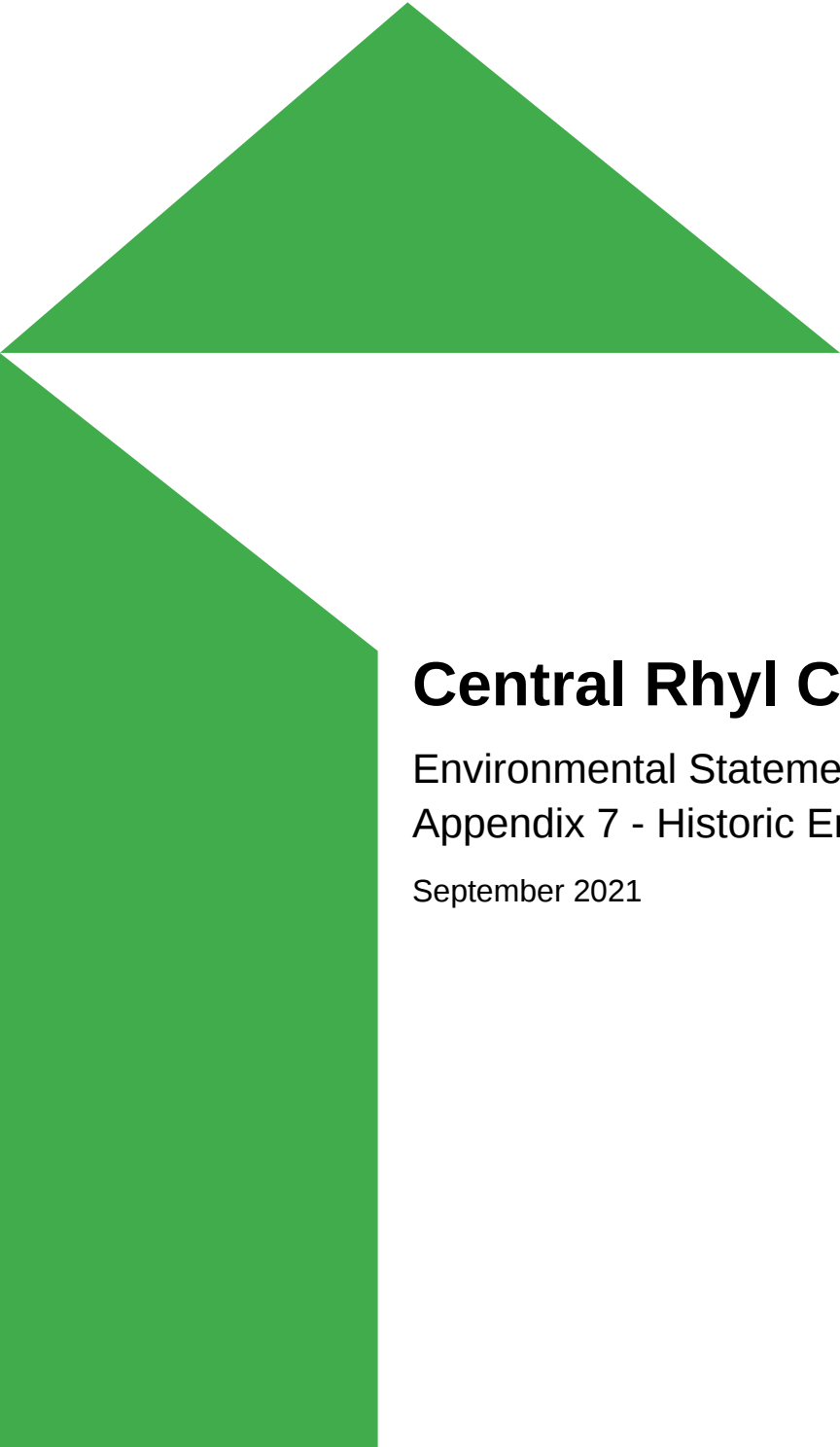




Central Rhyl Coastal Defences

Environmental Statement Volume 2: Technical
Appendix 7 - Historic Environment

September 2021

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Central Rhyl Coastal Defences

Environmental Statement Volume 2: Technical
Appendix 7 - Historic Environment

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Appendix 7.1 – Central Rhyl Coastal Flood Defences, Denbighshire Desk-based Assessment

CPAT Report No. 1621

Central Rhyl Coastal Flood Defence Scheme, Denbighshire

Desk-based Assessment



YMDDIRIEDOLAETH ARCHAEOLEGOL CLWYD-POWYS

CLWYD-POWYS ARCHAEOLOGICAL TRUST

Client name: JBA Consulting
 CPAT Project No: 2335
 Project Name: Central Rhyl & Prestatyn Flood Defence Schemes
 Grid Reference: SH 9994 8103 to SJ 0201 8244
 County/LPA: Denbighshire
 Planning Application: N/A
 CPAT Report No: 1621
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Prepared by:	Checked by:	Approved by:
		
Nigel Jones Principal Archaeologist	Paul Belford Director	Paul Belford Director
13 November 2018	14 November 2018	15 November 2018

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with the Chartered Institute for Archaeologists

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Summary

A desk-based assessment has been undertaken by the Clwyd-Powys Archaeological Trust in connection with proposals for a coastal flood scheme at Central Rhyl in Denbighshire.

The assessment has identified a number of heritage assets along the foreshore and coastal edge which could be affected by such as scheme. These include two aircraft crash sites, 10 ship wrecks and, perhaps most significantly, a series of peat and sediment deposits relating to prehistoric land surfaces which were submerged by rising sea-levels.

The assessment concludes that further stages of investigation would be required in order to define further the extent, significance and potential impacts on heritage assets.

Crynodeb

Bu Ymddiriedolaeth Archaeolegol Clwyd-Powys yn cynnal asesiad wrth ddesg mewn cysylltiad â chynigion ar gyfer cynllun rheoli llifogydd arfordirol yng Nghanol y Rhyl yn Sir Ddinbych.

Mae'r asesiad wedi nodi nifer o asedau treftadaeth ar hyd y blaen traeth ac ymyl yr arfordir y gallai cynllun o'r fath effeithio arnyn nhw. Mae'r rhain yn cynnwys dau safle damweiniau awyrennau, 10 llongdrylliad ac, yn anad dim o bosibl, cyfres o ddyddodion mawn a gwaddodion yn ymwneud ag arwynebau tir cynhanesyddol a foddwyd wrth i lefel y môr godi.

Daw'r asesiad i'r casgliad y byddai galw am gyfnodau ymchwilio pellach er mwyn diffinio ymhellach graddau, arwyddocâd ac effeithiau posibl ar asedau treftadaeth.

1 Introduction

- 1.1. The Clwyd-Powys Archaeological Trust (CPAT) was invited by JBA Consulting to conduct a desk-based assessment in connection with proposals for a new coastal flood defence scheme at Central Rhyl, Denbighshire (Fig. 1; SH 9994 8103 to SJ 0201 8244).



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Fig. 1 Location of Central Rhyl Coastal Defences

2 Methodology

- 2.1. The assessment consisted of a desk-based study of readily available primary and secondary sources in order to provide a historical framework for any surviving archaeological remains. This included relevant records held at the following repositories: the regional Historic Environment Record (HER), maintained by CPAT in Welshpool; the National Monument Record (NMR), maintained by RCAHMW in

Aberystwyth; the National Library of Wales, Aberystwyth; Flintshire Record Office, Hawarden; Denbighshire Record Office, Ruthin.

- 2.2. The study area has been defined to incorporate the whole of the foreshore within the area of the proposed new coastal defences, together with an inland buffer, the extent of which is designed to assist in determining potential visual impacts.

3 Sources of Information & Guidance

- 3.1. Cultural heritage is deemed to include the complete range of man-made features that have been introduced into the landscape from the Palaeolithic, more than two hundred and fifty thousand years ago, up to and including the 20th century. Some of these features will be visible as upstanding remains on the ground; others will be buried and only become apparent during ground disturbance, whilst others may be objects that have been discarded, lost or deliberately deposited. Some will have an archaeological interest and importance; others will be more historical in their origin. In addition, some natural features will be relevant because of the information they contain; peat bogs, for instance, hold pollen that can throw light on past human activity in the area. Collectively, all these features are known as heritage assets.
- 3.2. The revised Design Manual for Roads and Bridges (DMRB), Volume 11 Section 3 Part 2, HA 208/07 (August 2007), though not specifically focused on developments of this nature, provides a suitable, general framework for assessing the cultural heritage. The approach to the cultural heritage which it promotes, although designed for road developments, is relevant as a methodology for the proposed development and has been adopted here.
- 3.3. The desk-based assessment was undertaken with reference to the principles and methods for assessing heritage assets laid out in the *Standard and Guidance for Archaeological Desk-based Assessments* (2014, revised 2017) produced by the Chartered Institute for Archaeologists (CIfA), the regulatory body for the profession.

Administration

- 3.4. At a national level, it is Cadw, the historic environment service within Welsh Government, which holds the remit for the cultural heritage resource. Another national body, Natural Resources Wales, has a particular interest in historic landscapes.
- 3.5. At a regional level, the cultural heritage resource is monitored by the Heritage Sections of the regional archaeological trusts. The Clwyd-Powys Archaeological Trust (CPAT) act as archaeological advisers to Denbighshire County Council.
- 3.6. While the broad concern of all these bodies is with the preservation of the cultural heritage, there are inevitably differences in emphasis between regional and national organisations, and in the laws and regulations that govern the ways in which they operate.
- 3.7. The legislative framework for the historic environment in Wales was revised by The Historic Environment (Wales) Act 2016. The 2016 Act amended the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Buildings

- and Conservation Areas) Act 1990. It extended the definition of scheduled monuments and enhanced their protection, as well as making changes to the process of scheduled monument consent. Changes were also made to the protection of listed buildings. The 2016 Act also provided for a statutory register of historic landscapes, a statutory list of place names, and imposed a statutory duty on Welsh Ministers to compile and maintain Historic Environment Records (HERs).
- 3.8. Chapter 6 of Planning Policy Wales was revised and re-issued in November 2016. Technical Advice Note 24: The Historic Environment (TAN 24) came into force on 31 May 2017, and replaced previous Welsh Office Circulars 60/96 Planning and the Historic Environment: Archaeology; 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas; and 1/98 Planning and the Historic Environment: Directions by the Secretary of State for Wales.
 - 3.9. The revised Design Manual for Roads and Bridges (DMRB), Volume 11 Section 3 Part 2, HA 208/07 (August 2007), though not specifically focused on developments of this nature, provides a suitable, general framework for assessing the cultural heritage. The approach to the cultural heritage which it promotes, although designed for road developments, is relevant as a methodology for the proposed development and has been adopted here.
 - 3.10. Welsh Government's (2017) *Heritage Impact Assessments in Wales* sets out the general principles to consider when planning changes to historic assets and applying for listed building, conservation area and scheduled monument consent. This document, together with Cadw's (2011) *Conservation Principles for the Sustainable Management of the Historic Environment in Wales*, provides guidance on understanding historic assets, their significance and assessing potential impacts on them. The results of a heritage impact assessment should be summarised in a heritage impact statement and this process must be adopted in all cases where your proposals require listed building consent or conservation area consent.
 - 3.11. At a local level the Denbighshire Local Development Plan 2006-2021 was adopted in 2013. The theme of 'Valuing Our Environment' is concerned with the protection and enhancement of those assets, both natural and man-made, that make up Denbighshire's unique environment. Policy VOE 1 states that 'The following areas will be protected from development that would adversely affect them. Development proposals should maintain and, wherever possible, enhance these areas for their characteristics, local distinctiveness, and value to local communities in Denbighshire: ... Sites of built heritage; and Historic Landscape, Parks and Gardens.' Policy VOE 3 - Pontcysyllte Aqueduct and Canal World Heritage Site, states that 'development which would harm the attributes which justified the designation of the Pontcysyllte Aqueduct and Canal as a World Heritage Site and the site's Outstanding Universal Value will not be permitted.'

The categorisation and conservation of the cultural heritage resource

- 3.12. The cultural heritage resource is not a single body of equally significant assets, but an infinitely complex set of individual assets, the number of which increases and alters in form and relationships on a continual basis. They range in importance from internationally significant sites to features of minor and even negligible value. Those perceived to be of greater importance are categorised by designation (statutory) or

registration (which may be statutory or non-statutory), while those of lesser importance remain undesignated.

Setting

- 3.13. Planning Policy Wales (9th edition, 2016) identifies the desirability of preserving the setting of a World Heritage Site, a nationally important ancient monument (whether scheduled or unscheduled), a listed building, a Conservation Area and a site on the Register of Historic Parks and Gardens in Wales. This desirability will be a material consideration when assessing the potential impact of a development proposal on the historic environment. Recent guidance published by Welsh Government (2017) in *Setting of Historic Assets in Wales* defines the setting of a historic asset as including ‘the surroundings in which it is understood, experienced and appreciated, embracing present and past relationships to the surrounding landscape. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive, negative or neutral contribution to the significance of an asset. Setting is not itself a historic asset, though land within a setting may contain other historic assets. The importance of setting lies in what it contributes to the significance of a historic asset. The setting of a historic asset can also include less tangible elements. These may include function, sensory perceptions or historical, artistic, literary and scenic associations’.

4 Historical Background

- 4.1. This section provides a brief summary of the archaeology and history of the study area and its immediate surrounds, to enable the findings of the assessment to be placed in a wider context.

Prehistoric Era (10,000BC – AD 43)

- 4.2. During the Mesolithic Liverpool Bay was a dynamic and constantly changing landscape. Soils within the bay area would have been thin and immature during the Early Holocene, but as they developed, woodland would have colonised the areas previously occupied by pioneering vegetation. As sea-level increased the lowest areas would have been affected by salinity, and the area as a whole was transformed from dry-land to areas of fen, brackish vegetation, reed swamps and saltmarsh (Fitch and Gaffney 2011, 96).
- 4.3. The majority of the recorded undesignated assets within the study area relate to a series of archaeologically and palaeoenvironmentally significant deposits representing sedimentation of tidal flats (PRN 17103) and resulting from fluctuations in and the gradual rise of sea levels after the last glaciation. While in places these deposits are currently buried beneath 1.2m to 1.8m of beach sand, there are limited exposures (see below), although this is an ever changing situation.
- 4.4. Exposures of peat and the remains of a submerged forest on the Rhyl foreshore have been documented since the late 19th century and in 1912 around 200 tree stumps were observed. The peat deposits have previously been considered to be of Neolithic or Bronze Age date, in accordance with which the earliest deposits have been dated to 4725±65 BP.

- 4.5. When early Mesolithic activity took place at Rhuddlan c 7600 cal BC, sea level was at about 9m below Ordnance Datum, thus the main coast was about 10km to the north (see Fig. 2). By the time a Mesolithic mattock (PRN 33099) was deposited at Splash Point, Rhyl (c 5400 cal. BC) marine/estuarine influence was lapping at the edge of a boulder clay island or promontory at Rhyl and the estuary extended up the Vale of Clwyd probably to St Asaph. Splash Point was therefore at one side of the mouth of the extensive Clwyd estuary.

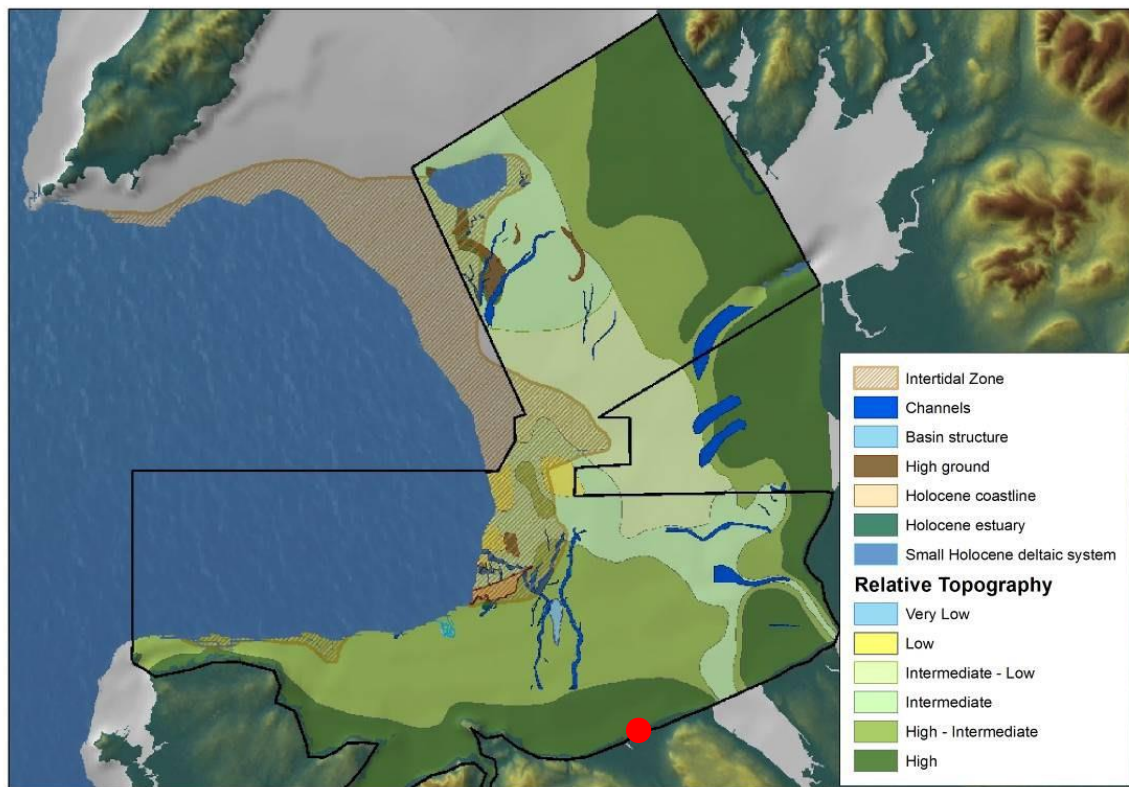


Fig. 2 Liverpool Bay in the Mesolithic, with Rhyl marked in red (after Fitch and Gaffney 2011, fig. 59)

- 4.6. Despite numerous previous observations the nature of the deposits between Rhyl and eastwards towards Prestatyn remain only partially understood. The most recent study of the area (Bell 2007) is based on data gathered in 2005/06, which identified the following stratigraphic sequence (from the latest to the oldest):

- vi) Estuarine sediments
- v) Upper peat with submerged forest including oaks, deer and auroch prints
- iv) Estuarine sediments with human and deer prints, possible context of Mesolithic mattock and polished axes
- iii) Lower peat and submerged forest of willow, possible context of flint artefacts reported by Smith (1924)
- ii) Estuarine sediments
- i) Boulder Clay

- 4.7. The 2005/06 study identified the presence of a flint core fragment embedded in the old land surface beneath the clay-silts. The presence of two palaeochannels was also suggested, which is significant since these features often contain animal remains.



Fig. 3 Part of the submerged forest near Splash Point, recorded on 20 July 2004 (Bell 2007, fig. 20.21; photo M Bell)

- 4.8. Archaeological material has been collected from the foreshore and occasionally from within the sediments associated with the peat/clay silts outcropping on the beach. These finds range in date from a Mesolithic antler mattock to a variety of finds of Neolithic or Bronze Age date. Significantly some of these finds have been made in the estuarine blue clay underlying the forest beds. These deposits have also produced mammal remains including red deer (including a full set of unshed antlers), roe deer, ox, horse, sheep, pig, badger, fox, wolf and whale.
- 4.9. While attention has often focused on the peat deposits and the submerged forest, it should be noted that most of the archaeology and faunal remains come from the underlying clays, as do a lot of the recorded footprints, some of which are human, and to a certain extent it is those deposits that are perhaps most important rather than the overlying peats. These deposits have the potential to contribute significantly to acknowledged national research objectives.
- 4.10. Recent field survey associated with the East Rhyl Coastal Defence Scheme identified two areas where significant deposits are currently exposed around Splash Point, one of which included the remains of two large trees. The deposits clearly continued up the beach, where they are buried beneath beach sand.

- 4.11. The other area contains the remains of a number of structures which were first recorded in 2013 (PRN 123322; Figs 4-5). Two parallel rows of stakes, each row around 4m in length, are set 2.9m apart. The stakes within each row are offset, suggesting the former presence of wattling woven between them and indicating that they are probably part of fish traps of unknown date. A single, shorter row was also noted further to the east. Four closely-set, vertical planks were also noted, as well as a number of concrete and wooden posts likely to be associated with former groynes.



Fig. 4 Features exposed in December 2013 (PRN 123322) west of Splash Point



Fig. 5 The remains of a probable fish trap (PRN 123322) first recorded in 2013

Roman Period (AD 43 - 410)

- 4.12. Roman activity in the area is attested by a small number of Roman coins found on the beach (PRN 102176), on Marsh Road (PRN 102177) and at Rhydwen Drive (PRN 102182).

Medieval Period (410 - 1500)

- 4.13. Although there are documentary references to Rhyl dating back to the 14th century, these probably refer to an area rather than a settlement as such. The early form of the name is thought to be 'Hull', translatable as 'hill', and perhaps referring to the collection of low sandbanks here, raised a little above the level of the low ground which was in the past subject to flooding in high tides. Until the beginning of the 19th century the area seems to have contained only a handful of scattered farms and cottages.

Post-medieval and Modern Periods

- 4.14. A Bill was passed in 1794 authorising the construction of a sea defence and land drainage channels to control flooding. The remains of possible early sea defences or fish traps (PRN 123322) have been identified within the study area, close to Splash Point, comprising a series of wooden posts set in roughly parallel short trenches filled with stone. These are recorded to have been cut through the peat deposits, rather than being associated with the prehistoric finds that have been recovered from the immediate surrounding area.
- 4.15. Rhyl was the earliest of the North Wales coast resorts to develop. Growth of the town began in the late 1820s with the building of two hotels and a number of lodging houses. By the time of the Tithe survey in 1839, a number of roads had been set out, but there were very few new buildings. Large areas of common still survived on the land nearest to the sea. Inland, there was much arable land and a large number of strip fields and quillies were depicted, and some of these were visible along the southern edge of the Study Area.
- 4.16. It is also evident that the depiction of the sea front on the Tithe map is some 140m further inland than the present front, which has undergone considerable redevelopment, particularly for the leisure and tourism industry.
- 4.17. The Royal Alexandra Hospital along Marine Drive was used for the care of wounded soldiers during the First World War and German prisoners of war were recorded at Rhyl, and were possibly accommodated in a camp there, in the years after the Second World War.

5 Baseline Assessment

- 5.1. Details of designated and undesignated heritage assets within the study area are provided in Appendix 1.

Designated and Registered Heritage Assets within the Study Area

- 5.2. The assessment includes designated and registered heritage assets within the Study Area, which are summarised in Table 1.

5.3. Table 1: Designated and Registered Heritage Assets within the Study Area

Designated Asset	Totals
World Heritage Site	0
Scheduled Ancient Monument	0
Listed buildings	27
Registered historic parks and gardens	0
Registered Battlefields	0
Designated wrecks	0
Aircraft crash sites	2
Conservation areas	2

Listed Buildings

5.4. These are protected under the Planning (Listed Buildings and Conservation Areas) Act 1990, as amended by the Historic Environment (Wales) Act 2016. All listed buildings are nationally important, but are graded in order of significance as Grade I, II* or II. Grade I buildings are considered to be of equal status to Scheduled Ancient Monuments. Local planning authorities must have special regard to the desirability of preserving the setting of a listed building regardless of its grade, and it also requires planning proposals to meet the test of determining the extent to which a development affects views to and from a listed building. Planning Policy Wales (9th edition, 2016) requires a 'general presumption in favour of the preservation of a listed building and its setting, which might extend beyond its curtilage' (6.5.10).

