

**Conservation of
PULHAMITE ARTIFICIAL ROCKWORK
Ramsgate, Kent**

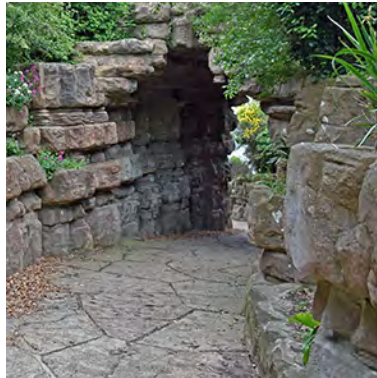
**WEST CLIFF CHINE
STAGE ONE REPORT**

for

**Ramsgate Heritage Action Zone
(HAZ) Partnership**

June 2020

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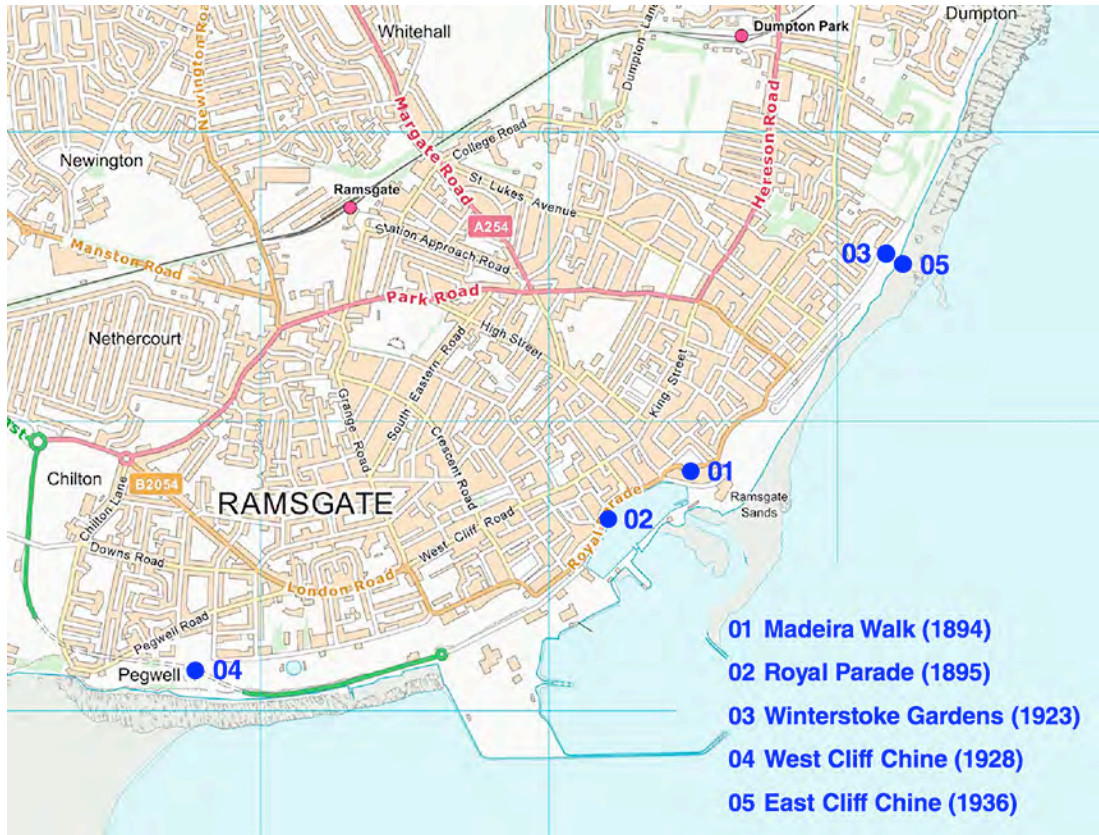
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1. INTRODUCTION



1.01: RAMSGATE'S PULHAMITE ARTIFICIAL ROCKWORK SITES IN CONTEXT (MAP BASED ON OS OPEN DATA)

1.1 Background

1.1.01 Launched in March 2017, the Ramsgate Heritage Action Zone ('HAZ') is a five year, government-funded project which aims to support the regeneration of Ramsgate by harnessing its historic environment as a catalyst for economic growth. Coupled with new investment and development, heritage-related programmes of engagement and conservation are seen as key to strengthening the local economy for the benefit of the community. A grant from the MHCLG Coastal Revival Fund enabled the HAZ Partnership — Thanet District Council ('TDC'), Historic England ('HE'), Ramsgate Town Council ('RTC'), Ramsgate Community Coastal Team (who in 2018 successful bid for the grant) and community representatives — to fund a survey of the Pulhamite Artificial Rockwork that is a unique part of the late 19th century and interwar heritage of the town. RTC acting on behalf of TDC (the accountable body) commissioned The Morton Partnership ('TMP') to undertake the survey with CHRISTOPHER GARRAND BSc BArch GraDipCons(AA) RIBA AABC IHBC, the author of this report, invited to lead due to his knowledge and understanding of PAR. IRENE SEIJO BA (Hons) MA Public Art & Design was also appointed by TMP, her role being to assess the landscape element of the rockwork, and advise on vegetation and planting. Structural engineering advice was provided by Ed Morton BEng (Hons) CEng FICE IHBC CARE Accredited.



1.02: MADEIRA WALK (1894)



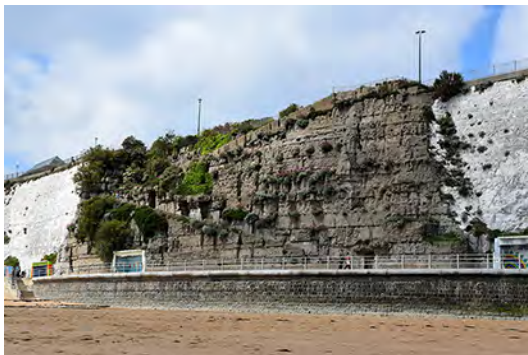
1.03: ROYAL PARADE (1895)



1.04: WINTERSTOKE GARDENS (1923)



1.05: WEST CLIFF CHINE (1928)



1.06: EAST CLIFF CHINE (1936)



1.07: ELLINGTON PARK (1893)

1.1.02 There are five Pulhamite Artificial Rockwork ('PAR') sites in Ramsgate:

- 01 Either side of Madeira Walk, a snaking road that rises from the Harbour to Wellington Crescent, the eastern part of a massive harbourside road improvement scheme of 1891–5; the PAR dates from 1894.
- 02 Within the brick arches that rise above Royal Parade, the inclined middle tier of the western part of the harbourside road scheme; the PAR followed–on from that of Madeira Walk and was completed in 1895.
- 03 Winterstoke Gardens at the northern end of Victoria Parade, opened in 1923.
- 04 Dating from 1926–8, a winding roadway in a gorge (chine) down through the cliff at the western end of Royal Esplanade Gardens; the PAR dates from 1928.

