



Data Centre 3, Next Generation Data, Newport

Heritage Desk-Based Assessment

Next Generation Data

23 October 2020





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Contents

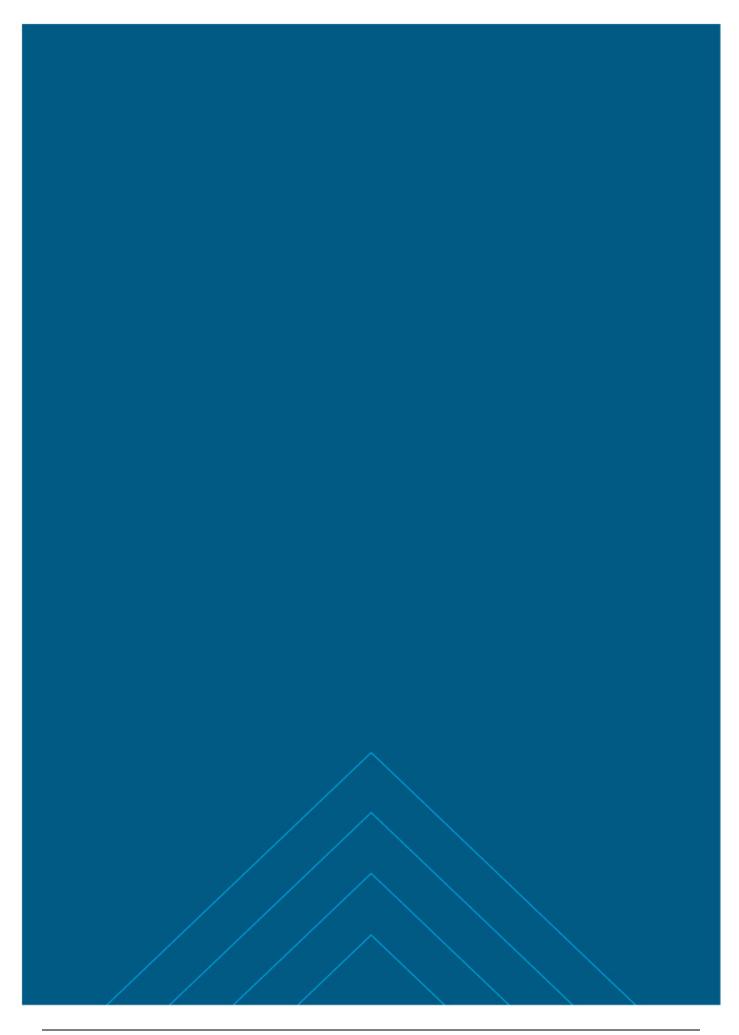
Chap	oter		Page
Execu	tive Sum	mary	6
1.	Introduc	etion	7
1.1.		d Development	7
1.2.		d Objectives	7
1.3.	Site Des	·	7
2.	Methodo		8
2.1.	Study Ar		8
2.2.2.3.	Desk-top	Research	8 9
2.4.		nent of Criteria	9
2.5.		nent of Archaeological Potential	10
3.	Legislat	ion, Policy & Guidance	11
3.1.	National	Legislation	11
3.2.	Planning		11
3.3.	Supplem	entary Planning Guidance	12
4.	Baseline	e Data	13
4.1.		, Topography	13
4.2. 4.3.	_	ted Historic Assets	13
4.4.		ignated Historic Assets Landscape Characterisation	13 13
4.5.		Investigations	14
5.	Historic	Environment Baseline	14
5.1.	Prehistor	ric Periods (800,000 BC - AD 43)	14
5.2.		-British Period (AD 43- AD 410)	16
5.3.	-	edieval Period (AD 410 – 1070)	16
5.4. 5.5.		l Period (1070– 1540) dieval (1540 – 1901)	16 17
5.6.		(Post 1901)	17
6.		ance Assessment & Potential Impacts	19
6.1.		ted historic assets	19
6.2.	Non-des	ignated historic assets	20
6.3.	Unknowr	n Buried Archaeological Remains	20
7.	Conclus	ion and Recommendations	21
Appe	ndices		23
Appen	dix A.	Bibliography	24
Appen	dix B.	Gazetteers	25
B.1.	Historic A	Assets	25
B.2.	Previous	Archaeological Investigations	27
Appen	dix C.	Historic Asset Maps	34
C.1.	Historic A		34
C.2	2 Previous Archaeological Investigations 3		





Figures

Figure 1-1 - Map of Site location	8
Figure 5-1 - First editon OS map of 1883	17
Figure 5-2 - 1996 OS map of the Site showing the new circular road	18
Figure 5-3 - The 2006 OS map of the Site showing development to the south and within the	Site18
Figure 5-4 - The OS map of 2020 showing how the current state of the Site and Study Area	19







Executive Summary

Next Generation Data have commissioned Atkins Ltd (Atkins), a member of the SNC Lavalin Group, to produce a Heritage Desk-Based Assessment (DBA) for the proposed data storage centre at Imperial Park, Marshfield, Newport, Wales.

The proposed development comprises a two-storey data centre building containing 10 data halls for the storage of data servers, support rooms and ancillary office space. The building will have a gross floor space of 25,500m². The building will be 19.6m in height, 142m in length and 100m wide. The proposals include 60 standby generators for use during a national grid failure, with 30 located along the north elevation of the building and 30 along the south. In addition, 10 flues will extend 1m above the top of the building to a total height of 20.6m.

Provision is made for 40 parking spaces, sustainable drainage, onsite landscape proposals an off-site ecological compensation. A 4m security fence with CCTV cameras will be installed to the site's perimeters. The highways access at the south-west corner will include a security kiosk and security gates

There are no designated or non-designated historic assets within the Site. There is a Scheduled Monument Gwern y Cleppa Burial Chamber (MM022) approximately 900m from the Site which is located within an area of archaeological potential., Approximately 400m northeast of the Site is Tredegar House and Grounds Conservation Area.

The Site will not impact upon the wider historic landscape is understood or appreciated. Although the proposed building would constitute a new element within the view from the Conservation Area, the building would blend with the existing 20th century and 21st century development with negligible impact upon the setting. There will be no appreciable loss to the significance of any of the historic assets identified, which equates to less than substantial harm.

Due to the Site close proximity to the Archaeological Sensitive Area (ASA) and the high survival potential for archaeological remains it is likely that the GGAT archaeological advisor will request further fieldwork to identify the nature and extent of remains present. Further assessment of the buried services along with a geotechnical works will need to be carried out to establish the survival of archaeological deposits. A site visit will also need to be carried out to assess the topography between the site and Tredegar House and Grounds Conservation Area, For archaeological buried remains this is likely to entail a proportionate and appropriate evaluation and mitigation strategy to ensure that archaeological remains are not removed without prior recording.





1. Introduction

1.1. Proposed Development

Next Generation Data have commissioned Atkins Ltd (Atkins), a member of the SNC Lavalin Group, to produce a Heritage Desk-Based Assessment (DBA) for the proposed data storage centre at Plot 4, Imperial Park, Marshfield, Newport, NP10 8BE.

The proposed development comprises a two-storey data centre building containing 10 data halls for the storage of data servers, support rooms and ancillary office space. The building will have a gross floor space of 25,500m². The building will be 19.6m in height, 142m in length and 100m wide. The proposals include 60 standby generators for use during a national grid failure, with 30 located along the north elevation of the building and 30 along the south. In addition, 10 flues will extend 1m above the top of the building to a total height of 20.6m.

Provision is made for 40 parking spaces, sustainable drainage, onsite landscape proposals an off-site ecological compensation. A 4m security fence with CCTV cameras will be installed to the site's perimeters. The highways access at the south-west corner will include a security kiosk and security gates.

1.2. Aims and Objectives

The purpose of this DBA is to determine, as far as is practicable, from existing information:

- The historical and archaeological context of the Site and the surrounding environs;
- The presence of known designated and non-designated historic assets, including their nature and extent, that may be impacted by the proposed development;
- The potential for archaeological features and surviving below ground remains within the proposed Site area;
- The significance of the historic environment assets and the potential impact from the proposed development upon their significance along with any resultant land changes; and,
- To inform the design and construction of the proposed development along with decisions for archaeological site investigations, surveys, evaluation and mitigation, as required.

