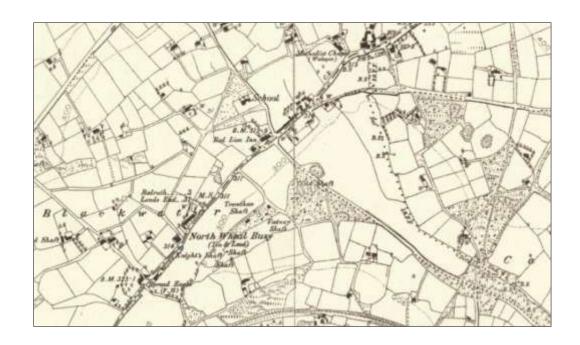
# LAND AT BLACKWATER ST. AGNES CORNWALL

Results of a Desk Based Assessment, Walkover Survey & Historic Visual Impact Assessment





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#### Land at Blackwater, St. Agnes, Cornwall

## Results of a Desk Based Assessment, Walkover Survey & Historic Visual Impact Assessment

For

Louisa Meek of CSA Architects (the Agent)

On behalf of

Johnny Hawkins of Hawkins Motors (the Client)

Ву



**SWARCH project reference: SAB15** 

National Grid Reference: SW 73547 59610

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#### **Summary**

This report presents the results of a desk-based assessment, walkover survey and historic visual impact assessment (HVIA) carried out by South West Archaeology Ltd. (SWARCH) on land at Blackwater, St. Agnes, Cornwall, prior to the re-development of a car showroom.

The desk-based assessment showed that post-medieval mining had a significant impact on a landscape that had been in use since at least the Bronze Age. Specific to the site would be elements associated with the North Wheal Busy Mine, a shaft of which is located beneath the southern tip of the current site. However, the site had been built on and developed through the 19<sup>th</sup> century and has been significantly landscaped, both in the 19<sup>th</sup> and 20<sup>th</sup> centuries.

The walkover survey complimented the desk-based assessment and informed the HVIA's Zone of Visible Influence. The setting of the site in the bottom of a valley with a relatively low roof and local screening from buildings, foliage and the A30 greatly reduces or negates its impact of the setting on most of the surrounding assets, such as the Gwennap Mining District to the south, or most of Blackwater to the north. The only concern of any development is the potential interference to the setting of the War Memorial and Passmore Edwards Literary Institute to the north-east, which have an uninterrupted line of sight along the visible south-western approach into Blackwater, along Coronation Terrace. The proposed development would not sufficiently increase the current impact of the site of the surrounding assets, which is negligible at most. The reduction of car parking to the east and north of the proposal site may in part improve the setting of the War Memorial and Passmore Edwards Literary Institute.

With this in mind, the overall impact of the proposed development can be assessed as **negligible**. The impact of the development on the buried archaeological resource would be **permanent** and **irreversible**. Although, apart from the roadside (Coronation Terrace) length of the site, it is unlikely any archaeological remains/features survive or would be disturbed.

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#### 1.0 Introduction

**Location:** Land at Blackwater

Parish: St. Agnes County: Cornwall

**NGR:** SW 73547 59610

#### 1.1 Project Background

This report presents the results of a desk based assessment carried out by South West Archaeology Ltd. (SWARCH) on land at Blackwater, St. Agnes in Cornwall (Figure 1). The work was commissioned by Louisa Meek of CSA Architects (the Agent) on behalf of Johnny Hawkins of Hawkins Motors (the Client) in order to identify any archaeological sites or features that might be affected by the proposed re-development of a car showroom and associated workshop.

#### 1.2 Topographical and Geological Background

The site is located to the north-east of the A30 trunk road on a ridge of land at the northern origin of a branch of the Carnon River approximately 10km west of Truro in Cornwall at a height of approximately 92m AOD on land currently used as a garage (see Figure 1).

The soils of this area are the well-drained fine loamy or fine silty soils of Manod Association (SSEW 1983). These overlie sedimentary mudstones and sandstones of the Porthtowan Formation (BGS 2015).

#### 1.3 Historical Background

Blackwater is situated within the mining district of the parish of St. Agnes, and hundred and deanery of Pyder. The surrounding landscape is littered with the copper and tin mines of the Gwennap-Chacewater mining district, known as 'the richest square mile on Earth' due to its extensive copper and arsenic production; producing over one third of the global copper in the late 18<sup>th</sup> century. The North Wheal Busy mine was in operation from 1854 under the ownership of North Busy Mining Company, though work was suspended in 1863-65, and finally ceased in 1886.

Blackwater (ModE *black* + *water*), formerly 'Black water coomb' c.1696, means 'black stream' (Watts 2010) and is likely to relate to either the appearance of the nearby stream as it runs through the local slates; or has been linked in contrast to nearby 'Chacewater' ('hunting ground'), and perhaps relate to an absence of game or the topography preventing its hunting.

#### 1.4 Archaeological Background

The historic fieldscape in this area is characterised by the Cornwall Council Historic Landscape Characterisation (HLC) as post-medieval enclosed land, though there are elements of medieval farmland. Medieval farmland is described as Anciently Enclosed Land (AEL) and formed the agricultural heartland of Cornwall with the settlements and field systems typically having clear medieval antecedents. AEL has also been strongly demonstrated to indicate areas first settled, enclosed and farmed during later Prehistory i.e. Middle Bronze Age (c.1500-1000 BC) until the

Roman period (AD 43-410) and continuing into the early medieval period (AD 410-1066). It is considered highly likely that buried archaeology dating to the Prehistoric and Roman-British periods generally survives within areas of AEL. The site itself, however, sits on the borders of such land with an area described as  $20^{th}$  century settlement.

There has been little or no archaeological investigation within the immediate area of the proposed site, although there are a large number of known heritage assets in the vicinity. The presence of prehistoric activity suggested by the AEL can be seen in the presence of Bronze Age barrows, though most of the other known heritage assets in the vicinity are related to post-medieval mining in the area.

#### 1.5 Methodology

The desk-based assessment follows the guidance as outlined in: Standard and Guidance for Archaeological Desk-Based Assessment (CIfA 2014a) and Understanding Place: historic area assessments in a planning and development context (English Heritage 2012).

The historic visual impact assessment follows the guidance outlined in: *Conservation Principles:* policies and guidance for the sustainable management of the historic environment (English Heritage 2008), The Setting of Heritage Assets (English Heritage 2011a, revised Historic England 2015), Seeing History in the View (English Heritage 2011b), Managing Change in the Historic Environment: Setting (Historic Scotland 2010), with reference to Visual Assessment of Wind farms: Best Practice (University of Newcastle 2002), Guidelines for Landscape and Visual Impact Assessment 3<sup>rd</sup> edition (Landscape Institute 2013), and Photography and Photomontage in Landscape and Visual Impact Assessment (Landscape Institute 2011).



Figure 1: Site location (the location of the proposed development is indicated).

#### 2.0 Desk-Based Assessment

#### 2.1 Documentary Background

Blackwater is situated within the mining district of the parish of St. Agnes, and hundred and deanery of Pyder (Lysons and Lysons 1822). The parish extends for 8294 acres, which in 1848 comprised 3633 acres of common or waste (Lewis 1848). The valley surrounding Blackwater contains small oases of 'cultivated fields and a few trees [to] gladden the eye' between the extensive mines, such as Wheal Busy which alongside its principal minerals of: copper, tin, zinc and lead; provides 'perfect slate' (Bolase 1828, 304-5).

The landscape surrounding Blackwater is littered with predominantly copper and tin mines, with: Great Wheal Busy (copper and arsenic); North Treskerby (copper and tin); East Downs (copper); Hallenbeagle (copper and tin); Killifreth (copper and tin); Wheal Rose (copper and tin); Wheal Daniell (ochre and lead); Stencoose and Mawla Mine (copper); Wheal Unity Wood (copper and tin); and Great North Downs (copper and tin) all within 2.5km of the village. The Wheal Busy mines are thought to been mined since the 16<sup>th</sup> century, and were formerly known as Chasewater mine, a notable copper producer from the early 1720's and part of the Gwennap-Chacewater mining district, known as 'the richest square mile on Earth' due to its extensive copper and arsenic production, producing over one third of the global copper production in the late 18<sup>th</sup> century. The North Wheal Busy mine included the Boscawen (formerly Hallenbeagle) mine and together formed a sett known as 'Wheal Truro' with numerous shafts (Cornwall in Focus 2015).

The North Wheal Busy mine was in operation from 1854 under the ownership of North Busy Mining Company, though work was suspended in 1863-65, and finally ceasing in 1886. Records show that in 1878 the mine employed 38 staff, including 17 miners, peaking in 1880 with 72 staff and 50 miners, dwindling to 13 staff and 10 miners in 1885 (Burt 2014).

#### 2.2 Cartographic Evidence

#### 2.2.1 Early cartographic sources

The earliest map depicting the site is the Ordnance Survey (OS) surveyor's draft of 1809, which shows the surrounding landscape in some, if perhaps misleading, detail. It shows the village of Blackwater as a small collection of houses situated along the road from Redruth, following a level platform between two steep inclines. It indicates a limited number of fields with boundaries based upon medieval strip field system, though surrounded by swathes of unenclosed land, presumably not suitable for agriculture. The pattern of fields on the draft map is, however, often speculative rather than accurate.



Figure 2: Extract from the 1809 OS surveyor's draft map (BL) (the location of the site is indicated).

#### 2.2.2 The 1840 Kenwyn tithe map

Although now within the parish of St Agnes, in 1840 the site was within the Parish of Kenwyn. The 1840 tithe map is the first accurate detailed map of the site and indicates the relative accuracy of the earlier surveyor's draft regarding the field pattern, although it shows the site in much more detail. The large number of small and narrow enclosures probably respects medieval strip fields and the fragmented ownership reflects the leasing out of a large estate from a single owner, in this case, the Earl of Falmouth. The ownership of consecutive plots run parallel to the main road (e.g. plots 5226, 5227, 5228 and 5248, which were owned by Mary Going; or 5231, 5239 and 5240, which were owned by Odgers) and further allude to late-medieval or early post-medieval tenancy patterns.

The site is divided into five enclosures with three buildings near its middle and an 'L'-shaped building in its north-east corner. These plots were owned/leased by John Powning and Mr/Miss Odgers and were occupied by John Powning. The field names are generally prosaic and reflect their relative locations, shape and use; such as *Valley Field* or Long Field. *Adit Field* (plot 5232) adjacent to the south-west corner of the site indicates the known or worked use for mining that would be exploited through the later 19<sup>th</sup> century as part of North Wheal Busy Mine, which worked a single lode from various shafts.

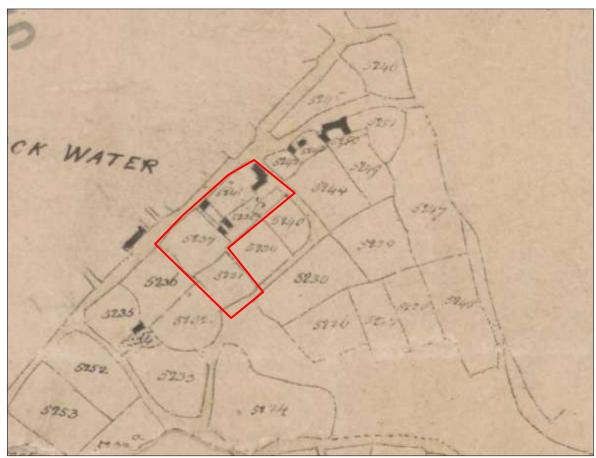


Figure 3: Extract from the 1840 Kenwyn Tithe map (the approximate location of the site is indicated) (CRO).