05 A chine down from Winterstoke Gardens to the base of the (east) cliff promenade and beach below, opened in 1936.

All sites were in February 1988 statutorily listed Grade II and are within (in one case next to) a designated conservation area. Madeira Walk is also part of the Grade II Registered Albion Place Gardens, first listed in July 1998.

1.1.03 Northwest of the Royal Harbour and Ramsgate town centre is Ellington Park, opened in 1893. A small formation of rockwork within the park has all the characteristics of near contemporary Pulhamite Artificial Rockwork, though its provenance as such is unproven; further research is needed. The site is not statutorily listed.

1.2 Purpose

1.2.01 The aim of the survey was to provide an assessment of the condition of Ramsgate's PAR, with a focus on defects that threaten its significance — defined in the National Planning Policy Framework ('NPPF') as its “value ... to this and future generations because of its heritage interest” — and the resultant need for conservation (“The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance”). Prioritised maintenance and repair strategies to be implemented ‘as and when’ by volunteers, conservators and local contractors were (subject to detailed survey) required. The outcome would also inform an overarching conservation management plan for the HAZ, and possibly the revision of the Historic England ('HE') guidance *Durability Guaranteed: Pulhamite rockwork — its conservation and repair*, published in 2008.

1.3 Brief

1.3.01 In terms of the resources available for the survey, the order of priority is:

- (a) Madeira Walk.
- (b) Winterstoke Gardens.
- (c) East Cliff Chine.
- (d) West Cliff Chine.
- (e) Royal Parade.

Initially, Madeira Walk, Winterstoke Gardens and the East Cliff Chine will be surveyed in detail, with the West Cliff Chine and Royal Parade deferred pending funding.

1.3.02 Fundamental to the survey is the notion of ‘informed conservation’, a philosophy which requires decision on intervention — including maintenance and repair — to be based on evidence and justified need, i.e. ‘understanding’. Hence the staged, methodical approach advocated in *Durability Guaranteed*, the basis of the brief:

A Drawing on a review of existing literature — including: a survey report on the Madeira Walk PAR prepared in 2000 by Simon Swann (1956–2018); a 1992 study of Royal Parade prepared by Donald W. Insall and Associates; and primary

and secondary historic research — investigate and survey in outline the five sites culminating in Stage One (overview) reports on PAR generally, Royal Parade and the West Cliff Chine.

- B Revisit and update the 2000 Madeira Walk survey — and where necessary and appropriate — its scope and format in light of subsequent work by Simon Swann and others on the conservation of Pulhamite Artificial Rockwork.
- C Using the Madeira Walk methodology and format (as perhaps modified), survey in detail the PAR of Winterstoke Gardens and the East Cliff Chine.
- D Bring together the outcome of each of the detailed surveys into a (Stage Two) report on the condition of the PAR and conservation issues to be addressed along with prioritised schedules of works; the latter to be clearly referenced to marked-up plans and photographic records that enable the location and nature of repairs (including site-specific constraints) to be easily identified.
- E Following-on from the survey and schedules, produce cross-referenced generic specifications that describe the necessary types of repair, and the parameters under which they are to be executed, noting also site-specific constraints.
- F Provide general and specific guidance on the maintenance and management of PAR including vegetation control, and the removal of graffiti and other soiling.
- G If required, help arrange for the collection and analysis of further samples, and the execution of trial repairs (exemplars) to guide future repair. Not required.
- H Assist in developing and supporting the training of volunteers (including as part of the survey), local contractors and others in the conservation of Pulhamite Artificial Rockwork.

Specialist advice on landscape and ecology was an integral part of the survey, as was collaboration with Ramsgate Town Council, HE and other interested parties.

- 1.3.03 This report is part of the outcome of paragraph 1.3.02A. Its purpose is to provide a contextual overview of the condition of the West Cliff Chine PAR along with a framework for a more detailed (Stage Two) survey, a starting point for the ongoing management of a Grade II listed building alongside a designated conservation area.

1.4 Methodology

- 1.4.01 A cursory visual and tactile survey of the West Cliff Chine PAR was carried out on a warm and sunny 23rd May 2019; an extensive digital photographic record was made. The main survey tool was a metal chisel that was selectively dragged over the surfaces of the PAR so as to broadly understand the potential extent of hollow areas. Working in parallel, Irene Seijo (landscape architect) undertook an initial survey of vegetation and planting, drawing comparisons with historic photographs.
- 1.4.02 HE provided copies of the most recent listing report for the West Cliff Chine (updated in 2019 as part of the HAZ programme) as well as images and catalogue entries from the Historic England Archive. Internet searches resulted in a large number of

additional historic images, the most fruitful sources being the Thanet Online website maintained by the owner of Michael's Bookshop in Ramsgate, whose self-published collections of old postcards provided an even wider range of material. Use of the British Newspaper Archive website to explore back copies of *The Thanet Advertiser* (from 1930–44 the *Advertiser and Echo*) pinpointed articles relevant to the history and development of the West Cliff Chine.

1.5 Structure and content

1.5.01 Following this Introduction:

- **Form and fabric** (Section 2) describes the PAR in terms of its location and setting, design, materials and construction.
- **Planting** (Section 3) comprises a brief overview of how the PAR was at the time of the survey planted.
- **History and significance** (Section 4) outlines the origins and development of the West Cliff Chine and identifies the significance of its PAR.
- **Condition** (Section 5) presents an overview of the condition of the PAR as the date of survey along with broad recommendation as to the potential need for work and a future detailed (Stage Two) survey.

The report ends with **Bibliography** (Section 6) and a single **Appendix** (the heritage designation for the West Cliff Chine).

1.6 Qualifications and limitations

1.6.01 THIS REPORT MUST BE READ IN CONJUNCTION WITH OVERVIEW: STAGE ONE REPORT, IN WHICH CAN BE FOUND IN-DEPTH INFORMATION ON THE NATURE, HISTORY, DESIGN, MATERIALS AND CONSTRUCTION, AND PLANTING OF PULHAMITE ARTIFICIAL ROCKWORK ALONG WITH DETAILED BACKGROUND INFORMATION ON ITS DETERIORATION AND AN OVERARCHING APPROACH TO ITS CONSERVATION.