1.3. Site Description

The Site is located within Imperial Park in Newport, Wales at grid reference ST284844 approximately 4km from Newport city centre. It is set within an industrial and residential area, with industrial parks to the east and west and residential areas to the south. For the purposes of this DBA, the Site is the area within the red line boundary as shown in Figure 1-1 (drawing reference: DC3-ATK-01-Z0-DR-AR-021001). The site currently comprises one large enclosed area, with hardstanding associated with previous development, including a tarmac car park, internal perimeter roads and areas of bare ground with some areas of scrub.

The Site falls within the Archaeology and Archaeological Sensitive Areas set out in the Supplementary Guidance by Newport City Council¹.

¹ Newport City Council. 2015. Supplementary Planning Guidance Archaeology & Archaeologically Sensitive Areas.





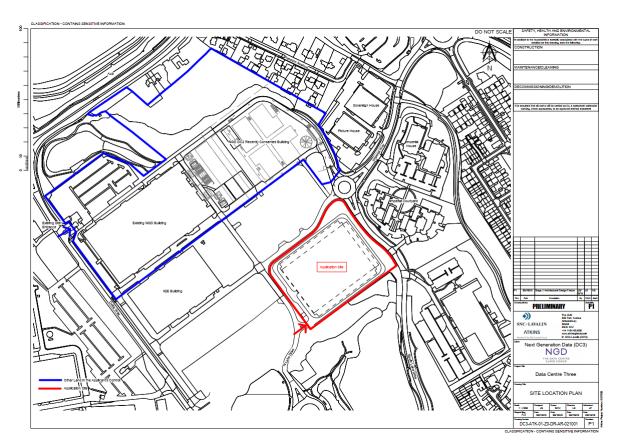


Figure 1-1 - Map of Site location

2. Methodology

The methodology adopted for the compilation of this DBA has been in accordance with relevant guidance including the Chartered Institute for Archaeologists' Standard and Guidance for Historic Environment Desk-Based Assessment (CIfA, 2017).

2.1. Study Area

A 1km Study Area around the Site was considered proportionate to inform the historic environment baseline for the purposes of this DBA, by reference to relevant guidance and professional judgment, to provide context and adequate interpretation of the heritage resource as well as the terrestrial, intertidal environments.

Historic Asset Maps depicting the locations of historic assets and previous investigations are produced in Appendix C, with the accompanying gazetteer tables listed in Appendix B.

2.2. Desk-top Research

In order to assess the impacts of the Scheme upon the historic environment, a desk-based review of the existing baseline data within the Study Area was undertaken to identify the historic character of the area and the key heritage receptors within it. The compilation of this DBA has been prepared with reference to the following sources to assist in establishing the baseline:

- The principal sources are the Glamorgan Gwent Archaeological Trust Historic Environment Record (GGATHER) which provides information on non-designated historic assets (monuments), and previous archaeological investigations (events), and the Cadw digital dataset for designated assets.
- British Geological Survey (BGS): Online digital solid and superficial geological data and historic borehole records;





- Documentary sources Published histories, historic mapping, site reports, and monographs; and,
- Online resources: Web-published material, including local planning authority planning policies, Historic England guidance, aerial photography,

The designated and non-designated historic assets within the Study Area and Site are detailed in the Historic Asset Maps and accompanying gazetteers in Appendices B and C. Designated historic assets are referred to with their Cadw list entry numbers and non-designated historic assets referred to with their HER references.

Designated assets considered to inform this DBA include:

- World Heritage Sites;
- Scheduled Monuments;
- Listed Buildings;
- Conservation Areas:
- Registered Parks and Gardens; and
- Registered Battlefields.

Non-designated historic assets include, but are not limited to:

- Archaeological sites; and
- Buildings and structures.

2.3. Limitations

A site walkover and archive record visit were not conducted as part of this assessment due to COVID-19 restrictions. It is anticipated a site visit may be undertaken to further inform this assessment at a later date but, at this stage, this assessment has been carried out through desk-based research only.

2.4. Assessment of Criteria

Current Welsh guidance for the assessment of the significance of historic assets is provided by Cadw in the document **Conservation Principles for the Sustainable Management of the Historic Environment in Wales** (Cadw 2011). Significance for heritage assessment is defined as: 'The significance of an historic asset embraces all of the cultural heritage values that people associate with it, or which prompt them to respond to it. These values tend to grow in strength and complexity over time, as understanding deepens and people's perceptions evolve.' (Cadw 2011, pp.10)

Significance is weighed by consideration of the potential for the asset to demonstrate the following value criteria:

- **Evidential value.** This derives from those elements of an historic asset that can provide evidence about past human activity, including its physical remains or historic fabric. These may be visible and relatively easy to assess, or they may be buried below ground, under water or be hidden by later fabric.
- Historical value. An historic asset might illustrate a particular aspect of past life or it might be associated
 with a notable family, person, event or movement. These illustrative or associative values of an historic
 asset may be less tangible than its evidential value but will often connect past people, events and aspects
 of life with the present.
- **Aesthetic value.** This derives from the way in which people draw sensory and intellectual stimulation from an historic asset. This might include the form of an historic asset, its external appearance and how it lies within its setting.
- Communal value. This derives from the meanings that an historic asset has for the people who relate to it, or for whom it figures in their collective experience or memory. It is closely linked to historical and aesthetic values but tends to have additional or specific aspects. Communal value might be commemorative or symbolic.





Table 2-1 - Table of Significance

Significance	Determining Significance
Very high	World Heritage Sites
	Assets of recognised international importance
	 Assets that contribute to international research objectives
High	Scheduled Monuments
	Grade I and Grade II* Listed Buildings
	Grade I and Grade II* Registered Parks and Gardens
	 Non-designated Assets of the quality and importance to be designated
	 Assets that contribute to national research agendas
Medium	Grade II Listed Buildings
	Grade II Registered Parks and Gardens
	 Assets that contribute to regional research objectives
Low	Locally Listed Buildings
	 Assets compromised by poor preservation and/or poor contextual associations
	Assets with importance to local interest groups
	 Assets that contribute to local research objectives
Negligible	Assets with little or no archaeological/historical interest
Unknown	The importance of the asset has not been ascertained from available evidence

2.5. Assessment of Archaeological Potential

Buried archaeological evidence is often an unknown quantity which can be difficult to fully identify during a desk-based assessment. The likelihood of the presence of unknown assets, the archaeological potential, is assessed based on available evidence, but the physical nature and extent of any archaeological resource surviving within the Site cannot be confirmed without detailed information on the below ground deposits or results of on-site fieldwork, typically through non-intrusive (e.g. geophysical, LiDAR), and intrusive (archaeological, geoarchaeological evaluation) survey.

A site's archaeological potential is identified using professional judgement and knowledge. A site's baseline potential is compared to the level of existing impact upon it, from modern and historic developments. The potential for surviving archaeological evidence of past activity within the Site boundary is expressed in this DBA according the criteria set out in Table 2-2.

Table 2-2 - Archaeological Potential

Potential	Criteria
High	The available evidence suggests a high likelihood for past activity within the Site boundary and a strong potential for archaeological evidence to survive intact or reasonably intact
Medium	The available evidence suggests a reasonable likelihood for past activity within the Site and consequently there is a potential that archaeological evidence could survive
Low	The available evidence suggests archaeological evidence of activity is unlikely to survive within the Site, although some minor land-use may have occurred
Uncertain	Insufficient information to assess





3. Legislation, Policy & Guidance

This DBA has been produced within the context of national legislation and policy, as well as local planning policy. European, national and local policies of relevance with respect to heritage and the historic environment are highlighted and summarised in this section.

3.1. National Legislation

3.1.1. Ancient Monuments & Archaeological Areas Act 1979

The Ancient Monuments & Archaeological Areas Act 1979 (as amended) protects the fabric of Scheduled Monuments but does not afford statutory protection to their settings. Relevant policies relating to the protection of the setting of scheduled monuments are contained within national and local development plan policies.