5.5. Twenty-seven Listed Buildings have been identified within the Study Area, all of which are grade II (Fig. 7 and Table 2).

Table 2: Listed buildings within the Study Area.

List entry	Grade	Name	Period	NGR
1510	II	Lookout Tower in Boundary Wall at Nos 39 and 40 East Parade	19 th Century	SJ0108881897
1521	II	Sussex Street Baptist Church	19 th Century	SJ0070681502
14136	II	No 4 The Gables, Bath Street (East side)	19 th Century	SJ0093381701
14137	II	Boundary Wall and Gate Piers at No 4 The Gables, Bath Street	19 th Century	SJ0092581691
14273	II	Marine Villa, Crescent Road (E Side)	19 th Century	SJ0057581417

14276	II	War Memorial, East Parade (North side)	20 th Century	SJ0100681935
14279	II	Crescent Public House, Edward Henry Street (Ne Side)	19 th Century	SJ0054481355
14280	II	No 21 Grafton Lodge, Fairfield Avenue (East side)	19 th Century	SJ0101481800
14281	II	No 23 Grafton Lodge, Fairfield Avenue (East side)	19 th Century	SJ0100581804
14290	II	Royal Alexandra Hospital	19 th Century	SJ0148182102
14297	II	No 40-42, Queen Street (W Side)	19 th Century	SJ0065981464
14298	II	No 44-46, Queen Street (W Side)	19 th Century	SJ0065581467
14320	II	No 42, (Ellis's Bar), Water Street (W Side)	19 th Century	SJ0060581423
14321	II	No 44, (Ellis's Bar), Water Street (W Side)	19 th Century	SJ0059881429
14325	II	No 47, Water Street (E Side)	19 th Century	SJ0060781459
14326	II	No 49, Water Street (E Side)	19 th Century	SJ0060281463
14327	II	No 46 Water Street (W Side)	19 th Century	SJ0059181433
14328	II	No 48, Water Street (W Side)	19 th Century	SJ0059081441
14329	II	No 50, Water Street (W Side)	19 th Century	SJ0059281443
14330	II	No 52, Water Street (W Side)	19 th Century	SJ0058981445
14331	II	No 54, Water Street (W Side)	19 th Century	SJ0058181447
14332	II	No 56, Water Street (W Side)	19 th Century	SJ0057681454
14333	II	No 71, West Parade (S Side)	19 th Century	SJ0019281188
14334	II	No 72, West Parade (S Side)	19 th Century	SJ0018181185
14335	II	No 73, West Parade (S Side)	19 th Century	SJ0017481178
14336	II	No 74, West Parade (S Side)	19 th Century	SJ0016881172
14337	II	No 75, West Parade (S Side)	19 th Century	SJ0015881166

Conservation Areas

- 5.6. These are protected under the Planning (Listed Buildings and Conservation Areas) Act 1990. This Act requires local planning authorities to have special regard to the desirability of preserving the setting of a Conservation Area, and it also requires planning proposals to meet the test of determining the extent to which a development affects views to and from such an area. Planning Policy Wales (9th edition, 2016) states

that there 'will be a strong presumption against the granting of planning permission for developments ... which damage the character of appearance of a conservation area or its setting to an unacceptable level' (6.5.19).

- 5.7. There are two Conservation Areas within the Study Area, Rhyl Central Conservation Area and Rhyl, River Street Conservation Area, which are depicted on Fig. 7.

Aircraft Crash Sites

- 5.8. All military aircraft crash sites in the United Kingdom, its territorial waters, or British aircraft in international waters, are controlled by the Protection of Military Remains Act 1986. Under this act it is an offence to tamper with, damage, move, or unearth any remains without a licence from the Ministry of Defence.
- 5.9. There are two aircraft crash sites within the Study Area, which are depicted on Fig. 7 and listed in Table 3.

Table 3 Aircraft crash sites within the Study Area

NPRN	Name	NGR
515475	Armstrong Whitworth Whitley V Bd204	SJ0078282558
515607	Boulton Paul Defiant I N1770	SJ0059582522

Undesignated Assets

- 5.10. The assessment has identified 51 undesignated assets within the Study Area. Of these, 12 are find spots and 10 are ship wrecks. These listed in Tables 4 and 5 and their distribution shown in Fig. 8.

Table 4: Undesignated Assets within the Study Area recorded in the regional HER.

PRN	Name	Period	Type	NGR
17103	Rhyl foreshore submerged landscape	Prehistoric	Submerged landscape	SJ023824
17613	Rhyl Roman Coin	Roman	Find only	SJ0081
33099	Rhyl foreshore (Splash Point) antler mattock	Mesolithic	Find only	SJ020825
34208	Rhyl Pier	Modern	Pier	SJ00658185
34292	Foryd Shipyard	Modern	Shipyard	SH996807
37700	Rhyl, Volunteers' rifle range	Post-medieval	Firing range	SJ0278882579
58795	Rhyl foreshore post-medieval finds	Post-medieval	Find only	SJ02388247
58796	Rhyl foreshore macehead	Bronze Age; Neolithic	Find only	SJ02388247

83516	Foryd landing stage east II	Post-medieval	Wharf	SH9961080710
83523	Foryd landing stage	Post-medieval	Landing stage	SH99648077
100565	Rhyl Marine Lake Roman Coins	Roman	Find only	SH999808
101903	Rhyl foreshore bronze spearhead	Bronze Age	Find only	SJ015822
101936	Rhyl foreshore Neolithic axes	Neolithic	Find only	SJ02388247
101937	Rhyl foreshore bronze chisel	Bronze Age	Find only	SJ02388247
102176	Rhyl foreshore Roman coin	Roman	Find only	SJ00598158
106402	Rhyl foreshore causeway	Post-Medieval	Trackway	SJ019825
106441	Rhyl, West Promenade Roman Coin	Roman	Find only	SJ006816
120560	Rhyl, Axehead	Neolithic	Find only	SJ0182
120705	Rhyl, High Street, Royal Hotel	Post-medieval	Hotel	SJ0075981536
120706	Esplanade/Church Street, Belvoir Hotel	Post-medieval	Hotel	SJ0083081679
120707	Rhyl, West Parade 18	Post-medieval	House	SJ0057881508
120709	Rhyl, Bath Street 5-9, Morfa Hall	Post-medieval	House	SJ00908166
123322	Rhyl foreshore (Splash Point) structures	Post-medieval; Prehistoric	Coastal defence; Fish trap; Occupation site	SJ0205082470
124733	Rhyl, Abbey Street (nos. 11-33)	Post-medieval	Terraced Housing	SJ0046181328
129248	Rhyl, Wellington Road, Ocean Beach Site	Post-medieval	Funfair	SH9981280807
141424	Rhyl, wood and metal object	Unknown	Find only	SJ025826
142079	Rhyl Prisoner of War camp	Modern	Prisoner of war camp	SJ015820

Table 5: Undesignated Assets within the Study Area recorded in NMR.

NPRN	Name	Period	Type	NGR
8133	Crescent Road Plymouth Brethren Meeting House	Post-medieval	Chapel	SJ00558140
23440	Gaiety Theatre; The Amphitheatre, Rhyl Promenade Pier	Post-medieval	Theatre	SJ0074681765
35826	Foryd Hall	Post-medieval	Dwelling	SH99808085
84920	Foryd Hall, Garden, Rhyl	Post-medieval	Garden	SH9979180796
408337	The Grange Hotel, 41- 42 East Parade.	Post-medieval	Hotel	SJ01158192
409676	Royal Floral Hall	20th Century	Glasshouse	SJ0084381786
411715	Rhyl Library, Museum And Arts Centre, Church Street	Modern	Arts centre, museum, public library	SJ0089581620
412353	Queen's Palace	Modern	Hotel	SJ0066581568
413371	Royal Hotel, Sussex Street, High Street	19th Century	Hotel	SJ0075981537
414696	Open-Air Swimming Baths, East Parade	20th Century	Swimming pool	SJ008818
416914	Queen's Theatre (Cinema)	20th Century	Cinema	SJ0066881570
416915	Palladium (Cinema)	20th Century	Cinema	SJ0074581530
417071	West Parade, Nos 21- 24, Crescent Road, Nos 2 & 4	Post-medieval	Club	SJ00538147
544025	Rhyl Lifeboat Station	Post-medieval	Lifeboat station	SJ0095681935

- 5.11. The NMR records 10 undesignated wrecks within the study area, which are listed in Table 6 and their approximate locations shown on Fig. 8.

Table 6 Undesignated wrecks within the Study Area

NPRN	Name	Period	NGR
442	City of Ottawa	Post-medieval	SH9959780738
271374	William Henry	Post-medieval	SJ0013382405
271431	Sir Peregrine	Post-medieval	SJ0027281756

271527	Raven	Post-medieval	SJ0052981907
271558	Saint Olaf	Post-medieval	SJ0246882901
506949	Unnamed Wreck	Post-medieval	SH9959780738
524837	Albion	Post-medieval	SJ0003981533
524863	Good Intent	Post-medieval	SH9995181851
525214	Sarah	Post-medieval	SJ0054681805
525228	Mayflower	Post-medieval	SJ0089282244

- 5.12. The Rhyl foreshore contains evidence for former land surfaces (PRN 17103) which were inundated during the prehistoric period as a result of rising sea-levels after the last glaciation. The peat and clay deposits contain the remains of substantial trees, as well as human and animal footprints and are likely to preserve significant palaeoenvironmental evidence.

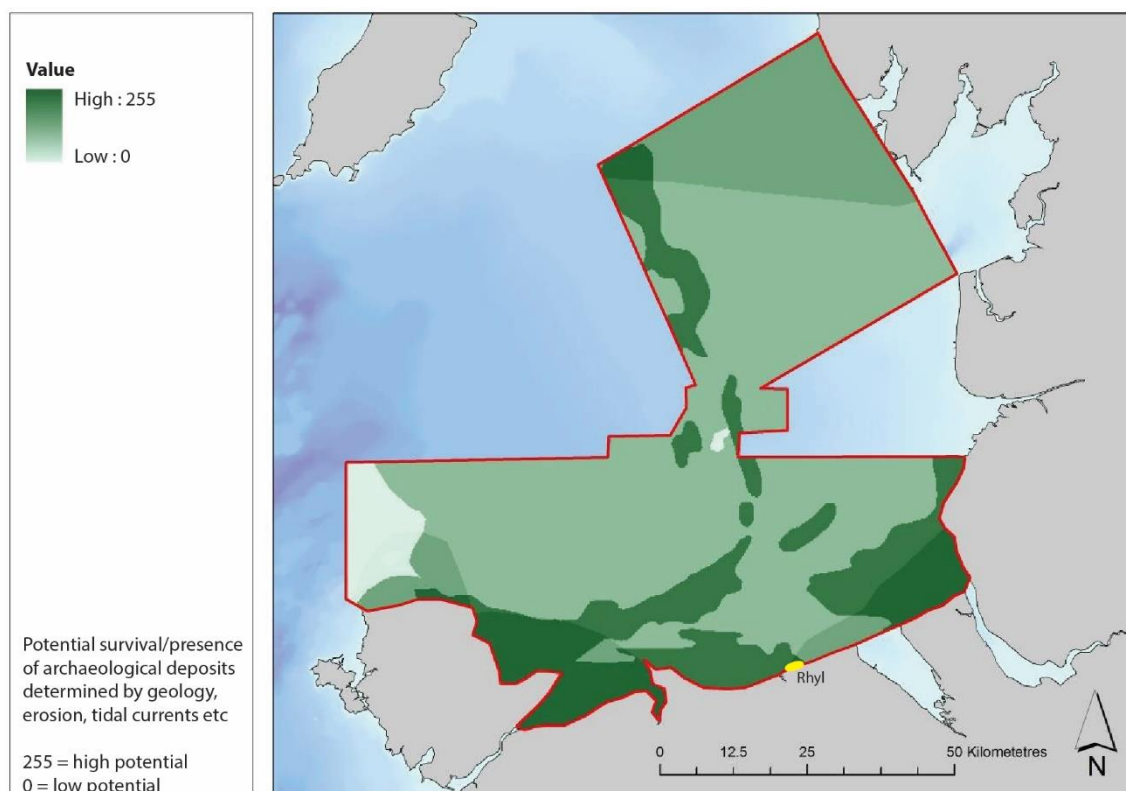


Fig. 6 Potential survival of archaeological deposits (combination of tidal stress, erosion, geology etc) within the Liverpool Bay (after Fitch and Gaffney 2011, fig. 53)

- 5.13. An analysis of data produced as part of assessments relating to off-shore wind farms (Fitch and Gaffney 2011) suggests that the potential for surviving archaeological deposits at Rhyl is high (Fig. 6), although further assessment would be required to elucidate this further.

6 Potential Impacts

- 6.1. At this stage it is only possible to discuss potential direct and indirect impacts in general terms. A more detailed assessment would be required as part of an Environmental Impact Assessment, which would inform an Environmental Statement.
- 6.2. The desk-based assessment has identified potential direct impacts on a series of heritage assets (PRN 17103) on the foreshore which are associated with sea-level changes since the last glaciation and have the potential to contain significant palaeoenvironmental evidence, as well as artefactual and other evidence for human activity from the Mesolithic to the Bronze Age. Other structures recorded on the foreshore which relate to changing sea-levels include possible fish traps (PRN 123322) and a causeway or track (PRN 106402), which could also be subject to impacts.
- 6.3. Two aircraft crash sites are recorded, although it is not clear whether any of the wreckage remains on the foreshore.
- 6.4. The foreshore also includes the site of 10 undesignated ship wrecks which may have significant structural remains, although their locations have not been confirmed, as well as the site of Rhyl Pier (PRN 34208).

Table 7 Potential direct impacts on known heritage assets

PRN	Name	Value	NGR
17103	Rhyl foreshore submerged landscape	High	SJ023824
34208	Rhyl Pier	Low	SJ00658185
106402	Rhyl foreshore causeway	Unknown	SJ019825
123322	Rhyl foreshore (Splash Point) structures	Medium	SJ0205082470
NPRN	Name		NGR
442	City of Ottawa	Unknown	SH9959780738
271374	William Henry	Unknown	SJ0013382405
271431	Sir Peregrine	Unknown	SJ0027281756
271527	Raven	Unknown	SJ0052981907
271558	Saint Olaf	Unknown	SJ0246882901
506949	Unnamed Wreck	Unknown	SH9959780738
515475	Armstrong Whitworth Whitley V Bd204	Unknown	SJ0078282558
515607	Boulton Paul Defiant I N1770	Unknown	SJ0059582522

524837	Albion	Unknown	SJ0003981533
524863	Good Intent	Unknown	SH9995181851
525214	Sarah	Unknown	SJ0054681805
525228	Mayflower	Unknown	SJ0089282244

- 6.5. The proposals are unlikely to have any long-term visual impacts on listed buildings within the town, or the two Conservation areas, although short-term, temporary impacts could arise, depending on the location of site compounds or other infrastructure during the construction period.

7 Further Stages of Assessment

- 7.1. The results from archaeological mitigation associated with a programme of coastal defence works at Borth, Ceredigion (Meek 2012), provide a useful strategy in relation to potential further stages of assessment at Rhyl.
- 7.2. The conclusions from the work at Borth were that 'the method of construction for the coastal defence structures was not one that was ideal for archaeological recording. The excavation of the footings of the structures was undertaken using a number of large machines to enable rapid excavation and laying of foundations between the receding and incoming tides. This window of opportunity was smaller depending on the height of the tides and reduced the further to the west the works were undertaken. The excavated areas were also often unstable and filled with water.' The situation at Rhyl is likely to be very similar.
- 7.3. Following on from the work at Borth discussions were held with the Archaeological Coastal Forum Group, which included representation from Cadw, the National Trust, RCAHMS, the four Welsh Archaeological Trusts and UWTSO, which resulted in suggestions as to how archaeological mitigation might be implemented on similar intertidal developments on areas of peat beds and submerged forests in the future. It was recognised, however, that in some cases this methodology for mitigation may not be possible.
- The presence of peat beds and submerged forests should be identified at the outset of the project;
 - Coastal monitoring should be undertaken over a period of at least 6 months to observe and define possible extents of peat beds and submerged forests, with the results feeding in to the design of the development or coastal defences scheme;
 - In all cases where intertidal development is proposed, it is recommended that some form of detailed geophysical survey of the sea bed is carried out at the early design stage of identify wreck sites or the presence of fish traps.
 - Where possible, structures to be constructed on the foreshore should be designed to avoid impacting upon these deposits, or minimising any impacts;
 - Prior to the commencement of development a scheme of archaeological evaluation of the deposits should be undertaken. This could include observation of the

exposed surfaces of any peat beds and initial assessment of tree stumps (identification of species and assessment for suitability for dendrochronology dating). A number of test pits should be excavated through the peats, where they will be impacted upon, to obtain palaeoenvironmental evidence for assessment. Radiocarbon dates should be obtained at this stage;

- Should significant remains be identified, such as artefacts or footprints, a scheme of detailed recording should then be implemented. This would include further palaeoenvironmental sampling. Alternatively this information may indicate that redesign of the proposals would be appropriate;
- If few or no significant remains are identified then a scheme of intermittent watching brief may be appropriate;
- Full assessment of the palaeoenvironmental and dendrochronology samples should then be undertaken, preferably before or during the construction phase in order that if highly significant information is revealed, further sampling can be undertaken; and
- Full reporting and archiving of all results.

7.4. A programme of further assessment should be considered as part of an Environmental Impact Assessment, to assist with developing the design and construction programme for the new coastal flood defences, the results from which should also be incorporated into an Environmental Statement.

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1871 Ordnance Survey 1st edition 25" map, Flintshire 1.10
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9 Archive deposition Statement

- 9.1. The project archive has been prepared according to the CPAT Archive Policy and in line with the ClfA *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives guidance* (2014). The archive is entirely digital and will be deposited jointly with the Historic Environment Record, Clwyd-Powys Archaeological Trust and the National Monuments Record (RCAHMW).

Appendix 1: Gazetteer of Heritage Assets

Designated Assets

Listed Buildings

1510 Lookout Tower in Boundary Wall at Nos 39 and 40 East Parade: Grade II

Said to have been built by Mr John Tarleton as a semaphore signalling station for the paddle steamers which operated between the Foryd Harbour, Rhyl and Liverpool. Probably built some time after 1831. Circular two-storey tower, of rubble construction with freestone dressings, corbelled and crenellated parapet.

1521 Sussex Street Baptist Church

Built 1862-3; with F D Johnson of Birmingham as architect, and James Taylor Jnr of Rhyl, the builder. Foundation stone laid July 1862 and chapel opened 1863. Major renovation in 1917, and another in 1951-63, especially to the front. The English Baptist Church was founded by a number of local Baptists together with some industrialists from Cheshire and Lancashire who came to Rhyl each summer, and originally the church was only opened in the summer months.

14136 No 4 The Gables, Bath Street (East side): Grade II

Built in 1893, to the designs of Henry Beswick, architect, of Chester. Used as holiday or long-let flats since c1924. Brick with terracotta and painted brick dressings and hipped slate roof with axial and end wall stacks. Arts and Crafts style.

14137 Boundary Wall and Gate Piers at No 4 The Gables, Bath Street: Grade II

Low brick and terracotta wall, with pairs of gate-piers to either end, built 1893, and probably also designed by the architect of the house, Henry Beswick of Chester.

14273 Marine Villa, Crescent Road (E Side)

Built as a private house and now used as offices. The Crescent Road area was laid out for development upon the enclosure of Rhyl Marsh between 1831-1836, and a map of 1842 shows the plots marked out but still unbuilt. Marine Villa is clearly shown on a map of 1852. The roof and chimneys may date from a later 19th-century remodelling.

14276 War Memorial, East Parade (North side): Grade II

Originally erected to commemorate those who died in the Boer War, and unveiled in 1904, its original site was further west on the promenade near High Street. It was moved to its present site and the Garden of Remembrance opened in 1948. White ashlar. Two short cenotaph pylons flank a high central plinth on which stands the statue of a uniformed soldier.

14279 Crescent Public House, Edward Henry Street (NE Side)

A building on this site was sketched in on a map of 1852, but does not seem to have been built until c1861-1871. Initially it seems to have comprised a pair of houses, with the corner building used as a public house from the outset, but the two properties were probably combined in the later 19th century. Present public house frontage to ground floor may date from c1880.

14280 No 21 Grafton Lodge, Fairfield Avenue (East side): Grade II

Probably c1820-30, one of the earliest private villas to be built after the sale of land for building by the Rhuddlan Marsh Embankment Trust between 1807 and 1827. A house on the site is

clearly shown on a map of 1852, and in a lithograph of c1855-7. The original house was extended and remodelled in the mid-late 19th century, and may have been subdivided laterally at some time (it is shown divided in this way in the Ordnance Survey map of 1871). Some alterations were made in 1885, when Fairfield Avenue was laid out. The rear wings now form a separate dwelling.

14281 No 23 Grafton Lodge, Fairfield Avenue (East side): Grade II

Probably c1820-30, one of the earliest private villas to be built after the sale of land for building by the Rhuddlan Marsh Embankment Trust between 1807 and 1827. A house on the site is clearly shown on a map of 1852, and in a lithograph of c1855-7. The original house was extended and remodelled in the mid-late 19th century, and may have been subdivided laterally at some time (it is shown divided in this way in the Ordnance Survey map of 1871). Some alterations were made in 1885, when Fairfield Avenue was laid out. The rear wings now form a separate dwelling.

14290 The Royal Alexandra Hospital: Grade II

The Royal Alexandra Hospital was built as a children's hospital and convalescent home, designed by Alfred Waterhouse, architect of Manchester, and probably finished by his son, Paul Waterhouse. The west wing and central block are dated 1899 and 1900, and opened in 1902 - these are the work of Alfred Waterhouse. The east wing was completed 1908-10, and is possibly by Paul Waterhouse. The hospital's siting on the sea-front and its plan - notable for the integral open balconies and verandahs of the west wing - reflected the importance then attached to fresh-air treatment. The chapel had originally been built for an earlier hospital building on another site in c1874 but was incorporated in Waterhouse's plans from the outset. It was designed by John Douglas, architect of Chester.

14297-8 Nos 40-42 and No 44-46 Queen Street (W Side)

Built as a pair of houses c1850 as part of the early development of Rhyl as a new town, and adapted for use as shops in the latter C19 (c1870-80). The building is a good surviving example of the style characteristic of Rhyl's urban development, and includes a good late 19th-century shop front and interior.

14320-1 Nos 42 and 44 Water Street (W Side)

An excellent well-detailed example of the buildings which once typified Rhyl's early development as a resort.

14325-6 Nos 47 and 49 Water Street (E Side)

Built as a pair of houses forming part of a longer terrace, probably between 1836 and c1850. A typical pair of houses from the first major phase of Rhyl's urban expansion, which survives almost intact.

14327-32 Nos 46, 48, 50, 52, 54 and 56 Water Street (W Side)

Dated 1903, and purpose-built as a terrace of shops with accommodation above and to the rear, to designs of T Lockwood of Chester.

