderland and District Burial Grounds* (incomplete reference)
- 7.5 *Sunderland Under Sail*, Vol. 4 (incomplete reference)
- 7.6 Hodges, H.W., 1927, *Antiquities of Sunderland and its Vicinity, Vol. XXVII*, The Sunderland Antiquarian Society, Sunderland
- 7.7 Tedder, S.E.J., 1992, *Ghosts, Mysteries and Legends of Sunderland*, Black Cat Publications, Sunderland
- 7.8 Corrigan, S., 2006, *Geotechnical desk study for 11 – 14 Villiers Street, Sunderland*, Report no. 3953, Ian Farmer Associates, Gateshead

For and on behalf of Ian Farmer Associates (1998) Limited

F Kruse
BSc, MSc, PIFA

Archaeologist & Engineering Geologist

P G Challinor
BSc, MSc, CEng, CGeol, CSci,
MIMMM, FGS.

Director

APPENDIX 1
DRAWINGS



**IAN FARMER
ASSOCIATES**

Geotechnical & Environmental Specialists

Villiers Street, Sunderland

Contract No. 11014

Site Location Plans

REPRODUCED FROM ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE
CONTROLLER OF HER MAJESTY'S STATIONARY OFFICE

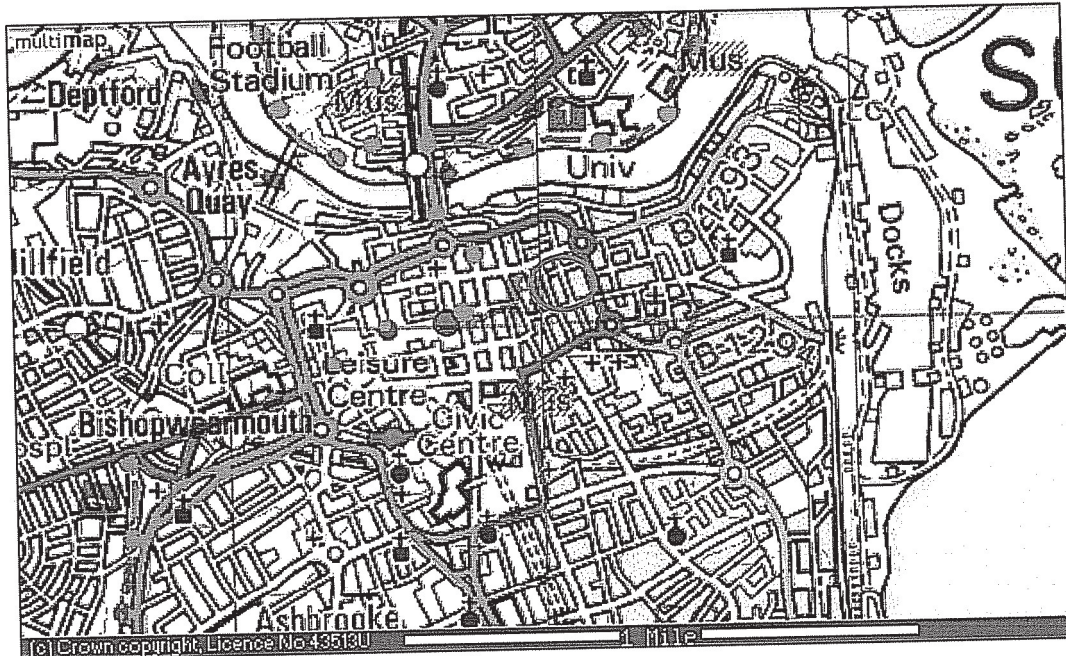
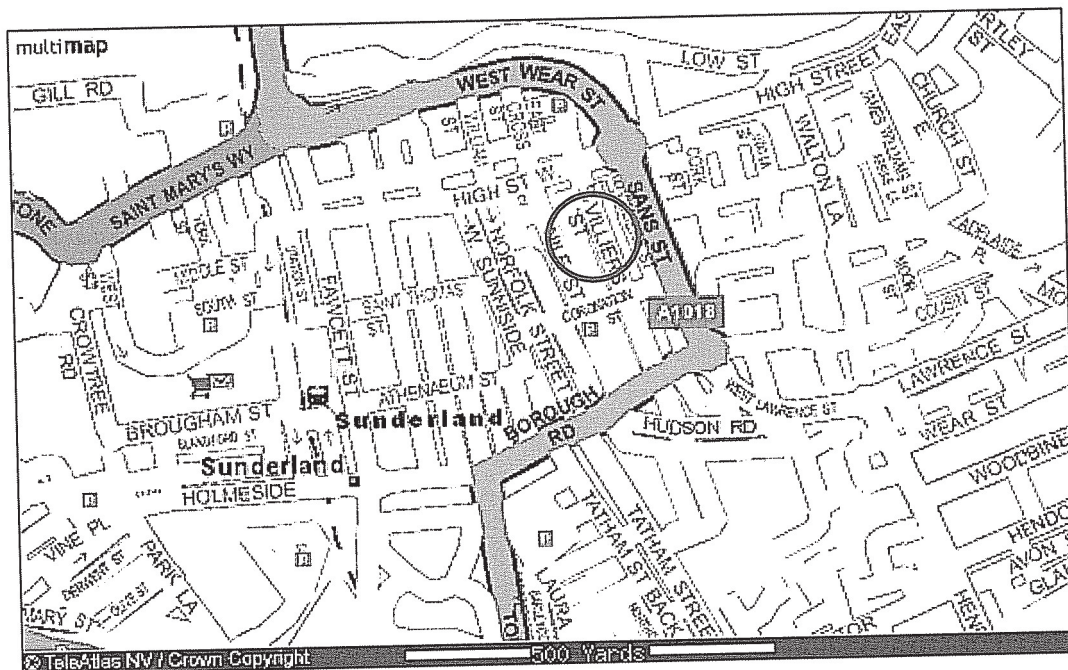


Fig. A1.1 Location plan



Licence No. 100031101



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Villiers Street, Sunderland

Contract No. 11014

Site Plan

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Fig. A1.2 Site plan

APPENDIX 2
SITE WORK



**IAN FARMER
ASSOCIATES**
Geotechnical & Environmental Specialists

Archaeological Services

Contract Name/No:

Villiers Street, Sunderland, 11014

Digital Photograph Index Sheet No:

1 of 3, taken 05.03.07

Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
100_3781	due east, left cast iron gate in-situ, set in concrete and rubble, air vent filled with rubble
100_3782	due north, immediately north of left cast iron gate, set in rubble and brick
100_3783	due north, immediately north of left cast iron gate, set in rubble and brick
100_3784	due south, immediately beneath the left cast iron gate, pit filled with rubble, note decoration on gate and inclination due east
100_3785	due west, close-up of air vent in left cast iron gate, partially obstructed by metal plate
100_3786	due east, cleaning of left cast iron gate in-situ beneath current concrete floor
100_3789	due east, Greg Harris, material technician, happy to be involved, also left cast iron gate slightly lifted from its position
100_3790	underside of left cast iron gate moved from its position
100_3791	approximate plan view of the pit exposed by the removal of the left cast iron gate, note the rock frame set on bricks
100_3792	due west, view of the pit exposed by the removal of the left cast iron gate and the metal plate which underlay the air vent (see 100_3785)
100_3794	underside of left cast iron gate moved from its position, about 1.80m in length
100_3795	underside of left cast iron gate moved from its position, about 1.80m in length
100_3796	due east, discovery of the right cast iron gate beneath thin concrete
100_3797	due east, close-up of the right cast iron gate beneath thin concrete
100_3799	due east, testing if the right cast iron gate can be moved manually
100_3800	due south, close-up of the rock and brick doorframe, note metal hinge in-situ, exposure of the first rock step into the vault beneath the rubble in the pit
100_3801	due east, detail of the rock frame and rubble-covered first step beneath the right cast iron gate