Field	Owner	0	<b>T</b>	Etald Name	etaldura.
No.		Owner	Tenant	Field Name	Field Use
5224		Ann Edwards	Herself	Croft	Croft
5226	]			Corner Field	Arable
5227	]			Middle Field	Arable
5228				Square Field	Arable
5229	]	Man. Caina	Diahand Cuasa	Moor Field	Arable
5230	]	Mary Going	Richard Craze	Long Field	Arable
5249				Orchard Field	Arable
5250				Cottages and Yard	Garden
5251	]			Garden	-
5232	]			Adit Field	Arable
5233	]			Field before Door	Arable
5234A		Llugh Moule	Himself	Moor Field	Croft
5234	Earl of	Hugh Moyle		Cottage and Garden	-
5235	Falmouth			Field behind House	Arable
5236	Faiilioutii			House Field	Arable
5237				Meadow	Arable
5238		John Powning	Himself	<b>Garden and Mowhay</b>	-
5241				Road Field	Arable
5231				Valley Field	Arable
5239		Odgers	John Powning	Grove Field	Arable
5240				Stile Field	Arable
5242				Garden	Garden
5243				Cottage and Yard	-
5244		Thomas Turnal	Himself	Town Meadow	Arable
5245		Thomas Tyrrel	піпізен	Three Corner Field	Arable
5246				Lower Outer Field	Arable
5247				Lower Moor	Arable Field

5248			Higher Moor	Croft
5252	John Powning	John Downing	Higher Field	Arable
5253	and Hocking	John Powning	Valley Field	Arable

Table 1: Extract from the 1840 Kenwyn tithe apportionment. The proposal site is highlighted in red.

#### 2.2.3 Ordnance Survey mapping

The 1<sup>st</sup> and 2<sup>nd</sup> edition Ordnance Survey maps depict a landscape similar in outline, but subject to limited loss of field boundaries alongside similarly minimally increased residential activity along the road. It also depicts the construction of the West Cornwall Railway, opened in 1863. The most significant development on the land surrounding Blackwater is associated with the North Wheal Busy Mine to the south-west, with the addition of mining structures, six named shafts and numerous spoil heaps indicated amongst the fields.

The road that looped around the east and south of the site on the tithe map has been removed and the fields to the east of the site opened out into larger enclosures. The earlier mentioned 'L'-shaped building appears smaller and may have lost part of its north-east wing. An 'Old' shaft to the North-Wheal Busy mine is shown at the southern tip of the site.

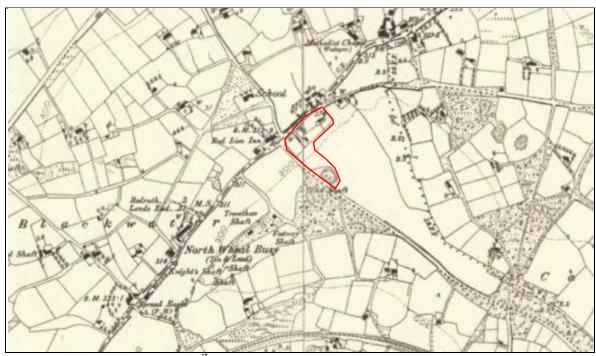


Figure 4: Extract from the 1888 OS 1<sup>st</sup> edition 6" map (Cornwall sheet LVII, CRO) (the site is indicated).

By 1909 the landscape remained fairly static and residential development of Blackwater appears to have stalled. The main development was the creation of Truro and Newquay branch of the great Western Railway line in 1905. The mining activity also appears to reflect the decline in the fortunes of the North Wheal Busy United Company, with fewer structures shown associated with the mine shafts, and no new shafts added. The spoil heaps are also shown as less pronounced, with some of the areas now rough pasture.

The building in the north-east corner of the site had been demolished by this time, perhaps indicating that it was also linked to the mining industry.

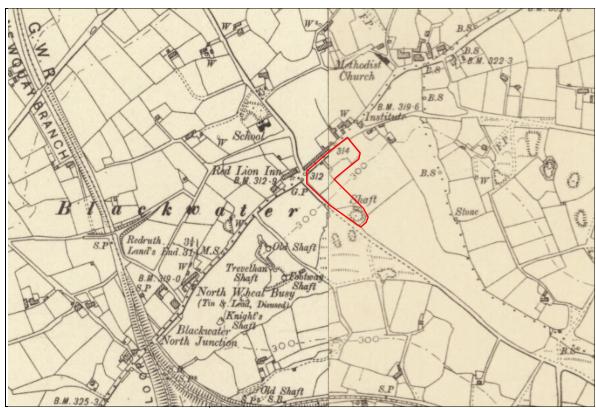


Figure 5: Extract from the 1909 OS 2<sup>nd</sup> edition 6" map (Cornwall sheet LXXI, CRO) (the site is indicated).

#### 2.3 Archaeological Background

There has been little or no archaeological investigation within the immediate area of the proposed site, although there are a large number of known heritage assets in the vicinity. The prehistoric activity suggested by the presence of AEL can be seen in a number of Bronze Age barrows, though most of the other known heritage assets in the vicinity are related to the post-medieval mining of the area.

The Cornwall Historic Environment Record (see Figure 6 and Table 2) records a number of heritage assets in close proximity to the development site, most of which are post-medieval in date. There are Bronze Age barrows located to the north (No's 36, 39, 40, 41)), east (No.48) and south (No.13) of the site. A further undated monument may similarly be a barrow (No.1), whilst there is a possible Iron Age or Romano-British enclosure (No.6) to the west of the site. There are very few early medieval or medieval sites presently marked on the HER, with boundary markers (No.42) and field systems (No.28). The surrounding landscape, however, is dominated by post-medieval and modern mining activity, including: Boscawen (No.12); East Downs (No.11); and North Wheal Busy (No.22) with numerous shafts and spoil tips. The village of Blackwater itself contains several Listed Buildings, including non-conformist chapels (No's 17 and 32), the childhood home of the local dignitary Passmore Edwards (No.26), the Literary Institute (No.30).

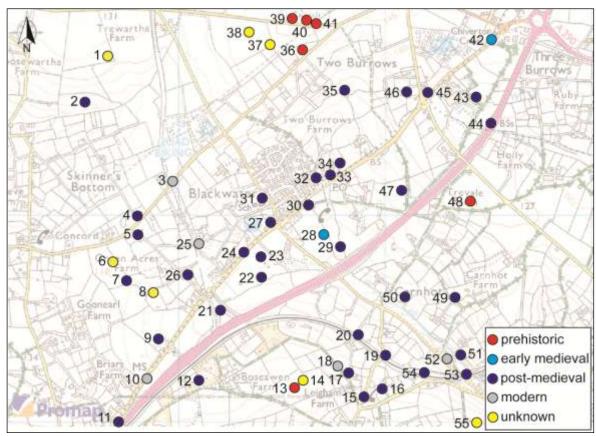


Figure 6: Map of nearby heritage assets (source: Cornwall HER).

No.	Mon ID.	Name	Record	Info
	PRN53791	Trewartha Farm –	Cropmark	Oval shaped mound visible as cropmark on aerial photograph.
1		undated mound		May be the remains of a spoil tip associated with mining or
				plough levelled remains of a Bronze Age barrow
	PRN53792	Bridge Farm – post-	Monument	Remains of a rectilinear field system visible as low earth
2		medieval field system		banks. Considered to contain Recently Enclosed Land. Post-
				medieval
3	PRN178066	Blackwater – modern	Structure	Bridge carrying road over the line of the Chancewater to
3		railway bridge		Newquay branch, opened in 1905, closed in 1963
	PRN41099	Wheal Concord – post-	Monument	Wheal Concord was an ancient mine incorporating East
4		medieval mine		Treskerby with Wheal Briton in the 1830's. Shafts located on
				historic mapping are visible on aerial photographs
	PRN41078	Wheal Briton – post-	Monument	Wheal Briton was worked before 1810 and in the 1830's
5		medieval mine		incorporated in East Treskerby. A single shaft with linear spoil
				tip is visible on aerial photographs
	PRN53789	Green Acres Farm –	Cropmark	Sub-rectangular enclosure visible as cropmark on aerial
		undated enclosure		photographs. Possibly an enclosed settlement of Iron Age or
6				Romano-British date. But later field boundaries are associated
Ü				with this boundary and it may be post-medieval
	NMR1824772	Land at Caervallack Lodge	Documentary	Desk-based assessment carried out in 2003 by Cornwall
				Archaeological Unit Report No 03R069
	PRN53790	Green Acres Farm – post-	Cropmark	Oblong mound visible on aerial photographs. Likely to be
7		medieval shaft		remains of a spoil tip possibly associated with the Scorrier
				Consols mine
	PRN53710	Green Acres Farm –	Cropmark	Small, curvilinear enclosure visible as cropmark on aerial
8		undated enclosure		photographs and appears incorporated into existing field
Ü				hedge. Date and function uncertain, but may be a small
				example of a round
9	PRN53709	Briar Farm – post-	Cropmark	Remains of a rectilinear field system visible on aerial
		medieval field system		photographs and fitting into the existing field pattern
10	MCO55089	Briar Farm – modern	Monument	Milestone recorded on modern mapping. Triangular over
		milestone		square base. Metal plates removed.
	PRN40974	East Downs – post-	Monument	East Downs mine, in operation from 1800, shown on Thomas's
11		medieval mine		map of 1819, though shown on OS map of 1878 as disused
				with ruined engine house