- The survey was conducted from ground level only with no use of ladders or other aids to reach areas at height, i.e. high level PAR was not inspected.
- No inspection could be made of any area of PAR obscured by vegetation.
- The concrete bridge, steps, paving and railings are excluded; other than where they directly impact on the PAR.

Planting and vegetation are only considered where of direct relevance to the PAR.

2. FORM & FABRIC



2.01: ASCENDING THE WEST CLIFF CHINE (UPPER PART)

2.1 Location and setting

- 2.1.01 The West Cliff Chine (gorge) meanders roughly southeast down through a cut in the chalk cliff approximately two kilometres west of the Royal Harbour, linking the end of the Westcliff (Prince Edward's) Promenade — which is carried over the Chine on a bridge — with the dead-end Western Undercliff some 17 metres below (Figure 1.01). It lies just outside the Royal Esplanade Conservation Area.
- 2.1.02 East, across open grassland that was formerly a miniature golf course and putting green, is a Grade II listed boating pond (the site of a former bandstand) and flanking pavilions. Further east are bowls and croquet pitches, the site of another putting green and the edge of the historic heart of Ramsgate, marked by the house of Augustus Pugin (1812–52) and adjacent Pugin-designed Church of St. Augustine, both listed Grade I. To the west is Court Stairs House, now converted to flats, its grounds a public park and memorial garden (orchard); a caravan site and Pegwell Bay lie beyond.
- 2.1.03 Across a patch of rough ground to the north is the Grade II listed West Cliff Terrace and its (separately listed Grade II) wall and gate piers to the north. Other than a few semi-mature trees to the north and east, the lonely clifftop setting of the Chine — which is protected with chain link fencing — is characterised by expanses of rough grass and tarmac. The PAR lies either side of the hidden, inward-looking gorge, though it stops short of the base of the cliff: the roadway continues down on a shelf below the massive concrete walls that stabilise the chalk above.



2.02: BRIDGE CARRYING END OF WEST CLIFF PROMENADE OVER THE CHINE



2.03: WESTERN UNDERCLIFF WITH CHINE (ABOVE) & CONCRETE RETAINING WALL



2.04: WEST CLIFF TERRACE FROM NEAR THE TOP OF CHINE



2.05: CLIFFTOP SETTING: ROUGH GRASS & TARMAC (CHINE TO THE LEFT)

2.2 Design

- 2.2.01 The near vertical PAR that lines the chalk faces of the West Cliff Chine follow closely its sinuous curves. Starting at the top and extending approximately 120 metres along both sides of the gorge, the rockwork of the north side — which maintains an almost level skyline — rises in height as the path drops from near flush with the ground to over 10 metres. Similarly the crags of the south side, until interrupted by the bridge, beyond which the PAR drops to terminate at the level of the metal balustrade protecting the exposed edge of the lower section of the path.
- 2.2.02 Thick and thin alternating strata are in the main horizontal with little sense of any geological ‘dip’, the strata tending to merely ‘step’ at setbacks, clefts and fissures, some of considerable depth and filled with stones or soil: each stretch of PAR forms a distinct, self-contained section. Other than perhaps a hint of pink, there is no evidence of any colouring beyond the ‘natural’ grey-beige of the render. Plant pockets — some shaped as ‘fallen’ boulders — are abundant with rockwork at the lip of the gorge designed to retain soil and hence planting, noting that the PAR on the north of the Chine has smaller overhangs than the less dramatic south side. Beneath the bridge — which is about six metres above the path — the rockwork corbels to the underside of the concrete slab to create a rock arch, the illusion enhanced by the parapets above also being of PAR. An insitu concrete pavement with its surface scored in imitation of ‘crazy’ paving is integral to the design of the Chine.



2.06: PAR 'TUNNEL' (ARCH) PASSING UNDER THE CLIFF PROMENADE (SEE FIG. 2.02)



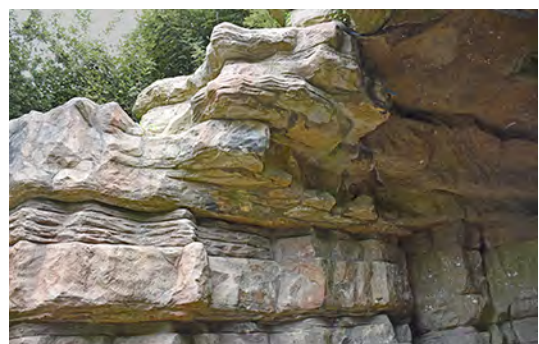
2.07: THICK & THIN ALTERNATING STRATA OF ROCKWORK



2.08: 'STEPPING' OF STRATA AT STONE-FILLED CLEFT



2.09: PLANT POCKET SHAPED AS 'FALLEN' BOULDER



2.10: CORBELLED PAR BENEATH BRIDGE CREATES ARCH

2.3 Materials and construction

2.3.01 In terms of materials and construction, the Royal Parade rockwork is typical of the work of James Pulham & Son as promoted by their brochure *Picturesque Ferneries and Rock-Garden Scenery* (Pulham, 1877), exhibiting as it does virtually all of the characteristics described in Section 4 of the Overview: Stage One Report. Backing materials comprise rough concrete and brick with overhangs of stone slabs. The deck of the bridge over the Chine is of reinforced concrete. Exposed flints are packed into fissures, a distinctive feature of the design of Ramsgate's PAR. The composition of the coatings is unknown; sampling and analysis is needed.