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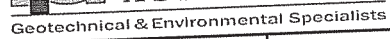
Contract Name/No:

Villiers Street, Sunderland, 11014

Digital Photograph Index Sheet No:

2 of 3, taken 05.03.07

Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
100_3802	due west, the right cast iron gate in place to give an impression of the width of the rock doorframe, note the groove along the rock edge, with the first rock step visible
100_3803	some finds from the rubble placed on the removed cast iron gate
100_3804	due west, working shot of the metal plate being levered out, note how the left cast iron gate overlay this plate, but the right one lies below it, also note the bolt holes, albeit the bolts are missing
100_3805	some finds from the rubble placed on the removed cast iron gate
100_3806	the removed thin cast iron plate which was wedged between the gates, approximately 0.88m by 0.66m
100_3807	the removed thin cast iron plate which was wedged between the gates, approximately 0.88m by 0.66m
100_3808	due east, a working shot of the right cast iron gate being lifted off the rock doorframe, note the decoration on the gate's face
100_3809	due west, removal of both cast iron gates and the metal plate exposed an opening beneath the concrete floor blocked by rubble
100_3810	due east, a working shot of the right cast iron gate being lifted off, note the decoration on the gate's face and the hinge
100_3811	due west, close-up of the opening with a brick arch and rubble blocking the entrance to the vaults
100_3812	due west, close-up of the opening with a brick arch and rubble blocking the entrance to the vaults, note the femur and tibia on the rubble heap
100_3813	due west, view into the vault, two spoil heaps, openings south, east and north, infilled air vent on east wall
100_3814	due west, view into the vault, two spoil heaps, openings south, west and north, infilled air vent on east wall
100_3816	due south, immediately next to entrance a blocked passage
100_3817	due north, immediately next to entrance a further blocked passage
100_3818	due north-west, view immediately down the rubble heap blocking the entrance, note the amount of rubble and the long bone
100_3819	some finds from the rubble placed on the removed cast iron sheet



Archaeological Services

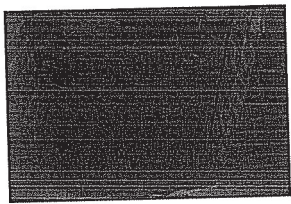
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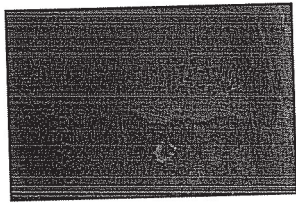
Villiers Street, Sunderland, 11014

3 of 3, taken 05.03.07

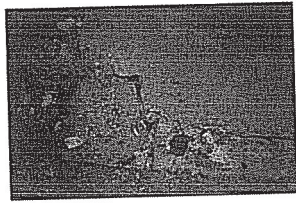
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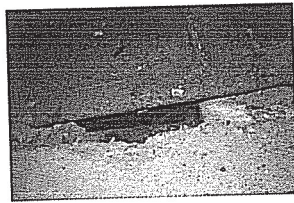
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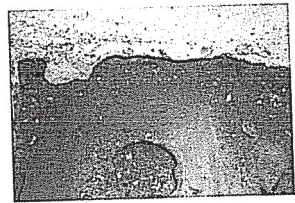
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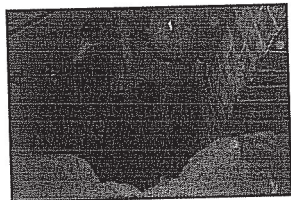
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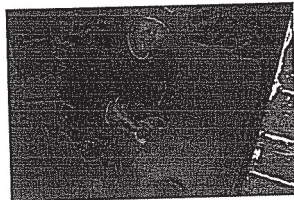
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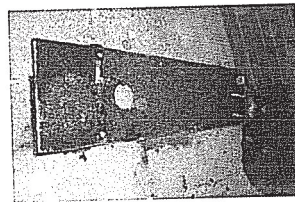
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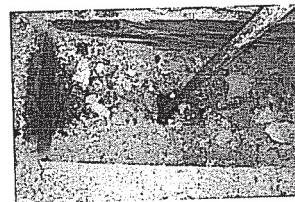
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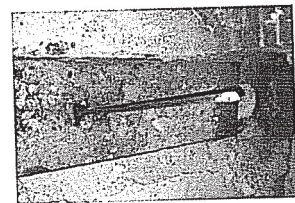
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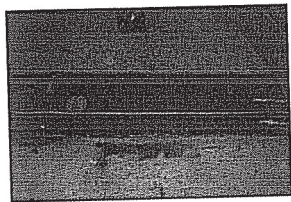
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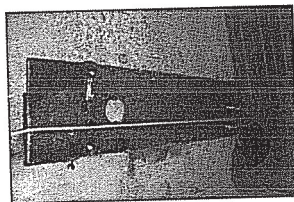
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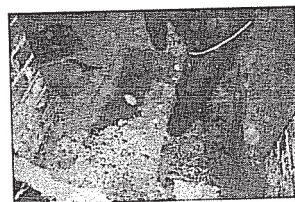
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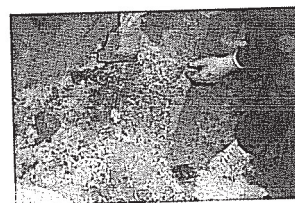
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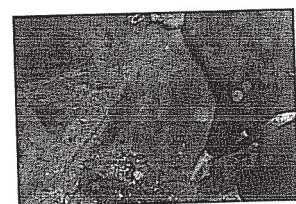
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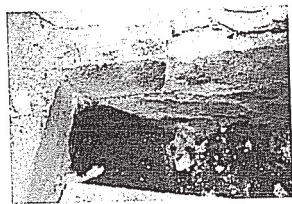
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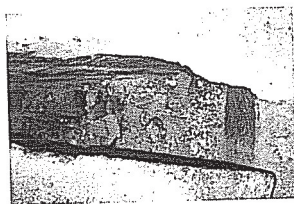
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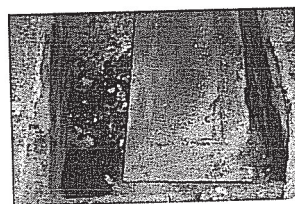
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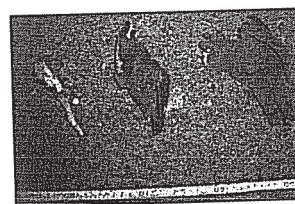
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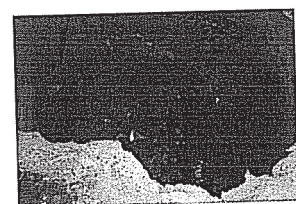
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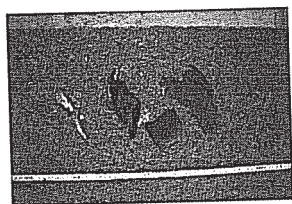
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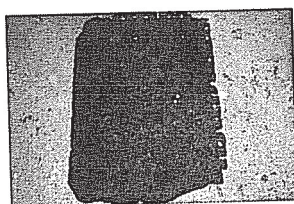
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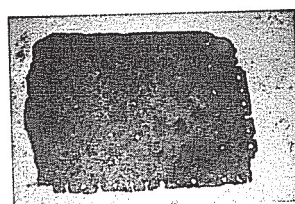
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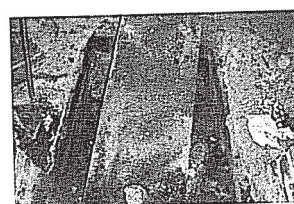
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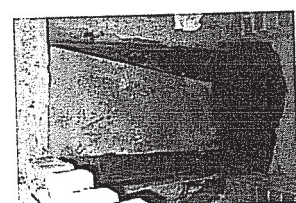
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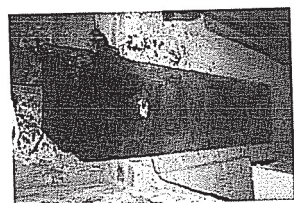
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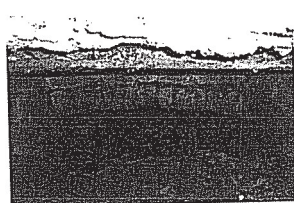
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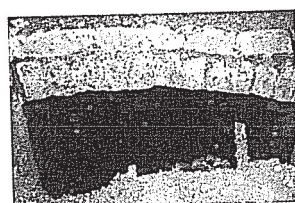
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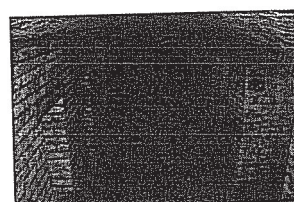
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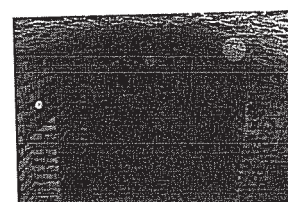
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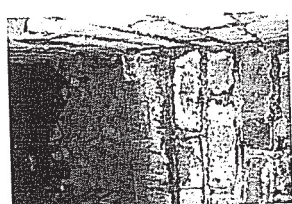
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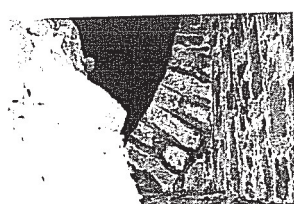
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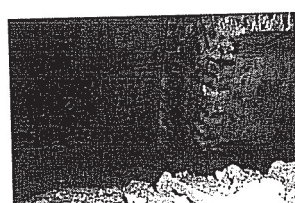
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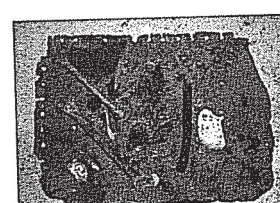
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100_3818