#### Land at Blackwater, St. Agnes, Cornwall

	PRN41085	Boscawen – post-	Monument	Late 18 <sup>th</sup> century mine worked with North Wheal Busy as
12	111111003	medieval mine	Worldment	Wheal Truro
13	PRN53707	Boscawen Farm – Bronze Age barrow	Cropmark	Sub-circular single-ditched enclosure visible as cropmark on aerial photographs. Likely the plough-levelled remains of a round barrow based on hill top location
14	PRN53708	Boscawen Farm – Undated mound	Monument	Sub-circular mound visible aerial photographs. May be a spoil tip associated with a mine, but may be a barrow
15	PRN53706	Leigham Farm – Post- medieval shaft	Monument	Three spoil tips, one with an associated shaft visible on aerial photographs
16	PRN163038	Wheal Ann – Post- medieval mine	Monument	Small early 19 <sup>th</sup> century copper mine. Part of Wheal Busy Sett with workings from Wheal Seymour Shaft
17	PRN137939	Wheal Busy – Post- medieval nonconformist chapel	Listed building	Grade II* (473911) listed Bible Christian chapel. Chapel, walls, gate-piers and railings all listed. Built 1863
18	PRN137941	Wheal Busy – Modern Sunday school	Building	Bible Christian Sunday school. Built 1905. Grouped with a Grade II* chapel of considerable interest
19	MCO55403	Trevint – Post-medieval railway bridge	Structure	Bridge carrying the road over the West Cornwall Railway. Built 1852
20	MCO55401	Leigham Farm – Post- medieval railway bridge	Structure	Bridge carrying the line of the West Cornwall Railway over a lane. Built 1852
21	PRN178063	Blackwater – Modern railway	Structure	Blackwater Junction was a triangular junction with the main GWR line from Truro and formed the connection for the Chacewater to Newquay branch. Opened in 1905 and closed in 1963
22	PRN41065	North Wheal Busy – Post- medieval mine	Monument	An old working included in the sett called Wheal Truro. Suspended between 1863 and 1865, worked again in 1877, closing in 1885/6. Up to 10 shafts and associated spoil tips visible on aerial photographs
23	PRN53711	North Wheal Busy – Post- medieval field system	Monument	Rectalinear field system visible as banks on aerial photographs in an area of Recently Enclosed Land and likely to be Post- medieval in origin
24	MCO55090	Blackwater – Post- medieval milestone	Monument	18 <sup>th</sup> century granite milestone
25	PRN178065	Blackwater – Modern railway bridge	Monument	Bridge carrying the road over the Chacewater to Newquay branch. Opened in 1905, closed in 1963
26	List1328671	Sunbeams	Listed building	Gade II (1328671) listed early-mid 19 <sup>th</sup> century house where Passmore Edwards lived for much of his childhood
27	PRN139360	Blackwater – Post- medieval public house	Building	The Red Lion Inn is present on the 1 <sup>st</sup> edition OS mapping
28	PRN53712	Blackwater – Early medieval field system	Monument	Remains of a field system with both rectilinear and curving boundaries visible as banks and hollows on aerial photographs
29	PRN53713	Blackwater – Post- medieval streamworks	Monument	Remains of a probable streamworking site visible as banks and mounds on aerial photographs
	PRN139363	Blackwater – Post- medieval well	Documentary	Well shown at this location on the 1 <sup>st</sup> edition OS map
30	PRN139364	Blackwater Literary Institute	Listed building	Grade II (1312854) listed building built 1889 by John Passmore Edwards. Shown at this location on the 2 <sup>nd</sup> edition OS map
	List1391926	War Memorial located outside Blackwater Literary Institute	Listed building	Grade II (1391926) listed war memorial unveiled in 1921 in memory of WWI, but now also WWII dead and returnees
24	PRN41093	Gump – Post-medieval mine	Monument	Gump mine consists of a burrow next to Blackwater School, shown as East Treskerby on Symons map of 1870
31	PRN139361	Blackwater – Post- medieval school	Listed building	Grade II (1312413) Board School built in 1877 and later extended
22	PRN138106	Wesley Chapel	Listed building	Grade II (1141533) listed Wesleyan Chapel and adjoining schoolroom built 1823
32	List1312414	Simla Trecoose	Listed building	Grade II (1312414) listed pair of 19 <sup>th</sup> century houses
33	PRN139365	Blackwater – Post- medieval post-office	Building	Post-office shown on the 2 <sup>nd</sup> edition OS map
34	PRN139362	Blackwater – Post- medieval pump	Documentary	A water pump is shown at this location on the 1 <sup>st</sup> edition OS map
35	PRN41092	Prince Coburg – Post- medieval mine	Monument	Prince Coburg mine was active in the 1820's and also worked in 1845. Shown on Symons map of 1870. The 1962 OS map shows surface features and a line of three shafts and spoil tips are visible on aerial photographs
36	PRN19096	Two Burrows – Bronze Age barrow	Monument	One of two barrows mentioned by Thomas in 1851. Nothing is visible but they are part of the group of six or seven barrows to the west of Chiverton Cross
	PRN19117	Two Burrows – Bronze Age barrow	Monument	One of two barrows mentioned by Thomas in 1851. Nothing is visible

37	PRN53749	Two Burrows – Undated mound	Monument	A mound, truncated by an existing field hedge visible on aerial photographs. May be related to surface mining in the area, though may associated with the nearby group of barrows
38	PRN53750	Two Burrows – Undated mound	Monument	Possible sub-circular mound visible on aerial photographs.  May be related to surface mining in the area, though may be associated with the nearby group of barrows
39	PRN19094	Two Burrows – Bronze Age barrow	Scheduled monument	Scheduled monument 29610 – two bowl barrows at Two Burrows . Visible as substantial mound
40	PRN19092	Two Burrows – Bronze Age barrow	Monument	Possible levelled barrow between the two barrows of Two Burrows recorded by Thomas in 1851
41	PRN19095	Two Burrows – bronze Age barrow	Scheduled monument	Scheduled monument 29610 – two bowl barrows at Two Burrows. Visible as an overgrown mound on aerial photographs
42	PRN19090	Three Burrows – Early medieval cross, early medieval boundary stone	Monument	Granite pillar suggested to be a cross, described as a boundary stone on OS maps
	HER63105	Three Burrows – Post- medieval milestone	Listed building	Grade II (63105) listed 18 <sup>th</sup> century granite milestone
43	PRN138107	Three Burrows – Post- medieval nonconformist chapel	Building	Wayside Primitive Methodist chapel converted to a dwelling, built 1859
44	PRN53716	Kea Farm – Post- medieval farmstead	Building	Farmhouse, outbuildings, yard, track and small field system visible on aerial photographs, probably dating to the 19 <sup>th</sup> century
45	List1328972	Milestone at SW 741465 SW	Listed building	Grade II (1328972) listed 18 <sup>th</sup> century granite milestone
46	List1328688	Highlands	Listed building	Grade II (1328688) listed 18 <sup>th</sup> century house and two cottages now one house
47	PRN53714	Carnhot – Post-medieval farmstead	Building	Farmhouse, garden and associated field system and small paddocks likely to be of post-medieval origin. Now completely destroyed
48	PRN53715	Trevale Farm – Prehistoric enclosure	Cropmark	Curvilinear enclosure visible on aerial photograph. Precise date and function uncertain, but possible given its location on a ridge that it is a round barrow
49	PRN19097	Carnhot – Post-medieval farmstead	Documentary	Remains of a possible post-medieval winnowing floor
50	PRN41100	Carnhot – Post-medieval mine	Monument	Carnhot Mine in operation in 1800, by 1811 had acquired a steam engine. Closed in 1812 but extensively worked in 1835-40 under the name Killiwerris Mine. A ruined building and shaft are probably associated with this mine
51	PRN41097	Chacewater – Post- medieval stamping mill	Documentary	A stamping mill north-east of Chacewater station is shown on the 1842 tithe map
52	PRN41098	Wheal Seymour – Modern mine	Monument	Wheal Seymour was in operation in the early 19 <sup>th</sup> century. Formerly known as Wheal Ann and became part of Great Wheal Busy. The mine is mentioned by Heard in 1817 and Thomas in 1819 but abandoned by 1906
53	MCO55404	Blackwater – Post- medieval railway viaduct	Structure	Blackwater Viaduct originally built in 1852 and replaced in 1888
54	PRN172656	Chacewater – Post- medieval railway station	Building	Chacewater station opened in 1853 as part of the West Cornwall Railway, but closed in 1964
55	PRN53689	Wheal Busy – Undated mound	Monument	Oblong mound visible on aerial photographs. Date and function not certain but probably the waste mound from a mine shaft

Table 2: List of nearby heritage assets (source: Cornwall HER).

#### 2.4 Walkover Survey

A walkover survey was conducted across the site on the 9<sup>th</sup> of December 2015. The site is an inverted 'L'-shaped area in the south-east quadrant at the cross-roads of Coronation Terrace and North Hill (becoming Station Road to the south). It is currently used as a garage and car show room with car parks. The site ownership includes the field that abuts the south-east boundaries of the site. A complete compliment of supporting photographs can be seen in Appendix 1.

The site has been landscaped to create two levels; an upper terrace along Coronation Road and a lower terrace to the rear of the site. The showroom is across the upper terrace with two storeys

to its rear and a single storey to the front face of the showroom and is surrounded by tarmac show car parks and concrete turning areas for the garage. The car park runs from the upper to lower parts in the north-east part of the site. The southern end of the site is a gravel and hardcore car park.

At the south-east end of the north-east boundary the ground had visibly been cut away to form a level terrace and access slope.

The southern car park originally extended as far as the enclosure to a post-medieval mineshaft that is visible on 19<sup>th</sup> century ordnance survey mapping and recent satellite images. On the site visit this car park extended to overlay this historic mineshaft enclosure. The southern and some of the eastern parts of this historic boundary are still intact. This boundary is a stone lined wall capped with earth and scrub (a probable wide Cornish hedgebank) c.1.75m in height. The overburden of the car park was then another c.1m in height and comprised of soil overlaid by hardcore and then gravels.

The eastern boundary fell away steeply to the adjacent field (within the ownership boundary) and was obscured by a thick width of scrub.

The north and west boundaries were lined with main roads; Coronation Terrace and North Hill (becoming Station Road).

From the site, the A30, apart from providing a physical and visible barrier to the landscape southeast of the site (including the Gwennap Mining District), provided a constant hum of noise from traffic occasionally interrupted by local traffic.

#### 2.5 Aerial Photography and LiDAR Data

Aerial photographs from the 1940s onwards are the primary source of evidence of cropmarks for a number of the heritage assets listed in Table 2; including: possible Bronze Age mounds (No.1), mounds that are probably post-medieval spoil tips (No.7), potential Iron Age enclosures/round' (Nos. 6 and 8), and medieval field systems that fit into the extant field system (Nos.9 and 28).

The available LiDAR data only provides partial coverage of the area immediately surrounding the site; however the impact of mining in the landscape is clearly visible. The medieval field system identified in aerial photography (No.28) can be seen with possible medieval or later rectangular enclosures immediately south-east of the site. A relict watercourse also appears to occur, running north-south, to the east of the site.

#### 2.6 Assessment of Impact on Buried Archaeological

The presence of mining-related features in and near to the site is not unexpected given the known mining history of this area. The Gwennap Mining District is c.0.35km to the south and the North Wheal Busy tin and lead mine is in Blackwater with shafts beneath the south tip of the site and remains immediately to the west, also, associated with the mine, a lode of Devonian Porthtowan Formation Slates runs approximately east-west across the site. The site itself has no visible earthworks and has buried the area of a shaft at its southern end (c.2010). Mining shafts and tips (some seemingly burying shafts) and associated structures and boundaries are not uncommon in this area.

The groundworks and landscaping associated with extending the car show room and improving the car parks are unlikely to cause further damage to the buried archaeology of the site, which has either already been built upon or truncated or buried for landscaping and levelling.

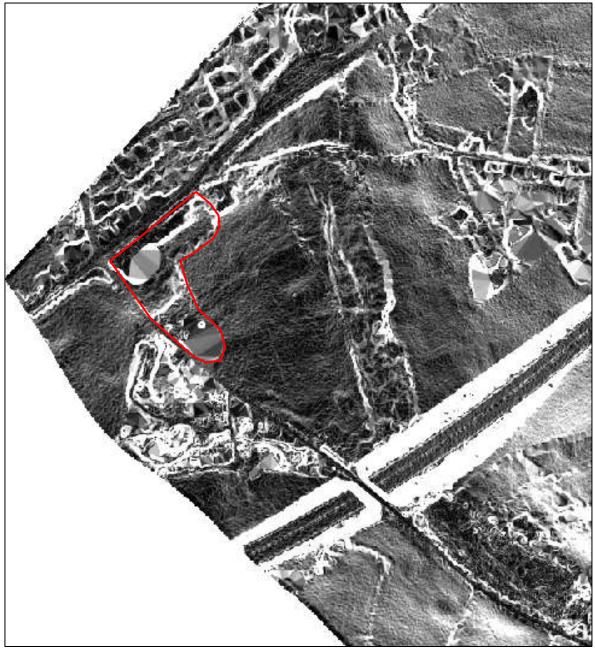


Figure 7: Detailed topographical image based on LiDAR data; the site is indicated. This is a QGIS-generated image (terrain analysis>slope) of TELLUS LiDAR survey data [contains freely available LIDAR data supplied by Natural Environment Research Council (Centre for Ecology & Hydrology; British Antarctic Survey; British Geological Survey); ©NERC (Centre for Ecology & Hydrology; British Antarctic Survey; British Geological Survey)]; the site is outlined in red.