2.11: LOSS OF SURFACE EXPOSES ROUGH CONCRETE BACKING



2.12: BRICK BACKING EXPOSED WHERE SURFACE HAS DETACHED



2.13: FLINTS & SMALL BOULDERS PACKED INTO FISSURE

3. PLANTING

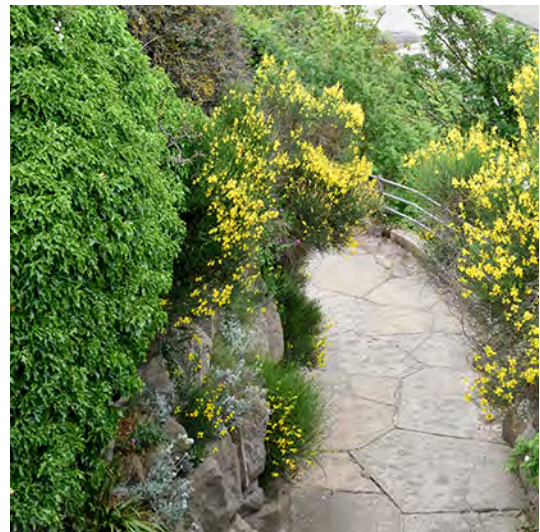


3.01: TYPICAL PLANTING NEAR TOP OF THE CHINE

- 3.1.01 Planting at the top of Chine consists of some very large *Tamarix*, *Quercus ilex* (Holm oak) and sycamore seedlings, along with large shrubs, e.g. *Elaeagnus x ebbingei*, *Escallonia*, *Cytisus*, *Crataegus sp* and *Prunus cerasifera 'Nigra'*. Most of low-level pockets appear reasonably planted. Pockets further down are planted with *Hebes*, *Osmanthus*, *Iris foetidissima*, *Osteospermums*, and *Cotoneaster* along with *Calendula* and *Nigella*. *Valeriana officinalis* is ubiquitous but there is little *Senecio maritima*. Towards the bottom of the Chine is much *Cytisus*, *Berberis* and common ivy; also sycamore seedlings and *Cotoneaster*. Smaller shrubs include *Osmanthus*, *Hebes*, *Nigella*, *Santolinas* and *Ostoeospermums*.



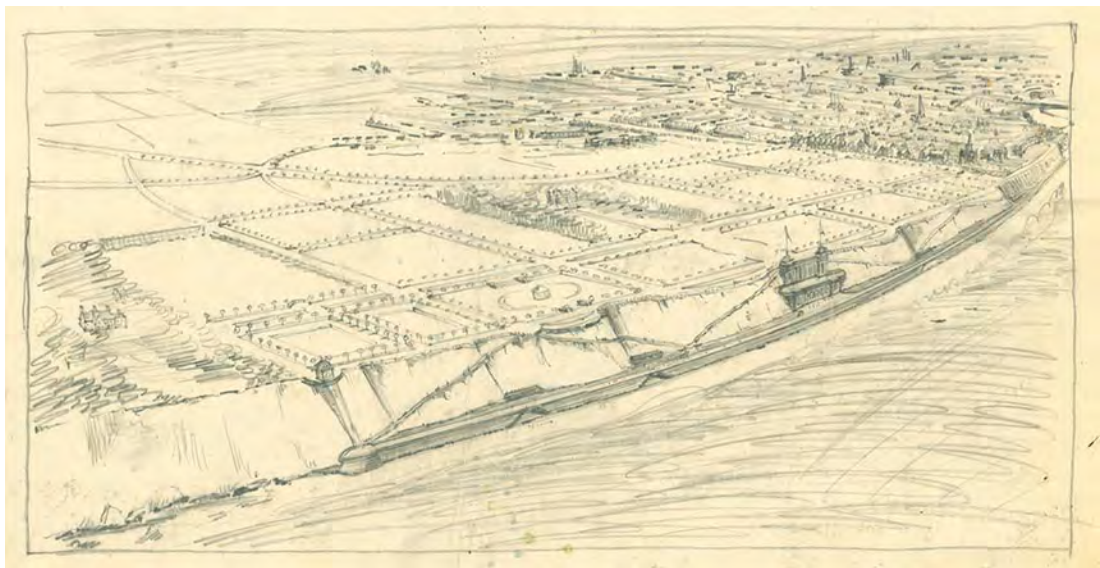
3.01: SANTOLINAS & BERBERIS



3.0: IVY & CYTISUS

4. HISTORY & SIGNIFICANCE

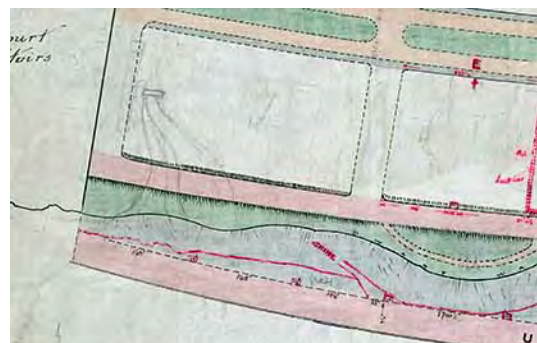
4.1.01 The PAR of the West Cliff Chine was the last major element of a project to develop — as tennis courts, putting greens, a children’s playground, a bandstand and other leisure facilities — 30 acres of clifftop land west of the centre of Ramsgate, a part of the Warre Estate that in 1921 had been purchased by the Borough Council. A design competition — adjudicated by Stanley Davenport Adshead (1868–1946), architect of the Royal Victoria Pavilion (now Weatherspoon’s) and professor of town planning at Liverpool University and University College London — led to the selection of a layout by Franklin & Deacon of Luton which, despite having been placed third, the Council felt to be the most practical and economical, i.e. best value for money. The design was the responsibility of Basil Charlton Deacon (1878–1958) who in 1928 left Franklin to become a partner in the Bedford firm of Usher & Anthony (Deacon & Gude after WW2; eventually the Charter Partnership), taking with him the project. Incorporated in the scheme was an existing project for a sea wall and undercliff drive designed by Thomas George Taylor (1866–1933), Borough Engineer from 1897 to 1931. The total cost of the project was in the order of £250,000.



4.01: PERSPECTIVE VIEW OF ORIGINAL WEST CLIFF SCHEME (BARS ref. CDE301–30)



4.02: ARCHITECT’S LAYOUT OF WEST END OF CLIFF WITH LIFT (BARS ref. CDE301–1)



4.03: BOROUGH ENGINEER’S DRAWING INDICATING CHINE (BARS ref. CDE301–2)

4.1.02 Works commenced in 1924, with the formal opening in November 1926 of Royal Esplanade and Westcliff (Prince Edward) Promenade. Originally, lifts were to connect both ends of the upper and lower promenades. However, the western lift gave way to the Chine, excavation of which was authorised — along with development between the Esplanade and the clifftop — by the Council on 2nd July 1925 (reported in *The Advertiser* of 4th July). The “top promenade” was laid out in the spring of 1926 with the cutting for the Chine complete by 28th October, on which day the bridge and “the completing of the chine in pulhamite” were approved. Pulham & Son’s contract was sealed on 2nd May 1928; its value is unknown save that a report on the opening ceremony (*The Advertiser* of 2nd August 1929) gives a figure of £4,503 for the Chine, its rockwork and planting (as opposed to £3,328 for the eastern lift; the structural cost of the project was reported as £160,519).