100_3819



100_3820



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ASSOCIATES**

Geotechnical & Environmental Specialists

Archaeological Services

Contract Name/No:

Villiers Street, Sunderland, 11014

Digital Photograph Index Sheet No:

1 of 2, 07.03.07

Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
100_3821	due east, the entry into the vault is hazardous
100_3822	due east and downward, three steps of the rock stairs exposed
100_3823	due west, the entrance to the vault is continually being exposed
100_3824	due west and downward, the entrance to the vault has barely 1m headroom yet
100_3825	due west and downward, once the rubble is removed the stairs into the vault may be steep with narrow steps
100_3826	due west and downward, the stairs and entrance to the vault are blocked with much material
100_3827	due east, detail of the uppermost two steps, made of rock with rounded edges, set on brick within a rock and brick frame, gate groove and lower hinge just visible to the right of photo
100_3828	due east, detail of the uppermost two steps, made of rock with rounded edges, set on brick within a rock and brick frame
100_3829	due east, detail of the uppermost two steps, made of rock with rounded edges, set on brick within a rock and brick frame
100_3830	due north, detail of the northern entrance wall with an inclined rock (note the groove) and brick frame, top left shows disruption in rock frame where modern wall meets the brick beneath
100_3831	due north, detail of the northern entrance wall with an inclined rock and brick frame, showing disruption in rock frame where modern wall meets the brick beneath, note raised concrete floor with rubble and brick below
100_3832	due north, detail of the northern entrance wall showing darker moist patches where rubble had been removed to gain entry, rubble removal continues
100_3835	due north, detail of stair construction
100_3836	due north, detail of stair construction, note groove and lower hinge along top edge
100_3839	due west, the entrance to the central chamber of the vault is continually being exposed, allowing light and air to penetrate
100_3840	due west, the central chamber of the vault, note extent of modern rubble heaps
100_3841	due west, detail of brick, rubble and sheet iron covering brick arch



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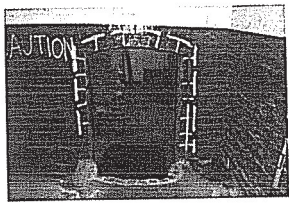
Contract Name/No:

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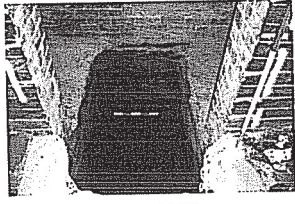
Villiers Street, Sunderland, 11014

2 of 2, 07.03.07

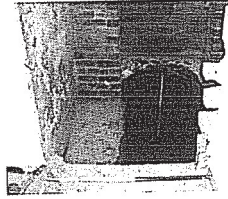
Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
100_3842	due south, detail of upper hinge of left cast iron door
100_3846	due west, detail of concrete floor, brick and rubble, and iron bar in place prior to enlargement
100_3849	due west, working shot of GH and JW breaking out concrete and removing the corrugated iron sheet
100_3853	due west, sequence of reinforced concrete floor above brick and dark brown rubble held up by corrugated iron sheet
100_3854	due west, working shot of JW breaking out the reinforced concrete
100_3856	due west, working shot of JW breaking out the reinforced concrete
100_3858	due west, working shot of JW breaking out the reinforced concrete
100_3859	due west and downward, working shot of the newly exposed arch with the corrugated iron sheet removed, note modern wall to the left (south side) founded on rock slap
100_3862	due west, sequence of reinforced concrete floor above brick and dark brown rubble held up by the brick arch
100_3866	due east, newly enlarged vault entrance
100_3867	due west, newly enlarged vault entrance with headroom in excess of 1.30m
100_3868	due east, three steps exposed, level with step four
100_3869	due north-east, detail of gate frame and exposed steps
100_3870	due west, the exposed vault entrance being made safe
100_3871	due east, the exposed vault entrance having been made safe