#### 3.0 Historic Visual Impact Assessment

#### 3.1 National Policy

General policy and guidance for the conservation of the historic environment are now contained within the *National Planning Policy Framework* (Department for Communities and Local Government 2012). The relevant guidance is reproduced below:

#### Paragraph 128

In determining applications, local planning authorities should require the applicant to describe the significance of any heritage assets affected, **including the contribution made by their setting**. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should be consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which a development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

#### Paragraph 129

Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including any development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.

It is also relevant to consider the Planning (Listed Buildings and Conservation Areas) Act 1990, Section 66(1):

In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

This test applies only where the effect of planning permission materially affects either the Listed building or its setting. Where such an effect has occurred the Local Authority (or the Secretary of State) then considers whether the desirability of preservation of the historical asset or its setting is such that the planning balance falls in favour of refusing the application.

#### 3.1.1 Case Law

The duty under Section 66(1) was extensively discussed by the Court of Appeal in the case of *East Northamptonshire District Council and others v Secretary of State for Communities and Local Government and another* [2014] EWCACiv 137, more commonly known as 'The Barnwell Judgement'. In that case the Court of Appeal held that under section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990, the duty required the decision maker to give the desirability of preserving the building or its setting 'not merely careful consideration for the purpose of deciding whether there would be some harm, but considerable importance and weight when balancing the advantages of the proposed development against any such harm'.

However, it is a common misinterpretation that this decision means that *any* harm to a historic asset or its setting would be sufficient to refuse an application when in actual fact the level of harm and the desirability of preservation must be weighed as against the proposed benefits of the application. Indeed, the Court continued that if the harm to the setting of the Grade I Listed

building would be less than substantial, then the strength of the presumption against the grant of planning permission would be lessened, albeit not entirely removed.

In the instance of the Barnwell Judgement, it is worth noting that it concerned the erection of four 91.4m wind turbines within 2km of, and in direct view of, two Grade I buildings (also Scheduled Monuments), afforded the highest level of National protection (2.5% of all Listed structures). These buildings stand within a contemporary Grade II\* Elizabethan Registered Park and Garden of arguable European significance, itself lying at the centre of an undesignated former park that extended to within 300m of the nearest proposed turbine. The heritage assessment for the site identified there would be a major negative impact (AOC 2011, section 7.7.19). The identified level of harm at Barnwell was an order of magnitude greater than that of many proposed developments, which must be judged on their own individual merit or lack thereof.

It is important, therefore, to bear in mind that one must first establish whether any harm is caused by the proposed development and then whether the historical asset or its setting is sufficiently desirable of such protection and then and only then can the harm be weighed as against the proposed benefit. This reflects the position in the *National Planning Policy Framework* 

#### 3.2 Setting and Views

The principle guidance on this topic is contained within two EH publications: *The Setting of Heritage Assets* (2011a, revised GPS 2015) and *Seeing History in the View* (2011b). While interlinked and complementary, it is useful to consider the following sites in terms of their *setting* i.e. their immediate landscape context and the environment within which they are seen and experienced, and their *views* i.e. designed or fortuitous vistas experienced by the visitor when at the heritage asset itself, or that include the heritage asset.

Setting is the primary consideration of any HVIA. It is a somewhat nebulous and subjective assessment of what does, should, could or did constitute the lived experience of a monument or structure. The following extracts (superseded but still relevant) are from the English Heritage publication *The Setting of Heritage Assets* (2011a, 4 & 7):

Setting embraces all of the surroundings (land, sea, structures, features and skyline) from which the heritage asset can be experienced or that can be experienced from or with the asset.

Setting is not a heritage asset, nor a heritage designation. Its importance lies in what it contributes to the significance of the heritage asset. This depends on a wide range of physical elements within, as well as perceptual and associational attributes, pertaining to the heritage asset's surroundings... In some instances the contribution made by setting to the asset's significance is negligible; in others it may be the greatest contribution to significance.

The HVIA below sets out to determine the magnitude of the effect and the sensitivity of the heritage asset to that effect. The fundamental issue is that proximity and visual and/or aural relationships may affect the experience of a heritage asset, but if setting is tangential to the significance of that monument or structure, then the impact assessment will reflect this.

Historic and significant views are the associated and complementary element to setting, but can be considered separately as developments may appear in a designed view without necessarily falling within the setting of a heritage asset *per se*. As such, significant views fall within the aesthetic value of a heritage asset, and may be *designed* (i.e. deliberately conceived and arranged, such as within parkland or an urban environment) or *fortuitous* (i.e. the graduated development of a landscape 'naturally' brings forth something considered aesthetically pleasing, or at least

impressive, as with particular rural landscapes or seascapes), or a combination of both (i.e. the *patina of age*, see below). The following extract is from the English Heritage publication *Seeing History in the View* (2011b, 3):

Views play an important part in shaping our appreciation and understanding of England's historic environment, whether in towns or cities or in the countryside. Some of those views were deliberately designed to be seen as a unity. Much more commonly, a significant view is a historical composite, the cumulative result of a long process of development.

On a landscape scale, views, taken in the broadest sense, are possible from anywhere to anything, and each may be accorded an aesthetic value according to subjective taste. Given that terrain, the biological and built environment, and public access restrict our theoretical ability to see anything from anywhere, in this assessment the term principal view is employed to denote both the deliberate views created within designed landscapes, and those fortuitous views that may be considered of aesthetic value and worth preserving. It should be noted, however, that there are distance thresholds beyond which perception and recognition fail, and this is directly related to the scale, height, massing and nature of the heritage asset in question. For instance, beyond 2km the Grade II cottage comprises a single indistinct component within the wider historic landscape, whereas at 5km or even 10km a large stately home or castle may still be recognisable. By extension, where assets cannot be seen or recognised i.e. entirely concealed within woodland, or too distant to be distinguished, then visual harm to setting is moot. To reflect this emphasis on recognition, the term landmark asset is employed to denote those sites where the structure (e.g. church tower), remains (e.g. earthwork ramparts) or – in some instances – the physical character of the immediate landscape (e.g. a distinctive landform like a tall domed hill) make them visible on a landscape scale. In some cases, these landmark assets may exert landscape primacy, where they are the tallest or most obvious man-made structure within line-of-sight. However, this is not always the case, typically where there are numerous similar monuments (multiple engine houses in mining areas, for instance) or where modern developments have overtaken the heritage asset in height and/or massing.

In making an assessment, this document adopts the conservation values laid out in *Conservation Principles* (English Heritage 2008), and as recommended in the Setting of Heritage Assets (page 17 and appendix 5). This is in order to determine the relative importance of *setting* to the significance of a given heritage asset. These values are: *evidential*, *historical*, *aesthetic* and *communal*.

#### 3.2.1 Evidential Value

Evidential value is derived from the potential of a structure or site to provide physical evidence about past human activity, and may not be readily recognised or even visible. This is the primary form of data for periods without adequate written documentation. It is the least equivocal value: evidential value is absolute; all other ascribed values (see below) are subjective.

#### 3.2.2 Historical Value

Historical value is derived from the ways in which past people, events and aspects of life can be connected via a place to the present; it can be illustrative or associative.

*Illustrative value* is the visible expression of evidential value; it has the power to aid interpretation of the past through making connections with, and providing insights into, past communities and their activities through a shared experience of place. Illustrative value tends to be greater if a

place features the first or only surviving example of a particular innovation of design or technology.

Associative value arises from a connection to a notable person, family, event or historical movement. It can intensify understanding by linking the historical past to the physical present, always assuming the place bears any resemblance to its appearance at the time. Associational value can also be derived from known or suspected links with other monuments (e.g. barrow cemeteries, church towers) or cultural affiliations (e.g. Methodism).

Buildings and landscapes can also be associated with literature, art, music or film, and this association can inform and guide responses to those places.

Historical value depends on sound identification and the direct experience of physical remains or landscapes. Authenticity can be strengthened by change, being a living building or landscape, and historical values are harmed only where adaptation obliterates or conceals them. The appropriate use of a place – e.g. a working mill, or a church for worship – illustrates the relationship between design and function and may make a major contribution to historical value. Conversely, cessation of that activity – e.g. conversion of farm buildings to holiday homes – may essentially destroy it.

#### 3.2.3 Aesthetic Value

Aesthetic value is derived from the way in which people draw sensory and intellectual stimulation from a place or landscape. Value can be the result of *conscious design*, or the *fortuitous outcome* of landscape evolution; many places combine both aspects, often enhanced by the passage of time.

Design value relates primarily to the aesthetic qualities generated by the conscious design of a building, structure or landscape; it incorporates composition, materials, philosophy and the role of patronage. It may have associational value, if undertaken by a known architect or landscape gardener, and its importance is enhanced if it is seen as innovative, influential or a good surviving example. Landscape parks, country houses and model farms all have design value. The landscape is not static, and a designed feature can develop and mature, resulting in the 'patina of age'.

Some aesthetic value developed *fortuitously* over time as the result of a succession of responses within a particular cultural framework e.g. the seemingly organic form of an urban or rural landscape or the relationship of vernacular buildings and their materials to the landscape.

Aesthetic values are where a proposed development would have its principal or most pronounced impact. The indirect effects of development is predominantly visual, and their reflective nature ensures they draw attention within vistas, where local blocking does not prevail. In most instances the impact is incongruous; however, that is itself an aesthetic response, conditioned by prevailing cultural attitudes to what the historic landscape should look like.

#### 3.2.4 Communal Value

Communal value is derived from the meaning a place holds for people, and may be closely bound up with historical/associative and aesthetic values; it can be commemorative/symbolic, social or spiritual.

Commemorative and symbolic value reflects the meanings of a place to those who draw part of their identity from it, or who have emotional links to it e.g. war memorials. Some buildings or

places (e.g. the Palace of Westminster) can symbolise wider values. Other places (e.g. Porton Down Chemical Testing Facility) have negative or uncomfortable associations that nonetheless have meaning and significance to some and should not be forgotten.

*Social value* need not have any relationship to surviving fabric, as it is the continuity of function that is important.

Spiritual value is attached to places and can arise from the beliefs of a particular religion or past or contemporary perceptions of the spirit of place. Spiritual value can be ascribed to places sanctified by hundreds of years of veneration or worship, or wild places with few signs of modern life. Value is dependent on the perceived survival of historic fabric or character, and can be very sensitive to change.

#### 3.2.5 Summary

Industrial building developments have a minimal or tangential effect on many of the heritage values outlined above, largely because almost all effects beyond the red-line area are indirect. The principle values in contention are aesthetic/designed and, to a lesser degree aesthetic/fortuitous, as industrial building developments are, despite the visual drawbacks, part of the evolution of the historic landscape. There are also clear implications for other value elements (particularly historical/associational and communal/ spiritual), where views or sensory experience is important.