3.1.2. Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended)

This statute identifies that where a local planning authority are considering a development which affects a Listed Building or its setting, the authority or Secretary of State shall have special regard to the desirability of preserving the building or its setting, as well as any features of special architectural or historic interest which it possesses (section 60).

3.1.3. Well-being of Future Generations (Wales) Act 2015

This Act places duties on public bodies requiring them to act in accordance with the 'sustainable development principle'. The Act also establishes well-being goals which include achieving 'a Wales of vibrant culture and Welsh language', described as 'a society that promotes and protects culture, heritage and the Welsh language'. The Act lays down the principle that a properly protected, conserved and enhanced historic environment can improve the quality of life and well-being for everyone.

3.1.4. Historic Environment (Wales) Act 2016

The Historic Environment (Wales) Act was given Royal Assent in March 2016. This Act provides the legislative framework for managing the historic environment in Wales. Accompanying the Act is new policy and guidance in the form of a Technical Advice Note (TAN) specific to the Historic Environment (TAN24, see below), and changes to Planning Policy Wales (PPW) Chapter 6 – Conserving the Historic Environment. This legislation and guidance supersede the previous Welsh Office Circulars which formed the basis of historic environment policy in Wales.

3.2. Planning Policy

3.2.1. Planning Policy Wales (PPW) Chapter 6

The Welsh Government has published Planning Policy Wales (PPW), currently updated to Version 9 from November 2016 (PPW9). This sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs). Procedural advice is given in circulars and policy clarification letters. Chapter 6 of PPW9, 'Conserving the Historic Environment', provides policy for planning authorities, property owners, developers and others on the conservation and Archaeological Desk-Based Assessment investigation of historic assets. Overall, the objectives of Chapter 6 in relation to archaeology can be summarised as seeking to:

- a) Conserve and enhance the historic environment, which is a finite and non-renewable resource and a vital and integral part of the historical and cultural identity of Wales.
- b) Recognise its contribution to economic vitality and culture, civic pride, local distinctiveness and the quality of Welsh life, and its importance as a resource to be maintained for future generations.
- c) Base decisions on an understanding of the significance of Wales' historic assets.
- d) Contribute to the knowledge and understanding of the past by making an appropriate record when parts of a historic asset are affected by a proposed change, and ensuring that this record or the results of any





investigation are securely archived and made publicly available; and specifically to conserve archaeological remains, both for their own sake and for their role in education, leisure and the economy.

In order to take into account archaeological considerations and deal with them from the beginning of the development control process Local Planning Authorities in Wales need to be fully informed about the nature and importance of archaeological remains and their setting, and the likely impact of any proposed development upon them. Paragraphs 6.5.6 to 6.5.8 of PPW9 Chapter 6 set out the staged process of investigations which may need to be undertaken by an applicant required to provide the relevant information to inform decisions and compliance with imposed conditions, including:

'6.5.6 The needs of archaeology and development may be reconciled, and potential conflict very much reduced, if developers discuss their proposals with the local planning authority at an early stage in pre-application discussions. A desk-based archaeological assessment can be commissioned by a developer (sometimes as part of a wider Environmental Impact Assessment) to provide information on the archaeological significance of a site before submitting a planning application. Where archaeological remains are known to exist or there is a potential for them to survive and a study has not already been undertaken by the applicant, the local planning authority should request an applicant to undertake a desk-based archaeological assessment and, where appropriate, an archaeological evaluation. The results of any assessment and/or field evaluation should be provided as part of a planning application and form part of the local planning authority's consideration of that application. The amount of information and analysis required should be proportionate to the potential impact that the proposal has on the significance of the archaeological remains and sufficient to determine the extent of this impact.

6.5.7 Local planning authorities may impose conditions to protect archaeological remains, if they are minded to approve an application. However, where a local planning authority decides that physical preservation of archaeological remains in situ is not justified, and the development resulting in the destruction of the archaeological remains should proceed, it must be satisfied that the developer has secured appropriate and satisfactory provision for:

the archaeological investigation and the subsequent recording of the remains;

the analysis, archiving and publication of the results;

the organisation and deposition of the archive into an approved repository.

3.2.2. Newport Local Development Plan 2011-2026

The Local Development Plan acknowledges that archaeological features throughout the urban and rural areas play a vital role in the quality of that environment. There will be a presumption in favour of the retention, safeguarding, conservation and enhancement of ancient monuments and other sites, recognised by the Council as being of archaeological importance, and the settings of such sites, buildings and areas.

The relevant policies in the LDP associated with the protection of archaeological remains are:

- Policy SP9 identifies the need for conservation of the natural, historic and built environment
- **Policy CE6** identifies the requirement to undertake an Archaeological Impact Assessment within Archaeologically Sensitive Areas and within other areas of recognised archaeological interest, such as Scheduled Ancient Monuments.

3.3. Supplementary Planning Guidance

3.3.1. Technical advice note (TAN) 24: the historic environment

The purpose of TAN is to provide guidance on how the planning system considers the historic environment during development plan preparation and decision making on planning and Listed Building (LBC) applications.

The TAN states the need for a desk-based assessment, and field evaluation where appropriate, should be discussed with the local planning authority prior to submission of an application, and where required the results of these studies should be submitted as part of the planning application.

3.3.2. Archaeology & Archaeologically Sensitive Areas

The supplementary planning guidance² designates four non-statutory Archaeologically Sensitive Areas (ASAs). These are Caerleon, The Levels, Lower Machen and the Medieval town of Newport. This designation highlights their archaeological significance and informs potential developers of the need to seek professional archaeological

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² Newport City Council. 2015. Supplementary Planning Guidance Archaeology & Archaeologically Sensitive Areas.





advice to establish the archaeological constraints of the site. Proposed development within the ASA will require developers to submit credible archaeological impact assessment in support of their proposals. The Site is approximately 10mm north of the Levels ASA.

4. Baseline Data

4.1. Geology, Topography

A site's location, topography, and geology can provide indication of its suitability for past human activity, including whether ground levels have been raised or terraced away, and can contribute to our understanding of the archaeological survival potential of a site.

An examination of the British Geology Survey (BGS) data indicates that the underlying geology comprises Mercia Mudstone Group, made of mostly mudstone. The Site lies on top of River Terrace Deposits comprising gravels of sandstone and mudstone. The Gwent Levels were created by the deposition of sediment on the banks of the Severn during the rise in sea-level at the end of the last period of glaciation

The surrounding landscape is characterised by the flat land of the Levels to the south, and rising topography to the north, with the majority of the proposed development site lying at between 7-8m above Ordnance Datum (aOD). The north-western corner of the site rises northward, to 12.85m aOD.

4.2. Designated Historic Assets

There are no designated historic assets within the Site. In the wider Study Area there is a Scheduled Monument Gwern y Cleppa Burial Chamber (MM022) approximately 900m from the Site located within an area of archaeological potential. Furthermore, approximately 400m northeast of the Site is Tredegar House and Grounds Conservation Area within which there are 14 listed buildings. Two of these are Grade I listed, namely Tredegar House (XX2902) approximately 700m to the north east of the Site and the Stable Block including Orangery (XX2910) which is located in the grounds of Tredegar House.

4.3. Non-designated Historic Assets

There are eight non-designated historic assets within the Study Area, outside the Site boundary, as detailed in Table 4.1

Table 4-1 - Non-Designated Assets

HER Number	Name	Period	Distance
GGAT06279.0g	LG SEMICONDUCTOR APPROACH ROAD (RR GGAT 002)	Roman	170m north
GGAT00019g	PENCARNOU (?PENCARN)	Early Medieval	645m south
GGAT00059g	GWERN-Y-CLEPPA	Medieval	900m north
GGAT03313g	TRE-DEG-ERW	Medieval	340m north
GGAT03344.0g	Gwern-y-Cleppa Park (Former G03)	Medieval-Post Medieval	1km north
GGAT03347.0g	Tredegar Deer Park	Medieval	500m north
GGAT05399.0g	GRAIG-Y-SAESON FARM	Medieval-Post Medieval	965m north
GGAT10186g	Gravel pit, Tredegar	Medieval-Post Medieval	180m east

4.4. Historic Landscape Characterisation

The Study Area is located within within the **Marshfield** Historic Landscape Character approximately 100m south of the Site. This landscape is broadly medieval, though Drenewydd/Percoed Reen could be a Roman drainage feature. This area, known as "Black Moores", is the lowest-lying in all the Level. Discoveries of prehistoric "bog oaks" from the peat, which lies just below the surface, are explained in local traditional having been washed there during the floods of 1606. This landscape represents the fen-edge and low-lying back-fen area between





Marshfield village in the west and Tredegar Park in the east. It is bounded by Drenewydd/Percoed Reen to the south.