14333-7 Nos 71-75, West Parade (S Side)

Built in stages to form a terrace of purpose-designed boarding houses, and dated 1889. The terrace is of exceptional interest as a purpose-built boarding house development which retains

almost all its original detail. The best example of its type in Rhyl, it shows the characteristic multi-storeyed form with prominent bay windows, which served as a model for the sea-side boarding house in the later 19th century.

Aircraft Crash Sites

NPRN 515607 Boulton Paul Defiant I N1770, Crash Site

This Defiant was built by Boulton Paul, Wolverhampton, and, at time of loss, was assigned to 256 Squadron. The aircraft's engine cut out and it crash landed on the beach at Rhyl on 31 August 1941.

NPRN 515475 Armstrong Whitworth Whitley V BD204, Crash Site

This Whitley V was built by AWA, Baginton, and was assigned to 24 OTU. On 17 May 1943, the aircraft's engine cut out and it belly-landed on mudflats at Rhyl.

Undesignated Assets

Ship Wrecks

NPRN 442 City of Ottawa

The City of Ottawa was built as a three-masted vessel with square rigging in 1860 by built by Jean Elie Gingras. The ship was by named the City of Ottawa to celebrate Queen Victoria's choice of a new Canadian capital just three years earlier. The City of Ottawa traded to various English ports and Australia, Asia, South America, the United States of America and Canada. The ship was brought to Rhyl in 1906 after being damaged in a storm and was soon afterwards was abandoned as beyond economic repair. In January 2007, Denbighshire Council began a major regeneration programme for the waterfront at Rhyl including a new road constructed from in front of the May Quay public house to the former timber yard, repairs to the timber yard quay wall, the creation of a secure boat storage area with wash-down facilities and a new cycle route link. In May 2007, the Council requested the removal of four sunken vessels to facilitate dredging and the development of the marina. Subsequently an initiative has been launched to recover part of the vessel, possibly consisting of up to 200 tons of timber, for a display in the Quebec City Hall. In November 2007, Denbighshire Council began a feasibility study to assess the desirability of preserve all or part of the wreck.

NPRN 271374 William Henry

The William Henry was a 77nt wooden Mersey flat (or jigger) built in 1869. At time of loss on 21 October 1895, the vessel was owned by P Speakman of Runcorn. The flat was carrying limestone from Llandulas to Widnes under the command of T Hoxworth when it was caught in a northerly force 7. Unable to claw off the land, the flat was wrecked off Rhyl with the loss of three crewmembers.

NPRN 271431 Sir Peregrine

The Sir Peregrine was a wooden schooner registered at Liverpool. At time of loss 5 January 1843, the vessel was under the command of master O'Connell. The vessel went ashore on Rhyl beach.

NPRN 271527 Raven

The Raven was a 56ft wooden sloop built in 1837. At time of loss 8 November 1878, the vessel was owned by H Kneeshaw of Liverpool. The vessel was caught by a north-northeasterly force 6 and went ashore near Rhyl.

NPRN 271558 St Olaf, Wreck Site

The Saint Olaf was a 128ft wooden brig built in 1852 and registered in Norway. At time of loss on 14 May 1884, the vessel was owned by A Hansen of Mandal. The brig was carrying pit wood from Mandal to Connah's Quay when it was blown ashore during a north-westerly force 6 gale.

NPRN 506949 Unnamed Wreck

The wreck is reported to lie with its keel orientated 030/210 degrees and has a length of 44m. The tops of the timbers are just visible above the sand/mud. The wreck was identified on aerial photographs taken in July 1987.

NPRN 524837 Albion

The Albion was a wooden smack built at Aberystwyth in 1831. Technical and configuration specifications are given as 40 8/94 tons; 41.9ft length x 13.9ft breadth x 7.9ft depth in hold; 1 deck, 1 mast, smack rigged with a running bowsprit, square sterned, carvel built. The smack's subscribing owners for the Port of Aberystwyth Shipping Register included Foulk Evans (24 shares) and John Evans (20 shares), shipbuilders; Thomas Evans, master mariner (16 shares); and Ann, wife of Lewis Evans, joiner (4 shares) - all of Aberystwyth. On the death of Foulk Evans in 1839, some of his shares passed to existing partners. However, 4 shares were placed into trust overseen by Thomas Jones the younger, merchant of Aberystwyth, and Evan Morgan, school master of Aberystwyth, for the benefit of the children Edward and Maria Evans. The smack's register entry is closed with annotation 'The above vessel was wrecked near Rhyl, North Wales, on 28 October 1843, and totally lost'.

NPRN 524863 Good Intent

The Good Intent was a wooden square-rigged ship (brig?) built at Appledore in 1818. Technical and configuration specifications are given as 47.1ft length x 15ft breadth x 8.7ft depth in hold; 1 deck, 2 masts, Square rigged with a standing bowsprit, square sterned, carvel built, frame and plank wood; official number 1717. At time of loss, the vessel was owned by Owen Parry of Felinhele, master mariner (48 shares); John Bowen of Llanelli, grocer (4 shares); David Williams of Llanelli, shopkeeper (8 shares); and George Llewellyn of Llanelli, master mariner (4 shares). The vessel's port of Caernarfon Shipping Register entry is closed with the annotation 'The vessel was lost near Rhyl, North Wales, on the 21 June 1869'.

NPRN 525214 Sarah

The Sarah was a Mersey flat built at Runcorn in 1823. Technical and configuration specifications are given as 52.42gt; 61.3ft length x 14.8ft breadth x 6.3ft depth in hold; 1 deck,

1 mast; rigging flat; stern square; build carvel; framework wood; official number 1561. At time of loss, the vessel was owned by Robert Owen of Caernarvon, coal merchant. The flat's port of Caernarvon Shipping Register entry is closed with the annotation 'Vessel wrecked on Rhyl beach 17 October 1879'.

NPRN 525228 Mayflower, Wreck Site

The Mayflower was a wooden sloop built in 1784 at Cardigan. Technical and configuration specifications are given as 22 tons burthen; 37ft 2in length x 12ft 6in breadth x 6ft 3in depth in hold; 1 deck, 1 mast, sloop rigged with a standing bowsprit, square sterned, carvel built. At time of loss, the vessel was owned by John Evans of Beaumaris, mariner (28); Charles Evans of Beaumaris, marine (20); Owen Richard of Beaumaris, blacksmith (12); and Jane Hughes of Bangor, spinster (4). The sloop's Port of Beaumaris Shipping Register entry is closed with the annotation 'Wrecked off Rhyl 13 September 1837'.

Undesignated Assets

PRN 17103 Rhyl foreshore submerged landscape

Peat and boulder clay along Rhyl foreshore from which Neolithic and Bronze Age finds have been recovered. New borings indicate the presence of a lower peat which may indicate a former coastline some 100-400m south of the present coast. Upper peat may be dated by analogy to c.4000-3000 BC (late Mesolithic/Early Neolithic).

PRN 34208 Rhyl Pier

The pier was built in 1867 to a design by James Brunlees. It was 2355 feet in length (705 yards) and stood 11 feet above high water level on cast iron screw piles. The Gaiety Theatre, or Amphitheatre, (NPRN 23440) stood at the landward end and it initially included a pier railway. Steamer excursions ran to other resorts and to Liverpool with Admiralty Sailing Directions dating to 1870 noting 'at the head there is a depth of 16ft at springs and 10 at neaps; and a white light is shown from it about half flood to half ebb'. The Bijou pavilion was opened in 1891 with variety artists providing the entertainment. Other attractions included restaurants, tea-rooms, a band-stand, shops and private baths. In 1901, a fire destroyed the pavilion and part of the structure was closed. A succession of storms in 1909 caused the collapse of a section of the pier. By 1913, the pier had become unsafe and was closed. It remained derelict until Rhyl Council acquired it in the 1920s. The seaward end was demolished, but the shoreward end was developed including the building of an amphitheatre. The pier re-opened from 1930 to 1966 when it was again closed on safety grounds. By then, the pier measured just 330 feet. Demolition began in March 1973

PRN 34292 Foryd Shipyard

No further details.

PRN 37700 Rhyl, Volunteers' rifle range

Local volunteer force rifle range recorded on the OS 1st edition 25" 1871, but not on the 2nd edition 25" map of 1899.

PRN 83516 Foryd landing stage east II

Landing stage depicted on OS 2nd edition 25 inch 1899.

PRN 83523 *Foryd landing stage*

Landing stage depicted on OS 2nd edition 25 inch 1899.

PRN 106402 *Rhyl foreshore causeway*

Stretch of stones visible at low tide, possibly a causeway measuring 5-8m wide. Composed of angular stones. Around 15m in length was visible, before disappearing into the rising beach.

PRN 120705 *Rhyl, High Street, Royal Hotel*

Rhyl's first hotel, completed c.1825, later known as 'Fieldings'

PRN 120706 *Esplanade/Church Street, Belvoir Hotel*

Hotel, built sometime before 1840.

PRN 120707 *Rhyl, West Parade 18*

A lodging house where the American writer Nathaniel Hawthorne stayed while on holiday with his family in 1854.

PRN 120709 *Rhyl, Bath Street 5-9, Morfa Hall*

Three storey, yellow brick building with a conical tower. Built as a private house, then became the Parade and Pier Hotel, later a women's convalescent home.

PRN 123322 *Rhyl foreshore (Splash Point) structures*

A series of wooden posts set in roughly parallel short trenches filled with stone. At least three trenches set roughly at right angles about a common axis. Large wooden posts set roughly axially may be the remains older groynes and unrelated to the trenches. Apparently dug through peat deposits exposed on Rhyl beach at Splash Point. Possibly part of fish traps or some sort of redundant sea defence. However, note presence of antler mattock, stone axes, a stone macehead and other prehistoric finds from Splash Point and presence of apparent stone causeway nearby.

PRN 124733 *Rhyl, Abbey Street (nos. 11-33)*

Terrace of original seaside town houses constructed between 1877 and 1899, subject of photographic survey in 2014 prior to demolition and redevelopment.

PRN 129248 *Rhyl, Wellington Road, Ocean Beach Site*

Amusement Park. Photographic survey undertaken in 2007 ahead of development.

PRN 14079 *Rhyl Prisoner of War camp*

German prisoners of war were recorded at Rhyl, and were possibly accommodated in a camp there, in the years after the Second World War.

NPRN 8133 *Crescent Road Plymouth Brethren Meeting House*

Crescent Road Plymouth Brethren Meeting House was built before 1877 and demolished by 1993.

NPRN 23440 *Gaiety Theatre; The Amphitheatre, Rhyl Promenade Pier*

The Gaiety Theatre, or Amphitheatre, stood at the landward end of Rhyl Promenade Pier (NPRN 34232), which was demolished in 1972

NPRN 35826 Foryd Hall

No further details.

NPRN 84920 Foryd Hall, Garden, Rhyl

This garden is depicted on the Second Edition Ordnance Survey 25-inch map.

NPRN 408337 The Grange Hotel, 41-42 East Parade.

The Grange Hotel was originally built as a pair of private villas known as Morannedd and Boddonnan. No. 42 (Boddonnan), to the east, is dated 1855, but the buildings are shown on a map of 1852 and it seems likely that they date from c1840-50 with some later remodelling. Both are shown on a lithograph of c1855-57. No. 41 was in use as a private school for some time before becoming a hotel. They are both good examples of the type of large private villa which characterised development on the east side of Rhyl in the mid 19th century, using a distinctive architectural vocabulary and exploiting the seaside location in the orientation of the plan.

NPRN 409676 Royal Floral Hall

The Royal Floral Hall, Rhyl, was situated on the eastern promenade opposite Bath Street. It opened in 1959 as a council-owned attraction and became one of the resort's most popular features. It later passed into the hands of a private company and became 'Butterfly Jungle'. The building was demolished in the early 1990s.

NPRN 411715 Rhyl Library, Museum And Arts Centre, Church Street

Rhyl Library, Museum and Arts Centre is a modern complex. It houses a small museum illustrating the social and maritime history of the former fishing village and its development as a major holiday resort. There are models of local ships, the lifeboat 'Caroline Richardson' and a photographic collection.

NPRN 412353 Queen's Palace

Queen's Palace, Rhyl, was built 1901-02 as an entertainment complex with theatre and ballroom. A fire in 1907 destroyed most the building, including the glass-domed roof gardens.

NPRN 413371 Royal Hotel, Sussex Street, High Street

Built in the early nineteenth century, the Royal Hotel reflects the emergence of Rhyl as a seaside resort. It was the headquarters of Rhyl Cycling Club (founded 1878). It was also the headquarters of the Rhyl branch of the Cyclists Touring Club.

NPRN 414696 Open-Air Swimming Baths, East Parade

The Open Air Swimming Baths were opened shortly before 1930, the pool was around 100m long and 21m wide with a large area for spectators.

NPRN 416914 Queen's Theatre (Cinema)

No further details.

NPRN 416915 Palladium (Cinema)

No further details.

NPRN 417071 West Parade, Nos 21-24, Crescent Road, Nos 2 & 4

Believed to have been built in the 1840's or 1850's, a large three-storey terraced building. It has a horseshoe layout around an inner courtyard occupied by a single storey infill.

NPRN 544025 Rhyl Lifeboat Station

OS 2nd edition mapping shows a small rectangular building on the beach with the annotation 'Lifeboat Station'. Modern aerial photography shows that lifeboat station has been formalised into the promenade and extended with a small slipway.

Find Spots***PRN 17613 Rhyl Roman Coin***

Single copper alloy Gaian As. Find spot unknown.

PRN 33099 Rhyl foreshore (Splash Point) antler mattock

Perforated Mesolithic antler mattock found near Splash Point, Rhyl.

PRN 58795 Rhyl foreshore Post Medieval finds

Various post medieval objects of bronze found on submerged land surface in this area in the early 20th century.

PRN 58796 Rhyl foreshore macehead

Pebble macehead found on submerged land surface in this area in the early 20th century.

100565 Rhyl Marine Lake Roman Coins

Late 1st- and 4th-century coins found near Marine Lake in 1934.

PRN 101903 Rhyl foreshore bronze spearhead

Bronze socketed spearhead 4.4 inches long found on the Rhyl beach. Now lost.

PRN 101936 Rhyl foreshore Neolithic axes

Various Neolithic objects found on submerged land surface in this area in the early 20th century including three Graig Lwyd axes (in the NMW) and two polished stone axes.

PRN 101937 Rhyl foreshore bronze chisel

Bronze chisel found in 1913 on a peat bed. The blade is 2.5 inches long and 1.25 inches wide and is housed at the National Museum of Wales.

102176 Rhyl foreshore Roman coin

A third brass of Licinius (AD 307-24) found 1937 on the beach.

106441 Rhyl, West Promenade Roman Coin

Bronze Roman coin located by metal detector.

PRN 120560 Rhyl, Axehead

Axehead of a dark grey, fine-grained stone, very hard and heavy. Stone slightly mottled, with inclusions, some of which have been leached out. Signs of wear/abrasions, perhaps from being moved around on the beach by the sea.

PRN 141424 Rhyl, wood and metal object

An unidentified object of possible modern date. The object consists of a curved sub-oval piece of wood, one edge of which has been covered in copper alloy. The wood is cracked and frayed due to drying out and the copper alloy encrusted and corroded. Seven circular rivets attach the copper alloy to the wood. Possibly nautical, though its size suggests perhaps from a smaller vessel rather than ship. Possibly the copper/bronze tipping of an oar blade, a fitting off a cutter or lifeboat? Although found within a blue clay layer the rivets suggest a more modern date.

APPENDIX 2: DMRB Assessment Criteria

Table 1: Definition of Value of Heritage Assets

Very High	World Heritage Sites (including those nominated) Assets of acknowledged international importance • Assets that can contribute significantly to acknowledged international research objectives.
High	Scheduled Ancient Monuments (including those proposed) Undesignated monuments which could potentially be worthy of scheduling Listed Buildings – Grade I, II* and II Registered Historic Landscapes, Parks and Gardens • Undesignated assets that can contribute significantly to acknowledged national research objectives.
Medium	Conservation Areas • Undesignated assets that contribute to regional research objectives.
Low	Undesignated assets of local importance Assets compromised by poor preservation and/or poor survival of contextual associations • Assets of limited value, but with the potential to contribute to local research objectives.
Negligible	• Assets with very little or no surviving cultural heritage interest.
Unknown	• Importance of the asset not ascertained.

The assessment of the magnitude of effect considers the extent to which a heritage asset may be changed or affected by the proposed development through the introduction of new structures or the infrastructure. The thresholds for assessing magnitude of effect are set out in Table 2 which is derived from the DMRB Volume 11 Section 3 Part 2, Annex 5/13, 2007, although in a slightly form for each cultural heritage sub-topic (archaeology, buildings, etc) has its own set of determining factors, which are set out in detail in the DMRB.

Table 2: Definition of Magnitude of Effect

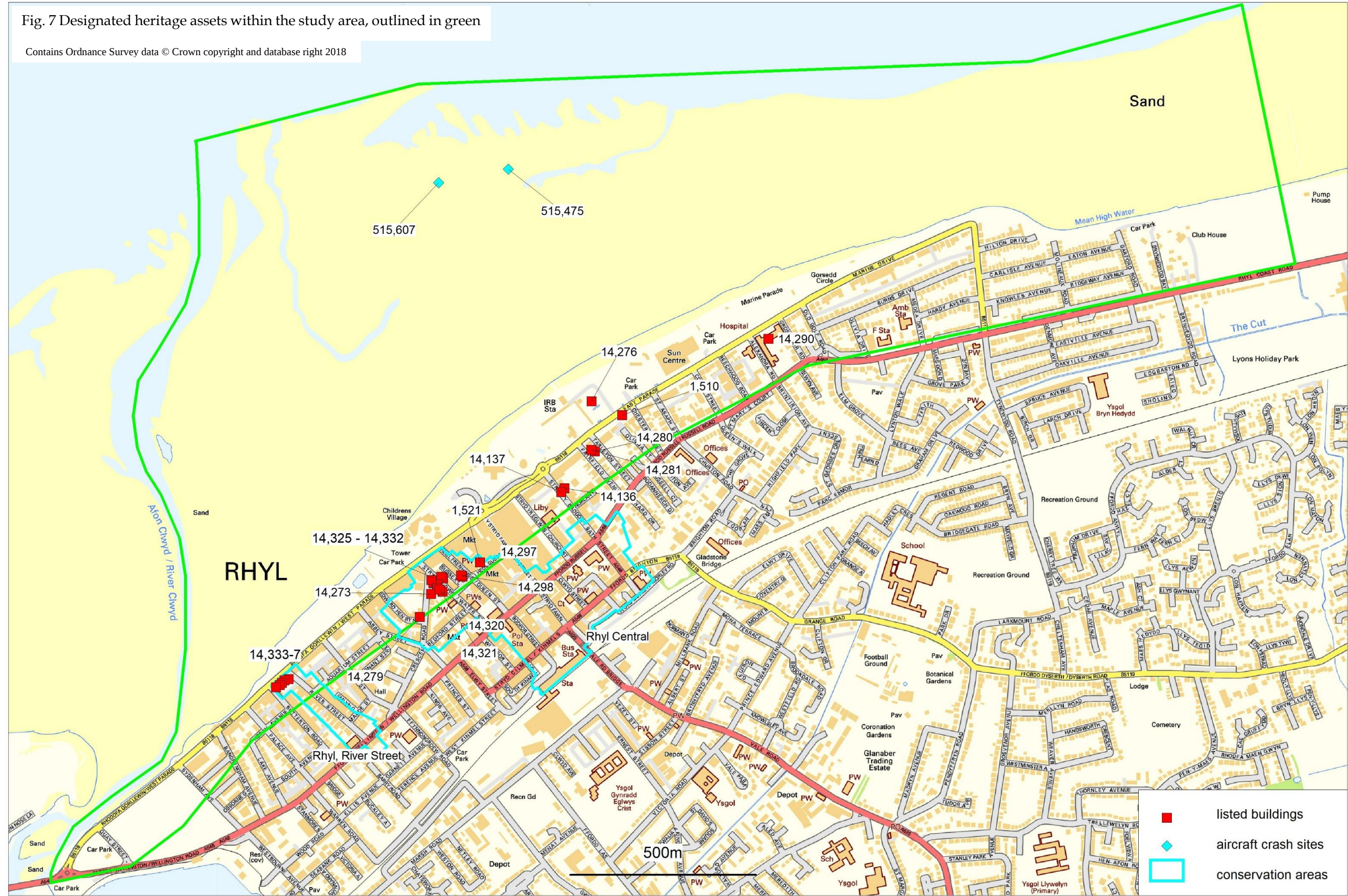
Major	• Changes to most or all of the key cultural heritage elements such that the assets Comprehensive changes to setting • Extreme visual effects
Moderate	Changes to many key cultural heritage elements such that the asset is clearly modified Considerable changes to setting which affect the character of the asset • Visual changes to many key elements
Minor	Changes to key cultural heritage elements such that the asset is slightly altered or different Sight changes to setting • Slight visual changes to a few key elements
Negligible	Very minor changes to cultural heritage elements, or setting • Virtually unchanged visual effects
No Change	• No change

A part of the EIA process is to extrapolate the degree of significance from the predictions of impact. No formal guidance from Welsh government currently exists for the assessment of significance of effects on heritage assets, but the DMRB does provide an alternative. The severity of the effect on heritage assets depends on both the magnitude of effect and the value or importance of the asset, as exemplified in the two tables above. Table 3 illustrates how information on the value of the asset and the magnitude of effect can be combined to arrive at an assessment of the significance of effect. This process ensures consistency in assessing the significance of effect, and serves as a check to ensure that judgements regarding value, magnitude and significance of effect are balanced. While the correlation of these two sets of criteria is a mechanical process, professional judgement provides the reasoned explanation of the rationale behind the conclusions that are drawn. For example, a highly valued heritage asset may require only a limited amount of change to result in an effect that is assessed as moderate or major, whereas a greater magnitude of change is likely to be required to result in equivalent effects on a less sensitive asset.