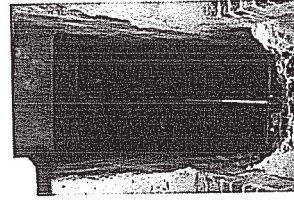
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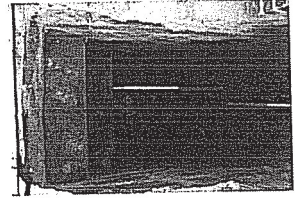
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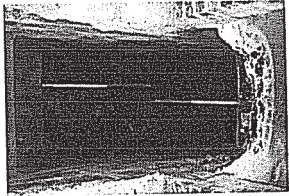
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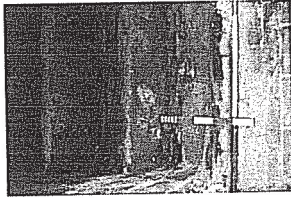
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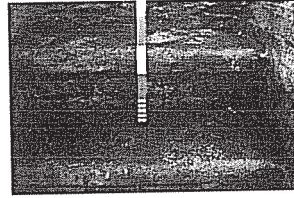
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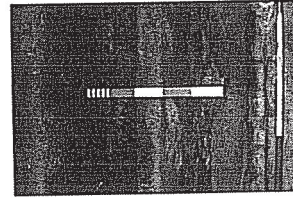
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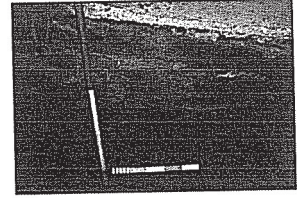
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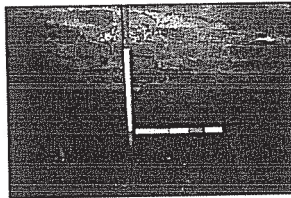
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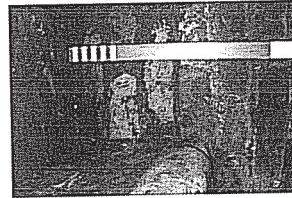
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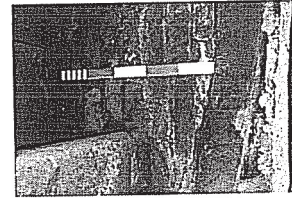
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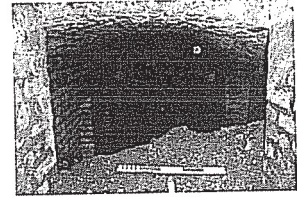
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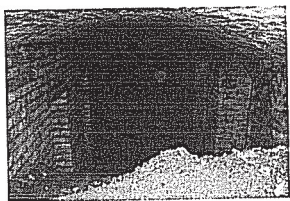
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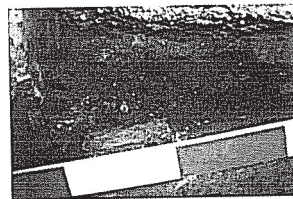
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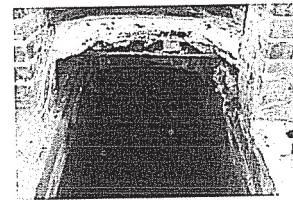
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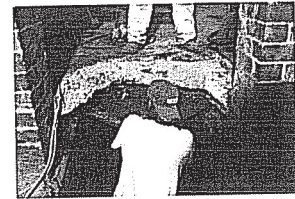
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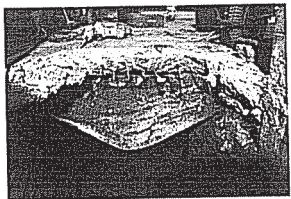
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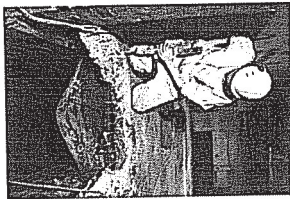
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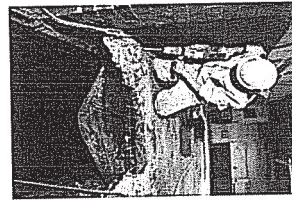
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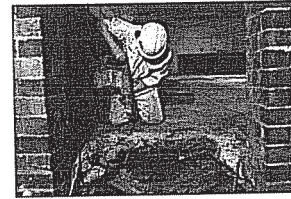
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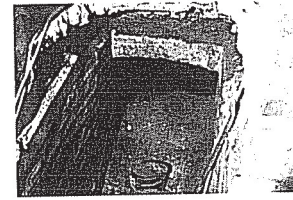
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100_3856



100_3858



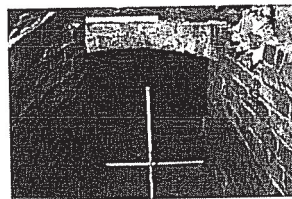
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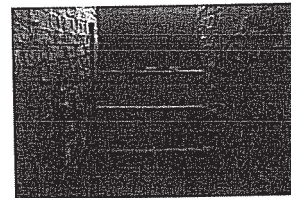
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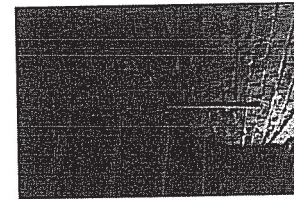
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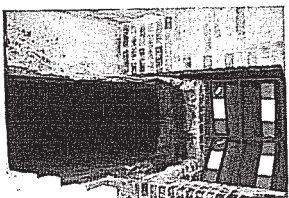
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100_3868



100_3869



100_3870



100_3871



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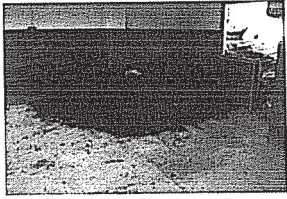
Contract Name/No:

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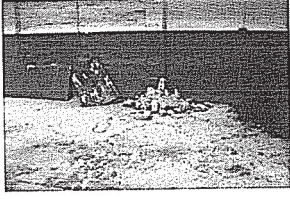
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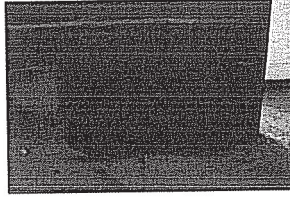
Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
100_3873	due north, view of the spoil heap kept indoors
100_3874	due north, view of the corrugated iron sheet and spoil removed during entrance enlargement
100_3875	due east, view of the cast iron sheet removed from between the iron gates
100_3876	James Wilson, Fred Fountain, and Greg Harris, experienced in entering confined spaces, during the site induction
100_3877	JW, Frigga Kruse, FF in appropriate PPE about the enter the vault
100_3879	due east, from inside the central chamber towards the entrance, note the gas monitor near the door and the rubble obstructing side chambers
100_3880	due east, from inside the central chamber towards the entrance, note the rubble obstructing side chambers
100_3881	due east, from inside the central chamber towards the entrance, note the rubble obstructing side chambers
100_3882	due west, western extent of central chamber with air vent, not shown is the hole in the ceiling (blocked up) through which this rubble heap was dumped
100_3883	due west, eastern and western rubble heaps almost meet, leaving little original sand-covered floor space in the central chamber
100_3885	due south-east, passage entrances immediately south of the main entrance, filled primarily with dark brown rubble from the doorway, also filled with limestone cobbles after vault breach in the 70s
100_3886	due south, detail of limestone cobbles filled from the inspection pit
100_3889	due east, a chamber immediately parallel to the stairs, blocked by dark brown rubble, note rock roof and brick back wall
100_3890	due south, detail of limestone cobbles beyond which lie further openings



100_3873



100_3874



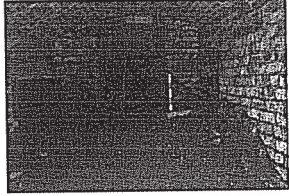
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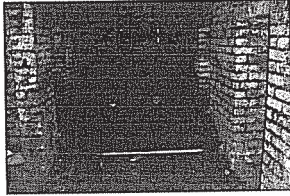
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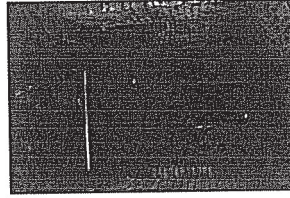
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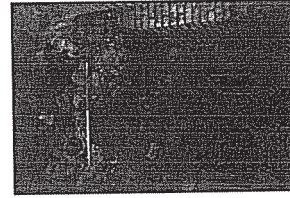
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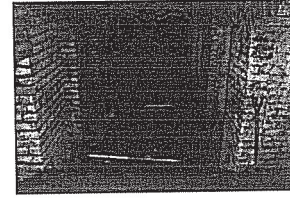
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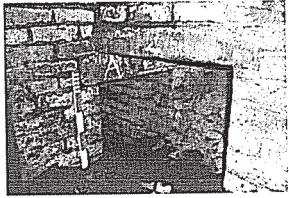
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100_3882