4.04: THE CHINE FROM THE UNDERCLIFF IN OCTOBER 1928 (KA ref. FO/S1/98/1)



4.05: INSPECTION OF THE CHINE ON 23RD OCTOBER 1928 (KA ref. FO/S1/98/1)



4.06: THE PAR NEARING COMPLETION IN OCTOBER 1928 (KA ref. FO/S1/98/1)

- 4.1.03 The completion of the West Cliff Chine can be dated via a set of photographs taken by the Folkstone Borough Engineer on 23rd October 1928 (refer Bibliography). These show the plant pockets being filled with soil with completion of the bridge (northern parapet); laying the concrete path and — on the basis of a pestle and mortar being visible — some work to coatings outstanding. An examination of historic photographs (postcards) in the context of what can be seen on site today reveals that little has changed save modern steel balustrades to the bridge parapets, the enclosing fences, and a greatly increased density of vegetation.



4.07: 1926–31 (HEA Ref. PC10059)



4.08: 1932–37 (HEA Ref. PC06929)



4.09: 1933–38 (HEA Ref. PC10918)



4.10: 1920–40 (HEA Ref. PC10060)

SIGNIFICANCE

- 4.1.04 Though not part of the original masterplan for the westward expansion of Ramsgate, the West Cliff Chine is the terminating element of the string of leisure facilities and promenades dating from the 1920s. Its almost hidden curving line, rising cliffs and towering rock arch combine with an abundance of planting to create an enclosed, ‘secret’ and yet picturesque design of much architectural interest. In terms of the work of James Pulham & Son, the West Cliff Chine is PAR on a grand scale, clearly reflecting the ideas set out in *Picturesque Ferneries and Rock Garden Scenery* and one of a number of architecturally impressive cliff paths that — starting with the Newgate Gap in Margate (1901) and ending with the East Cliff Chine (1936) — are characteristic of the later work of the firm. The West Cliff Chine is also a part of Ramsgate’s nationally important group of PAR structures, a record of the Pulham rock–building business over its last 42 years.

5. CONDITION

5.1 Introduction

5.1.01 Set out in this section is an overview of the condition of the PAR of the West Cliff Chine as recorded on 23rd May 2019, noting the limitations on access (refer 1.6.01). Its arrangement reflects the sequential description of deterioration used in Section 7 of the Overview: Stage One Report, which must be read in conjunction:

- Soiling and discolouration.
- Erosion and loss of coatings.
- Defects in backings.
- Cracks and fractures.
- Previous repairs.

Presented and discussed under each of these headings is what was observed, along with a broad assessment of the need for works. A concluding summary is followed by basic guidance on: a stage two (detailed) survey; further investigation; maintenance and management; health and safety; and the implications of heritage status. IT IS REITERATED THAT THIS SECTION OF THE REPORT ON THE ROYAL PARADE PAR IS ONLY AN OVERVIEW OF CONDITION AND MUST NOT IN ANY WAY BE TAKEN (OR USED) AS A SPECIFICATION OR SCHEDULE OF REPAIRS.

5.2 Soiling and discolouration

OBSERVATIONS

5.2.01 Notwithstanding some fading (loss) of colour due to surface erosion — the norm for Ramsgate's collection of PAR (refer 1.1.02) — the rockwork within the sheltered environment of the West Cliff Chine is only lightly soiled:

- **Lichens** were extensively present and instances of **mosses** were noted.
- **Airborne dirt** is present but minimal, the only area where there is a notable build-up of a light grey film being the below the arch.
- **Surface efflorescence** and **sulfate crusts** are also minimal, the only visible instances also being beneath the arch, and below some overhangs.
- **Graffiti** (mainly chalk and some spray paint) is also prevalent beneath the arch, some of it inexplicably at high level. A few other instances were noted.

There was no metal staining (electrical fittings below the arch and adjacent railings are galvanised) or significant biological deposits.



5.01: LICHENS



5.02: MOSS (POSSIBLE DAMP)



5.03: AIRBORNE DIRT BENEATH ARCH



5.04: SURFACE EFFLORESCENCE



5.05: SULFATE CRUST



5.06: GRAFFITI (CHALK & SPRAY PAINT)

DISCUSSION

- 5.2.02 Lichens and the relative lack of airborne dirt, surface efflorescence or sulfate crusts is indicative of the good condition of the PAR coating generally. This is partly due to the enclosed nature of the Chine creating a sheltered environment which is not facing directly the sea or in close proximity to traffic, but also because all of the rockwork except that below the arch (and obscured by vegetation) is rain-washed, meaning airborne salts and other pollutants are rapidly dispersed. Under the arch, dirt and salts are not washed away, a situation exacerbated by water percolating through and around the concrete bridge deck, bringing with it salts in solution including from the ground and possibly as a result of de-icing.

NEED FOR CLEANING

- 5.2.03 Soiling and discolouration of the West Cliff Chine is a minor issue and there is no pressing need for cleaning, other than perhaps the gentle removal of the worst of the graffiti. Mosses indicate damp and hence the condition the rockwork below should be exposed and its condition examined.

5.3 Erosion and loss of coatings

- 5.3.01 Coatings are generally in good condition with only minor instances of loss, including some underside loss from the corbelled slabs of the archway. Losses appear to be mainly due to localised impact or frost action with little evidence of chemical action, other than perhaps beneath the arch. Some areas of loss or loose coating are associated with cracking and fractures. There is at this stage little evident need for surface repair, albeit a detailed survey (refer 5.7.02) and removal of vegetation might reveal more extensive areas of lost or friable surfaces.



5.07: LOSS OF SURFACE DUE TO IMPACT



5.08: EVIDENCE OF FROST DAMAGE

5.4 Defects in backings

5.4.01 No defects in backing materials were observed, other than:

- Perhaps the loss of cover and corroded reinforcement to the concrete bridge deck over the arch which — due to the way the PAR is ‘tabled’ (corbelled) up to its underside — might to some extent be considered a backing. Examination of the condition of the reinforced concrete should form a part of the Stage Two (Detailed) Survey with the possible need to investigate further the condition of the concrete (refer 5.7.02 and 5.7.03).
- It was also noted that the final block of rockwork at the bottom of the south side of the Chine has a full-height vertical fracture yet no evidence of this having been caused by woody vegetation. While this small section of PAR — which is a short run of balustrade — appears to be solidly founded and the sides of the fracture are parallel, the possibility of structural movement needs to be investigated, if only to provide reassurance that the ‘rock’ is stable.