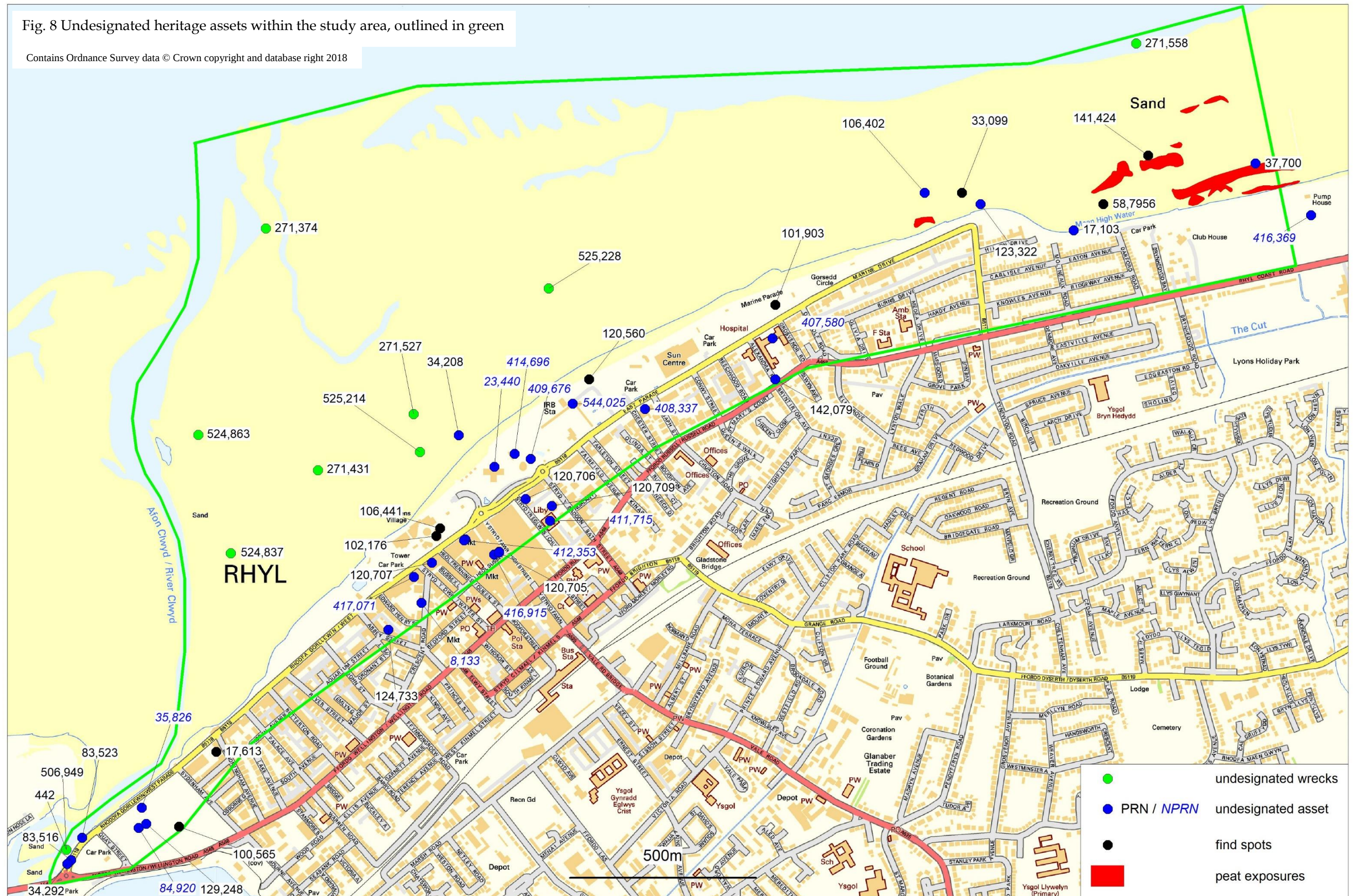
Table 3: Matrix for assessing significance of direct and indirect impacts on heritage assets

Magnitude of Effect	Value of Heritage Asset				
	Very High	High	Medium	Low	Negligible
Major	Very Large	Large/ Very Large	Moderate/ Large	Slight/ Moderate	Slight
Moderate	Large or Very Large	Moderate/ Large	Moderate	Slight	Neutral/ Slight
Minor	Moderate/ Large	Moderate/ Slight	Slight	Neutral/ Slight	Neutral
Negligible	Slight	Slight	Neutral/ Slight	Neutral/ Slight	Neutral
No change	Neutral	Neutral	Neutral	Neutral	Neutral

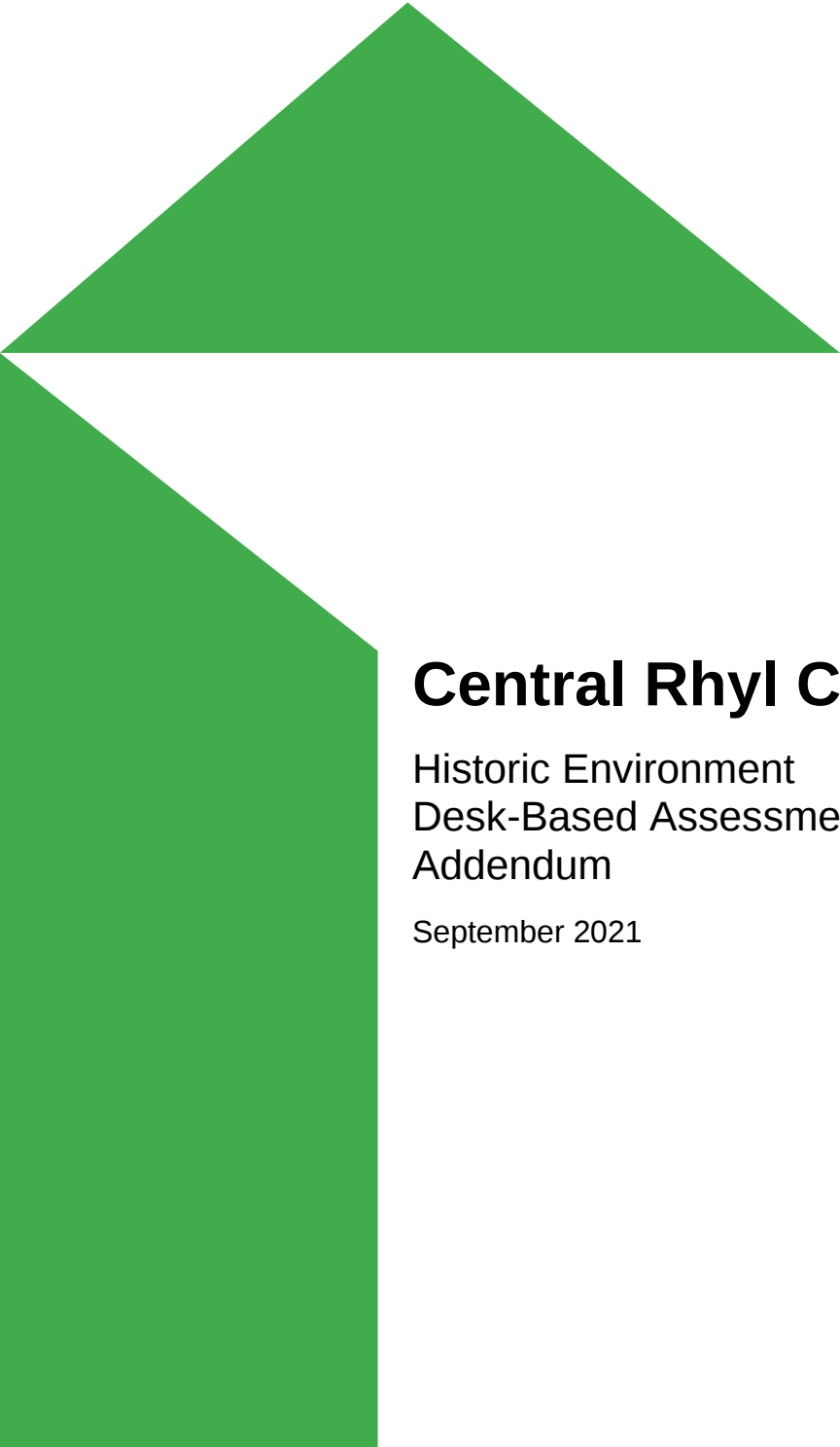
In the context of the EIA Regulations an impact judged to be moderate or greater is deemed to be 'significant'. Any effect which is considered significant under the EIA Regulations is flagged as such in the text of the main report.



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Appendix 7.2 – Central Rhyl Coastal Flood Defences, Desk-based Assessment Addendum



Central Rhyl Coastal Defences

Historic Environment
Desk-Based Assessment
Addendum

September 2021

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Central Rhyl Coastal Defences

Historic Environment
Desk-Based Assessment
Addendum

September 2021

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Executive summary

A Desk-Based Assessment (DBA) Addendum has been prepared by Mott MacDonald Ltd, on behalf of Balfour Beatty Civil Engineering Limited (BB), in advance of a coastal defence scheme at Rhyl and ecological mitigation area at Barkby Beach, Prestatyn. This document forms an addendum to a DBA produced by Clwyd-Powys Archaeological Trust (CPAT) in 2018, as part of an Outline Business Case (OBC) for the proposed Scheme. Following the production of an Environmental Impact Assessment (EIA) Screening and Scoping report in early 2021, Cadw requested that a number of listed buildings were scoped in for potential impacts. CPAT requested that the 2018 DBA was updated, as well as a walkover survey to identify potential archaeological remains. The aim of the DBA addendum was to fulfil the requests from Cadw and CPAT by:

- providing an update to the existing DBA;
- assess the likely impacts that the Scheme might have on heritage assets identified during the EIA Screening and Scoping consultation and during the development of the EIA ; and
- provide recommendations for further assessment, if appropriate, to mitigate the damage or total loss of potential heritage assets.

Rhyl is a Victorian coastal resort and the largest town in Denbighshire, with a well-established history as a tourist destination. Historically, Central Rhyl has been protected from coastal flooding by hard engineered defence structures constructed from at least the 1900s. These comprise a series of stepped revetments, recurve walls and vertical walls in various states of repair. The existing defences no longer meet acceptable performance standards and are known to be deteriorating.

The Scheme, located in the central area of Rhyl waterfront, Denbighshire, North Wales, comprises coastal defence works in the form of scour protection, stepped concrete revetment, promenade raising, sea wall works, access and promenade improvements, and associated tie-in works. This Scheme aims to improve the existing coastal defences and provide increased flood and erosion protection to people and property in Rhyl.

This addendum focuses on the evidence for submerged prehistoric land surfaces, highlighted initially in the existing DBA. Subsequent work since its production has revealed further evidence for these deposits within the East Rhyl Coastal Defence Scheme (ERCDS). The potential for prehistoric land surfaces as well as post-medieval remains within the Scheme area is high. It has been concluded that there is low potential for archaeological remains from the Roman and medieval periods at Rhyl. There is little potential for archaeological remains at Barkby Beach.

Impacts to potential archaeological remains from the proposed Scheme would be a result of the construction of rock armour toe concrete revetted steps along the base of the existing sea defences. There may also be impacts on shallow intertidal deposits and exposed archaeological remains, from movement of construction vehicles and rock storage areas along the foreshore.

This addendum also assesses the potential impacts on designated built heritage close to the Scheme, as identified in consultation with Cadw. A temporary construction impact has been identified on the Grade II Listed War Memorial, located along the promenade at Rhyl. Temporary construction impacts have also been identified on the Grade II listed buildings along Water Street. However, following completion of the Scheme no operational impacts are anticipated.

1 Introduction

1.1 Project background

1.1.1 Overview

The Central Rhyl Coastal Defences Scheme (herein referred to as 'the Scheme') is a design and build scheme being delivered by Balfour Beatty Civil Engineering Limited (BB) for Denbighshire County Council (DCC). Mott MacDonald Ltd (Mott MacDonald) has been commissioned by BB to support with the development and delivery of the Scheme.

The Scheme, located in the central area of Rhyl waterfront, Denbighshire, North Wales, is dependent on obtaining sufficient funding and comprises coastal defence works in the form of scour protection, stepped concrete revetment, promenade raising, sea wall works, access and promenade improvements, and associated tie-in works.

Rhyl is a Victorian coastal resort and the largest town in Denbighshire, with a well-established history as a tourist destination. There are ongoing and future plans to regenerate Rhyl to enhance its appeal to tourists and investors; however, the coastal defences for the Central Rhyl frontage are deteriorating and there is the risk that this integral asset for Rhyl's regeneration could be lost without intervention.

Historically, Central Rhyl has been protected from coastal flooding by hard engineered defence structures constructed from at least the 1900s. These comprise a series of stepped revetments, recurve walls and vertical walls in various states of repair. The existing defences no longer meet acceptable performance standards and are known to be deteriorating.

The existing promenade in the area of the Scheme can become inundated during storms, causing flooding of the promenade and surrounding areas. In the future this will be exacerbated by the effects of climate change, which is predicted to increase both the frequency and magnitude of flooding. The existing coastal defences and promenade require improvements to safeguard the area from overtopping with consideration given to the potential effects of climate change.

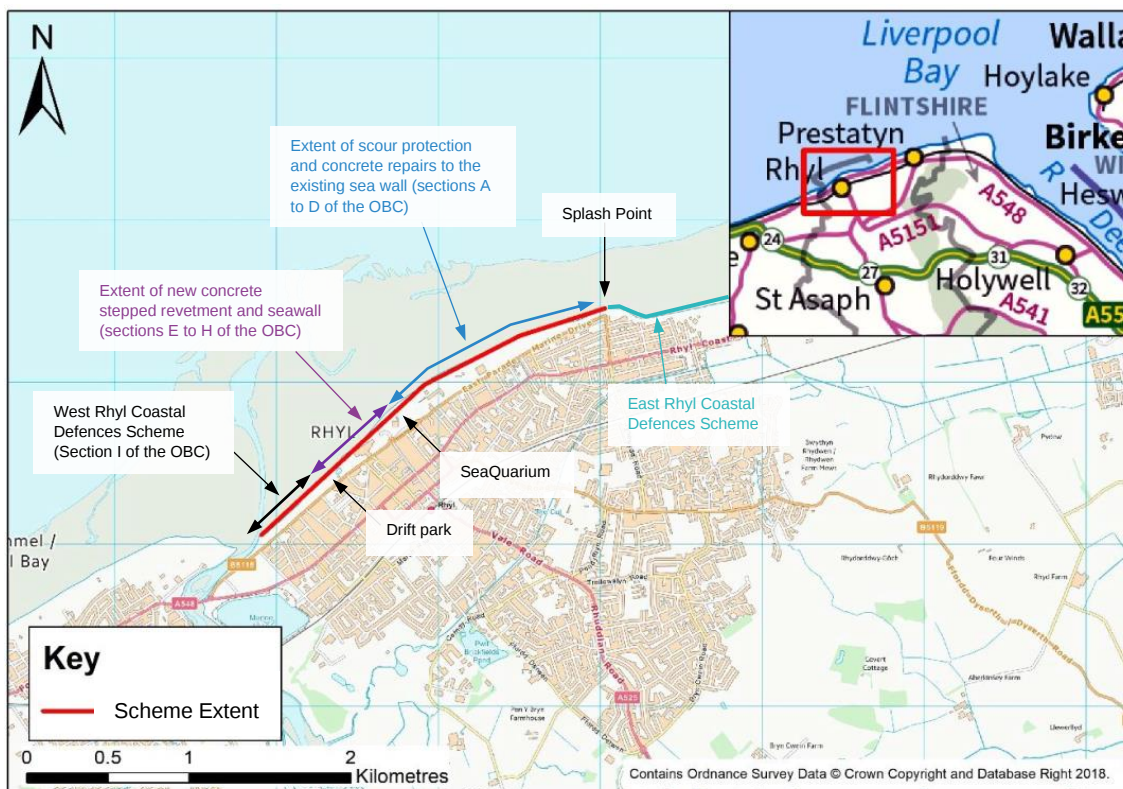
Subject to funding, this Scheme aims to improve the existing coastal defences to provide increased flood and erosion protection to people and property in Rhyl along with supporting local regeneration, achieving wider community benefits alongside flood risk management.

1.1.2 Scheme location

The Scheme is located along the coastal frontage of the town of Rhyl, North Wales. It extends from approximately 400m east of the mouth of the River Clwyd, to just west of Splash Point (and the start of the East Rhyl Coastal Defence Scheme, which was under construction at the time of writing this report). Figure 1.1 presents the approximate extent of the Scheme as outlined by the Central Rhyl Coastal Defences Outline Business Case (herein referred to as the "OBC") (DCC, 2019)¹

¹ Denbighshire County Council, 2019. Central Rhyl Coastal Defence Scheme Outline Business Case.

Figure 1.1: Scheme Location and sections at per the Central Rhyl Coastal Defences Outline Business Case



Source: Central Rhyl Coastal Defence Schemes Outline Business Case, DCC, October 2019. Additional annotations by Mott MacDonald 2021

As shown in Figure 1.1 as part of the OBC, the Scheme was split into nine sections along its length: Sections A – I, with Section A at the eastern end and Section I at the western end.

The western end of the Scheme (i.e. west of Drift park and OBC Section I) is the location of the West Rhyl Coastal Defences Scheme. The West Rhyl Coastal Defences Scheme was constructed in 2015, and no further works are proposed at this location.

1.1.3 Scheme proposals

The Scheme is to include the following key coastal works:

- The construction of approximately 1.45km of scour protection and concrete repairs, from Splash Point to the SeaQuarium (sections A to D of the OBC, see Figure 1-1). The scour protection will consist of boulders being placed at the base of the existing coastal defence structures.
- The construction of approximately 750m of new concrete stepped revetment, from the SeaQuarium to opposite Drift Park (sections E to H of the OBC, see Figure 1-1).
- New pedestrian beach accesses through the proposed revetments to replace the existing ones and extension of existing beach accesses through the rock armour scour protection.
- The extension of outfalls and protection works to existing outfalls that would be covered by the new revetment.

The Scheme also includes the following works to the promenade:

- Raised promenade from the SeaQuarium to opposite Drift Park.
- New seawalls at the back of the promenade from the SeaQuarium to opposite Drift Park.

- New flood gates for access points through the new rear seawalls between the SeaQuarium and opposite Drift Park.
- New retaining structures where appropriate at the back of the promenade between the SeaQuarium and opposite Drift Park, to accommodate level differences between the raised promenade and adjacent land.
- New ramps or steps to provide access to raised promenade between the SeaQuarium and opposite Drift Park.

1.2 Purpose of this report

The purpose of this report is to provide an update to the existing DBA and baseline, as well as report on the walkover survey which was carried out on 24 March 2021. A DBA was produced by Clwyd-Powys Archaeological Trust (CPAT) in 2018², as part of an Outline Business Case (OBC) for the Scheme. This document seeks to fulfil the requests within the EIA Screening and Scoping Report responses (see Section 3.6). This addendum focuses primarily on the known baseline and potential for the survival of former prehistoric land surfaces, which have been documented along the Rhyl foreshore. In addition, a setting assessment is also presented of a number of designated assets which may be affected by the Scheme, as identified within the response to the EIA Screening and Scoping Report³. A brief assessment is also presented on the potential impacts of the ecological mitigation scheme at Barkby Beach.

² Clwyd-Powys Archaeological Trust (CPAT) 2018, *Central Rhyl Coastal Flood Defence Scheme: Desk-based Assessment* CPAT Report No 1621

³ Mott MacDonald 2021, Central Rhyl Coastal Defences: EIA Screening and Scoping Report. CR-MMD-00-00-RP-EN-3005

2 National and Local Planning Policy

2.1 Overarching Legislation

2.1.1 Ancient Monuments and Archaeological Areas Act 1979

This Act relates to the investigation, preservation and recording of matters of archaeological and historic interest.

2.1.2 Planning (Listed Buildings and Conservation Areas) Act 1990

The Act sets out the protection given to buildings of special architectural or historic interest through listing. It also sets out the process for designation of conservation areas, which are recognised as areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.

2.1.3 Protection of Military Remains Act 1986

The Act prohibits entering and tampering with wrecked military vessels or aircraft. All military aircraft is automatically protected under this legislation, but vessels need to be designated individually. The Act enabled the government to establish controlled sites around wrecks in UK water or protected places for those in international water. The legislation is administered by the Ministry of Defence.

The Act makes it an offence to interfere, without a licence, with the wreckage of any crashed, sunken or standard military aircraft or designated vessel, irrespective of loss of life or whether the loss occurred during peacetime or wartime.

It is an offence under this Act to:

- Conduct diving, salvage or excavation operations;
- Tamper with, damage, remove, or unearth any remains; and
- Enter any hatch or opening on protected or controlled sites.

2.1.4 Historic Environment (Wales) Act 2016

The Act amends current UK legislation which provides the framework for the protection and management of the historic environment, namely the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Building and Conservation Areas) Act 1990. The amendments aim to give more effective protection, improve sustainable management, and introduce greater transparency and accountability into decisions taken in respect to the historic environment in Wales. There are also additional provisions relating to historic place names, historic environment records and the Advisory Panel for the historic environment in Wales.

2.2 Planning Policy Wales (Edition 11, Feb 2021)

Planning Policy Wales (PPW) considers the importance of the historic environment in planning and development and sets out the government's policies regarding development that affects the historic environment⁴. It requires that proposals are fully evidenced and assessed to help informed decision making. Chapter 6 outlines these policies.

⁴ Welsh Government 2018, Planning Policy Wales. Available at <https://gov.wales/planning-policy-wales> Accessed 08/06/2021

Paragraph 6.1.9 states that the significance and heritage values of heritage assets (both built and archaeological) must be considered. With relation to archaeological remains, there needs to be sufficient information to allow a full understanding of the impact of any proposals on the significance of the remains (para 6.1.27).

2.3 Local Planning Policy

The Denbighshire Local Development Plan (LDP) was adopted on 4th June 2013 and is scheduled to run until 2021⁵. Archaeology and built heritage is dealt with under the theme “Valuing our Environment”. Policy VOE1 – Key Areas of importance outlines that development proposals should maintain and, where possible, enhance sites of built heritage.

DCC are also in the process of updating their local plan (scheduled to run between 2018 and 2033) and the preferred strategy was published May 2019⁶. One of the objectives for the replacement LDP is to protect, enhance and sustainably develop Denbighshire’s built and historic assets.

⁵ DCC 2013, Denbighshire County Council Local Development Plan 2006-2021. Available at <https://www.denbighshire.gov.uk/en/documents/planning-and-building-regulations/ldp/adopted-ldp/adopted-local-development-plan-2006-2021.pdf> Accessed 08/06/2021

⁶ DCC 2019, Denbighshire Local Development Plan 2018-2033: Draft Preferred Strategy. Available at <https://www.denbighshire.gov.uk/en/documents/planning-and-building-regulations/ldp/replacement-ldp/preferred-strategy-and-pre-deposit-stage/draft-preferred-strategy.pdf>

3 Methodology

3.1 Assessment Methodology

Baseline information has been gathered within a maximum 1km radius of the site (hereby referred to as the 'study area')⁷. This search radius is considered sufficient to produce a comprehensive baseline for the development area and will allow an understanding of the archaeological potential to be established, and for recommendations for heritage mitigation to be made for the proposed development.

The DBA follows the 2020 updated Chartered Institute for Archaeologists' (CIfA) Standard and Guidance for Historic Environment Desk-Based Assessment (DBA)⁸, and Cadw's Conservation Principles for the Sustainable Management of the Historic Environment in Wales⁹. The CIfA guidance outlines the necessity of the DBA to enable appropriate mitigation strategies where necessary, in line with the local and national policies in place. The following actions have been undertaken for this assessment:

- An examination of the local, regional and national planning policies in relation to the historic environment;
- A search of the Cof Cymru – National Historic Assets of Wales for Listed Buildings, Registered Parks and Gardens, Scheduled Monuments, World Heritage Sites, Shipwrecks and Registered Battlefields within the study area;
- A search of the Clywd Powys Archaeological Trust (CPAT) Historic Environment Record (HER) database for archaeological sites, archaeological findspots, locally listed buildings, and archaeological event locations within the study area;
- A search of the Coflein database for archaeological sites, non-designated built heritage and maritime heritage assets
- An examination of the relevant published and unpublished archaeological and historic sources e.g. journals and historic records;
- A search of the Archaeological Data Service (ADS) for the reports of archaeological excavations within the wider area;
- An examination of topographical and geological evidence; and,
- A map regression exercise using historic maps to determine previous land use of the proposed development area.

3.2 Surveys

A site walkover was undertaken along the Rhyl foreshore on 24 March 2021 by a Mott MacDonald Senior Heritage Consultant. The location of the proposed development was viewed during the walkover, in order to understand the ground conditions and record any archaeological features along the foreshore.

⁷ A bespoke buffer was adopted for the heritage desk-based assessment carried out by CPAT (2018). This extended to 1km at its maximum to take in the extent of the intertidal zone to the north and east of the Scheme. The buffer extended to a maximum of 300m to the south to take into account the built heritage.