#### 3.2.6 Scale and Duration of Impact

The impacts of the proposed and its associated infrastructure on the historic environment may include positive as well as adverse effects. However, Industrial building development can be generally large and are usually inescapably modern intrusive visual actors in the historic landscape. Therefore the impact of a industrial building development will almost always be **neutral** (i.e. no impact) or **negative** i.e. it will have a **detrimental impact** on the setting of ancient monuments and protected historic buildings, save only where conscious design seeks to harmonise the proposed with the existing through sympathetic and careful planning.

For the purposes of this assessment, these impacts are evaluated on a six-point scale:

Impact Assessment	
Neutral	No impact on the heritage asset.
Negligible	Where the developments may be visible but will not impact upon the setting of the heritage asset, due to the nature of the asset, distance, topography, or local blocking.
Negative/unknown	Where an adverse impact is anticipated, but where access cannot be gained or the degree of impact is otherwise impossible to assess.
Negative/minor	Where the developments impact upon the setting of a heritage asset, but the impact is restricted due to the nature of the asset, distance, or local blocking.
Negative/moderate	Where the development would have a pronounced impact on the setting of a heritage asset, due to the sensitivity of the asset and proximity; it may be ameliorated by local blocking or mitigation.
Negative/substantial	Where the development would have a severe impact on the setting of a heritage asset, due to the particular sensitivity of the asset and/or

Land at Blackwater, St. Agnes, Cornwall

close physical proximity; it is unlikely local blocking or mitigation could

ameliorate the impact of the development in these instances.

Group Value Where a series of similar or complementary monuments or structures

occur in close proximity their overall significance is greater than the sum of the individual parts (e.g. Conservation Areas). This can

influence the overall assessment.

Permanent/irreversible Where the impact of the development is direct and irreversible e.g. on

potential buried archaeology.

In addition, the significance of a monument or structure is often predicated on the condition of its upstanding remains, so a rapid subjective appraisal was also undertaken.

#### **Condition Assessment**

Excellent The monument or structure survives intact with minimal modern damage or

interference.

Good The monument or structure survives substantially intact, or with restricted

damage/interference; a ruinous but stable structure.

The monument or structure survives in a reasonable state, or a structure that

has seen unsympathetic restoration/improvement.

Poor The monument survives in a poor condition, ploughed down or otherwise

slighted, or a structure that has lost most of its historic features.

Trace The monument survives only where it has influenced other surviving elements

within the landscape e.g. curving hedgebanks around a cropmark enclosure.

*Not applicable* There is no visible surface trace of the monument.

Note: this assessment covers the survival of upstanding remains; it is not a risk assessment and does not factor in potential threats posed by vegetation – e.g. bracken or scrub – or current farming practices.

#### 3.2.7 Statements of Significance of Heritage Assets

The majority of the heritage assets considered as part of the Visual Impact Assessment have already had their significance assessed by their statutory designations; which are outlined below:

#### Listed Buildings

A Listed building is an occupied dwelling or standing structure which is of special architectural or historical interest. These structures are found on the *Statutory List of Buildings of Special Architectural or Historic Interest*. The status of Listed buildings is applied to 300,000-400,000 buildings across the United Kingdom. Recognition of the need to protect historic buildings began after the Second World War, where significant numbers of buildings had been damaged in the county towns and capitals of the United Kingdom. Buildings that were considered to be of 'architectural merit' were included. The Inspectorate of Ancient Monuments supervised the collation of the list, drawn up by members of two societies: The Royal Institute of British Architects and the Society for the Protection of Ancient Buildings. Initially the lists were only used to assess which buildings should receive government grants to be repaired and conserved if damaged by bombing. The *Town and Country Planning Act 1947* formalised the process within England and Wales, Scotland and Ireland following different procedures. Under the 1979 *Ancient Monuments and Archaeological Areas Act* a structure cannot be considered a Scheduled Monument if it is occupied as a dwelling, making a clear distinction in the treatment of the two forms of heritage asset. Any alterations or works intended to a Listed Building must first acquire

Listed Building Consent, as well as planning permission. Further phases of 'listing' were rolled out in the 1960s, 1980s and 2000s; English Heritage advise on the listing process and administer the procedure, in England, as with the Scheduled Monuments.

Some exemption is given to buildings used for worship where institutions or religious organisations have their own permissions and regulatory procedures (such as the Church of England). Some structures, such as bridges, monuments, military structures and some ancient structures may have Scheduled Monument status as well as Listed Building status. War memorials, milestones and other structures are included in the list and buildings from the first and middle half of the 20<sup>th</sup> century are also now included as the 21<sup>st</sup> century progresses and the need to protect these buildings or structures becomes clear. Buildings are split into various levels of significance; Grade I, being most important; Grade II\* the next; with Grade II status being the most widespread. English Heritage Classifies the Grades as:

Grade I buildings of exceptional interest, sometimes considered to be **internationally important** (forming only 2.5% of Listed buildings).

Grade II\* buildings of particular importance, **nationally important**, possibly with some particular architectural element or features of increased historical importance; more than mere special interest (forming only 5.5% of Listed buildings).

Grade II buildings that are also **nationally important**, of special interest (92% of all Listed buildings).

Other buildings can be Listed as part of a group, if the group is said to have 'group value' or if they provide a historic context to a Listed building, such as a farmyard of barns, complexes of historic industrial buildings, service buildings to stately homes etc. Larger areas and groups of buildings which may contain individually Listed buildings and other historic homes which are not Listed may be protected under the designation of 'conservation area', which imposes further regulations and restrictions to development and alterations, focusing on the general character and appearance of the group.

#### World Heritage Sites

The Cornwall and West Devon Mining Landscape World Heritage Site. There is an inherent conflict between the protection and preservation of this landscape, and the duty to 'protect, conserve and enhance historical authenticity, integrity and historic character' and the need to appreciate this is a living landscape that continues to evolve and where sustainable development must be encouraged (see the WHS Management Plan 2005-10). The upland parts of this landscape form a highly distinctive landform, in which the relicts of its mining heritage form prominent components. Anything that detracts from that comes into conflict with the need to conserve and enhance historic character. The development of modern industrial units can erode the regional distinctiveness of this landscape. Any harm would need to be balanced against the benefits of the proposed development.

#### 3.3 Methodology

The methodology adopted in this document is based on that outlined in *The Setting of Heritage Assets* (English Heritage 2011 and revised 2015 GPA3), with reference to other guidance, particularly the *Visual Assessment of Windfarms: Best Practice* (University of Newcastle 2002). The assessment of visual impact at this stage of the development is an essentially subjective one, and is based on the experience and professional judgement of the authors.

Visibility alone is not a clear guide to visual impact. People perceive size, shape and distance using many cues, so context is critically important. For instance, research on electricity pylons (Hull &

Bishop 1988) has indicated scenic impact is influenced by landscape complexity: the visual impact of pylons is less pronounced within complex scenes, especially at longer distances, presumably because they are less of a focal point and the attention of the observer is diverted. There are many qualifiers that serve to increase or decrease the visual impact of a proposed development (see Table 3), some of which are seasonal or weather-related.

The principal consideration of this assessment is not visual impact *per se*. It is an assessment of the likely magnitude of effect, the importance of setting to the significance of heritage assets, and the sensitivity of that setting to the visual intrusion of the proposed development. The schema used to guide assessments is shown in Table 3 (below). A key consideration in these assessments is the concept of *landscape context* (see below).

#### 3.3.1 Assessment and Landscape Context

The determination of *landscape context* is an important part of the assessment process. This is the physical space within which any given heritage asset is perceived and experienced. The experience of this physical space is related to the scale of the landform, and modified by cultural and biological factors like field boundaries, settlements, trees and woodland.

Landscape context is based on topography, and can vary in scale from the very small – e.g. a narrow valley where views and vistas are restricted – to the very large – e.g. wide valleys or extensive upland moors with 360° views. Where very large landforms are concerned, a distinction can be drawn between the immediate context of an asset (this can be limited to a few hundred metres or less, where cultural and biological factors impede visibility and/or experience), and the wider context (i.e. the wider landscape within which the asset sits).

When new developments are introduced into a landscape, proximity alone is not a guide to magnitude of effect. Dependant on the nature and sensitivity of the heritage asset, the magnitude of effect is potentially much greater where the proposed development is to be located within the landscape context of a given heritage asset. Likewise, where the proposed development would be located outside the landscape context of a given heritage asset, the magnitude of effect would usually be lower. Each case is judged on its individual merits, and in some instances the significance of an asset is actually greater outside of its immediate landscape context, for example, where church towers function as landmarks in the wider landscape.

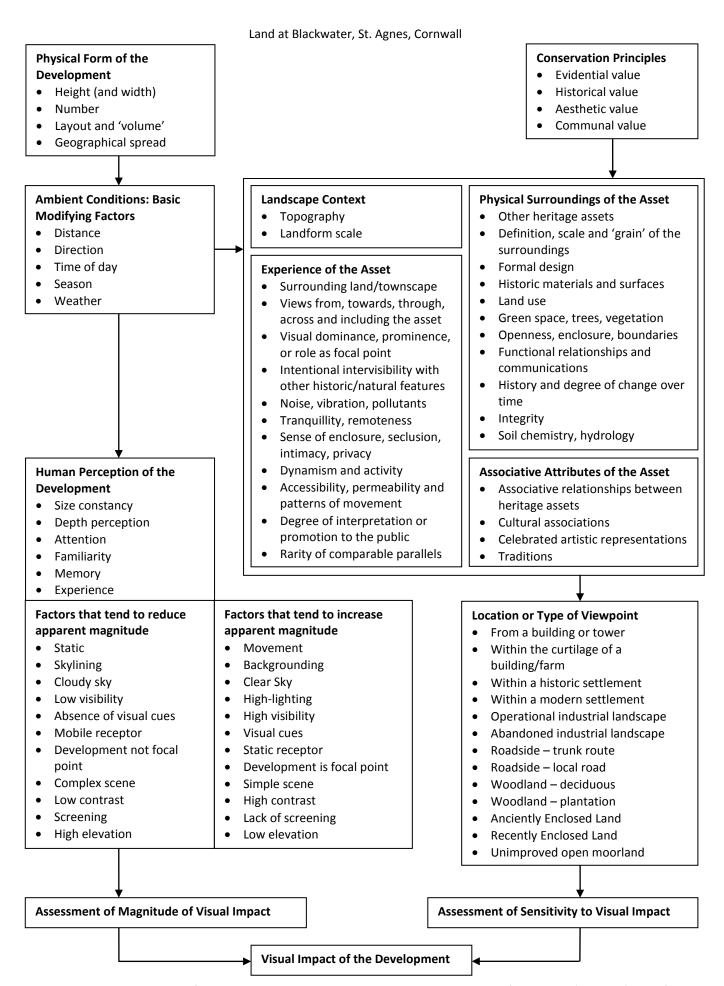


Table 3: The conceptual model for visual impact assessment proposed by the University of Newcastle (2002, 63), modified to include elements of *Assessment Step 2* from the Setting of Heritage Assets (English Heritage 2011, 19).