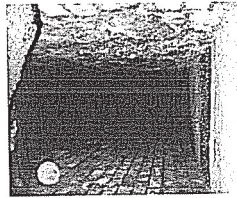
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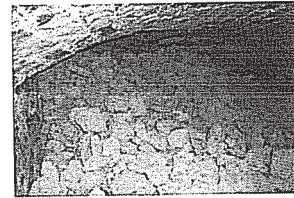
100_3885



100_3886



100_3889



100_3890



Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
PIC_0003	PPE worn by Frigga Kruse during the reconnaissance visit, LED head torch, hard hat, face mask, cotton overalls, hi vis vest, harness, escape set, gas monitor, latex gloves, safety boots
PIC_0007	PPE worn by Frigga Kruse during the reconnaissance visit, LED head torch, hard hat, face mask, cotton overalls, hi vis vest, harness, escape set, gas monitor, latex gloves, safety boots
PIC_0008	due east, main entrance (temporary label 1), central chamber beyond
PIC_0009	due west, main entrance 1, four exposed steps beyond, the remainder covered in rubble
PIC_0010	due south, passage entrance 2, with side chamber 2A and cobble-blocked chamber 2B
PIC_0011	due east, chamber 2A blocked by dark brown rubble, note rock roof, northern rock wall, and remaining brick walls
PIC_0012	due south, passage entrance 3, with grave plots 3A (left) and 3B (right)
PIC_0013	due north, out of chamber 3 toward passage entrance 12
PIC_0014	due north, out of chamber 3 toward passage entrance 12, showing rock lintel
PIC_0015	due south, plot 3Ai with coffin fragments, 3Aii beyond and back wall of rock
PIC_0016	due south, plot 3Bi with coffin fragments, 3Bii beyond and back wall of rock
PIC_0017	due south, passage entrance 4, with grave plots 4A (left) and 4B (right), note lack on dark brown rubble in chamber
PIC_0018	due north, out of chamber 4 toward passage entrance 11, note remaining thin layer of dark brown rubble
PIC_0019	due south, plot 4Ai with coffin fragments, 4Aii beyond
PIC_0020	chamber 4 with coffin lid
PIC_0021	due south, plot 4Bi, 4Bii beyond with rock back wall
PIC_0023	due south, passage entrance 5, with grave plots 5A (left) and 5B (right), note metal shavings from nearby rubble heap



Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
PIC_0024	due north, out of chamber 5 toward passage entrance 10, note modern rubble
PIC_0025	due south, plots 5Ai with 5Aii beyond (left) and 5Bi with 5Bii beyond (right)
PIC_0026	due south, plot 5Bii with rock back wall
PIC_0027	due south, passage entrance 6, obstructed by modern rubble
PIC_0028	due north, out of chamber 6 toward passage entrance 11, note modern rubble
PIC_0029	due south, plot 6Ai with 6Aii beyond
PIC_0030	due south, plot 6Bi containing coffin fragments with 6Bii beyond
PIC_0031	due west, chamber 6C with plots 6D and 6E beyond, note rock wall (left) and breach in 6D
PIC_0032	due south-west, detail of rock wall
PIC_0033	due west, detail of breach in 6D with brick rubble fill
PIC_0034	due west, detail of 6E with partial brick wall and complete brick wall
PIC_0035	due west, detail of rock-roofed and brick-lined narrow passage into a larger space
PIC_0036	due west, passage entrance 7, obstructed by modern rubble
PIC_0037	due west, chamber 7 with 7Ai beyond, note inclined wall (right, yet no signs of subsidence) and brick back wall
PIC_0038	due west, passage entrance 8, obstructed by modern rubble, with plots 8Ai (left) and 8Bi (right), both with brick back wall
PIC_0039	due west, plot 8Ai
PIC_0040	due west, plot 8Bi, disturbance exposing possible natural ground?



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Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
PIC_0041	due north, passage entrance 9, obstructed by modern rubble, with chamber 9C and plots 9D and 9E beyond
PIC_0042	due west, detail of the sand floor in chamber 9C
PIC_0043	due west, plot 9Ai with brick back wall
PIC_0044	due west, plot 9Bi with brick back wall
PIC_0045	due north, mason's mark in mortar where vaulted brick ceiling meets northern rock wall of chamber 9C
PIC_0046	due north, plots 9Di with 9Dii beyond and 9Ei with 9Eii beyond, both with brick back walls
PIC_0047	due north, sand in plot 9Di with a human skull and skeletal remains in 9Dii
PIC_0048	due north, plot 9Ei with 9Eii beyond
PIC_0049	due north, passage entrance 10, with plots 10A (left) and 10B (right) beyond
PIC_0050	due north, plots 10Ai with 10Aii beyond and 10Bi with 10Bii beyond, both with brick back walls
PIC_0051	due north, plot 10Ai, note human long bone
PIC_0052	due north, plot 10ABi
PIC_0053	due south, out of chamber 10 toward chamber 5, note extent of rubble
PIC_0054	due north, passage entrance 11, note width and arch on northern entrances as opposed to narrow and lintel on the southern entrances (see PIC_0053)
PIC_0055	due north, plots 11Ai with 11Aii (left) beyond and 11Bi with 11Bii (right) beyond, both with brick back wall
PIC_0056	due north, plot 11Ai
PIC_0057	due north, plot 11Bi



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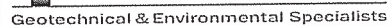
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Shot No	Comment (View, Context(s), Initials, Date & Weather, etc.)
PIC_0058	due north, passage entrance 12, partially obstructed by dark brown rubble, with plots 12A (left) and 12B (right) beyond, both with brick back walls
PIC_0059	due north, plot 12Ai, note high original sand levels
PIC_0060	due north, plot 12Bi, note high original sand levels
PIC_0061	due north, passage entrance 13 with plots 13A (left), 13B (middle) and chamber 13C (right)
PIC_0062	due north, plots 13Ai with 13Aii and breach into 13Aiii beyond (left) and 13Bi with 13Bii and breach into 13Biii beyond (right), note rock wall on right
PIC_0063	due north, plots 13Bi with 13Bii and breach into 13Biii beyond (right), note rock wall on right
PIC_0064	due east, plots 13Di (left) and 13Ei with breach into 13Eii beyond (right), note rock wall on left
PIC_0065	due east, plot 13Di with human vertebra
PIC_0066	plot 13Ei with breach into 13Eii
PIC_0067	plot 13Fi, largely obstructed by rubble, note rock wall on right
PIC_0068	due south-east, view of outer north wall of former Sunday school complete with bricked up windows and window sill
PIC_0070	due south-east, view of outer north wall and inner walls of former Sunday school
PIC_0071	bone finds from dark brown rubble blocking entrance, adult long bones found on top, all others found within, note number of infant bones and jaw
PIC_0072	ceramic and textile finds from dark brown rubble blocking entrance
PIC_0073	metal finds from dark brown rubble blocking entrance
PIC_0074	site cordoned off to visitors, note spray paint on the floor marking former breach into vault ceiling into which rubble was thrown
PIC_0075	site cordoned off to visitors, note spray paint on the floor marking former breach into vault ceiling into which rubble was thrown