4.5. Previous Investigations

The GGATHER records six archaeological evaluations, two watching briefs and a borehole survey as previous investigations within the Study Area as detailed in Table 4.2

Table 4-2 - Previous Investigations

HER Number	Name	Туре	Organisation	Year
GGATE002195	Little Pencarn Farm, Newport, Stage 2 Works	Borehole Survey	Glamorgan-Gwent Archaeological Trust (GGAT)	1997
GGATE002199	St Joseph's RC High School, Newport EVAL	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	2001
GGATE002194	Little Pencarn Farm, Newport, Stage 1 Works	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1997
GGATE002197	Little Pencarn Farm, Newport, Stage 2 Works, Trench T9	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1998
GGATE002196	Little Pencarn Farm, Newport, Stage 2, Trenches 10-17	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1998
GGATE002420	Duffryn Link EVAL Stage 1	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1996
GGATE002369	LG Semicon - Roman Road Stage 3 EVAL	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1997
GGATE002393	LG Electronics Site, Newport, Geophysical Survey	Geophysica I Survey	GSB Prospection (Geophysical Surveys of Bradford)	1996

5. Historic Environment Baseline

5.1. Prehistoric Periods (800,000 BC – AD 43)

5.1.1. Palaeolithic Period (800,000 – c. 12, 000 BC)

This period was characterised by the development of stone tool technologies. It spans the end of the Pleistocene geological epoch and marks the emergence of modern humans from earlier hominid species by the Upper Palaeolithic period (c. 40,000 - c.10,000 BC.). By the end of the Palaeolithic, the ice retreated for the last time as the climate got warmer and drier, and woodlands expanded.

The landscape in general would have changed considerably during the period as successive periods of glaciation and interglacial periods progressed. During warmer interglacials, hunter gatherer communities crossed the land mass which then connected Britain to continental Europe. The Scheme is located on the former gravel terraces of the River Evenlode which records the glacial and interglacial sequences.

Investigations into the buried archaeological landscapes of the Gwent Levels have revealed human activity from the Palaeolithic period onwards. Although material of Palaeolithic date has been recovered from the Gwent





Levels, the earliest material found within the defined Study Area for the Scheme is of Mesolithic date (c. 8,500 - 4,000 BC)³. This was a period generally characterised by rising sea levels following the most recent glacial maximum. There is no representation of this period within the Study Area.

5.1.2. Mesolithic Period (c. 10,000 – c. 4,000 B.C)

The arrival of microlithic technologies marks this period, many of which were fixed onto spears and harpoons required for hunting. Mesolithic people followed a seasonal pattern of occupation depending on food source management. Activity would have likely been focused close to rivers, for predictable resources, such as hunting and fishing. The landscape changed corresponding with a period of rising sea levels and landward inundation as the post-glacial ice sheet melted.

The Gwent Levels are alluvial wetlands situated on both sides of the River Usk in south east Wales. Comprised of the Calidocot and Wentloog levels, these lands have been actively reclaimed from the Severn Estuary since as far back as the Romans. Because of recurrent phases of inundation and alluviation, there is a proven potential for extensive, buried, waterlogged, archaeological and environmental deposits belonging to the earlier landscapes, which extend beyond the seawalls and banks into the intertidal mudflats. There is no representation of this period within the Study Area.

5.1.3. Neolithic Period (4,000 – c. 2,500 B.C)

The arrival of farming from continental Europe marks the beginning of the Neolithic period. This period witnessed extensive forest clearances to make way for crops and animal herds. There was also however a continuation of hunter/gather activities. The Early Neolithic is comparable to the Mesolithic in terms of stone tool technologies, however, this period saw the development of monumental features including long barrows and causewayed enclosures. The Middle Neolithic is marked by the earliest evidence of stone circles and individual burials. However, the Late Neolithic period blends into the Early Bronze Age with the widespread introduction of individual and satellite burials within round barrows, as well as the development of cursus monuments aligned on rivers and often associated with earlier barrows.

Evidence of Neolithic activity in Newport is extensive, the data indicates that all landscape types were utilised and exploited, including the coastal areas. Neolithic remains have been found in many locations, a skull of possible Neolithic date was recovered from Alexandra Docks in Newport, whilst other human remains also of potential Neolithic date were found in the early 20th century at Ifton Quarry just to the east of the area.⁴

A Scheduled Monument recorded as the Neolithic Chambered Tomb (GGAT00061g) is 900m north from the Site. The triangular shaped capstone has collapsed to the SE over the recumbent stone and would only cover half of the barrow chamber thus indicating a loss of at least half of the stone in antiquity.

5.1.4. Bronze Age (2,000 – 700 B.C)

The Bronze Age is characterised by the introduction of metal technologies. This period saw an increase in economic and cultural communications with mainland Europe, bringing new burial rites, people, objects and technology. The climate began to deteriorate; where once the weather was warm and dry it became much wetter driving the population away from easily defended sites in the hills and into the fertile valleys. Ore sources, such as tin and copper both used as components for bronze smelting became more important as bronze gradually replaced stone as the main material for tools. The period sees the increase in visibility of settlement sites and associated field systems within the archaeological record across much of Britain.

In contrast to the situation for the Neolithic, a considerable amount of information has been collated over recent years with regard to activity in the Gwent Levels during this period. Much of this has been the result of programmes of investigation focused on the intertidal zone, where structures and associated material of Bronze Age date are exposed at low tide in certain locations. The only known Bronze Age representation within the Study Area is a Bronze Age axe discovered during the archaeological evaluation of the proposed development of St Joseph's RC School approximately 500m northeast of the Site.

5.1.5. Iron Age (c. 700BC – AD 43)

The Iron Age period is characterised by the adoption of iron working techniques, which reached Britain from mainland Europe. Settlement areas and associated agricultural land division become more extensive. Generally, people continued to live in small villages and farmsteads with communities run by an individual or small group.

| 1.0 | 23 October 2020 Atkins | NGD Newport DBA_Final 23-10-2020

³ Chris Blandford Associates. 2017. Gwent Levels Landscape Character Assessment.

⁴Ibid.





Due to the iron technology, tipped ploughs made farming more efficient and agricultural production increased. The Iron Age also saw the wider use and the further development of hillforts, possibly for the defence of intermittently occupied settlement and storage areas. These began to be built in the late Bronze Age, around 1000 BC, but became much larger and more elaborate throughout the Iron Age.

This period is more generally characterised by a substantial marine transgression in which much of the Levels were reflooded and alluvial clays known as the Upper Wentlooge Formation were deposited. The landscape would have returned to one dominated by tidal mudflats and saltmarshes, although some areas of reed swamp were present and peats continued to form in some locations⁵. In the wider environs, Iron Age representation is dominated by the larger hillforts such as those at Wilcrick Hill and Tredegar. Smaller settlements, both enclosed and unenclosed, are likely to have been present within the land between the hillforts. There is no evidence of this period within the Study Area.

5.2. Romano-British Period (AD 43- AD 410)

The British landscape changed rapidly after the arrival of the Romans in AD43⁶. A new road network was established, connecting the major settlements and forts located throughout the landscape⁷. Many former *Oppida* (a fortified Iron Age trading centre) became regional administrative centres, and the new roads saw expansion of rural agricultural settlements, centred on farms or villas with larger market type settlements often located where roads crossed rivers.