#### 3.4 Results and Field Verifictaion of the Viewshed Analysis and Zone of Visible Influence

During the site visit a Zone of Visible Influence (ZVI) was relatively clear and all designated heritage assets within 0.5km or visible from the site were visited to clarify their potential views towards the site. There was very little visibility beyond 0.5km from the site (Figure 8). The housing and local blocking from trees and hedges on the north side of Coronation Terrace restricted views across and into Blackwater. The Grade II Listed Literary Institute and War Memorial had direct inter-visibility with the site and potential to affect one another's views. Of all the other Grade II Listed buildings in Blackwater only their roofs or tops of their chimneys were visible from the site and the site was largely blocked or not visible from these structures. To the south-east of the site the A30 and the hilly topography form a relatively comprehensive screening of views in that direction. A small section of the north-facing slopes to the south of the site was the only visible part of the Gwennap Mining District World Heritage Site (WHS) that had views of the proposal site. The bridges and spoil tip within this area and within the mining district were not individually considered in this assessment.

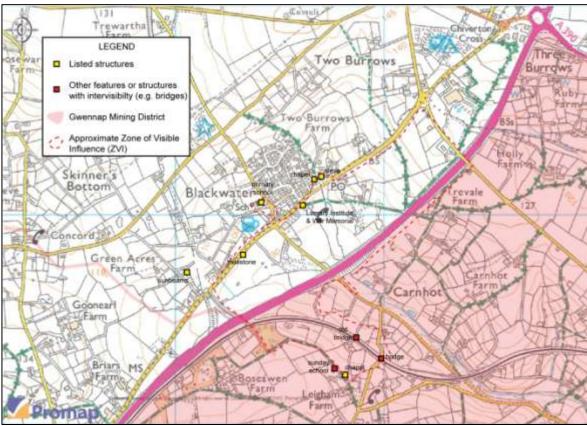


Figure 8: Zone of Visible Influence (ZVI) of the site and extent of the Gwennap Mining District.

#### 3.5 The Structure of Assessment

Given the primary setting of the development in relation to the World Heritage Site (Gwennap Mining District) to the south and the relatively restricted viewshed of the development, this assessment provides an analysis of inter-visibility and setting between a small number of assets within Blackwater and the Gwennap Mining District World Heritage Site landscape.

A comprehensive series of photographs can be found in Appendix 1.

#### 3.6 Impact by Class of Monument or Structure

### 3.6.1 Listed Buildings and Structures *Houses, Chapels, Schools, etc.*

Only a small number of these structures exist within the zone of theoretical visibility with the site. All of those discussed in this section are Grade II Listed structures. A Grade II \* Listed Chapel at Wheal Busy to the south is discussed in relation to the Gwennap Mining District World Heritage Site. The remaining structures generally lack significance regarding their group setting within Blackwater and can only be viewed/appreciated within a localised area directly around them, with little inter-visibility between- or relevance with other listed structures in the area. The exception being the Passmore Edwards Literary Institute (List Entry Number: 1312854) and adjacent War Memorial (List Entry Number: 1391926) which have wider visibility and settings; these are discussed in more detail below.

*Sunbeams* (List Entry Number: 1328671) was a 19<sup>th</sup> century property. The significance of the house being primarily its historical association with the journalist, M.P., and philanthropist (John) Passmore Edwards, who was born in Blackwater in 1823 and subsequently donated the village the first of his many public buildings. The tops of Sunbeams chimney stacks may just be visible from the proposal site, but the site is definitely not visible from *Sunbeams*, its gardens or setting. The proposals will not have any impact, due to a lack of inter-visibility; impact: **neutral**.

The *County Primary School* (List Entry Number 1312413) was built in 1877 and later extended. The roof of the school is visible from the proposal site, but the proposed development will not be visible from the school due to local blocking, which even in winter at the time of the site visit was too thick to clearly discern the site as anything over than a building as opposed to a green field. For this reason it will have a **neutral** to **negligible** impact from the proposed development.

The Wesleyan Chapel (List Entry Number 1141533) is a rubble built 19<sup>th</sup> century building set back from the main road. The building itself has no inter-visibility with the proposed site; however it can be seen from its immediate setting, such the entrance gate to the chapel plot. This intervisibility is unlikely to have a further adverse impact upon the setting of the chapel as it replaces an existing building, impact: **negligible**.

*Simla* is a 19<sup>th</sup> century building of killas rubble with granite dressings from which the existing car showroom is not visible, although a roadside sign is visible through a roadside plantation of deciduous trees and over a number of parked cars. For this reason it will have a **neutral** impact.

#### 3.6.2 Passmore Edwards Literary Institute and War Memorial

The setting of the Literary Institute is dependent on its being visible from the main south-western approach into Blackwater along Coronation Terrace. Views to the building and the later war memorial (placed in front), emphasise the importance of these structures to the identity and character of Blackwater. The building acts as a testament to Passmore Edwards making his mark on- and giving something back to his local community. The World War Memorial Was then built in relation to the Institute and with symmetry with it in mind. Developments outside the planned line of sight of these designed views will usually have a restricted impact on the meaning or historical relevance of these sites.

Locally and culturally specific buildings such as the Literary Institute are important due to its association with the local historic figure of philanthropist Passmore Edwards and its designed

visibility from the south-western approach along Corontation Terrace into Blackwater is important as the intended mode by which to appreciate the structure. Other features within the viewshed of the building are not relevant unless they block or critically distract from this intended experience of the building. War memorials are the most vivid reminder of war time losses and have strong connections to local communities as commemorative structures. Its original planned setting in conjuncture with the Literary Institute marries it with the view from the south-western approach into Blackwater and the most important aspect of the two monuments setting.

Asset Name: Blackwater Literary Institute, Coronation Terrace, Blackwater; and War Memorial located outside the Blackwater Literary Institute					
Parish: Chasewater, Cornwall Within the ZVI: YES					
Designation: GII	Conditio	on: Excellent	Distance to extant site structure: 99.50m & 91.40m Distance to extant site boundary: 30.80m & 22m		

Description: Blackwater Literary Institute — 1889. Built for John Passmore Edwards (donor). Killas with granite quoins and sills and brick jambs and arches. Dry Delabole slate roofs, half-hipped ends to front range, otherwise with gable ends. Alternated crested and pierced clay ridge tiles and terminals finials. Polychrome brick chimneys over side walls. Rectangular plan with entrance projection, wing to rear, left (west) with attached room to north. Single storey. Symmetrical 4-window south west front. Plinth and hoodmoulds over openings. Central round-headed entrance in projecting gabled bay with inscribed plaque over doorway. Flanking paired and segmental arched window openings with stoppd chamfers. Original segmental arched sashes with marginal panes or coloured glass. Interior not inspected. At the opening ceremony in 1890 the donor said, "Nothing gives me greater pleasure than to give this to my native village, and within a hundred yards of my old home where memories of boyhood cling around the place". (The Life and Good Works of John Passmore Edwards by R.S. Best). This is the first of many gifts to Cornwall by Passmore Edwards and appropriately to the inhabitants of Blackwater, his place of birth. John Passmore Edwards was the benefactor of 70 buildings including; hostpitals, libararies, drinking fountains, busts, schools convalescence homes and galleries. He worked with the architect Maurice Bingham Adams, a prolific architect of public buildings.

War Memorial located outside Blackwater Literary Institute unveiled in 1921. The cross is of dressed granite in the Celtic style with a pierced wheel-head cross on a tapered shaft with celtic knotwork decorative panels. The cross shaft stands upon a tapering base bearing the names of the First World War dead and returnees. The lower plinth is in turn surrounded by eight low granite posts supporting a chain. This striking granite memorial with its Celtic-style wheel cross stands in a commanding position, adjacent to a Grade II Listed Building.

Topographical Location & Landscape Context: Located in the base of a broad valley, at the southern and eastern foot of the valley sides. A spring to the east and watercourse to the south-east belies a relict water course and floodplain south-east of the site. The settlement of Blackwater extends across the north side of the main road, north and north-west of the site and open fields fill the valley floor to the south. The cultural context is the Cornwall and West Devon Mining Landscape and the principle approach into Blackwater, the birthplace of Passmore Edwards.

Setting: The Literary Institute and War Memorial form their own group within a definable public space located on the 'old A30', Coronation Terrace, on the south-side of Blackwater. It is set in the point of a fork between the main road and a track to its south with deciduous trees framing the south side of the building and the open space of the main road and hillside occupied by much of Blackwater rising to its north side. The Institute has the highest roof of the structures along this section of Coronation Road, both framing it with the sky behind and maintaining its dominance over the structures lining the main road to its southwest. Both assets are designed to be viewed from their south-western approach along Coronation Terrace: the Institute lacks ornate elements or windows to its rear. The later memorial was located in relation to the same view as the Institute and symmetrically to it.

*Principal Views:* The views between this group and the Red Lion pub and the Blackwater Primary School are blocked by housing to the west. Views to the south show the open fields with a house and the garage

and show-room in the foreground. Inter-visibility between the group and structures to the north-east are intermittent and not significant to the meaning or value of the assets. The significant view to the southwest along the road are uninterrupted and the relatively low height of the modern car showroom and garage does not detract from the open vista of the sky and/or across to the Gwennap Mining District

Landscape Presence: The Institute and Memorial are to be appreciated from the south-western approach into Blackwater and the area directly in front of the Institute. They hold no significant presence in wider landscape views.

Sensitivity of Asset: Being the first donation of Passmore Edwards and in his home town this is a particularly important example of- and memorial to Edwards and his philanthropy. Its design is dependent on it being prominent in views from the south-western approach into Blackwater. The war memorial has important communal value and shares the dependence on its being viewed in conjucture with the Institute from the south-western approach into Blackwater.

Magnitude of Impact: Extensions to the existing car showroom and garage at the proposed site would not block the view of the assets from their intended line of sight/sector of influence. The proposal will be part of the visual clutter within some views.

Overall Impact Assessment: Negative/minor impact.

#### 3.6.3 World Heritage Site

Cornwall and West Devon Mining Landscape

'...The development of industrialised mining in Cornwall and west Devon between 1700 and 1914, and particularly the innovative use of the high-pressure steam beam engine, led to the evolution of an industrialised society manifest in the transformation of the landscape through the creation of smallholdings, railways, canals, docks and ports, and the creation or remodelling of towns and villages. Together these had a profound impact on the growth of industrialisation in the United Kingdom, and consequently on industrialised mining around the world...

The extent and scope of the remains of copper and tin mining, and the associated transformation of the urban and rural landscapes presents a vivid and legible testimony to the success of Cornish and west Devon industrialised mining when the area dominated the world's output of copper, tin and arsenic...

The mining landscape of Cornwall and west Devon, and particularly its characteristic engine houses and beam engines as a technological ensemble in a landscape, reflect the substantial contribution the area made to the Industrial Revolution and formative changes in mining practices around the world.' – Historic England, List Entry.

The Gwennap Mining District reflects these criteria above and exists in a development zone that may be vulnerable to the possibility of incompatible development and it has a high authenticity in terms of form, design and materials and, the location and setting of surviving features.

'Much of the landscape of Cornwall and West Devon was transformed in the 18<sup>th</sup> and early 19<sup>th</sup> centuries as a result of the rapid growth of pioneering copper and tin mining. Its deep underground mines, engine houses, foundries, new towns, smallholdings, ports and harbours, and their ancillary industries together reflect prolific innovation which, in the early 19<sup>th</sup> century, enabled the region to produce two-thirds of the world's supply of copper. The substantial remains are a testimony to the contribution Cornwall and West Devon made to the Industrial Revolution in the rest of Britain and to the fundamental influence the area had on the mining world at large. Cornish technology embodied in engines, engine houses and mining equipment was exported around the world. Cornwall and West Devon were the heartland from which mining technology rapidly spread.' – Historic England, List Entry text.