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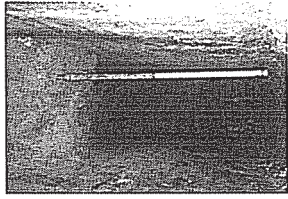
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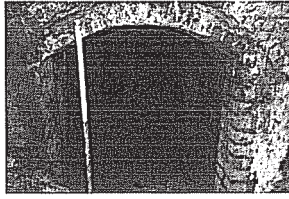
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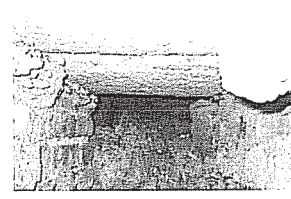
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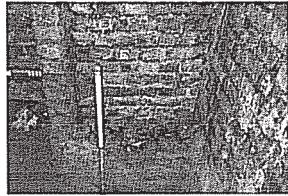
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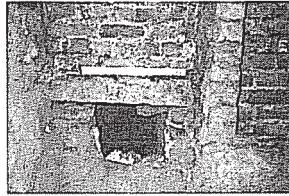
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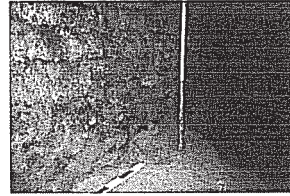
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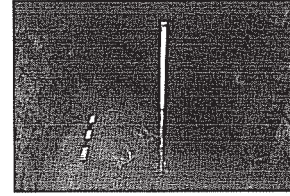
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PIC_0033



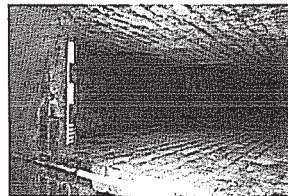
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PIC_0031



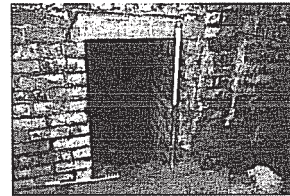
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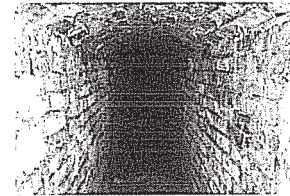
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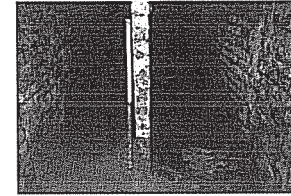
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PIC_0027



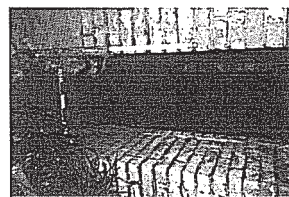
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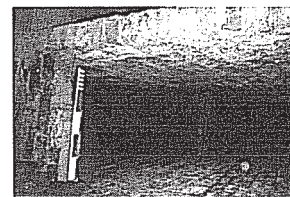
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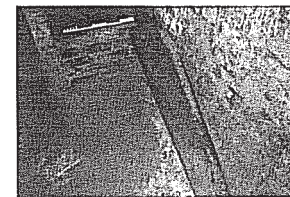
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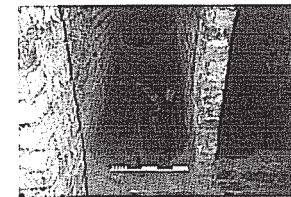
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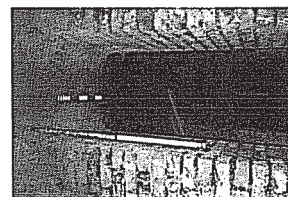
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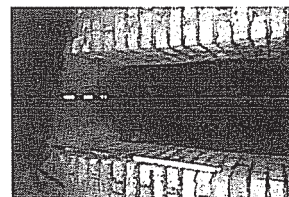
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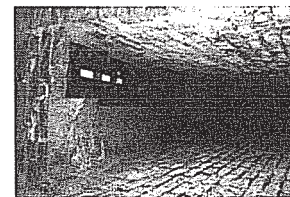
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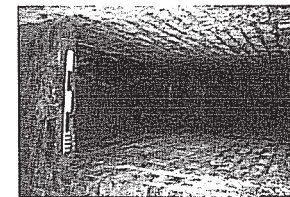
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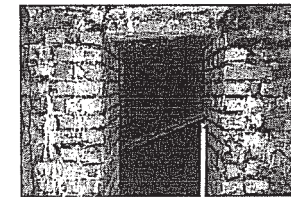
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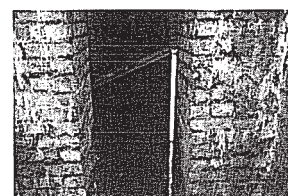
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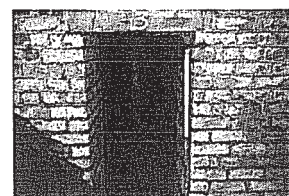
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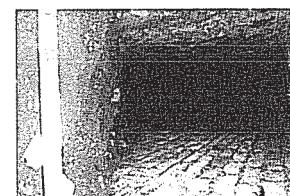
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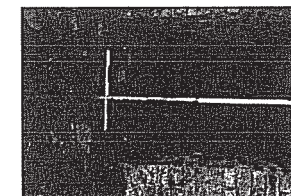
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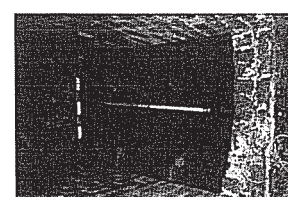
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PIC_0010