Roman Wales was the farthest point west that the Roman Empire in Britain reached, and as a defence point, the fortress at Caerleon built in AD 75 was one of only three permanent Roman Legionary fortresses in Roman Britain. It was occupied and operational for just over 200 years. The Site falls within the extended environs of Caerleon, a site of considerable archaeological importance as the location of a Roman legionary fortress or castra. It was the headquarters for Legio II Augusta from about 75 to 300 AD8. An evaluation was undertaken as stage 1 of archaeological mitigation at the construction site of the Duffryn Link approximately 280m from the Site showed a large Roman structure (probably a cobbled yard or building) extending over 35m by 25m, occupying the margin of the alluvium. A section of Roman road was found on the LG Electronics development site approximately 170m north from the Site, the alignment of which would bring it close to the Nant-y-Moor Reen area.

5.3. Early Medieval Period (AD 410 – 1070)

The early medieval period in Wales spanning the centuries between the end of Roman rule and the coming of the Normans, embodies a process of fundamental social, political and economic transition when the Welsh language, human landscapes, culture and belief first emerged. There seems to have been a period of decline with the departure of the Roman administration in Britain in the 5th Century. Population and general urban decline were seen in the context of successive settlement of northern Germanic peoples and the establishment of the Anglo-Saxon Kingdoms by the 7th century in England, which in turn became divided into manors and parishes. By the beginning of the 11th century, remaining Brittonic Celtic-speaking populations had split into distinct groups: the Welsh in Wales. The reshaping of the political geography of the country also saw the transition from pagan practices to Christianity as the dominant religion.

This period is characterised by the medieval church known as Pencarnou (GGAT00019g) approximately 645m south from the Site. It was first mentioned in one of the charters attached to the Vita Sancti Cadoci dating around c650-60. There is no longer any above ground remains of this structure.

5.4. Medieval Period (1070–1540)

The Norman Conquest heralded a period of political and social upheaval in southeast Wales, leading to the establishment of the Norman manorial system into the Newport area. New places of worship replaced any existing Celtic churches, which had been founded between the 7th to 9th centuries, and although these new buildings normally retained their existing churchyards, the replacement churches were themselves re-dedicated to Latin Saints. New churches were also built for the new settlements founded during the 11th and 12th centuries, and these were always dedicated to Latin Saints. The Norman Lords gave a considerable amount of their newly

⁵ Ibic

⁶ Allen M, Lodwick L, Brindle T, Fulford M, Smith A, 2017 The Rural Settlement of Roman Britain, Britannia Monograph 30.

⁷ Margary I, 1967, Roman Roads in Britain

⁸ Evans, E. M. 2004. The Roman fortress of Caerleon and its environs: A framework for research.





conquered lands to the church. The medieval landscape was dominated by use as pasture, much of it common, although there were extensive ecclesiastical estates, particularly on the Caldicot Level.

Evidence of this period focuses on an Unfortified Manor or Court house (GGAT00059g) from roughly the 14th century approximately 900m north of the Site. Its current state comprises mass of rock and earth with the foundations hardly distinguishable. A possible deserted medieval village is seen on the first edition OS map, but there are no further details known. It is likely that the Site was part of agricultural land due to its close proximity to the deserted rural settlement.

5.5. Post Medieval (1540 – 1901)

During the post medieval period, the area of Pencarnou and Dyffryn was known for the 16th Century deer park that covered most of the Study Area. The Royal Commission suggest that it may have taken place sometime during the reign of Henry VIII, after the dissolution of the Lordship of Wentllwch (Newport). In 1867 the park was described as "being surrounded by an ancient wall and contains 400 acres and about 600 fallow deer. It occupied the mouth of the valley of the Ebbw River, which flows straight through it, embracing a portion of the hills either side⁹.

The Tredegar Park Historic Park and Garden (GGAT101) is located 430m east of the Site. The garden is a restoration period formal walled garden with a late-18th century landscaped park with later planting. During the post medieval periods, the towns of Newport and Caerleon continued in their roles as market centres and trade slowly began to expand especially in shipping; although they remained minor ports, chiefly used for the transhipment of goods across the Severn to and from the major port at Bristol. The Study Area is characterised by a number of post medieval parks including Cleppa Park (GGAT00059g) whose outlines can be roughly traced on 1st-3rd editions OS maps associated with Gwern-y-Cleppa mansion.

5.6. Modern (Post 1901)

The area where the Site is located was utilised as as an agricultural field for the majority of the post medieval and modern periods. A gravel pit (GGAT10186g) is depicted on the 1st edition OS (Figure 5-1) mapping approximately 180m north of the Site, with a footpath diagonally crossing the Site aligned north east to south west. There are a number of buildings seen to the north which have been demolished or altered as seen in the 2020 OS map.

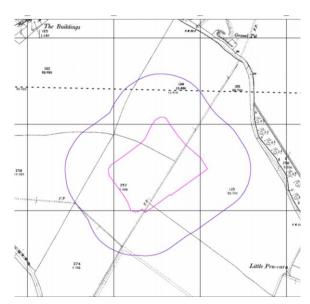


Figure 5-1 - First editon OS map of 1883 © Envirocheck

The land use remained unchanged up until the end of the 20th century. Between 1992 and 1996 the first development of the Site occurred. A circular road was constructed to connect Dyffryn Lane to Pencarn Lane (Figure 5-2) with some localised development, although the area of the Site and Study Area remained largely

⁹ HER Records





rural in nature, and the only other development is the M4 to the north. By 1999, the area had become more developed with various industrial to the north and west.

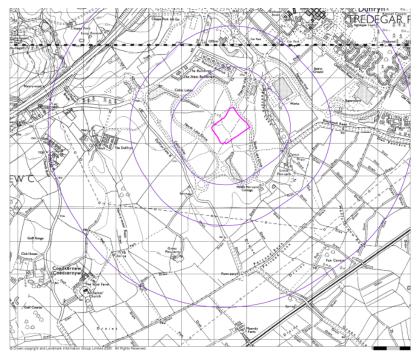


Figure 5-2 - 1996 OS map of the Site showing the new circular road © Envirocheck

The current industrial estate was built between 1999-2006. The current industrial estate was built in 2001 based on the analysis of online aerial photography. In the 2006 OS map (Figure 5-3), buildings can be seen within the current site boundary. Further industrial development can also be seen to the east of the Site, which has since been demolished. Further housing development can be seen to the south of the Site.

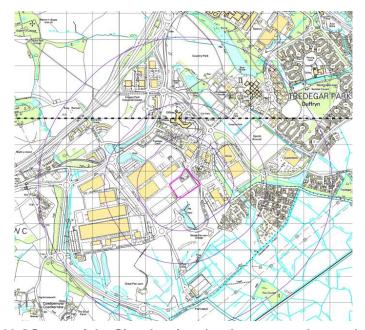


Figure 5-3 - The 2006 OS map of the Site showing development to the south and within the Site © Envirocheck





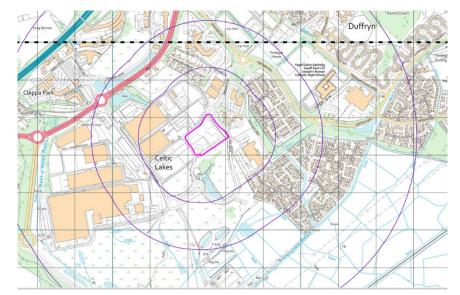


Figure 5-4 - The OS map of 2020 showing the current state of the Site and Study Area, © Envirocheck

The 2020 OS map (Figure 5-4) illustrates the existing land use and development of the Site and surrounding Study Area. Further housing development can be seen in the southwest of the map. More roads and industrial estates can be seen to the north of the Site past the M4. The industrial estate to the east of the Site has been demolished and housing has been constructed in its place.

Significance Assessment & Potential Impacts

Based on the current understanding of the Site, it is possible to identify the potential impacts to known and potentially unknown historic assets which may occur. Such potential impacts may be direct impacts in terms of disturbance of buried archaeological remains, for example, or direct impacts, in terms of settings impacts on historic assets and historic landscape. Impacts may arise from temporary enabling works associated with the construction and operational impacts from the longer-term permanent Site. Settings of historic assets may also be temporarily or permanently impacted due to the construction of new structures or from changes to existing features and/or cumulative alterations to the landscape over time.