⁸ CIfA, 2020 Standard and Guidance for Historic Environment Desk-Based Assessment. Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_4.pdf

⁹ Cadw, 2011 Conservation Principles for the Sustainable Management of the Historic Environment in Wales. Available at: https://cadw.gov.wales/sites/default/files/2019-05/Conservation_Principles%20for%20the%20sustainable%20management%20of%20the%20historic%20environment%20of%20Wales.pdf

A walkover was also done of the wider area, in order to understand what the potential impacts were on views and changes to the setting of the assets within the study area.

3.3 Aims and Objectives

The aim of this assessment is to:

- Provide an update to the DBA undertaken by CPAT in 2018¹⁰, taking into account archaeological work carried out since its production;
- Identify the presence or potential for built or buried heritage assets that may be impacted by the proposed development;
- Assess the likely impacts that the proposed development might have on potential heritage assets; and,
- Provide recommendations for further assessment, if appropriate, to mitigate the damage or total loss of potential heritage assets.

3.4 Guidance

The following guidance has been used for this assessment:

- The 2014 Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Historic Environment Desk-Based Assessment (updated 2020)¹¹;
- Cadw, 2011 Conservation Principles for the Sustainable Management of the Historic Environment in Wales¹²;
- Cadw, 2017a Heritage Impact Assessment in Wales¹³;
- Cadw, 2017b Setting of Historic Assets in Wales¹⁴; and
- Planning Policy Wales Technical Advice Note 24: The Historic Environment¹⁵.

3.5 Assumptions and limitations

The assessment is reliant on available data. All designated and non-designated data is up to date as of June 2021.

Information provided by the HER can be limited because it depends on previous opportunities for research, fieldwork and discovery. Where nothing of historic interest is shown in a particular area, this can be down to lack of targeted research or investigation rather than the genuine absence of sub-surface archaeological deposits.

The current understanding of the extent and survival of archaeological remains within the study area is based on data relevant to the assessment which has been selected based on professional judgement. However, the specific nature, extent, date, degree of preservation and significance of known and potential archaeological remains is impossible to predict without invasive investigation. There is the possibility that further or more complex unknown buried archaeology exists on sites.

¹⁰ CPAT, 2018 Central Rhyl Coastal Flood Defence Scheme: Desk-based Assessment CPAT Report No 1621

¹¹ CIfA, 2020 Standard and Guidance for Historic Environment Desk-Based Assessment. Available at:

¹² Cadw 2011

¹³ <https://cadw.gov.wales/sites/default/files/2019-05/20170531Heritage%20Impact%20Assessment%20in%20Wales%2026917%20EN.pdf>

¹⁴ <https://cadw.gov.wales/sites/default/files/2019-05/Setting%20of%20Historic%20Assets%20in%20Wales%20EN.pdf>

¹⁵ <https://gov.wales/sites/default/files/publications/2018-09/tan24-historic-environment.pdf>

Documentary sources are rare before the medieval period, and many historic documents are inherently biased. Older primary sources often fail to accurately locate sites and interpretation can be subjective.

Historic maps provide a glimpse of land-use at a specific moment and served a specific purpose. It is therefore possible that short-term structures or areas of land-use are not shown and therefore not recorded within this assessment.

3.6 Consultation

3.6.1 Archaeology

In 2018, Clwyd-Powys Archaeological Trust (CPAT) produced a DBA as part of an Outline Business Case (OBC) for the Scheme at Central Rhyl. This highlighted the potential for the survival of important geoarchaeological and palaeoenvironmental deposits related to the prehistoric landscape along the Rhyl foreshore. A scoping report was completed in February 2021¹⁶ and archaeology was scoped in as part of this process. Following consultation with the archaeological adviser to DCC, they have advised the following should be completed as part of the cultural heritage assessment:

- The existing 2018 DBA should be updated with any new information from the sources previously examined and any new relevant sources that may be available; and
- A walkover survey of the whole red boundary area (including any intended works compounds, rock storage areas, vehicle tracking zones) should be completed at the optimum time and preferably at a very low tide to identify and map any timber/stone structural features, peat deposits, tree stump remains and potential prehistoric land surfaces that may be present. Identified features of archaeological significance should all preferably be avoided by iterative design.

There has been no consultation undertaken with the archaeological adviser regarding the Barkby Beach ecological mitigation area.

3.6.2 Designated Assets

Cadw were also consulted with regards to the scoping and screening. They identified a number of listed buildings which were considered to be potentially affected by the Scheme. Cadw recommended that an assessment be carried out for the impacts of the Scheme during the construction and operational phases of the works. Cadw supplied a list of designated assets (see Section 4.3) and confirmed that apart from those noted in the consultation response, the views between listed buildings and the works are blocked and no impacts were predicted. There has been no consultation undertaken with Cadw for the Barkby Beach ecological mitigation area.

¹⁶ Mott MacDonald 2021, Central Rhyl Coastal Defences: EIA Screening and Scoping Report. CR-MMD-00-00-RP-EN-3005

4 Baseline

4.1 Overview

The baseline conditions for the Scheme and study area are outlined in the 2018 DBA by CPAT (see ES Volume 2: Appendix 7.1). This section focuses on the archaeology and built heritage highlighted for further assessment following the EIA Screening and Scoping consultation (see Section 3.6). A gazetteer detailing the heritage assets potentially affected by the Scheme, can be found in Appendix A. A plan showing the location of the heritage assets can be found in Appendix B.

4.2 Topography and geology

The Scheme lies along the frontage of a wide coastal plan that extends inland to the lower slopes of the hills of the Clwydian range. Spot levels vary across the Scheme between 6mAOD (west) and 9mAOD (east). Further inland, the levels vary between around 4mAOD and 8mAOD.

The bedrock geology¹⁷ comprises the Kinnerton Sandstone Formation, described as a red-brown to yellow, generally pebble free, fine to medium grained, cross stratified sandstone¹⁸. The superficial deposits comprise Marine Beach Deposits on the beach, with Blown Sand on the onshore sections. Marine Beach Deposits are described as shingle, sand, silt and clay. Blown sand is described as sand transported by the wind.

Geotechnical investigations along the Scheme confirms the general deposit sequence to be:

- Made Ground (0.2m-5.45m thick), along the promenade
- Marine Beach Deposits (0.03-8.80m thick)
- Tidal Flat Deposits (0.44-4.0m thick)
- Glacial Deposits: Granular (0.79m-10.1m thick)
- Glacial Deposits: Cohesive (3.02-18.25m thick)¹⁹

4.3 Designated Assets

Following consultation with Cadw (see Section 3.6.2), it was agreed that only nine listed buildings had the potential to be impacted by the Scheme. These buildings comprised the War Memorial (MM01) and eight buildings on Water Street (MM02-03), all of which are outside the boundaries of the Scheme but within the study area. These buildings are listed below in Table 4.1.

Table 4.1: Listed buildings

MM No	Cadw UID	Name	Designation	Distance from Scheme (m)
MM01	14276	War Memorial	Grade II listed building	8
MM02	14325	No 47, Water Street (E Side), Clwyd	Grade II listed building	78
	14326	No 49, Water Street (E Side), Clwyd	Grade II listed building	72
MM03	14327	No 46, Water Street (W Side), Clwyd	Grade II listed building	90
	14328	No 48, Water Street (W Side), Clwyd	Grade II listed building	83
	14329	No 50, Water Street (W Side), Clwyd	Grade II listed building	83

¹⁷ British Geological Survey 2020, Geology of Britain Viewer. Available at: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

¹⁸ British Geological Survey 2020, BGS Lexicon of Names Rock Units. Available at: <http://www.bgs.ac.uk/lexicon/home.cfm> (contains descriptions of the geology described)

¹⁹ Mott MacDonald 2021, Central Rhyl Coastal Defences: Ground Investigation Report. CR-MMD-00-ZZ-RP-GT-4004

MM No	Cadw UID	Name	Designation	Distance from Scheme (m)
	14330	No 52, Water Street (W Side), Clwyd	Grade II listed building	80
	14331	No 54, Water Street (W Side), Clwyd	Grade II listed building	74
	14332	No 56, Water Street (W Side), Clwyd	Grade II listed building	64

Source: Cadw 2021

4.4 Local Authority designations

Conservation areas are protected under the Planning (Listed Buildings and Conservation Areas) Act 1990. The Act requires local planning authorities to have special regard to the desirability of preserving the setting of a Conservation Area. It also requires planning proposals determine the extent to which a development affects views to and from such an area. There are no conservation areas within the RLB, however two are recorded within the buffer zone. These are listed below in Table 4.2

Table 4.2: Conservation Areas

MM No	Name	Distance from Scheme (m)
MM35	Rhyl Central Conservation Area	7
MM36	Rhyl, River Street Conservation Area	14

Source: Lle (21 Jun 2021)

4.5 Historic map regression

Table 4.3: Historic Mapping Summary (within Scheme boundary)

Date	Map	Development
1878	Flintshire I	This map shows the original coastline along the northern side of Rhyl. The area north of East Parade mostly consisted of sand dunes. The esplanade and pier were constructed by this date.
1900	Flintshire I.SW	No change, although the Grand Pavilion/Amphitheatre at the southern end of the pier was constructed by this date.
1914	Denbighshire II.SW	Marine Parade, which lay to the north of Marine Drive, is laid out by this date and broadly follows the north extent of the current promenade just west of Splash Point. Other small developments within the beach area include the New Pavilion and a lifeboat station. The war memorial (MM01) is shown in its original location, opposite Abbey Street.
1948	Denbighshire II.SW	No change
1953	Denbighshire II.SW	Marine Parade has been extended westwards as far as the Amphitheatre (formerly the Grand Pavilion). The promenade and sea defences are shown from the western end of Marine Parade and along West Parade.
Satellite imagery Google Earth		The timeline feature (between 2006 and 2015) shows that the sea defences have changed little, with the exception of a new slipway to the north-east of the lifeboat station.

Source: Historic Mapping www.oldmapsonline.org

4.6 Archaeological and historical background

4.6.1 Introduction

The historic baseline in the following narrative is based on indicative archaeological and historic periods compiled using information from a number of sources, including HER and other archaeological reports²⁰. These historical periods are outlined in Table 4.4.

Research of the baseline conditions for the scheme shows that most of the recorded undesignated assets relate to a series of submerged landscapes within the Liverpool Bay area. The Liverpool Bay area facilitated access between the British mainland and the Isle of Man during the Late Upper Palaeolithic²¹ and Mesolithic periods. The area was subject to fluctuations in, and the gradual rise of sea levels during the prehistoric period, resulting in the sedimentation of tidal flats.

Evidence for these submerged landscapes around Rhyl and Prestatyn have been observed since the 19th century. A number of studies have been carried out to understand the date and sequence of these deposits. More recently, studies have been carried out to understand the nature of human exploitation and offer an understanding of the changing environment along this coastline. However, the full extent, survival and nature of these deposits around Rhyl and Prestatyn are still not fully understood. It is primarily through recent work on coastal defence schemes that these submerged landscapes are beginning to be understood.

Table 4.4 Archaeological and historic dates

Prehistoric Period Dates	Historic Period Dates
Palaeolithic 500,000 to 10,000 BC	Roman AD 43 to 410
Mesolithic 10,000 to 4,000 BC	Early medieval 410 to 1066
Neolithic / Early Bronze Age 4,000 to 1,600 BC	Medieval 1066 to 1540
Middle Bronze Age 1,600 to 1,100 BC	Post-medieval 1540 to 1900
Late Bronze Age 1,100 BC to 700 BC	Modern 1900 to present
Early Iron Age 700 to 400 BC	
Middle Iron Age 400 to 100 BC	
Late Iron Age 100 BC to AD 43	

Source: Mott MacDonald

4.6.2 Prehistoric Period

4.6.2.1 Liverpool Bay: General landscape change

The post-glacial landscape of the early Mesolithic across Liverpool Bay created conditions to establish forest of pine and birch, incorporating hazel, oak and elm. There were also rapid rises in sea levels which began to submerge previously dry terrain²². Around 7,600 BC, the sea level was around 9m below Ordnance Datum, placing the coastline approximately 10km north of its present location²³. Over the course of the Mesolithic, the sea-level rapidly rose which submerged large areas. There were several periods when the sea level rose and fell in broad patterns²⁴ and the coastline position would also have fluctuated. Land surfaces would have

²⁰ Clwyd-Powys Archaeological Trust (CPAT) 2018, *Central Rhyl Coastal Flood Defence Scheme: Desk-based Assessment* CPAT Report No 1621, p5

²¹ Coles, B.J. 1998, Doggerland: a speculative survey. *Proceedings of the Prehistoric Society* Vol 64: 45-81

²² Fitch, S. and Gaffney, V 2011, *West Coast Palaeolandscapes Survey (WCPS)*, University of Birmingham, p13

²³ CPAT 2018, p5

²⁴ E.g. Tooley, M.J. 1985a, Sea-Levels, *Progress in Physical Geography* Vol 9, Issue 1: 113-120

developed but they would have then been inundated and buried beneath marine and estuarine deposits²⁵.

4.6.2.2 Submerged landscapes: Historical studies and observations

Evidence for submerged landscapes has been recorded from the 19th century, with observations focusing on remnants of prehistoric ‘forests’. These exposures tend to occur during stormy conditions and have been recorded recently, such as at Borth in Cardigan Bay when in 2010 and 2014, storms exposed hundreds of tree trunks²⁶. One particular exposure along the Rhyl foreshore is dated to 1893²⁷:

The action of the tide at Rhyl within the last few days has disclosed the singular sight of an ancient forest, which, for a period of eighty years has been completely covered by the sea. The scoured portion of the beach where the remarkable sight is presented is situated opposite the Marine Drive, about a mile east of the pier. The town surveyor Mr. R. Hughes has made an accurate plan of the place, which shows about thirty trees rooted as they grew, whilst there are a number of horizontal trunks which appear to rest as they fell. Several of the trees have been proved to be of oak and elm, and the remainder appeared to be birch, alder and hazel. The stumps vary in diameter from 12 to 24 inches, and are situated about 100 yards from the edge of the sandhills and are covered during high spring tides by about 10 feet of water. The scoured portion in the sands, which exposes these old roots, extends for about 550 yards in length and varies in width from 7 to 35 yards. Folk lore asserts that this is part of an old forest, the portion in question being known as “Coed Mawr y Rhyl”

This exposure appears to have been recorded somewhere around Splash Point. Further exposures of ancient forests have also been recorded at Prestatyn during the 19th century, amongst “muddy and peaty strata”²⁸. These observations were not in isolation and caused much discussion. Observers during the late 19th century speculated that these forests represented when Britain was not separated from the continent²⁹. Early attempts at a sequence were made, including one by W Shone in 1894³⁰.

Table 4.5 The sequence of tidal flat deposits, predicted in the late 19th century

Layer	Description	Period
Uppermost	Blown sand	Post-glacial
	Alluvium	Post-glacial
	Peat and forest bed	Post-glacial
	Blue clay, <i>scrobicularia</i> ³¹	Post-glacial
	Boulder clay	Glacial
Lowermost	Sand and gravel	Glacial

²⁵ CPAT 2019, East Rhyl Coastal Defence Scheme: Archaeological Watching Brief

²⁶ E.g. The Guardian 2014, Prehistoric forest uncovered by storms in Cardigan Bay – in pictures. Available at <https://www.theguardian.com/uk-news/gallery/2014/feb/21/prehistoric-forest-uncovered-by-storms-in-cardigan-bay-in-pictures> Accessed 10/06/2021

²⁷ The North Wales Chronicle and Advertiser for the Principality, 11th February 1893, A Submerged Forest: A Curious Discovery. Available at: <https://newspapers.library.wales/> Accessed 16/06/2021

²⁸ E.g. Rhyl Journal, 11th February 1893, The Submerged Forest: To the Editor of the Rhyl Journal. Available at: <https://newspapers.library.wales/> Accessed 16/06/2021

²⁹ E.g. Rhyl Journal, 18th February 1893, The Submerged Forest. Available at: <https://newspapers.library.wales/> Accessed 16/06/2021

³⁰ Rhyl Journal, 1st September 1894, The Submerged Forest at Rhyl. Available at: <https://newspapers.library.wales/> Accessed 16/06/2021

³¹ A bivalve mollusc found in estuarine and intertidal conditions

Further study during the 20th century began to refine the sequence, as well as identify the species of trees present, as well as pollen evidence. Ashton noted that the trees were 'rooted in clay' and suggested that the peat deposits occurred at different elevations³². Studies in 1936³³ and 1940³⁴, for example, recognised the presence of an 'upper' and 'lower' forest, north of the Rhyl Golf Links (and east of the Scheme). Bibby considered the peats to be Neolithic or Bronze Age in date. The submerged landscapes have continued to be studied and represent a dynamic and changing landscape which was inundated at different times during the prehistoric period.

4.6.2.3 The submerged landscapes of Rhyl and Prestatyn

Evidence for prehistoric activity along the Rhyl and Prestatyn coastline is mainly derived from the sequence of inter-layered silts and peats. The peats represent former land surfaces, preserved beneath estuarine silts which represent sea level rises³⁵. In places, these deposits are buried beneath 1.2-1.8m of beach sand, however there are areas where the sediments have been exposed³⁶. This is due to a continued process of erosion, as the high-water mark has retreated from the 19th century onwards. Their full extent is presently unknown, however the West Coast Palaeolandscapes Survey (WCPS) suggest that the potential for encountering these deposits is medium at Prestatyn and high at Rhyl³⁷.

The present-day Rhyl foreshore would have been along relatively high ground in prehistory with the lower lying land now out to sea³⁸. The coastal topography suggests that there was a slight promontory at Splash Point and the boulder clay is thought to dip to the east. At times, this may also have formed a drier island³⁹. There may have also been palaeochannels weaving through the landscape as well⁴⁰. The complex pattern of marine transgressions (sea level rises) and regressions (sea level falls) and lack of dating means it is difficult to pinpoint the changing position of the coastline during prehistory. However, Manley's study suggests that one position of the coastline was at least 100-400m further inland and was present sometime around 4000-3000 BC⁴¹.

A number of studies have concluded that there are two former land surfaces at separate depths⁴². The lowermost is dated to the early Mesolithic and the uppermost dated to the later Mesolithic and Neolithic periods⁴³. A number of prehistoric artefacts, faunal remains and even footprints have been found along Rhyl foreshore. However, most of these are by chance, and therefore this deposit sequence is still not fully understood. Some of these finds have come from estuarine deposits which lie beneath the forest (peat) beds and it is argued that these are more important than the peats⁴⁴. This demonstrates evidence for exploitation of the landscape during periods of marine transgression.

³² Ashton, W. 1920, *The Evolution of a Coastline, Barrow to Aberystwyth and the Isle of Man* London

³³ Neaverson, E. 1936, Recent observations on the post-glacial peat beds around Rhyl and Prestatyn (Flintshire) *Proceedings of the Liverpool Geological Society* Vol 17: 45-63

³⁴ Bibby, H.C. 1940, The submerged forests at Rhyl and Abergelge, North Wales: Data for the study of postglacial history *New Phytologist* Vol 39, Issue 2: 220-225

³⁵ Fitch and Gaffney 2011, p18

³⁶ CPAT 2018, *Central Rhyl Coastal Flood Defence Scheme: Desk-based Assessment* CPAT Report No 1621, p4

³⁷ Fitch and Gaffney 2011

³⁸ Fitch and Gaffney 2011, p72

³⁹ Armour-Chelu, M., Bell, M., Brayshaw, B., Britnell, W.J., Cameron, N., Caseldine, A.E., Dresser, P.Q., Fancourt, E., Gonzalez, S., Healey, E., Johnson, S., Norris-Hill, J., Schulting, R. and Thomas, D. 2007, Shell middens and their environment at Prestatyn, Wales. In Bell, M. ed. *Prehistoric Coastal Communities: The Mesolithic in western Britain* Council for British Archaeology Research Report 149

⁴⁰ Bates, M.R. and Bale, R. 2018 *An evaluation of the foreshore deposits at Splash Point, Rhyl* University of Wales Trinity Saint David: Lampeter

⁴¹ Manley, J. 1989 Rhyl and Coastal Evolution *Journal of the Flintshire Historical Society* 32: 181-189

⁴² Bates and Bale 2018

⁴³ Bell, M. 2007b The Mesolithic and Neolithic in the coastal zone of western Britain. In Bell, M. ed. *Prehistoric Coastal Communities: The Mesolithic in western Britain* Council for British Archaeology Research Report 149

⁴⁴ Manley 1989

Table 4.6 Sequence of deposits based on evidence from the foreshore at Rhyl and Prestatyn. Based on Bell 2007b; Bale and Bates 2018

Layer Order	Layer Type	Comment	Dating Evidence
Uppermost	Estuarine Sediments		
	Upper peat: submerged forest including oaks, deer and auroch prints	Former land surface, identified at 2.43m AOD ⁴⁵ . Stratigraphically related to the shell middens at Prestatyn ⁴⁶ .	Base of peat: 4000-3500BC. Top of peat: 800-200 BC Sample from the peat: 3640-3370 cal BC
	Estuarine sediments: human and deer prints present.	Identified as the possible context for the Mesolithic mattock and polished axes	Mattock dated to 5640-5360 BC.
	Lower peat: submerged forest of willow	Former land surface. Identified as the possible context of flint artefacts, reported in 1924	C14 samples dated to 7050-6800 cal BC.
	Estuarine sediments		
Lowermost	Boulder clay		Glacial deposits

Recent analysis of the deposits along the foreshore to the east of the Scheme, has confirmed the presence of tidal flat deposits along the beach length at depths between 1.2m and 1.8m below the current beach level. Their thickness also varied, increasing from 0.2m in the west to 0.7m in the east⁴⁷. This shows that the area consists of complex terrain and the sediments are likely to vary laterally⁴⁸. A number of exposures have also been recorded recently, east of Splash Point. One deposit (termed Area A) consisting of clay-silt with peaty lenses has been exposed over large areas, with deposits up to 0.2m in thickness. Large trees also protruded from these deposits, which continued further up the beach beneath the sand⁴⁹.

4.6.2.4 Prehistoric occupation evidence

Evidence for human occupation around Rhyl and Prestatyn is predominantly late Mesolithic and Neolithic in date. This evidence includes possible occupation sites, thought to be temporary and seasonal in nature. Isolated finds and scatters of flint have also been identified in a number of places along the Rhyl and Prestatyn foreshore.

Extensive activity during the Mesolithic has been identified at Rhuddlan, approximately 3.5km south-east of Rhyl. It lies on higher ground along the eastern banks of the Clwyd, close to an important river crossing and on better draining sands and gravel deposits. Numerous chert and flints have been recovered from Rhuddlan as well as worked pebbles and evidence of possible structures. This activity is predominantly early Mesolithic in date and has been interpreted as a base camp.