PIC_0009



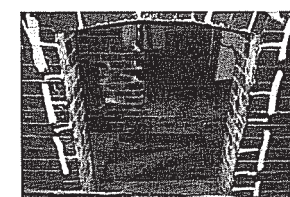
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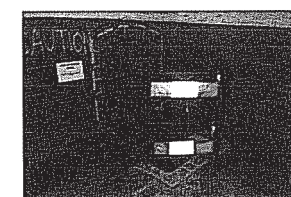
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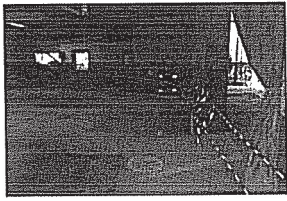
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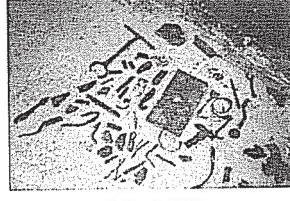
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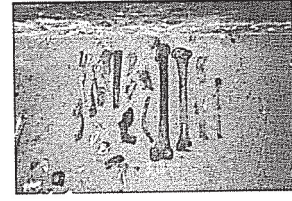
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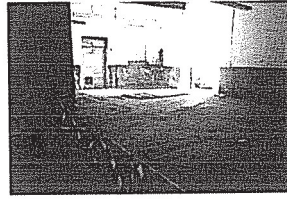
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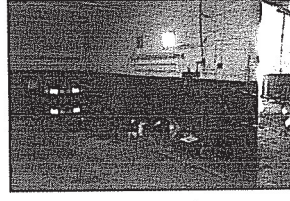
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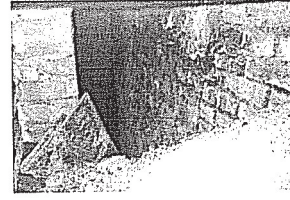
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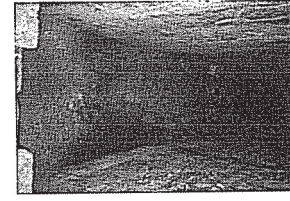
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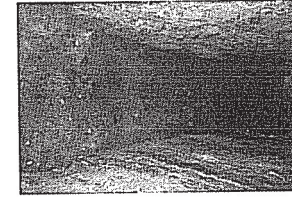
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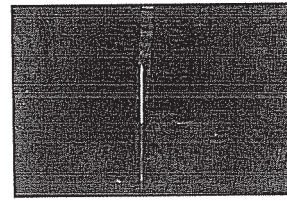
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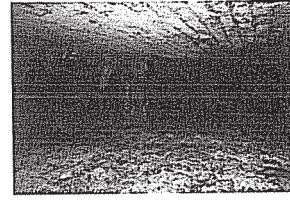
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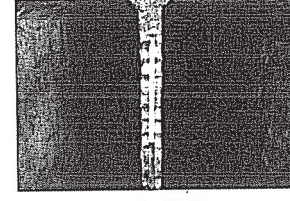
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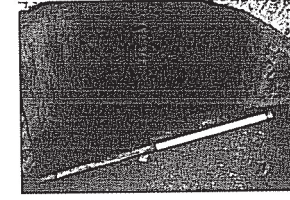
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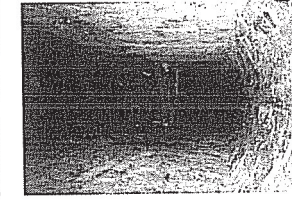
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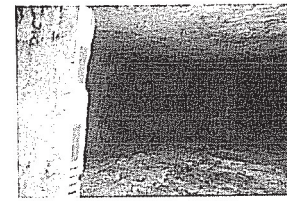
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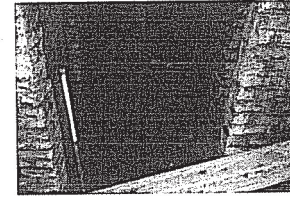
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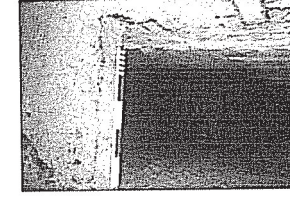
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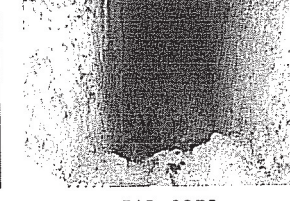
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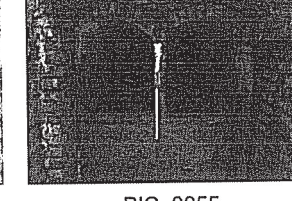
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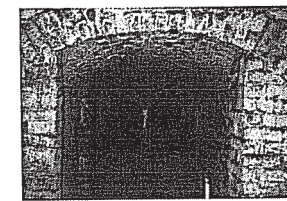
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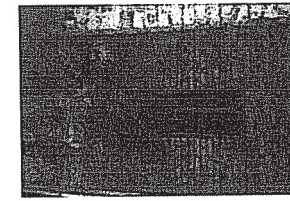
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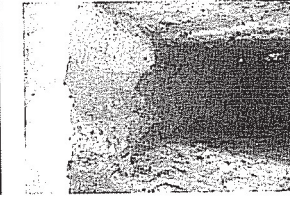
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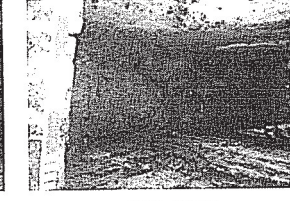
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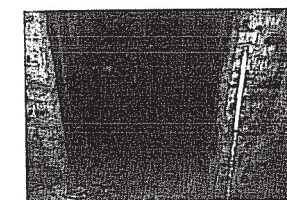
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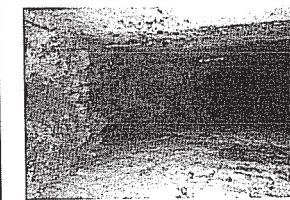
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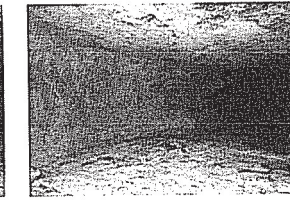
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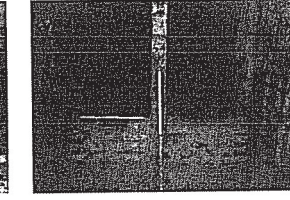
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PIC_0048



PIC_0047



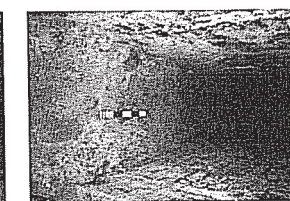
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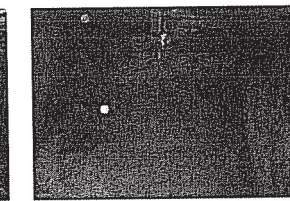
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PIC_0044



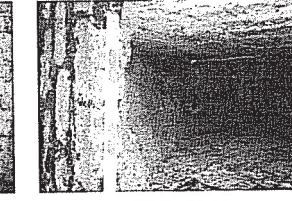
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PIC_0042