There are no designated or non-designated historic assets within the Site boundary. The key designated assets within the Study Area are Tredegar House and Grounds Conservation Area which includes the Grade I listed Tredegar House. Assets which have been deemed not to be affected by the development have been scoped out.

6.1. Designated historic assets

The main reasons for the Tredegar House and Grounds Conservation Area designation are the survival in parts of the late 17th century layout including the garden walls, gate screen, walled parterres and avenue, and the Grade I listed Tredegar House and other listed buildings within the conservation area. The significance of these assets is derived from their historical and evidential value. There are fourteen listed buildings within the conservation area including Tredegar House (Grade I), riding school and stables (Grade II) and gate piers and gates (Grade II). The garden is separated from the site by intervening topography, vegetation and modern development and therefore no part of the garden is visible from within the Site. These historic assets are of high significance.

Their setting makes a major contribution the significance of these assets. However, the surrounding residential and industrial development has already degraded the wider setting which has already had a detrimental impact upon the setting causing harm to the significance of these assets. However, the development of the Site is likely to have minimal impact despite its proximity to the Conservation Area and listed buildings, making little contribution to the setting as views are likely to be filtered both to and from the Site by existing buildings. This could be assessed further following a site visit, which has not been possible as part of this assessment.





6.2. Non-designated historic assets

There are no known non-designated assets within the Site boundary and none within the Study Area which will be directly impacted by the Scheme proposals. Tredegar medieval Deer Park is recorded by the HER. Tredegar Deer Park (03347.0g) was located c.420m to the east of the site and is believed to have been established in the 16th century, a modern housing development now covers much of the former parkland. Considering the fact that the park is screened from the Site by intervening vegetation and topography, and has no historical association with it, the Site is not thought to represent a part of the park's setting and makes no contribution to its significance. As such, the Site's development would have no impact that would be harm the significance of the Deer Park.

6.3. Unknown Buried Archaeological Remains

Due to a lack of previous archaeological investigation within the Site, the significance of any such archaeological remains from other periods could not be accurately assessed on the basis of the available evidence. Therefore, the assessment is based on the archaeological potential within the Site.

The Gwent Levels have been exploited for at least 6000 years, and the landscape is considered to have been 'hand-crafted'. Archaeological remains within the Levels include evidence of drainage, agriculture, settlement and wetland exploitation. The area is also noted for its exceptional preservation of both archaeological and palaeoenvironmental remains, facilitated by the waterlogged conditions. The proximity of the possible Roman road to the site does suggest some potential for Roman activity in the area.

The potential for archaeological remains of any period to survive within the Site is dependent on the extent of modern disturbance as a result of the development of the site from the 1990s. There is moderate potential for archaeological remains associated with the Iron Age period, however archaeological remains have most likely been severely truncated by subsequent redevelopment in the late 20th century and therefore it is considered to have low survival potential.

Between the top of the natural and the current ground level is modern made ground, unlikely to contain archaeological deposits. Services and utilities within the current Site are likely to be limited to the predicted 2.5m depth of made ground and archaeological survival is expected to be low in these localised areas. Apart from the buried services it is likely that the remaining land under the made ground within the Sites' extent are undeveloped beneath the foundations, and therefore any archaeological survival in those areas is expected to be generally high based on currently available information.

Based on the assessment, there is a moderate potential for the Scheme to impact unknown buried archaeological remains, particularly during the construction phase. Depending on the method of excavation, works have the potential to create direct impacts on below ground remains and deposits by disturbing unknown remains or wholly removing them. The potential for archaeological remains being encountered within the Site is summarised in Table 6-1 with any significance if present likely to be low.

Probable Presence Likelihood of Potential for Further **Heritage Asset** Discoveries Prehistoric Unlikely Low Roman Likely High Anglo-Saxon Uncertain Likely Late Medieval Likely Medium Post Medieval Likely High Industrial Unlikely Low Modern Unlikely Low

Table 6-1 - Archaeological Potential

Pilling will possibly impact through modern made ground into archaeological horizons. Any archaeological remains within the footprint of each pile would be removed as the pile is driven downwards. The severity of the impact would therefore depend on the pile size, type and pile density. Any archaeological remains would be entirely removed within the footprint of the Site. Floor and formation levels are not available, but it is assumed for the purposes of this assessment any basement would be excavated following the insertion of the perimeter wall. The method of foundation construction is not currently known.





The identification of potential direct impacts upon previously unrecorded archaeological remains within the Site considers all activities that may entail ground disturbance. The main potential impacts to archaeological remains arising from the proposals above are presented in Table 6-2.

Table 6-2 - Potential Direct Impacts upon Unknown Archaeological Remains

Period	Features	Value	Impact
Palaeoenvironmental	Remains within alluvial deposits/peat	Moderate (evidential)	Would remove/ damage any remains located within the footprint
Prehistoric	Lithic scatters, occupational evidence such as ditches, gullies and pits	Moderate - high (evidential)	Would remove any remains located within the footprint
Roman	Roads, settlement activity	Moderate-high	Would remove any remains located within the footprint
Medieval	Agricultural activity evidence such as ditches, gullies and pits	Low (evidential)	Would remove any remains located within the footprint.
Post-medieval	Quarries, industrial	Low (evidential)	Would remove any remains located within the footprint

Conclusion and Recommendations

The proposed development would have minimal impact upon any known historic assets; further assessment following a site visit would allow for a more robust setting impact review to be made.

The development area is close to an ASA, however because of the disturbed nature of the ground within the Site it is unlikely that substantial archaeological deposits survive. However, there is potential for the development to impact unknown archaeological remains.

Table 7-1 - Summary of archaeological impact and risk of the proposed development

Asset	Potential	Significance	Potential Impact
Unknown archaeological remains	Low	Low (Evidential)	Basement excavation, piles, pile cap and ground beam footprints: any surviving remains removed locally.
Overall Risk	Justificatio	n	
Low			mains would be localised to the areas of e would impact remains of low significance

The development of the Site will not affect how the wider historic landscape is understood or appreciated. In relation to the setting of Tredegar Park, its setting is not only formed by visual relationships but also other factors such as historical associations. Although the proposed building would be a new element within the view from the Conservation Area, the building would form part of the already existing 20th century and 21st century development and there would be no change to the contribution of the setting to the significance of Tredegar Park or Tredegar





House. There will no appreciable loss to the significance of any of the historic assets identified, which equates to less than substantial harm.

Due to the Site close proximity to the ASA and the low survival potential for archaeological remains it is possible that further fieldwork may identify the nature and extent of remains present. Further assessment of the potential for buried remains in the form of an archaeological watching brief on any further ground investigations, plus interpretation of geotechnical data, may establish the survival of archaeological deposits. Dependent on the results of further ground investigations, a proportionate and appropriate evaluation and mitigation strategy to ensure that archaeological remains are not removed without prior recording during the construction phase can be established







Appendix A. Bibliography

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Appendix B. Gazetteers

B.1. Historic Assets

HER number	Name	Summary	Period	Distance	Designation
GGAT00061g	Gwern-y-Cleppa	The present visit noted 7 stones situated in a slight hollow on a local summit in Cleppa Park. The site comprises 1 capstone, 5 upright stones (orthastats) and a 6th beneath the capstone. S recumbent stone-diameter; 1.2m x 0.5m height; 0.7m. W orthastat-	Neolithic	955m north	Scheduled Monument
GGAT101	Tredegar House and Grounds	Tredegar Park makes up the original grounds to Tredegar House, one of the most magnificent 17th century buildings in South Wales. Important parts of its grand late I7th-century layout survive, including garden walls enclosing both `restored' and modern gardens, with a gatescreen, and avenue. The basis for restoration of the spectacular restored `inorganic parterre' is questionable. Much of the I8th-century landscape park and later planting survives, but there are also modern gardens, some of them in the modern public park.	Post Medieval	430m east	Conservation Area
GGAT00019g	PENCARNOU (?PENCARN)	The church was first mentioned in one of the charters attatched to the Vita Sancti Cadoci (Wade-Evans 1932, 154-5 no.4); 'Ager Pencarnov' granted by Gualluuir to Llancarfan, with Abbot Paul signing as first witness.	Early Medieval	645m south	Non-designated historic asset
GGAT00059g	GWERN-Y-CLEPPA	Unfortified Manor or Court house extant in the 14th C. Today it is a confused mass of rock & earth with the foundations hardly distinguishable.	Medieval	900m north	Non-designated historic asset