While not strictly a backing issue, soil slippage was in some areas observed and should be monitored, noting in the light of the fact the Chine is cut through the chalk of the cliff, the depth of top soil and (backing) fill is likely to be minimal.



5.09: LOSS OF COVER & CORROSION OF REINFORCEMENT (UNDERSIDE OF BRIDGE)



5.10: FULL HEIGHT FRACTURE TO FINAL BLOCK OF ROCKWORK (SOUTH SIDE)

5.5 Cracks and fractures

5.5.01 Fine cracking surface cracking is in a few places evident, and hairline cracks — vertical and horizontal — were observed, often just above the undersides of overhangs. Some of these are clearly historic while others relate to areas of surface loss. The cracks to overhangs are probably the first indicator of underside loss. A number of full-height fractures to plant pockets were also noted, almost certainly the result of unmanaged woody vegetation; in one case, the stump of a substantial tree was noted in a pocket hardly larger. These should in due course be filled and if

necessary pinned (stitched) from behind, meaning clearance of plant pockets. Vertical hairline cracks have the capacity to become fractures and should be monitored.



5.11: SURFACE CRACKING
(WEATHERED EDGES SUGGEST HISTORIC)



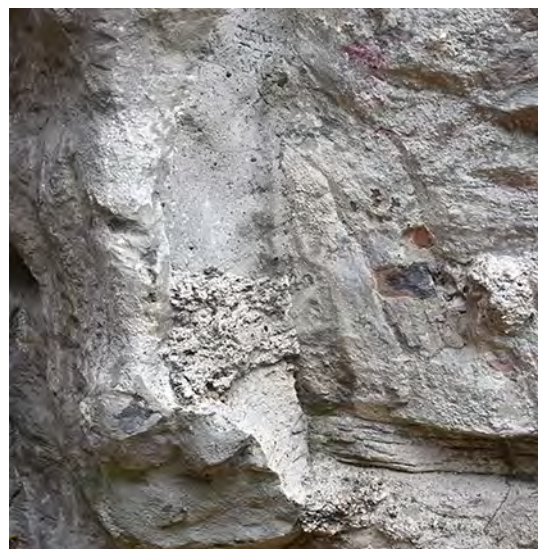
5.12: FULL-HEIGHT FRACTURE OF PLANT
POCKET & OVERHANG

5.6 Previous repairs

- 5.6.01 A few small areas of surface repair were noted. While not of the highest quality in terms of match — and sometimes failing or applied with feathered edges (render repairs should be cut-back and undercut) — these do not overall detract from the PAR. It may be best to carefully remove failing repairs, provided the resulting loss of surface does not further encourage the ingress of water.



5.13: ILL-MATCHED RENDER REPAIR
(TEXTURE & COLOUR) — FAILING



5.14: SMALL SCALE RENDER REPAIR (POOR
MATCH & FEATHERED EDGES)

5.7 Conclusion

SUMMARY

- 5.7.01 The PAR of the West Cliff Chine will in 2020 be 92 years old. It has performed exceptionally well and is generally in very good condition, bearing out the Pulham strapline of ‘Durability Guaranteed’. Structurally sound with no evident issues with its backing and only minor deterioration of surface, the only potentially serious damage is the fracturing of plant pockets due to unmanaged vegetation — repair will eventually be necessary. This is notwithstanding concern over the condition of the concrete deck of the bridge which spans the PAR arch. Although there is no immediate need for repair, further survey and investigation are required, as well as ongoing monitoring.

STAGE TWO (DETAILED) SURVEY

- 5.7.02 Crucial to the prioritised assessment of future repairs and a manageable ‘works plan’ is a Stage Two survey based on the methodology used in the detailed 2019 surveys of Madeira Walk, Winterstoke Gardens and the East Cliff Chine (reports dated February 2020). While a relatively straightforward proposition, a mobile elevated platform will be needed for the survey of PAR above head height including the arched and flat underside of the bridge — due to the loss of cover and corroded reinforcement noted in 5.4.01 the survey should be extended to include the concrete deck.

FURTHER INVESTIGATION

- 5.7.03 To enable the design of appropriate coating mixes for repair — and to fully understand materials and construction of the West Cliff Chine — samples of PAR from a variety of locations should be submitted for petrographic (thin section) analysis by a UKAS accredited laboratory. The purpose of the analysis is to gain a picture of the composition of the coating including: binder to aggregate ratio; mineralogical content; grain size and shape; the presence of salts; and the identification of any chemical reactions that may be causing (or have the capacity to cause) the breakdown of coatings. Pigment (electron microscope) analysis should also be undertaken. In order to fully understand the decay mechanism affecting the bridge deck, thin section analysis of concrete cores and an assessment of corrosion may also be required.

MAINTENANCE

- 5.7.04 Regardless of any works, further survey and investigation, a high priority should be given to the maintenance of the West Cliff Chine PAR. The Historic England (formally English Heritage) guidance document *Conservation Principles* published in April 2008 defines maintenance as “routine work regularly necessary to keep the fabric of a place in good order”. This is distinct from repair: “Work beyond the scope of maintenance, to remedy defects caused by decay, damage or use, including minor adaptation to achieve a sustainable outcome, but not involving restoration or alteration”.
- 5.7.05 The key to the maintenance of any building or structure — including those which are statutorily listed — is a planned inspection regime, tailored to circumstances and proportional to size, form, fabric, usage and significance. In which context, condition

surveys are crucial, as is made clear in BS 7913:2013 *Guide to the conservation of historic buildings* and the *Conservation Basics* volume of the English Heritage (Historic England) *Practical Building Conservation* series. Hence the need for a stage two (detailed) survey as 5.7.02 — the necessary baseline for a meaningful and practical M&M plan; the survey should be updated every five years. Beyond which planned maintenance should as a minimum involve:

- Regular checking (monitoring) supported by dated photographs, including of the underside of the concrete bridge deck over the arch.
- Management of vegetation to ensure that roots and other woody growths do not outgrow plant pockets. Plants that have self-seeded in cracks (including at the PAR–brickwork interface) should be carefully removed and any seedlings that in future take hold plucked–out before they have had a chance to propagate.
- Allowance should also be made for unplanned (reactive) maintenance, e.g. in the event of vehicle impact (motorbikes and scooters were observed to be using the Chine as a shortcut).