Excavation at Nant Hall Road has revealed evidence for extensive prehistoric occupation. This area lies approximately 1km from the present coastline and at the interface of the drier, sandy

⁴⁵ Tooley, M. 1978, *Sea-level Changes: North-West England During the Flandrian Stage* Oxford: Clarendon Press

⁴⁶ Armour-Chelu, M., Bell, M., Brayshay, B., Britnell, W.J., Cameron, N., Caseldine, A.E., Dresser, P.Q., Fancourt, E., Gonzalez, S., Healey, E., Johnson, S., Norris-Hill, J., Schulting, R. and Thomas, D. 2007, Shell middens and their environment at Prestatyn, Wales. In Bell, M. ed. *Prehistoric Coastal Communities: The Mesolithic in western Britain* Council for British Archaeology Research Report 149: pp263-317

⁴⁷ CPAT 2019, 11

⁴⁸ Bates and Bale 2018

⁴⁹ JBA Consulting 2018, *East Rhyl Environmental Statement: Volume 1* p102

gravels of the Pleistocene and the Holocene (post-glacial) wetlands. Hundreds of lithics have been recovered from this area and a number of shell middens have been recorded. The evidence suggests that this area was occupied on a number of occasions for a short space of time. Activity here has been dated from Mesolithic and Neolithic periods (4200-2500 BC)⁵⁰ and shows that communities based here were exploiting coastal resources. Middens have also been recorded within the Rhyl area⁵¹ although their date and location are not accurately recorded.

Prestatyn Woman was a burial of an adult female, aged between 25 and 35, discovered by workers digging on High Street in 1924. The skeleton was found at the base of the peat, overlying estuarine clay, and dates to the Mesolithic/Neolithic transition (3695-3525 BC)⁵². It is not clear if the woman was deliberately buried.

Excavation of the Roman activity at Melyd Avenue in Prestatyn (see 4.6.3 below) revealed traces of Mesolithic and Neolithic activity. This area also has substantial peat deposits, with up to 3m overlying quartz sand. A number of flint and chert artefacts have been recovered from a number of excavations. Analysis of the deposit sequence shows evidence for small-scale activity and the site appears to have been occupied on a short-term basis during the early prehistoric period⁵³.

The evidence from Prestatyn suggests that occupation was short-lived and focused on the boundary between the coastal wetlands, and the drier ground. Sites like Rhuddlan, 3.5km south-east of Rhyl, may have been a location for more permanent settlement. These would have formed a base to exploit the Clwyd estuary, based upon varied annual movements according to particular strategies of hunting and gathering of coastal and wetland resources⁵⁴.

Activity during the Bronze Age is much more difficult to see in the archaeological record around Rhyl and Prestatyn. There are a number of isolated finds recorded along the foreshore. Limited activity has been recorded at Rhuddlan, including an early Bronze Age cremation though it was heavily truncated by later occupation and erosion⁵⁵. Bronze Age round barrows have been recorded on the higher ground to the south of Prestatyn. Iron Age activity in the form of possible roundhouses are also recorded at Rhuddlan as well as Prestatyn⁵⁶, however it was again limited.

4.6.3 Roman

There is some evidence for Roman occupation at Prestatyn. A bathhouse and industrial complex have been excavated at Melyd Avenue. The site was initially interpreted as the remains of a fort and civilian settlement; however, the remains are thought to represent a small military station⁵⁷. Otherwise, activity is limited mostly to isolated finds. A small number of Roman coins have been recorded within Rhyl and Rhuddlan has produced limited evidence for occupation during this period. Four-post structures were tentatively attributed to the Roman period but many of the finds were residual. However, the finds indicate that there was Roman settlement, perhaps even military activity, within the wider area⁵⁸.

⁵⁰ Armour-Chelu et al. 2007

⁵¹ Smith, F.G. 1924, Some evidence of early man within and near to the northern portion of the Vale of Clwyd, *Proceedings of the Liverpool Geological Society* Vol 14: pp117-22

⁵² Armour-Chelu et al. 2007, p303-305

⁵³ Armour-Chelu et al. 2007, p305-306

⁵⁴ Quinnell, H. and Blockley, M.R. 1994, *Excavations at Rhuddlan, Clwyd 1969-1973 Mesolithic to Medieval* Council for British Archaeology Research Report 95

⁵⁵ Quinnell and Blockley 1994, p139

⁵⁶ Blockley, K. 1989, *Prestatyn 1984-5: An Iron Age Farmstead and Romano-British Industrial Settlement in North Wales*

⁵⁷ RCAHMW 2021, Prestatyn Roman Site. Available at: <https://coflein.gov.uk/en/site/306722/> Accessed 16/06/2021

⁵⁸ Quinnell and Blockley 1994, p145-146

4.6.4 Medieval

4.6.4.1 Rhyl

There are documentary references to Rhyl dating to the 14th century; however, there is very little evidence for substantial settlement. The name of the town is thought to refer to a collection of low sandbanks in the area. Up until the 19th century, the area contained scattered farms and cottages⁵⁹.

4.6.4.2 Prestatyn

Very little is known about Prestatyn during the medieval period. It is mentioned in the Domesday Survey of 1087, however it only had a recorded population of four households⁶⁰. Prestatyn had a motte and bailey castle (MM33), occupying a low-lying position on the coastal plain. It has been suggested that settlement was focused around the castle. However, the castle is said to have been destroyed in an attack in 1167⁶¹. To the east of the castle lies the 19th century Nant Hall, now a hotel. This is recorded in the medieval period and was the seat of the Lords of Penrhyn⁶².

There is evidence to suggest that a new settlement focus evolved along High Street⁶³, approximately 0.5km west of the Castle. Excavations at the southern end of High Street, close to the junction with Meliden Road, revealed evidence for medieval pottery, although it does not appear to represent intensive occupation. A possible medieval town boundary was also excavated⁶⁴.

4.6.5 Post-medieval and modern

Both Rhyl and Prestatyn remained relatively small settlements until the mid-19th century, when they became popular leisure destinations. Rhyl was one of the earliest North Wales coastal resorts to develop, with two hotels and a number of lodging houses built in the 1820s. Prestatyn developed later; however, development at both was accelerated by the arrival of the Chester and Holyhead Railway in 1848.

4.6.5.1 Rhyl

19th century mapping shows that the area seawards from East Parade was marshy ground, with the sea front around 140m further inland⁶⁵. The Rhuddlan Marsh Embankment Act of 1794 allowed the land to be drained and reclaimed⁶⁶, with a Trust set up to sell the reclaimed land between 1807 and 1827.

Possible fishtraps dating to the post-medieval period have been recorded immediately west of Splash Point, and within the Scheme (MM09). Two parallel rows of stakes, with each row around 4m in length and set 2.9m apart. A single, shorter, row was observed to the east. Four closely set vertical planks were also noted, which were interpreted as part of a groyne⁶⁷. A possible post-medieval trackway (MM10) has also been identified at the north-eastern end of

⁵⁹ CPAT 2018, p8

⁶⁰ Open Domesday 2021, Prestatyn. Available at: <https://opendomesday.org/place/SJ0682/prestatyn/> Accessed 16/06/2021

⁶¹ Lewis, S. 1849 Prestatyn – Pyle. In *A Topographical Dictionary of Wales* pp. 324-330. Available at: <https://www.british-history.ac.uk/topographical-dict/wales/pp324-330> [accessed 16 June 2021].

⁶² Gwynedd Archaeological Trust 2019, *Nant Hall, Prestatyn: Archaeological Watching Brief*

⁶³ CPAT 2014, p6

⁶⁴ Walker, W.S. and Garner, D.J. 1996 *An Archaeological Evaluation on land adjoining 179 High Street, Prestatyn* Unpublished Earthworks Archaeological Services Report

⁶⁵ CPAT 2018, p8

⁶⁶ Denbighshire County Council 2014, *Rhyl Town and Area Plan: Looking Forward Together 2014-2020* Available at [Town and area plan: Rhyl \(denbighshire.gov.uk/en/documents/your-council/strategies-plans-and-policies/plans/town-and-area-plans/town-and-area-plan-rhyl.pdf\)](https://www.denbighshire.gov.uk/en/documents/your-council/strategies-plans-and-policies/plans/town-and-area-plans/town-and-area-plan-rhyl.pdf) [denbighshire.gov.uk] Accessed 11/06/2021

⁶⁷ JBA 2018, p105

the scheme. There is no firm dating evidence for these features; however, they may indicate exploitation of coastal resources prior to the development of Rhyl as a tourist destination. A number of ships were wrecked around Rhyl (MM23-32), but only the location of the City of Ottawa's (MM31) and an unnamed wreck (MM32) within Ford Harbour have been confirmed.

The coastal town of Rhyl began to develop rapidly soon after the reclamation of the marshy areas, becoming a popular leisure destination throughout the 19th and into the 20th century. Early development was generally characterised by the construction of private villas within large plots⁶⁸. Rhyl was one of the earliest North Wales coastal resorts to develop, with two hotels and a number of lodging houses built in the 1820s. Most development concentrated initially around the crossroads of High Street and Wellington Road. The opening of the railway line to the south of the commercial centre in 1848 also accelerated development and much of Rhyl's built heritage is a product of its success as a tourist destination.

Sea defences in the early 19th century appear to have consisted of an embankment and fencing, as stipulated in the 1794 act. This also necessitated the need to drain the marshy ground, which was achieved by constructing the Rhyl cut. This runs from the River Clwyd, eastwards towards Prestatyn where it is known as the Prestatyn Gutter (see 4.6.5.2 below). There is evidence for pre-19th century sea defences at Rhyl in the form of wooden groynes⁶⁹. The development of the defences was accelerated in the 19th century. The central area of Rhyl appears to have been the earliest to be defended, followed by defences to the east. They appear to have originally consisted of a sea wall and promenade, with groynes recorded in the early 20th century as well. These defences were significantly altered and added to in the mid-20th century and this is what largely remains today. The eastern portion consists of a concrete stepped revetment and recurve wall which forms the crest. This is followed by sections, from east to west, of a concrete recurve wall, a concrete stepped revetment with the upper step forming the crest and a concrete wall. At the western end of the site, a vertical wall with concrete modular blockwork forms the primary defence. The groynes appear to have been renewed slightly later in the 1970s⁷⁰.

4.6.5.2 Prestatyn

The settlement at Prestatyn remained relatively small until the late 19th century. Industrial activity in the form of limekilns are recorded to the south of the town, a number of which still survive along the hillside at the edge of Prestatyn. There is evidence for quarrying as well and an alkali works, east of Barkby Avenue and north of Marine Road East. The alkali works operated during the mid-19th century and produced soda ash and crystals, at a rate of around 50 tons weekly. The plant contained vitriol chambers, along with evaporating pans and furnaces. There were also two steam engines, a mill, warehouses, sheds, stables and a smithy. There was housing for workers and the manager. There was a harbour and a quay, as the seashore was located immediately north of the works. The complex was owned by Bigland, Sons and Jeffreys in the 1860s; however, they auctioned the complex in 1864. The land appears to have been part of the Nant Hall estate⁷¹. The complex was mostly demolished by the late 19th century however the office block, manager's house and workers cottages still survive on Warren Drive.

The coastline was around 400m further inland until reclamation during the late 19th century. The line of Prestatyn Gutter marks where the high water mark was, with areas of saltmarsh where the Prestatyn golf course is. Prestatyn became a popular tourist destination and a number of holiday camps developed to the rear of the sand dunes in the early 20th century. Prestatyn Golf

⁶⁸ E.g. Grafton Lodge, Grade II listed. Reference Number: 14280

⁶⁹ JBA 2018, p105

⁷⁰ Mott MacDonald 2021, Central Rhyl Coastal Defences: Ground Investigation Report. CR-MMD-00-ZZ-RP-GT-4004

⁷¹ 1864 Sale plan and particulars of alkali works. Flintshire Archives D/DM/1210/6

Course, at Barkby Beach, opened in 1905. Today, the commercial centre remains focused around High Street, with substantial residential development particularly to the south.

There is little evidence for coastal defences at Prestatyn during the early 19th century and it is not clear if the embankment and fencing recorded at Rhyl extended this far. However, a long drainage channel extending from the river Clwyd, in the west, through to Prestatyn, in the east, was created at this time. It is known as the Prestatyn Gutter and was part of the reclamation scheme of the salt marshes. Originally, it discharged into the sea, to the north of Nant Hall. However, as land reclamation accelerated, the discharge route moved further east. It appears that the Prestatyn coastal defences were mostly built in the mid-20th century. The coastline is defended by concrete stepped revetments, set back wave overtopping walls and an asphalt toe and wide promenade. There are also rock groyne field fronts. Prestatyn Gutter was also straightened and modified around this time, and now discharges to the north-east of Gronant.

5 Geotechnical Investigations

5.1 Introduction

A series of boreholes and trial pits were undertaken in November and December 2020 by Lankelma and Geotechnics Ltd⁷² along the Scheme. The result of this will be incorporated into a geoarchaeological deposit model, to be undertaken by Trent and Peak in 2021.

5.2 Results

The ground conditions, identified from the geotechnical investigations, are summarised below.

Table 5.1: Ground Conditions

Strata	Description	Depth to top of stratum (m bgl)	Depth to base of stratum (m bgl)	Stratum thickness (m)
Made Ground	Dark brown gravelly slightly sandy silty clay. Light brown slightly gravelly fine to coarse sand. Black/grey tarmacadam.	0-1.2	0.2-5.45	0.2-5.45
Marine beach deposits	Medium brown very gravelly slightly silty fine to coarse sand. Brown slightly gravelly fine to medium sand.	0-5.0	0.2-8.8	0.03-8.80
Tidal Flat Deposits	Bluish grey slightly sandy silt with frequent pockets (up to 150mm) of pseudofibrous peat. Dark brown slightly gravelly clay.	3-7.3	4.2-10	0.44-4.0
Glacial deposits (Granular)	Medium dense brown sandy to very sandy subangular to rounded fine to coarse gravel. Densely thinly laminated dark grey sandy silt.	3.0-18.0	5.45-20	0.79-10.1
Glacial deposits (Cohesive)	Dark brown sandy clay with frequent pockets of silt. Thinly laminated silty clay. Dark brown slightly sandy gravelly clay.	3.22-20.0	9.2-25.45	3.02-18.25

Source: Mott MacDonald 2021

The tidal flat deposits (submerged landscapes) were proven at levels between 3-7.3mbgl, varying in thickness between 0.4-2.2m. These deposits were only visible within boreholes and none were observed within trial pits on the beach as they did not reach the depth these deposits were present at. The deposits were also absent within sections F-I (from the SeaQuarium west towards the Harbour).

⁷² Mott MacDonald 2021, Central Rhyl Coastal Defences: Ground Investigation Report. CR-MMD-00-ZZ-RP-GT-4004

The deposits were visible within the following boreholes:

Table 5.2 Details of tidal flat deposit depths

Borehole	Location	Ground Level (m OD)	Depth to top of strata (m)	Level of top of strata (m OD)	Depth to base of strata (base)	Level of base of strata (m OD)
BH402	301348.6, 382130.4	6.57	5.7	0.87	7.00	-0.43
BH404	300910.7, 381956.0	6.01	6	0.01	4.00	-3.99
BH406	300604.0, 381676.0	6.13	5.00	1.13	6.80	-0.67

Source: Mott MacDonald 2021

5.3 Conclusion

The geotechnical investigations have confirmed the presence of submerged land surfaces within the Scheme area. The observation of deposits at around 0mAOD is similar to those observed along East Rhyl. Their absence from the western side of the Scheme is not unexpected, as they were not observed within the West Rhyl Coastal Defence Scheme⁷³. However, the presence of tidal flat deposits cannot be discounted entirely within this area.

⁷³ Cascade Consulting 2010 *West Rhyl Coastal Defence Scheme – Environmental Statement*, p432

6 Walkover Survey

6.1 Introduction

A walkover survey was conducted on the 24 March 2021. The walkover was conducted across the foreshore at low tide and a number of features were observed, summarised below:

6.2 Features Identified

6.2.1 Tidal flat deposits (see PhotoApp 1)

An exposure of tidal flat deposits (MM13), located c.70m northwards of the sea wall was recorded at the eastern end of the Scheme. The exposure measured approximately 50 x 22m and around 150mm in thickness. Three layers were visible:

- the uppermost deposit consisted of a light brown grey silty clay. This was 50mm thick;
- the next visible layer below consisted of a dark brown silty clay and measured a maximum of 30mm thick;
- the lowest visible layer was a light blue grey silty clay, which was visible to a maximum thickness of 70mm.

A number of trees were also exposed; however, these were still partially buried by sand and could not be definitively associated with the observed deposits. Three tree trunks were observed, as well as isolated roots (see PhotoApp 4). These features have been interpreted as part of the prehistoric submerged landscapes of the Liverpool Bay.

6.2.2 Other features

Four other features were observed, although these could not be dated with any certainty. They include:

- An area with three large worked stones and possible concrete, sat within a slight hollow (MM15). Possible remnants of an anti-tank block. This was located to the south of the peat exposure and c.30m north of the sea wall;
- Possible concrete, covered in seaweed and heavily weathered. The concrete covered an area measuring 1.50m in length;
- Two iron prongs (MM16), projecting up from the sand and set 300mm apart; and
- A row of four timber planks (MM14), 0.60m high and 0.25m visible. These have been interpreted as a possible early groyne (see PhotoApp 5).

6.3 Conclusion

The most significant features identified were associated with the exposed area of estuarine clays and peat, observed at the eastern end of the Scheme and close to Splash Point. Previous exposures have mainly been observed to the east, although one exposure noted in 2018 lies just to the south of the present one.

Three layers were observed, which appear to follow the sequence outlined in Table 4.6. The peat is likely to be the lower peat, sandwiched between the estuarine clays.

The other features cannot be closely dated but appear to reflect post-medieval/modern activity. Similar closely set timber planks have been observed within the ERCDS and were interpreted as former groynes. They are probably 19th century or early 20th century in date.

7 Archaeological potential and significance

7.1 Assessment of significance

The significance of heritage assets has been based on criteria outlined in Table 7.1. The assessment of significance derives from a combination of designated status and professional judgement.

Table 7.1: Criteria for assessing significance

Significance	Typical criteria
Very High	Assets that can contribute significantly to acknowledged international research objectives. World Heritage Sites (including nominated sites). Assets of acknowledged international importance.
High	Designated or undesignated assets that can contribute significantly to national research objectives. Archaeology: Scheduled monuments, undesignated assets of schedulable quality Built Heritage: Grade I, II* or II listed building, Conservation Areas containing very important buildings, and undesignated structures of clear national importance.
Medium	Designated or undesignated assets that contribute to regional research objectives. Archaeology: Sites of moderate archaeological resource. Built Heritage: Grade II Listed Buildings, undesignated historic buildings of exceptional qualities in their fabric or historical associations, Conservation areas containing buildings that contribute significantly to its historic character, historic townscapes or built-up areas with important historic integrity in their buildings or built setting.
Low	Undesignated assets important to local interest groups, limited by poor preservation or poor contextual association, with the potential to contribute to local research agendas. Archaeology: Sites of limited archaeological resource. Built Heritage: Locally listed buildings, unlisted historic buildings of modest quality in their fabric or historical association, historic townscapes of limited historic integrity in their buildings, or built settings.
Negligible	Very low importance and rarity, local scale where values are compromised by poor preservation, survival or contextual associations.

Source: DMRB LA104 Section 3 and LA106 Cultural heritage assessment

7.2 Survival of archaeological deposits

7.2.1 Rhyl

The survival of archaeological deposits is generally anticipated to be high along the beach. The walkover survey identified the remains of a submerged landscape within the Scheme and similar remains may lay close to the surface in certain areas. Although the exposure was clearly subject to erosion, there is potential for the deposit sequence to survive elsewhere beneath the beach sand. However, the survival of remains is likely to have been impacted by the construction of the current sea defences. The survival of deposits within the footprint of the sea wall is considered to be low.

7.2.2 Barkby Beach

The survival of archaeological deposits is currently unknown. There has been little archaeological investigation within the area, although it has been suggested that there are submerged landscapes within the area⁷⁴. The reclamation of the former saltmarsh and

⁷⁴ CPAT 1997 Prestatyn to Llanasa Sewage Pumping Main: Archaeological Assessment CPAT Report No 217, p5

subsequent landscaping is likely to have had an impact on the survival of archaeological remains.

7.3 Archaeological potential

7.3.1 Rhyl CDS

Table 7.2: Archaeological potential of the Scheme

Historic asset	Significance	Potential
Prehistoric remains (including submerged landscapes)	There is extensive evidence for the presence of submerged landscapes along the foreshore. In-situ remains would be of medium-high significance, depending on level of truncation.	Investigations at East Rhyl and the HER data suggest a high potential for early prehistoric remains. Previous work has demonstrated that there is a good environment for paleoenvironmental remains to have been preserved, such as seeds and pollens. Evidence for animal and human footprints have been preserved, as well as artefacts.
Roman remains	There is very little evidence of Roman activity, except for isolated findspots and the military station at Prestatyn. Therefore in-situ Roman remains could be of high significance.	There is a low potential for Roman remains. Evidence for Roman activity is scarce across the study area and in the immediate vicinity of the site.
Medieval remains	There is very little evidence of medieval activity. Therefore in-situ medieval remains could be of high significance.	There is a low potential for medieval remains. Although Rhyl is named in documentary evidence, settlement was sparse up until the 19 th century. However, there may be evidence for exploitation of coastal resources, such as fish traps. Current known evidence of this is post-medieval in date.
Post-medieval remains	The causeway (MM10) and groynes/fish traps (MM09) indicate Post-Medieval activity. Rhyl pier (MM11) was also located within the Scheme area. There is potential for undesignated shipwrecks although their locations are not confirmed. The significance of the causeway and wrecks are unknown. The pier is of low significance and possible groynes and fish traps are of medium significance.	There is a high potential for post-medieval remains. A possible early groyne was identified during the site walkover.
Modern remains	There are two aircraft crash sites, although their present location is approximately 500m northwest of the Scheme. It is not clear if there are any wreckage remains on the foreshore. As designated remains, these are of high significance.	There is a low potential for remains of the aircrafts to survive within the Scheme area. However, the potential for wreckage remains cannot be discounted entirely.

Source: Mott MacDonald

7.3.2 Barkby Beach

Table 7.3: Archaeological potential of the Scheme

Historic asset	Significance	Potential
Prehistoric remains (including submerged landscapes)	There is evidence for the presence of submerged landscapes along the foreshore. There is also evidence for prehistoric occupation approximately 1km southeast of the scheme. In-situ remains would be of medium-high significance, depending on level of truncation.	Investigations at Prestatyn suggest a medium-high potential for early prehistoric remains. However, little is known regarding evidence for prehistoric activity around Barkby Beach. The ecological mitigation area lies to the north of the area between wet and dry land during prehistory. The reclamation and subsequent landscaping will have impacted on the survival of remains.
Roman remains	There is evidence of Roman activity, in the form of a military station at Prestatyn approximately 2km to the south-west. Evidence is still relatively rare; therefore, in-situ Roman remains could be of high significance.	There is a low potential for Roman remains. Evidence for Roman activity is scarce across the study area and in the immediate vicinity of the site.
Medieval remains	There is very little evidence of medieval activity. Prestatyn Castle (MM33) lies c.350m to the south. However, settlement focus appears to have shifted further to the west. Therefore, in-situ medieval remains could be of high significance.	There is a low potential for medieval remains. The main focus of activity during the earlier medieval period (11 th -12 th century) was approximately 350m south. However, from the mid-12 th century onwards, focus appears to have shifted further west. The proposed ecological mitigation area is likely to have been underwater or marshland.
Post-medieval remains	The site of an alkali works lay to the immediate south of Prestatyn Gutter. There are earthworks surviving associated with this, as well as built heritage. The significance of the alkali works is low. The Ranger shop is known to have been lost near Prestatyn in 1853; however, its location is not confirmed. The significance of the wreck is unknown, as its extent and condition has not been ascertained. The ecological mitigation area was marshland at this stage before being reclaimed at the end of the 19 th century.	There is a low potential for post-medieval remains due to the area being predominantly saltmarsh until reclamation in the late 19 th century.