GGAT03313g	TRE-DEG-ERW	Possible DMV. Tre-deg-erw, dwelling of the ten acres. It's a mystery how it got on the OS map "for there is no such place, nor ever was such a name or place that anyone now living can recollect or ever heard of, and there never was any field of ten acres	Medieval	340m north	Non-designated historic asset
GGAT03344.0g	Gwern-y-Cleppa Park (Former G03)	Gwern-y-Cleppa Park, associated with Gwern-y-Cleppa mansion, with possible medieval antecedents.	Medieval-Post Medieval	1km north	Non-designated historic asset
GGAT03347.0g	Tredegar Deer Park	Deer park probably extent in the Sixteenth Century.	Medieval	500m north	Non-designated historic asset
GGAT05399.0g	GRAIG-Y-SAESON FARM	A. Borthwick assessment Graig-y-Saeson Farm 1992 - terrace and stone revetment/ha ha associated with Tredegar park	Medieval-Post Medieval	965m north	Non-designated historic asset
GGAT10186g	Gravel pit, Tredegar	Depicted on 1st edition OS mapping.	Medieval-Post Medieval	180m east	Non-designated historic asset





B.2. Previous Archaeological Investigations

HER Number	Name	Summary	Event Type	Organisation	Year
GGATE002195	Little Pencarn Farm, Newport, Stage 2 Works	The Glamorgan Gwent Archaeological Trust was commissioned by Bovis Homes Ltd to undertake an archaeological Field Evaluation at the Little Pencarn Farm in Newport.	Borehole Survey	Glamorgan-Gwent Archaeological Trust (GGAT)	1997
GGATE002978	Celtic Springs, Newport. DBA	GGAT were commissioned by Broadhall Limited to conduct a desk based assessment for the proposed development of Celtic Springs on land formerly known as Cleppa Park, Newport. 7 sites were identified within the development area. Further evaluation is recommended to assess the potential nature, extant and value of the archaeological features in the development area (Mackintosh 2000).	DESK BASED ASSESSMENT	Glamorgan-Gwent Archaeological Trust (GGAT)	2000
GGATE001411	The Roman fortress of Caerleon and its environs: A framework for research	The Glamorgan-Gwent Archaeological Trust undertook a research frame for the Roman fortress of Caerleon and its environs.	Desk based assessment	Glamorgan-Gwent Archaeological Trust (GGAT)	2004
GGATE004695	St Joseph's R.C. High School	During July 2002, GGAT were commissioned by Nicholas Jones Partnership Ltd on behalf of the Archdiocese of Cardiff to carry out an assessment of a proposed development site at St Joseph's R.C. School, Newport. The assessment identified 26 archaeological sites within the boundaries of the proposed development, and concluded that one, Home Farm, a Grade II Listed Building within Tredegar Park Registered Park and Garden, located adjacent to the site, could suffer a major impact from any future proposed development of the subject site. The assessment recommended the retention of Home Farm within future development proposals, and that a watching brief should be carried out during any proposed groundworks.	DESK BASED ASSESSMENT	Glamorgan-Gwent Archaeological Trust (GGAT)	2002





GGATE005137	Land at Duffryn, Newport	In 2013, Cotswold Archaeology were commissioned by Panasonic System Networks UK to carry out a desk based assessment of land at Duffryn Newport. The assessment noted that there was the potential for the presence of archaeological remains dating from the Prehistoric to the Post medieval periods, but that modern development may mean that such remains only survive in the south and north west parts of the site.	DESK BASED ASSESSMENT	Cotswold Archaeology	2013
GATE002199	St Joseph's RC High School, Newport EVAL	The Glamorgan-Gwent Archaeological Trust was commissioned by Nicholson Jones Partnership, to undertake an Archaeological Field Evaluation. The Evaluation was carried out at Duffryn Newport, at the proposed new site of St Josephs RC High School. Some flint, glass and pottery were found at the site. The field evaluation determined that archaeologically significant features are located within the proposed development area. The two small ditches 608 and 707, both aligned in a northwest / southeast direction, probably represent the remains of an earlier system of land division and / or drainage, and may have formed part of a more extensive field system. Whilst the lack of datable artefacts recovered from the fills of the ditches precludes the secure dating of these features, the depth of overlying alluvial deposits (0.29 0.042) does suggest a degree of antiquity for this putative field system. The presence of prehistoric flints on the site, along with the Bronze Age axe found in 1986, indicates a degree of activity in the area during the prehistoric period. Whilst it is possible that features 608 and 707 are Bronze Age in date, they may also date the Iron Age, Romano British, post-Roman or Medieval periods. The area had been incorporated into the deer park associated with Tredegar Park by the post-Medieval period, therefore it is unlikely that the ditches were originally dug after this date (Howell 2001).	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	2001





GGATE002194	Little Pencarn Farm, Newport, Stage 1 Works	The Glamorgan-Gwent Archaeological Trust was commissioned by Bovis Homes Ltd to undertake a archaeological field evaluation at the Little Pencarn Farm, to allow development of residential housing.	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1997
GGATE002197	Little Pencarn Farm, Newport, Stage 2 Works, Trench T9	The Glamorgan Gwent Archaeological Trust was commissioned by Bovis Homes Ltd to undertake a Field Evaluation at the Little Pencarn Farm in Newport. The work was carried out with the intention to develop the land at the farm into residential housing.	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1998
GGATE002196	Little Pencarn Farm, Newport, Stage 2, Trenches 10-17	The Glamorgan Gwent Archaeological Trust was commissioned by Bovis Homes Ltd to undertake an archaeological Field Evaluation. The work was carried out at the Little Pencarn Farm in Newport which revealed remains of timber uprights within a peat deposit (Roberts 1998).	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1998
GGATE002420	Duffryn Link EVAL Stage 1	A field evaluation was undertaken as stage 1 of archaeological mitigation at the construction site of the Duffryn Link (Newport Southern Distributor Road) between A48 to Percoed Lane between Duffryn and Coedkernew by GGAT on behalf of the Duffryn Link Partnership (Newport County Borough Council, Costain Civil Engineering Ltd and Gwent Consultancy). The project comprised of a preliminary study of surface features and an extensive programme of evaluation trenching on the solid geology (39 trenches) and the alluvium (10 trenches). The area to the west should be evaluated prior to commencement of any work as the area hasn't been evaluated. The roman structure will need further work to expose and record its main feature, followed by excavation to establish its full sequence. Locock, 1996	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1996





GGATE002369	LG Semicon - Roman Road Stage 3 EVAL	The Glamorgan-Gwent Archaeological Trust, was commissioned by The Welsh Development Agency, on behalf of LG Electronics and LG Semicon Inc, and through its agents Wyn Thomas PLC, to conduct an Archaeological Field Evaluation. The work was carried out at a site in the Imperial Park, Newport. The reason for the work was to construct an integral television components plant and water fabrication and assembly plant. The only find was a single small sherd of Roman black-burnished ware (Williams 1997).	Evaluation	Glamorgan-Gwent Archaeological Trust (GGAT)	1997
GGATE002393	LG Electronics Site, Newport, Geophysical Survey	A geophysical survey was undertaken by Geophysical Surveys of Bradford in order to see the archaeological potential of the area surrounding and encompassing the LG Electronics Site. 17 fields were surveyed, either in whole or part, covering 70 hectares. The variations of volume magnetic susceptibility (VMS) were measured all over the fields and any areas of archaeological potential of the VMS were then put under a detailed gradiometry. Fields 1, 2, 4, 5, 8, 9 and 11 were surveyed subsequently by gradiometer. There is no definite evidence for any archaeological site.	Geophysical Survey	GSB Prospection (Geophysical Surveys of Bradford)	1996
GGATE002401	Newport Landscapes - Landscape Strategy DBA/SUR	TACP, Environmental Consultants were commissioned by a client team, made up of Newport County Borough Council, the Welsh Development Agency and the Countryside Council for Wales (CCW), to do a landscape assessment, develop a landscape strategy and design guidelines for using CCW's LANDMAP. The aim of the report is to provide a landscape framework including sustainable preferences for the area, its economic regeneration and environmental improvement. There are many things that are needed to make sure the landscape strategy is implemented successfully. * All the different groups have to work together as each has a role in the strategy. * Building upon initiatives that have already begun. * The commercial investment in the landscape to complement other initiatives and strategies. (TACP 1998).	Management Plan Landscape	TACP, Environmental Consultants	1998