The setting of the post-medieval mining landscape incorporates the inter-relationships between its constituent parts; buildings such as engine houses, miners cottages and chapels and, trams,

spoil-tips etc, in practical industrial terms and community relationships to their industrial working and living environment. Individual development sites will usually have a restricted impact on the meaning or historical relevance of these sites as the wider setting can absorb them into a relatively diffused landscape of varied features from various periods. The only features within the Gwennap Mining District with a possible inter-visibility and potential impact from the proposed development are the Grade II\* Listed Wheal Busy Chapel (List Entry Number: 1386521) and the adjacent Sunday School to its north. Technically outside the World Heritage Site, but in keeping with the spirit of the heritage asset are the remains of the North Wheal Busy mine, which are in the fields to the south-west of the proposed site (c.167m-333m to the south-west).

Asset Name: Wheal Busy Chapel, attached walls, gate- piers						
Parish: Chasewater, Cornwall Within the ZVI: YES (Partially)						
Designation: Grade II*	Condition: go	ood	Distance to extant site structure: c.730m			

Description: Bible Christian chapel. 1863 datestone. Built of killas rubble with granite dressings; grouted scantle slate roofs with pierced and crested red clay ridge tiles and end finials; cast-iron ogee gutters and downpipes. A small rectangular aisle-less plan with later 19<sup>th</sup> century porch in front of original doorway; gallery to ritual west end. A single storey; symmetrical 2-window front. Segmental brick arches over original 6/9-pane hornless sashes at both front and rear. Gable-ended porch has open braced truss as barge board over granite name and date panel with relief inscription. Basket-arched doorway has leaded overlight and pair of panelled doors; flanking leaded sidelights and side buttresses. INTERIOR: unaltered interior with plaster ceiling cornice and roses; panelled dado and panelled gallery front carried on brackets and the gallery supported on slender columns; L-plan staircases with stick balusters and turned newel posts. The original round-arched doorway has a spoked fanlight over pair of panelled doors. FITTINGS: there are box pews in both the gallery and in the central area below, plus space for loose fittings at either side. There are also box choir and leaders' pews ramped up on either side of the communion area and rostrum. The pews and other fittings are panelled, the lower pews have open balustraded friezes at the front and sides including the doors. The communion area has similar detail to its front and to a communion rail in front of the rostrum. There is a loose leaders' bench in front of this. The rostrum has a projecting panelled centrepiece with arched panels and a moulded cornice. There is a tall turned balustrade on either side with rounded corner to the right and a straight-flight staircase to the left. The handrail is surmounted by 2 turned lamp standards. SUBSIDIARY FEATURES: on either side of a garden court at the front of the chapel is a slurried rubble wall with gabled coping. At the front of the courtyard are low granite coped walls surmounted by ornate cast-iron railings. The central gateway has square granite piers and a fine cast-iron gate, and there is a cobbled path which leads to the front door of the chapel. This is arguably the best surviving complete example of the simple type of wayside chapel in Cornwall and one of only 6 examples of its type to retain all the original fittings. The unusual and beautiful fittings are quite remarkable.

#### Topographical Location & Landscape Context:

Setting: Located in a triangular shaped plot with rubble walled garden and mature mixed species hedge to the north, with a narrow lane/track running to the west and Sunday School to the north-west. The wider former industrial landscape forms the wider setting.

*Principal Views:* Primary views and from the lane, of the south (front) elevation. Views north are very restricted and will be locally blocked in views of the chapel from the south. The southward view from the proposal site includes part of a mining heritage trail and glimpses of the Wheal Busy Chapel.

Landscape Presence: A low single storey structure, with no wider landscape presence. Prominent local feature particularly from the lane.

Sensitivity of Asset: Not built with outward views in find, designed as a roadside chapel, and these relationships are key.

Magnitude of Impact: Extensions to the existing car showroom and garage at the proposed site are only visible at a distance of c.730m between gateways in hedgebanks to the rear of the Wheal Busy Chapel and opposite the Sunday school north of the chapel. The view would not be altered at this distance as the

extension is both slight and does not increase the overall height of the building; and would occupy a car park already filled with modern cars. The cars arguably having a greater intrusion upon the setting given their reflective windscreens.

Overall Impact Assessment: Negligible impact.

Asset Name: Gwennap Mining District; UNESCO World Heritage Site; Cornwall and West Devon Mining Landscape						
Parish: Chasewater, Cornwall Within the ZVI: YES (Partially)						
Designation: UNESCO World Heritage SIte	Condition: go	ood	Distance to extant site structure: c.327m			

Description: This extensive site comprises the most authentic and historically important components of the Cornwall and West Devon mining landscape dating principally from 1700 to 1914, the period during which the most significant industrial and social impacts occurred. The ten areas of the Site together form a unified, coherent cultural landscape and share a common identity as part of the overall exploitation of metalliferous minerals. Copper and tin particularly were required in increasing quantities at this time through the growing needs of British industry and commerce. Copper was used to protect the hulls of ocean-going timber ships, for domestic ware, and as a major constituent of important alloys such as brass and, with tin, bronze. The usage of tin was also increasing greatly through the requirements of the tin plate industry, for use in the canning of foods and in communications.

The substantial remains within the Site are a prominent reminder of the contribution Cornwall and west Devon made to the Industrial Revolution in Britain and to the fundamental influence the area asserted on the development of mining globally. Innovative Cornish technology embodied in high-pressure steam engines and other mining equipment was exported around the world, concurrent with the movement of mineworkers migrating to live and work in mining communities based in many instances on Cornish traditions. The transfer of mining technology and related culture led to a replication of readily discernible landscapes overseas, and numerous migrant-descended communities prosper around the globe as confirmation of the scale of this influence.

The North Wheal Busy mine adjacent to the site is outside the Gwennap mining district due to the arbitrary nature of its boundary following the A30 and modern parish boundaries.

Topographical Location & Landscape Context: The mining landscape is spread across a wide area (c.8km×7km) of steep hills and valleys, particularly about watercourses that feed the principle tributary of Carnon River, which runs through Chacewater and is slightly north of the middle of the site. The sites northern boundary is defined by the A30.

Setting: Setting is assessed by the group value of domestic and industrial features within the landscape and are defined by the arbitrary boundaries of the heritage site. Although associated features may exist outside the boundaries. Generally features built of Killas stone associated with post-medieval mining industry and communities are of relevance throughout the heritage site and generally exist within their own confined settings without significance to their outward views and inter-visibility with other features, although chapels are often in prominent sites and nodal points.

*Principal Views:* The topography and terrain of the mining landscape restrict most views to specific localised vistas. Views from high points are typically incidental in a landscape of steep and high hills and valleys. There is a restricted view between the proposal site and southward, north of the Wheal Busy Mine that includes part of a mining heritage trail and the Wheal Busy Chapel. The A30 is located between the WHS and the proposal site.

Landscape Presence: As a whole the landscape is too vast to be appreciated in its entirety from any one location on the ground. The many elements features that constitute the landscape have a cumulative presence of the landscape as one explores it. Below ground elements have no significance on landscape presence, although evidence of their existence by tips, shafts and engine houses have significance within a localised environment and on an international industrial history level; while road side chapels and miners cottages may have a local community significance.

Sensitivity of Asset: Gwennap Mining District is one of a number of mining districts in the southwest (St

Agnes is 2.5-3kmto the north-west; Camborne and Redruth is immediately to the south-west and part of the same UNESCO World Heritage Site). The landscape may be sensitive to non-industrial or unsympathetic designs, however, the large area and localised views due to the landscapes topography can absorb small developments. The constituent assets and heritage trails that link them are the principle elements of the Gwennap Mining District that are sensitive to direct development.

Magnitude of Impact: The proposal is for a clearly modern building, of a similar height and massing to the existing structures on the site. It is therefore unlikely to have any greater level of impact upon the setting of the WHS. The busy A30 reduces any possible impact further, as it acts as a clear visual, physical and aural barrier. The site is also viewed from the WHS as part of the settlement of Blackwater, which further reduces its impact.

Overall Impact Assessment: Negligible impact.

#### 3.6.4 Aggregate and Cumulative Impact

The aggregate impact of a proposed development is an assessment of the overall effect of a single development on multiple heritage assets. This differs from cumulative impact (below), which is an assessment of multiple developments on a single heritage asset. Aggregate impact is particularly difficult to quantify, as the threshold of acceptability will vary according to the type, quality, number and location of heritage assets, and the individual impact assessments themselves.

Cumulative impacts affecting the setting of a heritage asset can derive from the combination of different environmental impacts (such as visual intrusion, noise, dust and vibration) arising from a single development or from the overall effect of a series of discrete developments. In the latter case, the cumulative visual impact may be the result of different developments within a single view, the effect of developments seen when looking in different directions from a single viewpoint, of the sequential viewing of several developments when moving through the setting of one or more heritage assets.

The Setting of Heritage Assets 2011a, 25

The key for all cumulative impact assessments is to focus on the **likely significant** effects and in particular those likely to influence decision-making.

GLVIA 2013, 123

The nature of the development extending an existing modern imposition within existing parameters (within the site boundary with only a slight extension to the building footprint and within the existing maximum height of the building) sustains the current impact of the site on the surrounding heritage assets with a potential negligible increase. A well built extension may reduce the impact in some ways as the number of shiny reflective cars of the show car park is reduced and they are restricted largely to the rear of the site.

In terms of cumulative impact in this landscape, there are numerous modern developments, notably the A30, which forms a visual and audible barrier between the site and the Gwennap Mining District. In terms of aggregate impact the site already has a neutral to negligible impact of the heritage assets within the immediate landscape. For both the aggregate and cumulative impact, because the proposed extension conforms to existing parameters the impact is taken to be **negligible**.

#### 3.7 Summary of the Evidence

ID	UID	Name	NGR	Assessment
WHS	N/A	Gwennap Mining District	c. SW 75 43	Negligible
GII*	473911	Wheal Busy Chapel	SW73824 45238	Negligible
GII	63144	Blackwater Literary Institute	SW 73612 46058	Negative/minor
GII	503073	War Memorial	SW 73602 46049	Negative/minor
GII	63761	Sunbeams	SW 73051 45719	Neutral
GII	63758	County Primary School	SW 73420 46070	Neutral to
				Negligible
GII	63759	Wesleyan Chapel	SW73668 46188	Neutral to
				Negligible
GII	63760	Simla	SW73708 46195	Neutral
N/A	HER No: 41065	North Wheal Busy Mine	SW 734 457	Negligible
		Cumulative Impact		Negligible
		Aggregate Impact		Negligible

Table 4: Summary of Impacts.

#### 4.0 Conclusion

The proposed extension to the car showroom and garage at Blackwater would be located in a post-medieval mining landscape on the northern edge of the Gwennap Mining District (a World Heritage Site). Very little archaeological field work has taken place in the area. However the landscape of post-medieval enclosed land with medieval elements as identified on the HLC contains Bronze Age barrows and frequent evidence of post-medieval mining activity. Particularly that of the North Wheal Busy mine that has up to ten shafts and associated tips identified on aerial photography. The desk-based assessment indicates that the site had buildings located on its north-east portion by 1840 and the road along its south-west boundary and various mining developments inside and outside the proposal site had occurred by 1888. By 1909 most of the buildings on the site had been removed, presumably as they had been associated with the mining industry.