PIC_0041

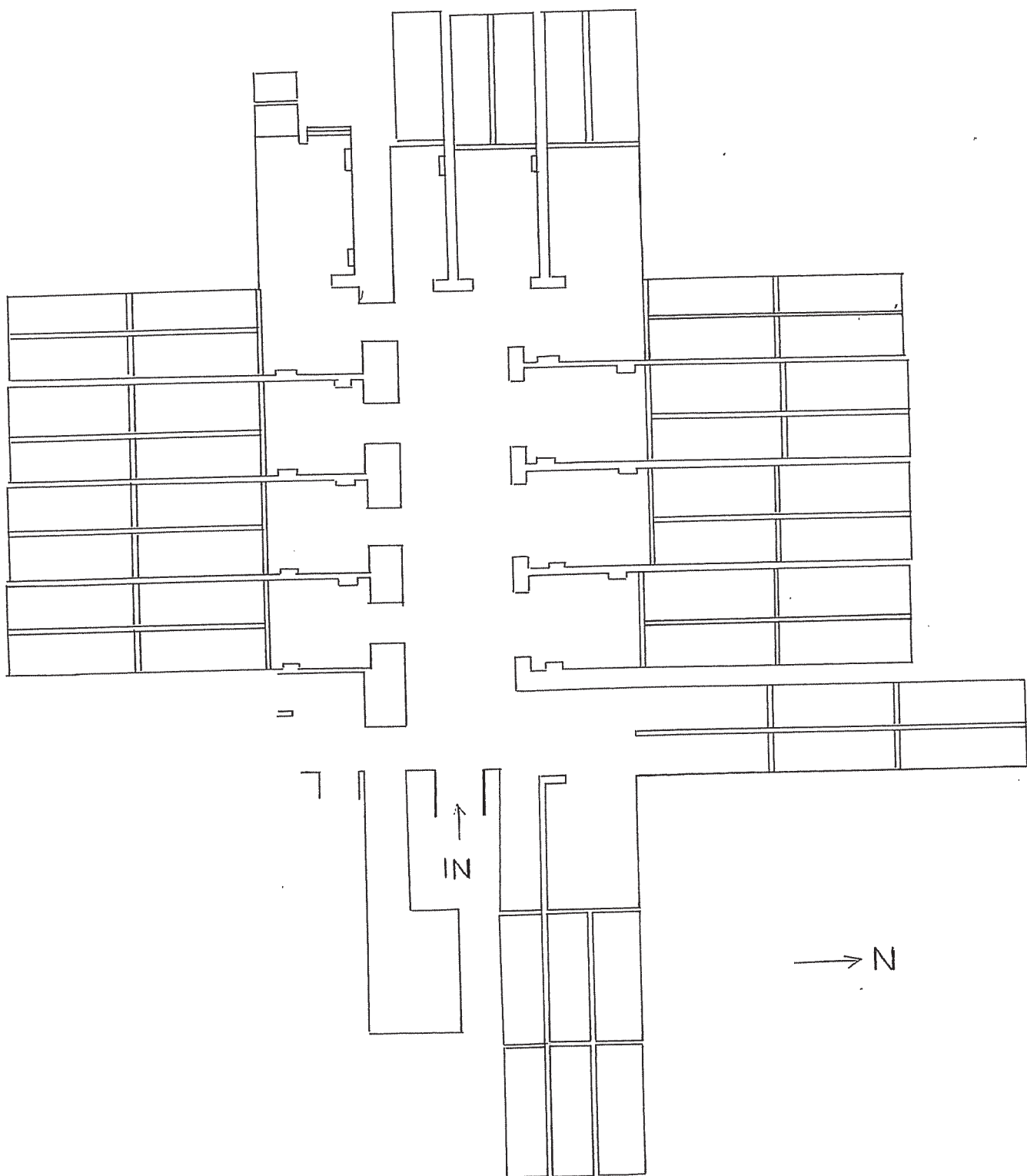


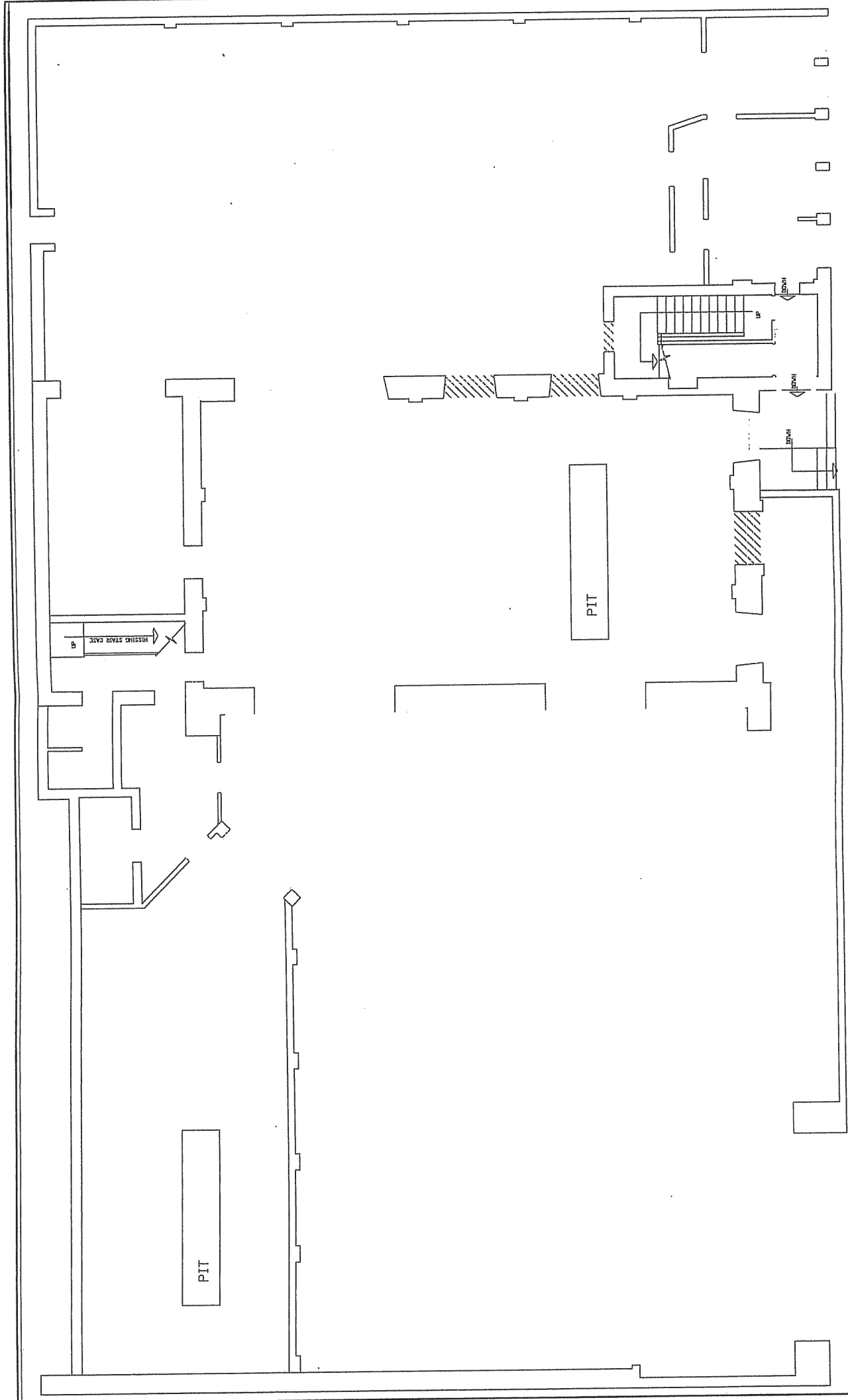
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APPENDIX 3

OBSERVATIONS







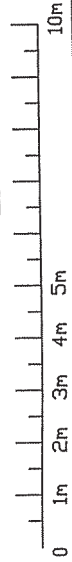
EXISTING GROUND FLOOR PLAN

FIGURED DIMENSIONS TO BE USED IN PREFERENCE TO SCALE
 ALL DIMENSIONS MUST BE OBTAINED FROM OR CHECKED ON
 SITE.
 ANY DISCREPANCIES MUST BE REPORTED.
 ILLUSTRATIONS ARE FOR THE BENEFIT OF THE ADDRESSEE
 ONLY.

Notes:



BLOCKED UP OPENINGS



Title: GROUND FLOOR
 Project: EXISTING DRAWINGS OF
 12-14 VILLIERS ST
 SUNDERLAND
 TYNEWEAR
 SR1 1HA

Date: 12.09.06
 Scale: 1:100
 Sheet Size: A3
 Drg No: 3 of 11

Ian Farmer Associates
 Geotechnical and Environmental Specialists
 Unit 1, Barnburgh Court, Team Valley Trading Estate
 Gateshead, NE11 0TX
 Tel: 0191 482 8500
 E-Mail: newcastle@ianfarmerassociates.co.uk

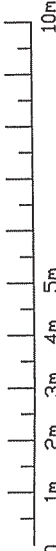


EXISTING GROUND FLOOR PLAN

Notes:



BLOCKED UP OPENINGS



FIGURED DIMENSIONS TO BE USED IN PREFERENCE TO SCALE.
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E-Mail: newcastle@ianfarmerassociates.co.uk

Date: 12.09.06
Scale: 1:100
Sheet Size: A3
Dwg No: 9 of 11

Title: GPS AT 20ms OVERLAY OVER
Project: EXISTING DRAWINGS OF
12-14 VILLIERS ST
SUNDERLAND
TYNEWEAR
SR1 1HA

APPENDIX 4

OASIS