Source: Mott MacDonald

8 Built Heritage

8.1 Introduction

Following consultation with Cadw (see Section 3.6), the effect of the Scheme on the setting of a number of listed buildings is assessed below. Nine designated assets are assessed below, in line with the following guidance:

- Cadw 2011, Conservation Principles for the sustainable management of the historic environment in Wales
- Cadw 2017, Setting of Historic Assets in Wales

The setting assessment was undertaken on 24th March 2021 in clear, sunny conditions. The photographs can be found within Appendix D.

8.2 Baseline

A total of nine designated assets have the potential to be affected by the Scheme (see Table 8.1). One asset (War Memorial) falls within the RLB and the other assets along Water Street, are located approximately 60-100m SE of the RLB.

Table 8.1 List of designated assets potentially affected by the Scheme's construction and operation

MM No	Cadw UID	Name	Designation	Distance from Scheme (m)
MM01	14276	War Memorial	Grade II listed building	8
MM02	14325	No 47, Water Street (E Side), Clwyd	Grade II listed building	78
	14326	No 49, Water Street (E Side), Clwyd	Grade II listed building	72
MM03	14327	No 46, Water Street (W Side), Clwyd	Grade II listed building	90
	14328	No 48, Water Street (W Side), Clwyd	Grade II listed building	83
	14329	No 50, Water Street (W Side), Clwyd	Grade II listed building	83
	14330	No 52, Water Street (W Side), Clwyd	Grade II listed building	80
	14331	No 54, Water Street (W Side), Clwyd	Grade II listed building	74
	14332	No 56, Water Street (W Side), Clwyd	Grade II listed building	64

Source: Cadw 2021

8.2.1 War Memorial (MM01)

8.2.1.1 Description

The War Memorial is located north of East Parade and approximately 65m south-east of the current sea wall. The monument was originally erected to commemorate six local men who died in the Boer War, of 1899-1902. The memorial was unveiled in 1904 and was originally located on West Parade, near John Street. In 1948, it was moved to its current location and a Garden of Remembrance was created⁷⁵.

The memorial comprises a central raised plinth on two stepped York stone, surmounted by a Kennay granite pedestal. This is topped by a Carrara marble figure of a Royal Welsh Fusilier in khaki uniform and slough hat. The figure stands at ease with arms reversed. This is flanked by two miniature cenotaphs in Aberdeen grey granite, fixed on a base of hard York stone steps⁷⁶. Original inscriptions are carried in a raised

⁷⁵ Rhyl War Memorial. Available at: <https://historypoints.org/index.php?page=rhyl-war-memorial#:~:text=Rhyl%20war%20memorial-.Rhyl%20war%20memorial.War%2C%20of%201899%20to%201902>. Accessed 18/06/2021

⁷⁶ Imperial War Museum 2021, Rhyl Memorial. Available at: <https://www.iwm.org.uk/memorials/item/memorial/7169> Accessed 18/06/2021

cartouche on the plinth, commemorating the six men who fell in the Boer War. Names of the dead of World War I are carried on copper plates on the side pylons. Those lost in World War II and more recent conflicts are commemorated on the sides of the central plinth⁷⁷.

8.2.1.2 Assessment of significance (including setting)

The War Memorial derives its significance from a number of heritage values. The asset holds historic value, through its association originally with the Boer War but now offers a reminder of a number of conflicts that have taken place over the last c.100 years. The asset also holds aesthetic value as a simple, but poignant, reminder of those lost in conflict. The memorial is a result of conscious design, although plaques carrying the names of those lost in subsequent conflicts, have been added over time. The addition of these plaques has not changed the overall form of the asset. The memorial also holds communal value, commemorating those lost in conflict.

The asset is located close to Rhyl seafront and close to the centre of town. The memorial is located within a garden of remembrance and is approached from the sole entrance to the south. The garden is formally laid out, with small beds of grass and flowers and formal paths. The exterior is lined with a rockery arrangement and surrounded by a high hedge. The garden itself is set back from the road and seafront, within a mixed period townscape. The garden was created in 1948, when the memorial was moved for the second time to its present location. Although the asset is no longer in its original location, this does not detract from its significance. The asset's significance is derived from its association with conflict and commemoration of those lost in previous wars and the current setting allows an appreciation of this. The location away from the main road and the high hedges give the asset a sense of privacy and allows quiet reflection within the garden. The garden layout also complements the simple design of the war memorial and the asset is deliberately orientated towards the south (and only) entrance. This conscious design adds to the experience of the asset. The setting of the asset within the garden of remembrance, makes a positive contribution to its significance.

8.2.2 47 and 49 Water Street, East Side (MM02)

8.2.2.1 Description

47 and 49 Water Street, E are assessed together as they are contemporary terraced buildings. These buildings date to 1836-1850 and were originally built as a pair of houses which were later incorporated into a longer terrace. The houses are three storeys over a basement, with a 4-window range. The houses are rendered, with a slate roof and end wall stacks. Each house has a doorway to the right with a slim architrave and fanlight, set back in a round-headed archway. A canted bay window to the left, rises from the basement level across the two principal storeys. Each window has 8 and 12-pane sashes and a continuous sill band. No 47 has applied decoration forming architraves to the door and windows, as well as panels on the bay window. However, number 49 has also lost the moulded cornices around the windows⁷⁸.

8.2.2.2 Assessment of Significance (including setting)

The assets derive their significance from a number of heritage values. The assets hold historic value, associated with the early urban expansion of Rhyl as it became a popular leisure destination. The assets also hold some aesthetic value, with unusual architectural detailing around the canted bay windows. This detailing is not present on the surrounding terraces and sets the assets apart, despite the overall homogeneity of the terrace.

The setting of the assets is formed by the townscape of Water Street. The assets are adjoined either side by terraces, which were built to a similar style and can be seen lining either side of Water Street. These are

⁷⁷ Cadw 2021, War Memorial. Available at: <https://cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=&id=14276> Accessed 18/06/2021

⁷⁸ Cadw 2021, No 47, Water Street, E. Available at: <https://cadwpublic-api.azurewebsites.net/reports/listedbuilding/FullReport?lang=&id=14325> Accessed 18/06/2021

interspersed with early 20th century commercial development. Despite later conversion of these houses into commercial use, there is a sense of harmony and homogeneity to Water Street. The early 20th century commercial developments, such as those on the west side of the street, form a coherent grouping within this townscape and are of a similar massing. There is some modern development to the north of the assets, which detracts from the overall appearance of the townscape. However, this is not overly dominant and maintains a similar height to its surroundings. The broadly contemporary townscape reflects the rapid development of Rhyl's urban centre and makes a positive contribution to the significance of the assets.

8.2.3 46-56 Water Street, West Side (MM03)

8.2.3.1 Description

These assets are assessed together as they form part of the same building (it is also described as a singular asset below for ease of reading). This building comprises a row of shops with accommodation above and to the rear. The asset was built in 1903 and designed by T Lockwood of Chester, however the original designs were for a much more ambitious and larger scale development. The building is two storeys and consists of red brick with gold terracotta bands and dressings, with a slate roof. There were four shops originally along the Water Street elevation, with a larger shop on the corner with Crescent Road. The Water Street elevation is articulated by two advanced pedimented bays housing entrances and flanked by shop fronts. There are outer and paired central canted oriel windows on the first floor. The higher block on the corner has big segmentally arched windows with scrolled voussoirs, set between mannerist pilasters on the ground floor. There is a continuous moulded cornice and blocking course bands, above which a canted turret is corbelled out with three narrow sash windows and an ogee leaded roof with fleche. A decorative low relief panelling incorporates a clock below the roof.

8.2.3.2 Assessment of significance (including setting)

The asset derives its significance from a number of heritage values. The asset has historic value, illustrating Rhyl's development into the early 20th century and the wealth derived from tourism to allow the construction of decorative buildings. The asset also holds aesthetic value, as an excellent example of a purpose-designed commercial building. It exploits the decorative potential of its materials and, despite its massing being the same as much of the townscape, it makes good use of its corner site. Although there has been a change of use, the building retains much of its original external appearance and is highly decorative.

The setting of the asset is formed by the townscape of Water Street. There are a number of mid-19th century terraces which line either side of Water Street, interspersed with early 20th century commercial development. Despite later conversion of these houses into commercial use, there is a sense of harmony and homogeneity to Water Street. The early 20th century commercial developments, such as those on the west side of the street, form a coherent grouping within this townscape and are of a similar massing. There is some modern development to the north of the assets, which detracts from the overall appearance of the townscape, however this is not overly dominant and maintains a similar height to its surroundings. The broadly contemporary townscape reflects the rapid development of Rhyl's urban centre and makes a positive contribution to the significance of the asset.

8.3 Barkby Beach

The nearest designated assets are Prestatyn Castle (MM33), approximately 350m to the south, and Nant Hall Hotel (MM34), approximately 600m south of the proposed ecological mitigation area. However, these are not discussed in detail due to the distance from this area and the light touch nature of the proposed works (see Section 7.3).

9 Impacts

9.1 Built Heritage

9.1.1 Rhyl

The identification of impacts on built heritage assets in the vicinity of a site takes into account any temporary or permanent changes to the asset's setting. Temporary impacts may include the presence of construction machinery within the settings of assets during construction of the Scheme. The permanent changes which could potentially affect the setting of the designated assets mainly relate to the works on the promenade. It is anticipated that the full width of the promenade would need to be raised over a 750m length. In addition, new retaining walls would be needed to provide earth retainment to required level differences along the southern edge of the raised promenade. Flood gates are also proposed within the new retaining wall. Works adjacent to the promenade and sea wall along the beach are likely to impact buried archaeological remains and are considered below.

A minor temporary impact has been identified on the designated heritage assets along Water Street. Although there is anticipated to be an increase in the presence of construction traffic along West Parade to the north, Water Street is already a busy thoroughfare within Rhyl town centre. The assets' significance is drawn mainly from the broadly contemporary townscape setting. New structures will be introduced approximately 100m north-west of the designated assets on Water Street. However, the area between West Parade and the foreshore has been heavily developed during the 20th century with landscaping and modern structures. As such there is no visual connection between the Scheme and the designated assets and therefore no adverse impact is predicted during the operation phase of the Scheme. A beneficial impact has been identified through the decreased future risk of flooding and associated damage to the buildings.

A construction temporary impact is anticipated on the War Memorial. The garden of remembrance makes a positive contribution to the significance of the memorial. Noise from construction machinery to the north and increase construction traffic, will affect the peaceful experience of the asset and have an adverse impact on the memorial. However the high hedge that encloses the asset will mitigate some of these potential impacts. Once the works on the Scheme are completed, no further adverse impact is anticipated. A beneficial impact has been identified through the decreased future risk of flooding and associated damage to the war memorial.

9.1.2 Barkby Beach

No designated assets are anticipated to be affected by the ecological mitigation area at Barkby Beach due to their distance from the Scheme and the limited nature of the works proposed.

9.2 Buried archaeological remains

9.2.1 Rhyl

The area of permanent construction is located along the beach adjacent to, and over the northernmost area of the promenade. The main impacts from excavation are anticipated to be from the excavation along the sea wall for the rock armour toe (Sections A-D) and stepped revetment (Sections E-H). There are also potential impacts from the construction of new access points. However, as archaeological deposits were observed on the beach there may also be impacts from construction machinery tracking across the beach. Works to repair the existing sea wall and revetment, as well as raise the promenade and built a new retaining wall are not anticipated to impact on archaeological remains.

Deposits of archaeological interest are likely to have been truncated by the construction of the existing sea wall. However, there is the potential for deposits to survive seawards. The designs are currently being

finalised, but the proposed revetment and rock armour toe will extend out beyond the current defences. Excavations will be required to around 0m AOD, and submerged landscapes have been observed around this level. Therefore, this has potential to impact on buried archaeological remains.

9.2.2 Barkby Beach

Data gathered from within the study area suggests that there is potential for remains of prehistoric date. However, this former saltmarsh area was reclaimed in the late 19th century and has been subsequently landscaped. The works proposed are light touch in nature to protect the grassland, with the use of hand tools proposed across some areas. Construction is anticipated to be low impact, with proposed ecological ponds being excavated to a maximum of 0.5m deep. Therefore, there are no anticipated impacts on the archaeological remains at Barkby Beach.

10 Conclusions and recommendations

10.1 Conclusions

This DBA addendum has been prepared by Mott MacDonald on behalf of Balfour Beatty Civil Engineering Limited to determine the heritage constraints of the proposed coastal defence works at Central Rhyl and the ecological mitigation area at Barkby Beach. The work undertaken includes updating the existing baseline, assessing the potential impacts and recommending an appropriate mitigation strategy.

10.1.1 Rhyl

There are nine designated assets recommended by Cadw to be assessed for potential setting impacts. Data gathered from within the study area suggests that there is high potential for remains of prehistoric date. This has been highlighted in the 2018 DBA and by further work along the foreshore to the east of the Scheme. The submerged landscapes have potential to preserve palaeoenvironmental evidence, as well as human and animal footprints and prehistoric artefacts. Evidence suggests that there is low potential for Roman-medieval archaeological remains and high potential for post-medieval remains. Evidence for post-medieval sea defences and fish traps have been recorded, as well as a possible causeway. In addition, there are a number of undesignated wrecks along the foreshore, including the wreck of 'Sarah' (MM27) potentially within the Scheme area although, with the exception of 'City of Ottawa' (MM31) and an unnamed wreck (MM32), the exact locations of wreck sites are unconfirmed. There is a low potential for modern remains relating to two aircraft crash sites, which are thought to lie beyond the Scheme. While a low risk, the presence of wreck fragments on the foreshore cannot be entirely discounted.

Deposits of archaeological interest are likely to have been removed by the construction of the current coastal defences. However, deposits of archaeological interest are likely to be encountered along the beach and foreshore. This has been shown by the walkover survey, although the action of the incoming and receding tides will have eroded some of the deposits. Although no archaeological deposits have been observed along the western part of the Scheme (Sections E-I), the presence of tidal flat deposits at shallower levels seawards cannot be discounted.

There is no anticipated impact from the scheme on the designated heritage assets along Water Street. Although there is an anticipated increase in the presence of construction traffic along West Parade to the north, Water Street is already a busy thoroughfare within Rhyl town centre. The assets' significance is drawn mainly from the broadly contemporary townscape and the temporary presence of construction traffic will not detract from this. New structures will be introduced approximately 100m north-west of the designated assets on Water Street. However, the area between West Parade and the foreshore was heavily developed during the 20th century with landscaping and modern structures. As such, there is no visual connection between the Scheme and the designated assets and therefore no impact is predicted during the operation phase of the Scheme.

A construction temporary impact is anticipated on the War Memorial. The garden of remembrance makes a positive contribution to the significance of the memorial. The noise from construction machinery to the north and increased flow of construction traffic will affect the peaceful experience of the asset and have an adverse impact on the memorial. However, once the works on the Scheme are completed, no further impact is anticipated.

Excavation for the construction of the rock armour toe and concrete steps at the base of the current sea defences are anticipated to impact upon archaeological deposits. In addition, vehicles on the foreshore as well as rock storage areas could also have an impact upon shallow or exposed archaeological remains.

10.1.2 Barkby Beach

No designated assets are anticipated to be affected by the ecological mitigation area at Barkby Beach due to their distance from the Scheme and the limited nature of the works proposed. Data gathered from within the study area suggests that there is potential for remains of prehistoric date. However, this former saltmarsh area was reclaimed in the late 19th century has been subsequently landscaped. The works proposed are light touch in nature to protect the grassland with the use of hand tools proposed across some areas. Construction is anticipated to be low impact, with the ecological ponds being excavated to a maximum of 0.5m deep. Therefore, there are no anticipated impacts on the archaeological remains at Barkby Beach.

10.2 Recommendations

10.2.1 Rhyl

10.2.1.1 Archaeology

The results from archaeological mitigation associated with a programme of coastal defence works at Borth, Ceredigion form the basis of the strategy for further assessment at Rhyl. It has been recognised that the method of construction for coastal defence structures is not ideal for archaeological recording. Work along the foreshore has to be relatively rapid because of the receding and incoming tides. Excavated areas within the sand can be unstable and fill quickly with water⁷⁹. Following this, a series of recommendations have been made as to how archaeological mitigation might be implemented on similar intertidal developments. The following is based on that list, as well as discussions with the archaeological adviser to DCC:

- The intertidal deposits identified during the walkover survey should be avoided during the construction phase. It should also be included in a programme of survey and sampling (see below), regardless of whether it is affected or not;
- Prior to commencement, a programme of survey and sampling should be undertaken across the foreshore by a suitably qualified geoarchaeological specialist. This should determine the depth and location of the submerged landscape deposits, as well as their potential for further detailed work;
- Should significant remains be identified, a scheme of detailed recording should be undertaken which should include further paleoenvironmental sampling and full assessment; and
- Full reporting and archiving of the assessment work should be carried out, in line with ClfA Standards and Guidance.

The study of submerged prehistoric land surfaces has been identified as a priority research theme within the research framework for the archaeology of Wales⁸⁰. This mitigation has the potential to contribute to this research theme.

10.2.1.2 Built Heritage

Recommendations for mitigation regarding the War Memorial are discussed within ES Volume 1: Chapter 13. This includes the potential to reduce noise impacts through the use of press piling near the SeaQuarium.

10.2.2 Barkby Beach

Due to the light touch nature of the works proposed at Barkby Beach, archaeological deposits and designated built heritage are not anticipated to be affected and no further mitigation is proposed.

⁷⁹ Meek, J. 2012 *Borth Coastal Defence Scheme, Phase 1, Borth, Ceredigion: Archaeological Watching Brief* Unpublished Report. Dyfed Archaeological Trust Report 2012/13

⁸⁰ Anon. 2017 A Research Framework for the Archaeology of Wales: Maritime. Available at: <https://www.archaeoleg.org.uk/pdf/review2017/maritimereview2017.pdf>

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A. Gazetteer of Designated and Undesignated Heritage Assets

MM no.	Name	Cadw no.	HER no.	RCAHMW No	Type	Description	Period
MM01	War Memorial	14276	26173/145076		Grade II Listed Building	War memorial to the north of East Parade within a garden of remembrance. Constructed in 1904 to commemorate six local men who died in the Boer War and moved to the present location in 1948. The original memorial is flanked by memorials to casualties of the World Wars and later conflicts.	Modern
MM02	No 47, Water Street (E Side) No 49, Water Street (E Side)	14325 14326	-		Grade II Listed Building	Adjacent buildings constructed 1836-1850. Originally pair of houses that were later incorporated into a longer terrace. The buildings are an intact example of construction from the first major phase of Rhyl's urban expansion.	Post-medieval
MM03	No 46 Water Street (W Side) No 48, Water Street (W Side) No 50, Water Street (W Side) No 52, Water Street (W Side) No 54, Water Street (W Side) No 56, Water Street (W Side)	14327 14328 14329 14330 14331 14332	-		Grade II Listed Building	Row of shops with accommodation above and to the rear. Structures built in 1903 to the design of T Lockwood of Chester, although the original designs were for a much more ambitious and larger scale development. The building is of two storeys and consists of red brick with gold terracotta bands and dressings, with a slate roof.	Modern
MM04	Armstrong Whitworth Whitley V Bd204	-	-	515475	Designated aircraft crash site	Aircraft which crash landed on the mudflats of Rhyl on 17 th May 1943. Archaeological remains are not confirmed as present but may be in the vicinity.	Modern
MM05	Boulton Paul Defiant I N1770	-	-	515607	Designated aircraft crash site	Aircraft which crash landed on the beach at Rhyl on 31 st August 1941. Archaeological remains are not confirmed as present but may be in the vicinity.	Modern
MM06	Rhyl foreshore submerged landscape		17103		Undesignated	Peat and boulder clay along Rhyl foreshore from which Neolithic and Bronze Age finds have been recovered. New borings indicate the presence of a lower peat which may indicate a former coastline some 100-400m south of the present coast. Upper peat may be dated by analogy to c.4000-3000 BC (late Mesolithic/Early Neolithic).	Prehistoric
MM07	Foryd landing stage east II	-	83516		Undesignated	Landing stage depicted on 1899 25-inch mapping (2 nd edition). Destroyed with construction of West Parade and sea front.	Post-medieval
MM08	Kinmel Bay, Pillbox	-	167182		Undesignated	1946 Pillboxes and anti-tank blocks built on the sea wall. Planned for removal in 2002 and not observed during site visit, presumed destroyed.	Modern

MM no.	Name	Cadw no.	HER no.	RCAHMW No	Type	Description	Period
MM09	Rhyl foreshore (Splash Point) structures	-	123322		Undesignated	A series of wooden posts set in roughly parallel short trenches filled with stone. At least three trenches set roughly at right angles about a common axis. Large wooden posts set roughly axially may be the remains of older groynes and unrelated to the trenches. Apparently dug through peat deposits exposed on Rhyl beach at Splash Point. Possibly part of fish traps or some sort of redundant sea defence. Antler mattock (MM17) and other prehistoric finds found in vicinity, as well as an apparent stone causeway (MM10).	Prehistoric/Post-Medieval
MM10	Rhyl foreshore causeway	-	106402		Undesignated	Stretch of stones visible at low tide, possibly a causeway measuring 5-8m wide. Composed of angular stones. HER records observation of around 15m in length, before disappearing into the rising beach.	Post-medieval
MM11	Rhyl pier	-	34208	34232	Undesignated	Pier built in 1867 to a design by James Brunlees. Demolished in 1973. Remains at the site of the pier may include remnants of the cast iron screw piles and foundations.	Post-medieval
MM12	Rhyl Lifeboat Station	-	-	544025	Undesignated	Small rectangular building with the annotation 'Lifeboat Station' shown on the beach in the 6-inch OS 2nd edition mapping of 1900. The 19 th century structure has been destroyed and the location is now occupied by the 20th century lifeboat station building. The building surroundings have been formalised into the promenade and extended with a small slipway.	Modern
MM13	Rhyl foreshore submerged landscape	-	-	-	Undesignated	Area of peat with exposed tree trunks and roots recorded during 2021 walkover survey.	Prehistoric
MM14	Rhyl foreshore groyne	-	-	-	Undesignated	Possible remains of a groyne represented by a short stretch (c. 0.6m) of closely set timbers recorded during 2021 walkover survey	Post-medieval
MM15	Rhyl foreshore – worked stone with possible anti-tank block	-	-	-	Undesignated	Depression containing exposed stone, some apparently shaped observed during 2021 walkover survey. Includes a large angular block with smooth sides, possibly remains of an anti-tank block. A concentration of smaller stones showing signs of shaping, but of unknown function. It is not clear whether the group is in-situ.	Modern
MM16	Rhyl foreshore - Possible metal fixtures	-	-	-	Undesignated	Two corroded, bent metal shafts emerging from sand, observed during 2021 walkover survey. Nature and purpose is unknown. Possibly the remains of groyne fittings.	Post-medieval