The walkover survey indicated that the site had been landscaped and terraced, particularly towards the north-east end of the site, although truncation along the roadside (Coronation Road) will probably be less severe. The south section of the site had been levelled and the southern end made-up by several meters. The site was set within the bowl-like, broad valley that isolated the site and Blackwater from having an intrusive effect on surrounding landscape vistas. The roof of the existing site building sits lower than all the surrounding structures and so was not intrusive to the experience of them or the sky-line. From the site, the A30, apart from providing a physical and visible barrier to the landscape south-east of the site (including the Gwennap Mining District), provided a constant hum of noise from traffic.

The surrounding topography greatly limits the zone of visual influence. The embankment of the A30 to the south creates a significant barrier between the site and the Gwennap Mining District. In all other directions the slope of the surrounding valley and local blocking from housing and woodland similarly limits the visibility. For this reason there is no impact upon the majority of heritage assets within 1km of the site. There are six Grade II Listed structures within 0.5km of the site, two of which have direct inter-visibility with the site: the Blackwater Literary Institute and War Memorial. There is a single Grade II\* structure within the Gwennap Mining District with some limited visibility of the proposal site. Regardless of inter-visibility, the significant views and settings associated with these structures are not significantly imposed upon by the existing site and would not be significantly impacted further upon by the proposed re-development, which includes an extension to the existing building but does not increase the overall height of the structure. With this in mind, the overall impact of the proposed development can be assessed as negligible. The impact of the development on the buried archaeological resource would be permanent and irreversible. Although, apart from the roadside (Coronation Terrace) length of the site, it is unlikely any archaeological remains/features survive or would be disturbed.

#### 4.1 Recommendations

Provided the final development does not exceed the dimensions and plans indicated in the preapplication feasibility document (CSA Architects 2015); it seems unlikely that any further archaeological works would be required.

#### **Published Sources:**

**Boase, H.S.** 1828: 'Contributions Towards a Knowledge of the Geology of Cornwall' in *Transactions of the Royal Geological Society of Cornwall* Volume 4

Burt, R. 2014: Mining in Cornwall and Devon: Mines and Men

**Chartered Institute of Field Archaeologists** 2014a: *Standard and Guidance for Historic Environment Desk-based Assessment.* 

**Cornwall Council** 2013b: An Assessment of the Landscape Sensitivity to On-shore Wind Energy and Large-scale Photovoltaic Development in Cornwall.

**English Heritage** 2008: Conservation Principles: policies and guidance for the sustainable management of the historic environment.

**English Heritage** 2011a: The Setting of Heritage Assets.

English Heritage 2011b: Seeing History in the View.

Highland Council 2010: Visualisation Standards for Wind Energy Developments.

**Historic Scotland** 2010: Managing Change in the Historic Environment: Setting.

**ICOMOS** 2005: Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas.

**Landscape Institute** 2013: *Guidelines for Landscape and Visual Impact Assessment*, 3<sup>rd</sup> edition. London.

**Landscape Institute** 2011: *Photography and Photomontage in Landscape and Visual Impact Assessment*. Advice Note 01/11

Lewis, S. 1848: A Topographical Dictionary of England

Lysons, D. & Lysons, S. 1822: Magna Britannia, Volume 3. London.

**Soil Survey of England and Wales** 1983: Legend for the 1:250,000 Soil Map of England and Wales (a brief explanation of the constituent soil associations).

Watts, V. 2011: The Cambridge Dictionary to English Place Names. Cambridge University Press.

## Unpublished Sources:

**CSA Architects (Author: LM)** 2015: Proposed Replacement Car Showroom and Workshop, Blackwater, Truro, Cornwall. Hawkins Motors: Feasibility Document. File Ref: 2929-Pre-Application Document-150527-Im.

#### Websites:

**British Geological Survey** 2015: *Geology of Britain Viewer*.

http://maps.bgs.ac.uk/geologyviewer\_google/googleviewer.html [accessed 27.11.2015]

Cornwall in Focus: <a href="http://www.cornwallinfocus.co.uk/mining/northbusy.php">http://www.cornwallinfocus.co.uk/mining/northbusy.php</a> [accessed 27.11.15]

**TELLUS LiDAR data** (Composite Digital Terrain Model (DTM)) 2015: *Natural Environment Research Council.* <a href="http://environment.data.gov.uk/ds/survey#">http://environment.data.gov.uk/ds/survey#</a> [accessed 10.12.2015].

### Cornwall Record Office:

Kenwyn Tithe Map 1840 Kenwyn Tithe Apportionment 1840 Ordnance Survey 1<sup>st</sup> edition map of 1888 Ordnance Survey 2<sup>nd</sup> edition map of 1909

# Appendix 1 Supporting Photographs



From rear car park entrance south corner of existing building; looking south-west (no scale).



From rear car park entrance/south corner of existing building; looking south-west (no scale).

South West Archaeology Ltd. 38



From rear car park entrance/south corner of existing building; looking north-west (no scale).



From rear car park entrance/south corner of existing building; looking north (no scale).



From rear car park entrance/south corner of existing building; looking south-east (no scale).



From rear car park entrance/south corner of existing building; looking east (no scale).



From rear car park entrance/south corner of existing building, chimneys of buildings towards *Sunbeams*; looking west (no scale).



From south corner of site; looking south (no scale).



From south corner of site; looking south-east (no scale).



From south corner of site; looking east (no scale).



From south corner of site; looking north-east (no scale).



From south corner of site; looking north-west (no scale).



From south corner of site; looking north (no scale).



From south corner of site; looking west-north-west (no scale).



From south corner of site; looking east (no scale).



From south corner of site, mine shaft enclosure boundary; looking north-east (no scale).



From south corner of site, mine shaft enclosure boundary; looking north-east (2m scale).



Dog-leg in site boundary/east corner of existing building; looking south-east (2m scale).



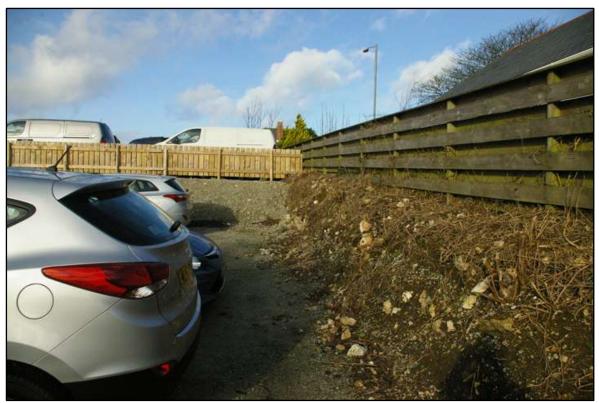
Dog-leg in site boundary/east corner of existing building; looking south-west (no scale).



South-east boundary in north-east section of site; looking south-east (2m scale).



East corner in north-east section of site; looking east (2m scale).



South-east end of the sites north-east boundary; looking north-west (no scale).



North-east part of site car park; looking south-west (no scale).



North-east part of site car park, spoil tip in Gwennap Mining District and towards Wheal Busy chapel; looking south (no scale).



North-east part of site car park; looking south-east (no scale).



North-east part of car park looking towards Blackwater Literary Institute; Looking north-east (no scale).



North-east part of car park looking towards Blackwater Literary Institute; Looking north-east (no scale).



Blackwater Literary Institute and War Memorial; looking north-east (no scale).



North corner of site; looking south-west (no scale).



Blackwater Literary Institute and War Memorial; looking north-east (no scale).



House adjacent to Blackwater Literary Institute and site; looking south (no scale).



The site from in front of Blackwater Literary Institute; looking south-west (no scale).



Simla (No.34, Table 2); looking north-west (no scale).



Chapel (No.33, Table 2); looking north-west (no scale).



Chapel (No.33, Table 2) looking towards the site; looking south-west (no scale).



Chapel (No.33, Table 2) looking towards the site; looking south-west (no scale).



View towards Literary Institute and the site from road by chapel; looking south-west (no scale).



Literary Institute from in front of-/across the road from the site; looking north-east (no scale).



Literary Institute from in front of-/across the road from the site; looking north-east (no scale).



The site; looking south (no scale).



The site; looking east (no scale).



The site and Literary Institute; looking east (no scale).



Primary school; looking west (no scale).



Best view towards the site from the primary school; looking south-east (no scale).



Play area in front of primary school with mound (building site occuring to south); looking west (no scale).



Mound in play area; looking west (2m scale).



West corner of site; looking east (no scale).



West corner of site looking towards primary school; looking north-west (no scale).



West corner of site looking towards Red Lion; looking west-north-west (no scale).



View of site from south-western approach on Coronation Terrace; Looking north-east (no scale).



View of site from south-western approach on Coronation Terrace; Looking north-east (no scale).



The site and mining spoil tips in fields to south-west of site; looking north-east (no scale).



Verge of old railway embankment to south-west of the site; looking south-west (no scale).



The site and mining spoil tips in fields to south-west of site; looking north-east (no scale).



The site and mining spoil tips in fields to south-west of site; looking north-east (no scale).



Water course south-west of mining spoil tips; looking south-east (2m scale).



Western tip, c.15+m across; looking north-east (2m scale).



View from the western tip; looking north-east (2m scale).



Eastern tip, c.25+m across; looking north-west (2m scale).



Eastern tip, c.25+m across; looking north-east (2m scale).



View from the eastern tip; looking west (2m scale).



Eastern tip, c.25+m across; looking north-west (2m scale).



West end of ruin adjacent to tips c.5m×13m; looking east (2m scale).



South side of ruin adjacent to tips c.5m×13m; looking north (2m scale).



South side of ruin adjacent to tips c.5m×13m; looking north-west (2m scale).



South-east corner of ruin adjacent to tips c.5m×13m; looking north-east (2m scale).



Bricks in south facing wall of ruin adjacent to tips c.5m×13m; looking north (2m scale).



East end of ruin adjacent to tips c.5m×13m; looking west (2m scale).



Track and boundary running south-east from ruin adjacent to tips c.5m×13m; looking south-east (no scale).



Ruin adjacent to tips  $c.5m \times 13m$  (0.5+m thick wall); looking south-east (2m scale).



Field to south-west of site; looking north-east (no scale).



Field to south-west of site; looking north (no scale).



Shaft adjacent to tips to south-west of site; looking north (2m scale)



Shaft adjacent to tips to south-west of site; looking north (no scale)



Tips from the west corner of the site/across the road; looking south-west (no scale).



South-west side of the existing building; looking south-east (no scale).



View towards the site from behind *Sunbeams*; looking east (no scale).



Sunbeams; looking north (no scale).



View towards the site from in front of *Sunbeams*, the site will not be visible; looking east (no scale).



View of site over gate behind Wheal Busy Chapel; looking north-north-west (no scale).



View of site over gate behind Wheal Busy Chapel; looking north-north-west (no scale).



View of site over gate behind Wheal Busy Chapel from beside the chapel; looking north-north-west (no scale).



Wheal Busy Chapel; looking north-north-west (no scale).



Sunday school to rear of Wheal Busy Chapel; looking north-west (no scale).



View of site from sunday school to rear of Wheal Busy Chapel; looking north (no scale).



View of tip on hill leaning over a gateway (photographed from car park) north-west of the Sunday school along a heritage walk; looking north (no scale).



View of site from gateway along heritage walk to north-west of Sunday school; looking north (no scale).



Heritage walk marker near to Wheal Busy Chapel area; looking south-west (no scale).



Wheal Busy Chapel; looking south-east (no scale).



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