GGATE006100	GGAT150: Rapid Coastline Zone Assessment	A series of Rapid Coastline Zone Assessments were undertaken by the Welsh Archaeological Trusts in the 1990s around the whole of the coast of Wales. They have since been used to inform our input into coastline management plans and other conservation measures, but with the advances made elsewhere in methodology and techniques, they are no longer fit for this purpose in the 21st century. The purpose of this project is to bring the existing Rapid Coastline Zone Assessment, carried out in the 1990s, into line with recent assessments in England, where a rolling programme of Rapid Coastline Zone Assessment is still ongoing.	PROJECT	Glamorgan-Gwent Archaeological Trust (GGAT)	2016-17
GGATE006100	GGAT150: Rapid Coastline Zone Assessment	A series of Rapid Coastline Zone Assessments were undertaken by the Welsh Archaeological Trusts in the 1990s around the whole of the coast of Wales. They have since been used to inform our input into coastline management plans and other conservation measures, but with the advances made elsewhere in methodology and techniques, they are no longer fit for this purpose in the 21st century. The purpose of this project is to bring the existing Rapid Coastline Zone Assessment, carried out in the 1990s, into line with recent assessments in England, where a rolling programme of Rapid Coastline Zone Assessment is still ongoing.	PROJECT	Glamorgan-Gwent Archaeological Trust (GGAT)	2016-17
GGATE006100	GGAT150: Rapid Coastline Zone Assessment	A series of Rapid Coastline Zone Assessments were undertaken by the Welsh Archaeological Trusts in the 1990s around the whole of the coast of Wales. They have since been used to inform our input into coastline management plans and other conservation measures, but with the advances made elsewhere in methodology and techniques, they are no longer fit for this purpose in the 21st century. The purpose of this project is to bring the existing Rapid Coastline Zone Assessment, carried out in the 1990s, into line with recent assessments in England, where a rolling programme of Rapid Coastline Zone Assessment is still ongoing.	PROJECT	Glamorgan-Gwent Archaeological Trust (GGAT)	2016-17





GGATE006100	GGAT150: Rapid Coastline Zone Assessment	A series of Rapid Coastline Zone Assessments were undertaken by the Welsh Archaeological Trusts in the 1990s around the whole of the coast of Wales. They have since been used to inform our input into coastline management plans and other conservation measures, but with the advances made elsewhere in methodology and techniques, they are no longer fit for this purpose in the 21st century. The purpose of this project is to bring the existing Rapid Coastline Zone Assessment, carried out in the 1990s, into line with recent assessments in England, where a rolling programme of Rapid Coastline Zone Assessment is still ongoing.	PROJECT	Glamorgan-Gwent Archaeological Trust (GGAT)	2016-17
GGATE005431	The Rural Settlement of Roman Britain	The Rural Settlement of Roman Britain project was undertaken by Reading University and Cotswold Archaeology, on behalf of Historic England and the Leverhulme Trust, with the aim of creating a resource that brings together the excavated evidence for the rural settlement of Roman Britain with the over-arching aim to inform a comprehensive reassessment of the countryside of Roman Britain.	PROJECT	University of Reading	2015
GGATE005431	The Rural Settlement of Roman Britain	The Rural Settlement of Roman Britain project was undertaken by Reading University and Cotswold Archaeology, on behalf of Historic England and the Leverhulme Trust, with the aim of creating a resource that brings together the excavated evidence for the rural settlement of Roman Britain with the over-arching aim to inform a comprehensive reassessment of the countryside of Roman Britain.	PROJECT	University of Reading	2015
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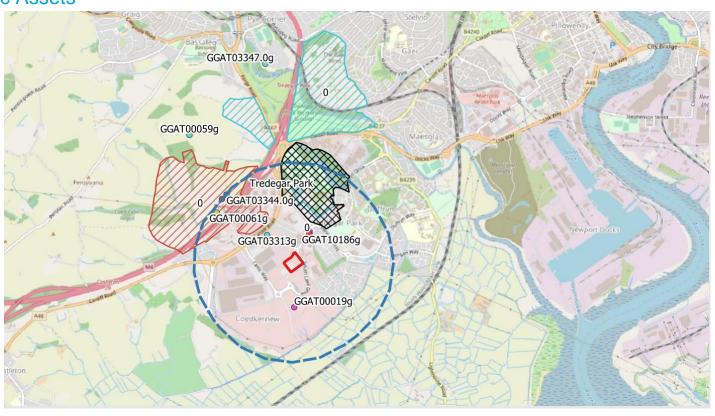
GGATE005431	The Rural Settlement of Roman Britain	The Rural Settlement of Roman Britain project was undertaken by Reading University and Cotswold Archaeology, on behalf of Historic England and the Leverhulme Trust, with the aim of creating a resource that brings together the excavated evidence for the rural settlement of Roman Britain with the over-arching aim to inform a comprehensive reassessment of the countryside of Roman Britain.	PROJECT	University of Reading	2015
GGATE006249	Land at Duffryn, Newport	An archaeological watching brief at Land at Duffryn, Pencarn Way, Newport, was undertaken by Cotswold Archaeology during groundworks for the removal of existing warehouses and the residential development of the site. The works took place from September 2014 to January 2015. No features or deposits of archaeological interest were observed during groundworks, and no artefactual material was recovered.	Watching Brief	Cotswold Archaeology	2015
GGATE002390	LG Europe Development (New Pumping Station & Sewer Diversion) WB	On behalf of LG Europe development Thomas Morgan Associates appointed GGAT to carry out work on the LG Semicon site as the development might affect potential archaeological interests. The watching brief took place during the groundworks on site on 22nd-24th October and the 2nd November 1997. This included a visual inspection of the sections revealed by soil removal and an examanation of these, and the contractors spoil heaps for stray artefacts. No archaeological evidence observed of any previous activity on the site, either in form, cut features or artefacts. The watching brief ensured that no damage was occasioned to archaeological interests (Sell and Marvell 1997).	Watching Brief	Glamorgan-Gwent Archaeological Trust (GGAT)	1997





Appendix C. Historic Asset Maps

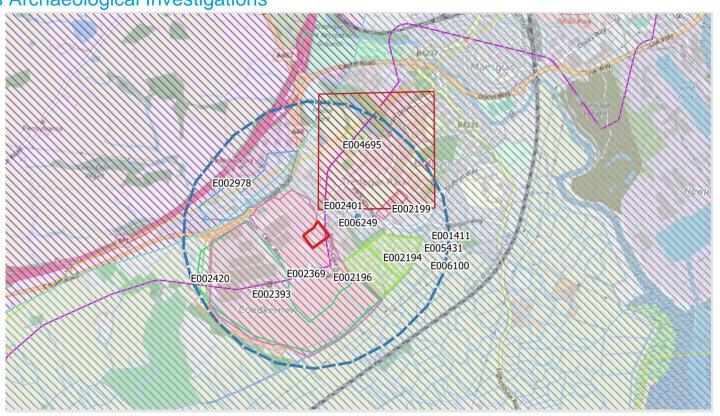
C.1. Historic Assets







C.2 Previous Archaeological Investigations







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