MM no.	Name	Cadw no.	HER no.	RCAHMW No	Type	Description	Period
MM17	Rhyl foreshore (Splash Point) antler mattock	-	33099		Findspot	Findspot of perforated antler mattock found near Splash Point, Rhyl.	Mesolithic
MM18	Rhyl foreshore bronze spearhead	-	101903		Findspot	Findspot of bronze socketed spearhead 4.4 inches long found on the Rhyl beach.	Bronze Age
MM19	Rhyl foreshore roman coin	-	102176		Findspot	Findspot of third brass of Licinius (307-24 ad) found 1937 on beach.	Roman
MM20	Rhyl Roman coin	-	17163		Findspot	Findspot of Roman coin recorded in HER but no further detail available.	Roman
MM21	Rhyl axehead	-	120560		Findspot	Findspot of possible Neolithic axehead of dark grey, fine-grained stone. Possibly polished.	Neolithic
MM22	Rhyl, West Promenade Roman Coin	-	106441		Findspot	Findspot of bronze Roman coin. Too badly worn to date.	Roman
MM23	William Henry	-	-	271374	Undesignated shipwreck	Wooden Mersey flat built in 1869. Lost on 21 st October 1895. Archaeological remains are not confirmed as present but may be in the vicinity.	Post-medieval
MM24	Good Intent	-	-	524863	Undesignated shipwreck	Wooden ship built in 1818. Lost near Rhyl on 21 st June 1869. Archaeological remains are not confirmed as present but may be in the vicinity.	Post-medieval
MM25	Albion	-	-	524837	Undesignated shipwreck	Wooden smack built in 1831. Wrecked near Rhyl on 28 th October 1843. Archaeological remains are not confirmed as present but may be in the vicinity.	Post-medieval
MM26	Sir Peregrine	-	-	271431	Undesignated shipwreck	Wooden schooner, probably early 19 th century. Lost on Rhyl beach on 5 th January 1843. Archaeological remains are not confirmed as present but may be in the vicinity.	Post-medieval
MM27	Sarah	-	-	525214	Undesignated shipwreck	Mersey flat built in 1823. Vessel was wrecked on Rhyl beach on 17 th October 1879. Archaeological remains are not confirmed as present but may be in the vicinity.	Post-medieval
MM28	Raven	-	-	271527	Undesignated shipwreck	Wooden sloop built in 1837. Vessel went ashore on 8 th November 1878. Archaeological remains are not confirmed as present but may be in the vicinity.	Post-medieval
MM29	Mayflower	-	-	525228	Undesignated shipwreck	Wooden sloop built in 1784. The vessel was wrecked off Rhyl on 13 th September 1837. Archaeological remains are not confirmed as present but may be in the vicinity.	Post-medieval
MM30	Saint Olaf	-	-	271558	Undesignated shipwreck	Wooden brig built in 1852. Vessel was blown ashore and lost on 14 th May 1884. Archaeological remains are not confirmed as present but may be in the vicinity.	Post-medieval
MM31	City of Ottawa	-	-	442	Undesignated shipwreck	Three-masted vessel built in 1860. Damaged in a storm in 1906 and brought to Rhyl, but later	Post-medieval

MM no.	Name	Cadw no.	HER no.	RCAHMW No	Type	Description	Period
						abandoned. Wreck location within a mud bank in Ford Harbour.	
MM32	Unnamed Wreck	-	-	506949	Undesignated shipwreck	Wreck identified close to the City of Ottawa (442). Seen on aerial photographs dating to July 1987. Timbers are visible within a mud bank in Ford Harbour.	Post-medieval
MM33	Prestatyn Castle	FL024	102226	92922	Scheduled Monument	Remains of a motte and bailey castle. Prestatyn Castle consists of a low, ditched motte within a roughly rectangular enclosure. The enclosure is defined by traces of walling and an external ditch. There is a projection, tentatively identified as a gate, on the northern side. Excavation in 1913 identified walls of the castle and an approach causeway, all dating to the eleventh century.	Medieval
MM34	Nant Hall Hotel	1426	102205	36042	Listed Building	Large two-storey house of predominantly 19th century construction but retaining earlier elements in the west wing. Stands at the site of the historical seat of the lords of Penrhyn and, later, the residence of the Conways of Bodrhyddan. Present building restored and altered through the 19th century. Originally a private residence but now functioning as a hotel.	Post-medieval
MM35	Rhyl Central Conservation Area	-	-	-	Conservation Area	Conservation area preserving the historic character of a planned Victorian seaside town containing many Victorian and Edwardian buildings. The conservation area includes 76 listed buildings and a wide variety of architectural styles.	Post-medieval
MM36	Rhyl, River Street Conservation Area	-	-	-	Conservation Area	Conservation area characterised by distinctive 3 storey yellow brick, bay fronted properties.	Post-medieval

Source: Information obtained from the Regional Historic Environment Record curated by the Clwyd-Powys Archaeological Trust (HER Enquiry E6651); Coflein

B. Map of Heritage Constraints



Key to Symbols	
	Scheme red line boundary
	500m buffer of Scheme extent
	1km buffer of Scheme extent
	2km buffer of Scheme extent
	Observed heritage feature (2021 survey, see note 2)
	Designated air crash site
	Non-designated heritage assets
	Grade II* listed building
	Grade II listed building
	Maritime heritage assets
	North Wales Coast Railway Line
	Public footpath
	Restricted byway
	Byway open to all traffic
	Wales Coast Path
	National Cycle Route 5
	National Cycle Route 84
	Exposed tidal flat deposit (2021 survey, see note 2)
	Conservation areas

Notes

1. This drawing is intended only to be used to support the Environmental Impact Assessment for the proposed Central Rhyl Coastal Defences Scheme, and it should not be used for any other purpose. It presents the heritage and landscape constraints only.
2. This drawing should be read in conjunction with the Central Rhyl Coastal Defences Heritage Desk Based Assessment (DBA) Addendum (CR-MMD-00-00-RP-EN-3052) and Chapter 7 (Historic Environment) of the Central Rhyl Coastal Defences Environmental Statement (Volume 1: Main Text, CR-MMD-00-00-RP-EN-3016). The DBA Addendum includes full details on the 2021 survey completed by Mott MacDonald.
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C01	03/09/21	SL	Accepted for EIA	CW	NMP
P01	03/08/21	SL	For Review and Comment	CW	NP
Rev	Date	Drawn	Description	Ch'k'd	App'd

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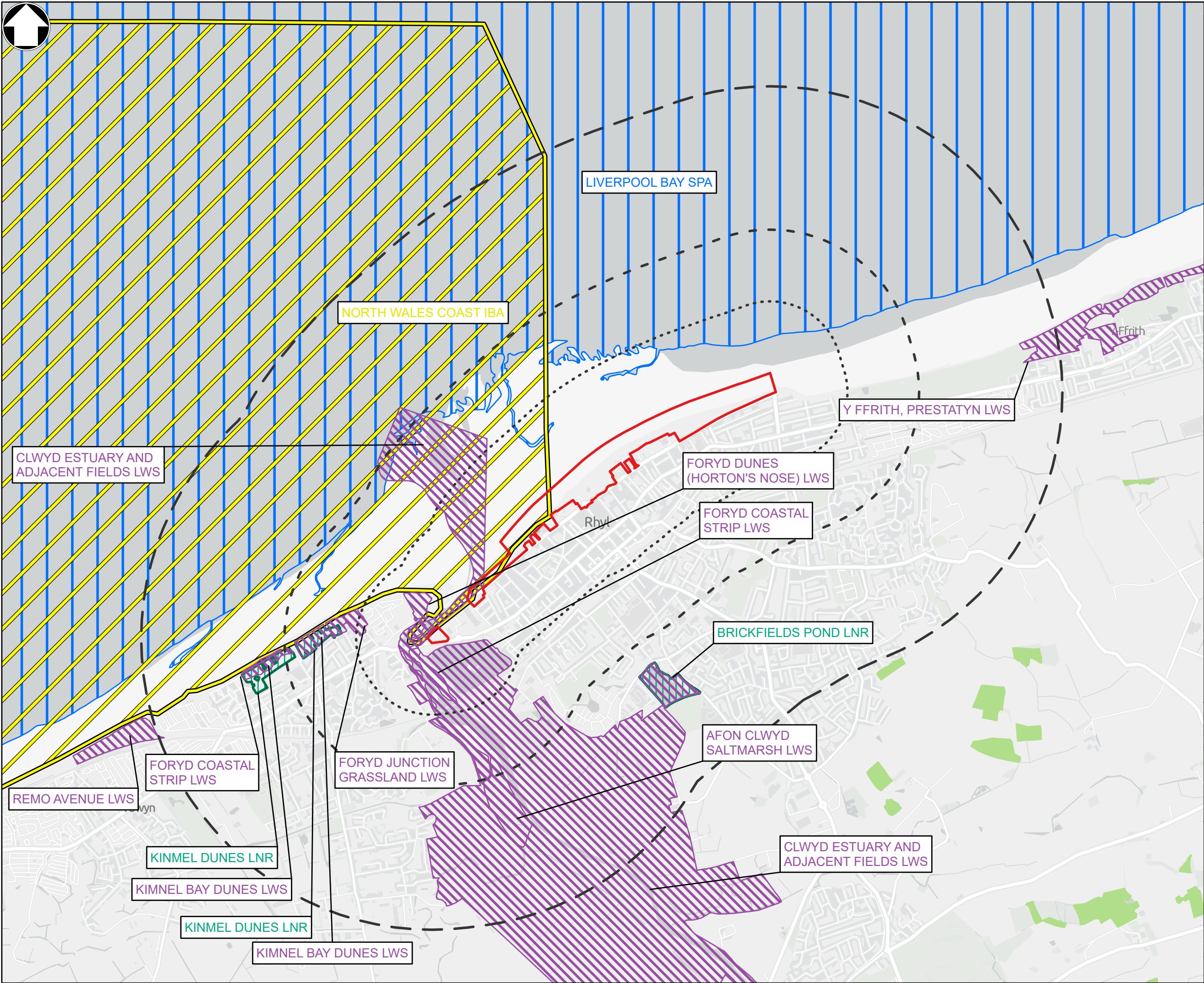
Title
Central Rhyl Coastal Defences
Heritage and Landscape Constraints

Designed	M Reynolds	MR	Eng Check	C Williams	CW
Drawn	S Li	SL	Coordination	N Spofforth	NS
GIS Check	S Anstice	SA	Approved	N M Price	NMP

Scale at A3	Status	Rev	Security
1:22,000	A4	C01	STD

Drawing Number
CR-MMD-00-00-DR-EN-3037





Location Map

Key to Symbols

Scheme red line boundary

Scheme red line boundary buffer (500m)

Scheme red line boundary buffer (1km)

Scheme red line boundary buffer (2km)

Local Wildlife Sites (LWS)

Important Bird Areas (IBA)

Special Protection Areas (SPA)

Local Nature Reserves (LNR)

Ancient Woodland

Notes

1. This drawing is intended only to be used to support the Environmental Impact Assessment for the proposed Central Rhyl Coastal Defences Scheme, and it should not be used for any other purpose. It represents the Statutory and Non-Statutory Designated Sites within 2km of the Central Rhyl Coastal Defences Scheme.

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Title

Central Rhyl Coastal Defences

Statutory and Non-Statutory Designated Sites within 2km

of the Scheme

Page 1 of 2

Designed	N Spofforth	NS	Eng Check	C Williams	CW
Drawn	S Li	SL	Coordination	N Spofforth	NS
GIS Check	S Anstice	SA	Approved	N M Price	NMP
Scale at A3	Status	Rev	Security		
1:25,000	A4	C01	STD		

Drawing Number

CR-MMD-00-00-DR-EN-3035

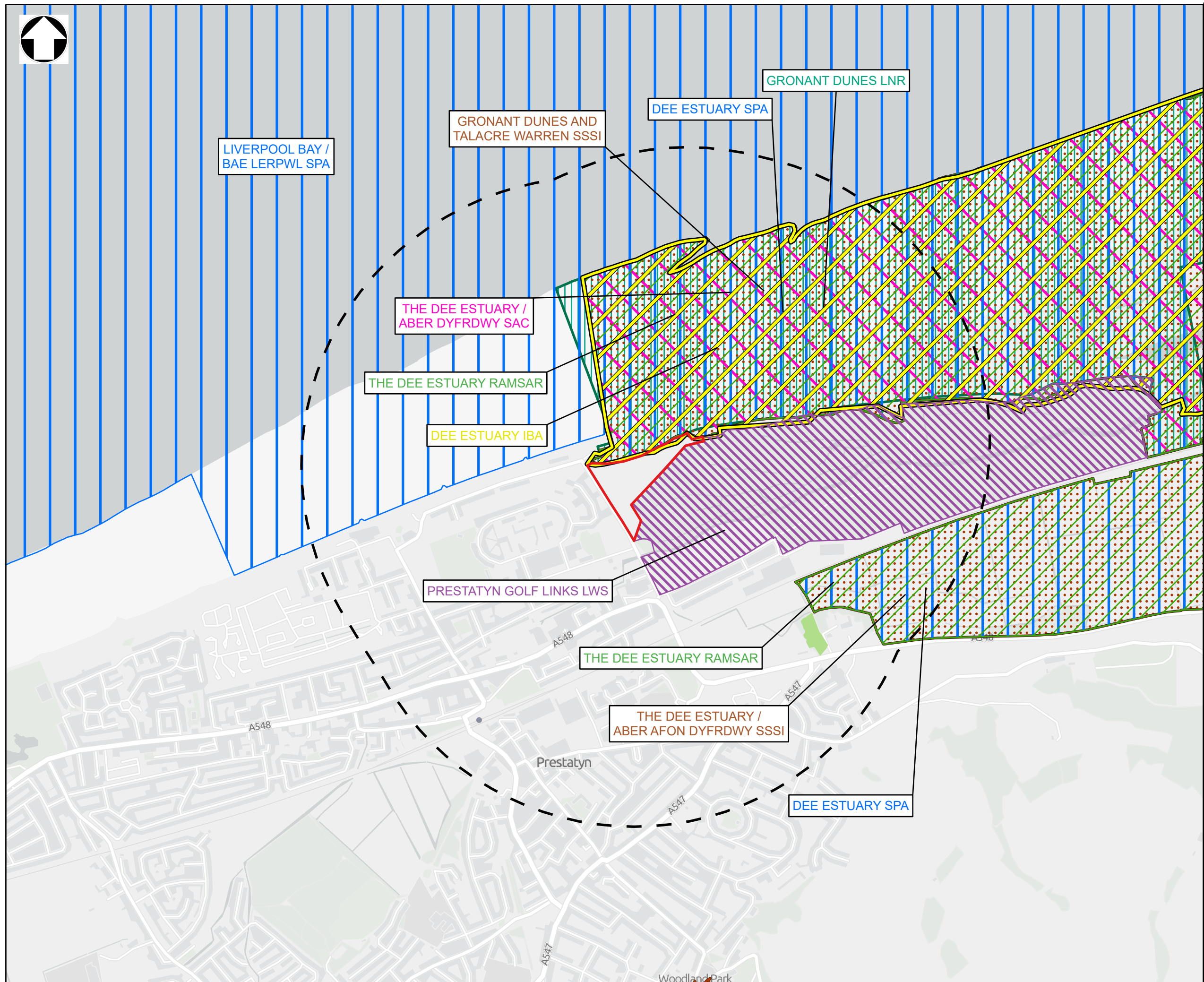
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0 200 400 600 800 1,000

Metres



Location Map

Key to Symbols

- Scheme red line boundary
- Scheme boundary buffer (1km)
- Local Wildlife Sites (LWS)
- Important Bird Areas (IBA)
- Ramsar
- Special Protection Areas (SPA)
- Special Areas of Conservation (SAC)
- Sites of Special Scientific Interest (SSSI)
- Local Nature Reserves (LNR)
- Ancient Woodland

Notes

1. This drawing is intended only to be used to support the Environmental Impact Assessment for the proposed Central Rhyl Coastal Defences Scheme, and it should not be used for any other purpose. It presents the Statutory Designated and Non-Statutory Sites within 1km of the ecological mitigation area for Central Rhyl Coastal Defences Scheme.

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Rev	Date	Drawn	Description	Ch'k'd	App'd

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Title

Central Rhyl Coastal Defences

Statutory and Non-Statutory Designated Sites within 1km of the Ecological Mitigation Area for the Scheme

Page 2 of 2

Designed	J Styles	JS	Eng. Check	C Williams	CW
Drawn	S Li	SL	Coordination	N Spofforth	NS
GIS Check	S Anstice	SA	Approved	N M Price	NMP

Scale at A3

1:12,500

Status

A4

Rev

C01

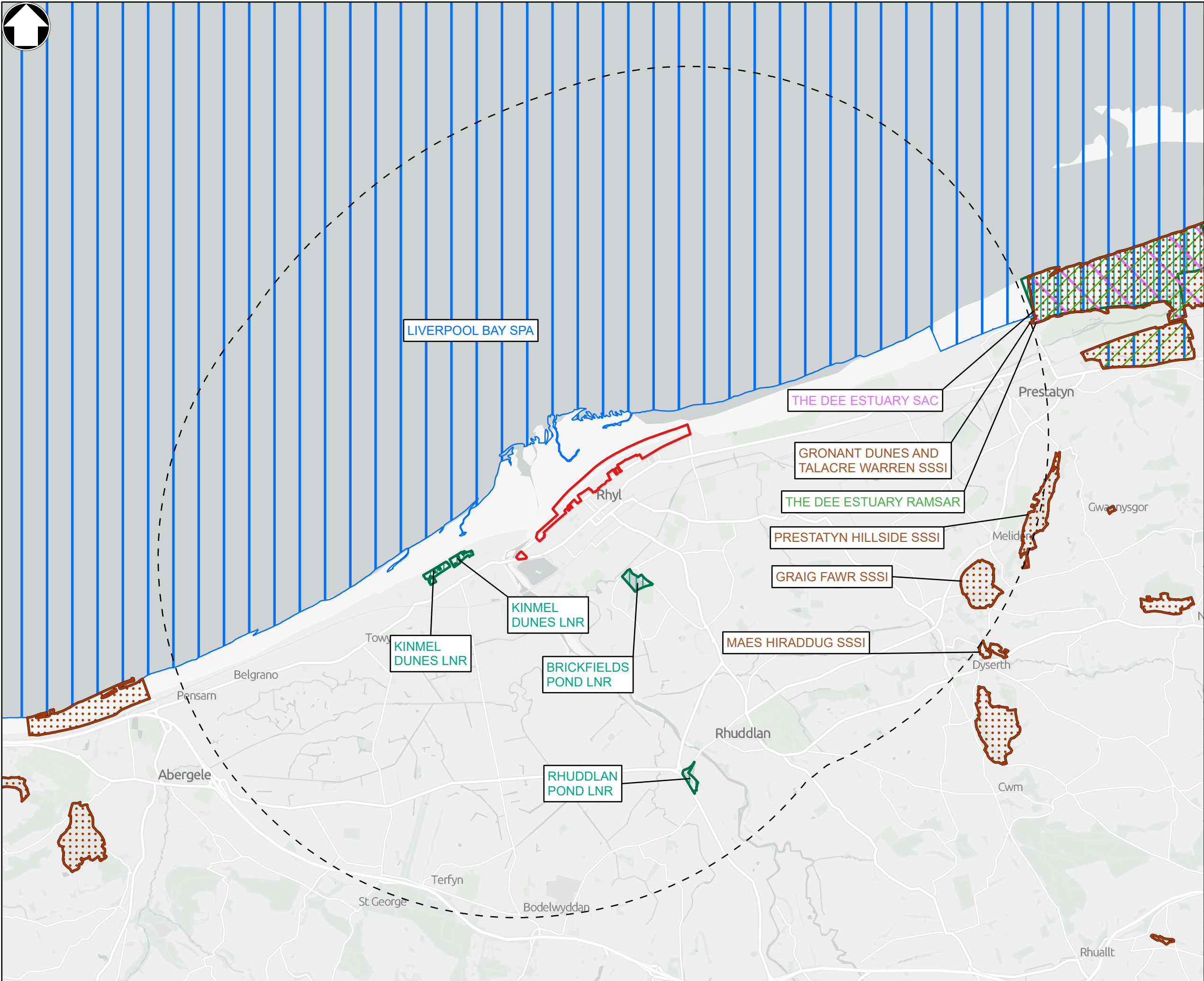
Security

STD

Drawing Number

CR-MMD-00-XX-DR-EN-3045





Location Map

Key to Symbols

- Scheme red line boundary
- Scheme red line boundary buffer (5km)
- Ramsar
- Sites of Special Scientific Interest (SSSI)
- Special Protection Areas (SPA)
- Special Areas of Conservation (SAC)
- Local Nature Reserves (LNR)

Notes

1. This drawing is intended only to be used to support the Environmental Impact Assessment for the proposed Central Rhyl Coastal Defences Scheme, and it should not be used for any other purpose. It presents the Statutory Designated Sites within 5km of the Central Rhyl Coastal Defences Scheme.

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Central Rhyl Coastal Defences
Statutory Designated Sites within 5km of the Scheme

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Drawn	S Li	SL	Coordination	N Spofforth	NS
GIS Check	S Anstice	SA	Approved	N M Price	NMP

Scale at A3	Status	Rev	Security
1:50,000	A4	C01	STD

Drawing Number
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0

500

1,000

1,500

2,000

2,500

Metres

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Location Map

Key to Symbols

Scheme red line boundary

Observed heritage feature (2021 survey, see note 2)

Exposed tidal flat deposit (2021 survey, see note 2)

Heritage

Maritime

Designated air crash site

Grade II listed building

Conservation area

Notes

1. This drawing is intended only to be used to support the Environmental Impact Assessment for the proposed Central Rhyl Coastal Defences Scheme, and it should not be used for any other purpose. It presents the designated and non-designated heritage assets.

2. This drawing should be read in conjunction with the Central Rhyl Coastal Defences Heritage Desk Based Assessment (DBA) Addendum (CR-MMD-00-00-RP-EN-3052) and Chapter 7 (Historic Environment) of the Central Rhyl Coastal Defences Environmental Statement (Volume 1: Main Text, CR-MMD-00-00-RP-EN-3016). The DBA Addendum includes full details on the 2021 survey completed by Mott MacDonald.

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8. Listed buildings: Grade I - Exceptional interest, Grade II* - Particularly important, Grade II - Special interest

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Title Central Rhyl Coastal Defences

Designated and Non-Designated Heritage Assets

Page 1 of 2

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GIS Check	H Wheldon	HW	Approved	N M Price	NMP

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1:10,000	A4	C01	STD

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0

100

200

300

400

500

Meters



Location Map

Key to Symbols

Scheme red line boundary

Designated assets

Grade II listed building

Scheduled Ancient Monument

Notes

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Title Central Rhyl Coastal Defences

Designated and Non-Designated Heritage Assets

Page 2 of 2

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C. Walkover Survey Photographs

PhotoApp 1 Looking north-east across the exposure of peat and estuarine clays at the eastern end of the Scheme.



PhotoApp 2 Close up of deposits, showing the peat overlying the estuarine clay below



PhotoApp 3 Close up of deposits, showing a possible layer of estuarine clay overlying the peat below



PhotoApp 4 Looking NE towards exposed trees within the sand. Roots are visible in the foreground and background



PhotoApp 5 Line of closely set timbers, possibly the remains of an old groyne



D. Setting Assessment Photographs

PhotoApp 6 War Memorial, within the Garden of Remembrance. Looking north-west



PhotoApp 7 Looking east, along the east side of Water Street (no 25 and 27 are in the middle)



PhotoApp 8 46-56 Water Street (west side), looking west



PhotoApp 9 46 Water Street, with modern development in the background (looking north-west)



PhotoApp 10 Looking north-west along Water Street towards the seafront. Note the modern developments in the background blocking views of the seafront.