Records are also crucial; provision for archiving and access should be an integral part of the management of the West Cliff Chine PAR.

HEALTH & SAFETY

- 5.7.06 Attention is drawn to the fact that future works of all types (including maintenance) are likely to fall within the remit of the *Construction (Design and Management) Regulations 2015*. These impose on those commissioning building works (Clients) a duty to make suitable arrangements for managing projects including: allowing sufficient time and resources; making sure that relevant information is provided by others duty holders; that designers and contractors carry out their duties; that welfare facilities are provided; and a Health & Safety File is kept.

IMPLICATIONS OF HERITAGE STATUS

- 5.7.07 It is assumed that — following the survey and further investigation outlined in 5.7.02 and 5.7.03 — minor repairs will be carried out using the same materials and techniques as the existing fabric, and hence will not affect the significance of the West Cliff Chine as a designated heritage asset (Grade II listed building). Likewise routine maintenance. It is therefore unlikely that listed building consent will be required albeit if certainty is needed, a Certificate of Lawful Proposed Works could be applied for (refer paragraph 9 of *Historic England Advice Note 2: Making Changes to Heritage Assets* published in February 2016). Anything other than minor repair should be discussed with the local conservation officer and agreement sought on any need for consents. If works are to be carried out piecemeal over a period of time, as and when funds permit, the possibility of Listed Building Heritage Partnership Agreement could be explored: essentially a ‘term’ consent for routine works that removes the need for successive consent applications.

6. BIBLIOGRAPHY

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1925 (4th July p.5, 12th September p.8), 1926 (30th October p.5),
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<http://bedsarchives.bedford.gov.uk/ArchivesAndRecordOffice.aspx>

Item ref. CDE301–1

Proposed layout of West Cliff Terrace grounds by Franklin & Deacon. Drawing shows area at western end of St Lawrence Cliffs, south of West Cliff Terrace, with trees and flower beds at the western end of the Royal Esplanade and tennis courts to the south, adjacent to the Promenade. Scale 1 inch to 40 feet. October 1923

Item ref. CDE301–2

Borough of Ramsgate: proposed new promenade, St Lawrence Cliffs, by Borough Engineer. Drawing shows area between Royal Esplanade and Promenade running east–west between West Cliff Terrace and Grange Road, with proposed Undercliff Drive along the seafront. Scale 1 inch to 80 feet. 29th July 1924

Item ref. CDE301–30

Perspective sketch of West Cliff area from aerial viewpoint over the sea, showing paths to Undercliff Drive, shelters and prominent central building (proposed lift?). No attribution, probably Basil C Deacon. Not dated, 1928–29 [more likely 1922–23]

KENT ARCHIVES (KA)
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Mr Pulham's layout of rock wall at Ramsgate. 23rd October 1928
(7 x Photographs by Folkstone Borough Engineer).

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Item ref. PC06929

General view of The Chine. 1932–37.

Item ref. PC10059

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General view in The Chine Gardens. 1920–40.

Item ref. PC10918

General view in West Cliff Chine. 1st Jan 1933 — 5th Aug 1938.

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Item ref. INF/9/631/31

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[wrongly described; is actually West Cliff Chine]

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25 inch (1:2500) County Series

Kent XXXVII.8

1874 surv.1871; 1898 rev.1896; 1907 rev.1905; 1933 rev.1931; 1946 rev.1938–9

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DEPARTMENT OF COMMUNITIES & LOCAL GOVERNMENT (DCLG)

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Advice Note 2: Making Changes to Heritage Assets. February 2016.

APPENDIX

A LIST ENTRY



Access road, underpass and retaining walls from Court Stairs to Western Undercliff

Overview

Heritage Category:

Listed Building

Grade:

II

List Entry Number:

1086050

Date first listed:

04-Feb-1988

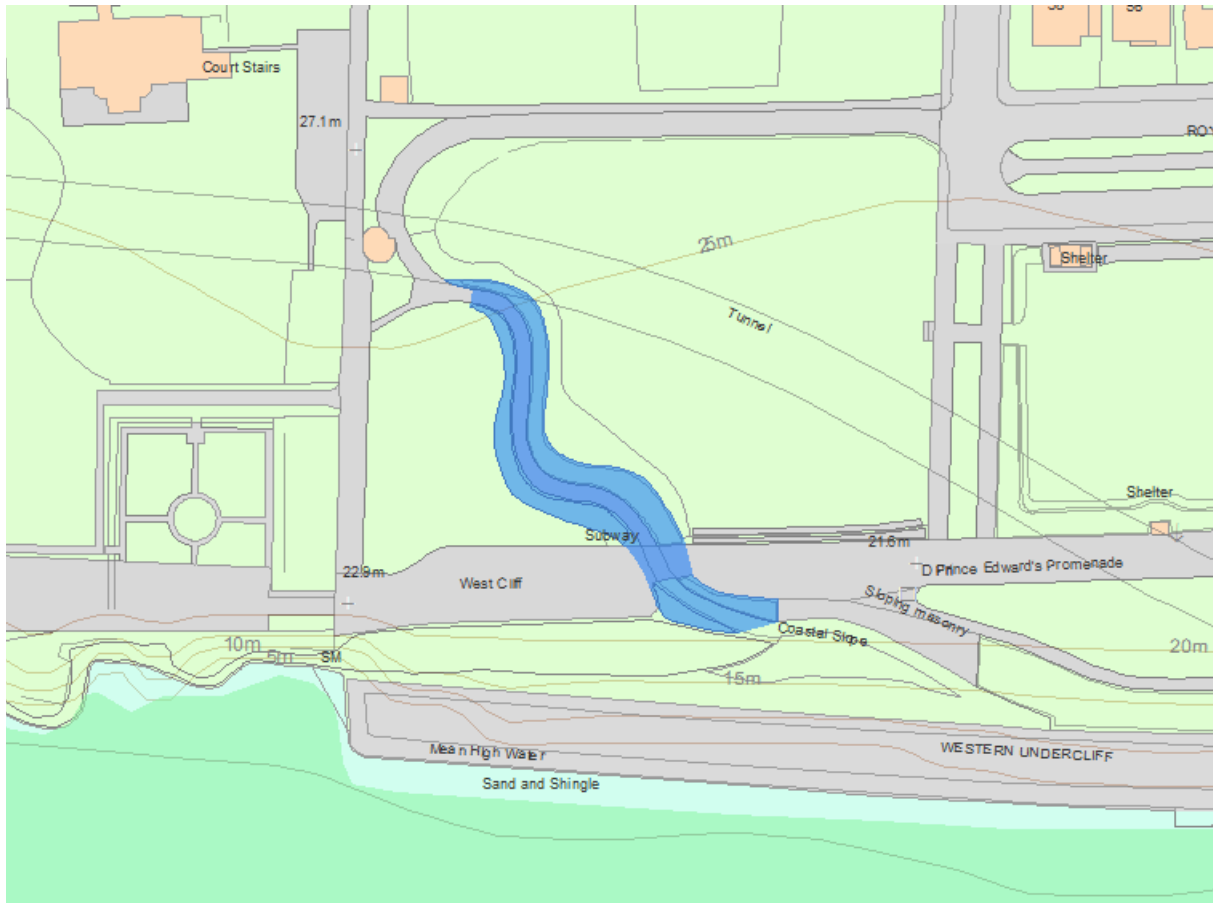
Date of most recent amendment:

22-May-2019

Statutory Address:

Ramsgate

Map



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(<https://historicengland.org.uk/terms/website-terms-conditions/>).

The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - **1086050.pdf**

(http://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/532023/HLE_A4L_Grade|HLE

The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

This copy shows the entry on 22-Jun-2020 at 18:30:18.

Location

Statutory Address:

Ramsgate

The building or site itself may lie within the boundary of more than one authority.

County:

Kent

District:

Thanet (District Authority)

Parish:

Ramsgate

National Grid Reference:

TR3676364114

Summary

A pathway, retaining walls and bridge connecting Court Stairs to the Western Undercliff, designed as part of the Royal Esplanade improvements along the seafront to the west of Ramsgate.

Reasons for Designation

The access road, underpass and retaining walls from Court Stairs to Western Undercliff are listed at Grade II for the following reasons:

Architectural interest: * they are comparable in interest to other designated examples of Pulhamite structures and representative of the Pulhams' innovative design and construction of garden and park structures; * designed by the noted engineer Basil Deacon.

Historic interest: * the structure forms part of the an important grouping of Pulhamite structures which are spaced along the seafront at Ramsgate and which were built in the period between 1893 and 1936. Group value:

* with 1-23 West Cliff Terrace and the eastern and western quadrants of the lido (all Grade II).

History

From the mid-C18 Ramsgate became increasingly popular as a seaside resort, its expansion being accelerated by road improvements and faster sea passage offered by hoys, packets and steamers. An assembly room, warm water baths, subscription libraries and places of worship were joined by new streets such as Effingham Street and speculative crescents and squares on the East and West Cliffs such as Albion Place of around 1791-1798 and

Nelson Crescent of around 1800-1805. During the Napoleonic Wars Ramsgate became a busy garrison town and a major port of embarkation. Ramsgate's importance in the 1820s is attested by its patronage by the British and European royal families and the creation of a separate parish by Act of Parliament, served by the large Church of St George (1824-1827). The harbour is the only one in the British Isles which has the designation 'Royal', granted by George IV.

The arrival of the South Eastern Railway's branch line in 1846 opened up Ramsgate to mass tourism and popular culture, bringing a range of inexpensive, lively resort facilities intended for the sorts of middle- and working-class holidaymakers depicted in WP Frith's painting 'Ramsgate Sands' of 1854 (Royal Collection). Wealthier visitors were accommodated at a respectable distance from the town in developments such as EW Pugin's Granville Hotel of 1867-1869. Competition with other Kentish resorts stimulated a series of large-scale improvements in the late-C19 and early-C20 including the construction of Royal Parade and landscaped stairs and pathways at the eastern and western ends of the seafront to join the upper promenades to the Undercliff walks. New schools, hospitals and services were also built. The thriving town attracted diverse faith communities; Moses Montefiore founded a synagogue and a religious college at East Cliff Lodge, while AWN Pugin St Augustine's Church and the Grange as part of an intended Catholic community on the West Cliff.

Rock gardens first seem to have appeared in England from the C17 as a suitable setting for exotic plants. The influential landscape designers Humphry Repton (1752-1818) and John Claudius Loudon (1783-1843) both promoted the idea of naturalistic rock formations in a landscape and this coincided with the importation of new species of plants into England from mountainous areas.

From the 1840s a number of companies began experimenting with cements to cover a base of hard core in imitation of large-scale rock formations. James Pulham and Son of Broxbourne in Hertfordshire were amongst several such makers, and also specialised in terracotta ornaments. The longevity of their company which lasted from about 1845 to 1945 under the leadership of three generations of Pulham, all named James, marked them out, as did the quality of their products. Their work and patrons included relatively modest suburban villas as well as bankers, ship and railway owners and the royal family. Work at Sandringham, Windsor and Buckingham Palace earned the company a royal warrant in 1895. 'Durability Guaranteed' was one of the company's claims, and this has largely proved to be true. Whether real stone or artificial, an aim of designers was to replicate the appearance of genuine rock formations with geological strata. Pulhams was noted for this and from the 1880s they experimented with different colours and textures of cement. The structure of their designs was a core of over-burnt bricks, waste stone and slag, or other industrial waste that was locally available. Overhangs were of real slate or sandstone and the whole structure was finished with two coats of render, between 6mm and 15mm thick.

The various constructions of rockwork at Ramsgate, realised by Ramsgate Corporation from the 1890s, with the last work on the Winterstoke Chine in 1936, form one of the largest groupings of their designs and provides a good cross-section of their work and the compositional possibilities offered by different locations and gradients.

The access road, underpass and retaining walls leading from Court Stairs to the Western Undercliff were a part of the civic improvements to the western end of the Ramsgate seafront which were called the Royal Esplanade and were opened by the Prince of Wales in November 1926. The work was planned and undertaken between 1924 and 1926 and initially designed in 1922 by BB Franklin and Basil C Deacon and executed by Deacon.

Details

A pathway, retaining walls and bridge connecting Court Stairs to the Western Undercliff, designed as part of the Royal Esplanade improvements along the seafront to the west of Ramsgate, between 1924 and 1926 under the overall charge of BB Franklin and Basil C Deacon and executed by Deacon and James Pulham and Sons.

MATERIALS and PLAN: Pulhamite concrete laid over brick and stone hardcore. The pathway ascends in a serpentine curve between sides covered with Pulhamite which are moulded and coloured in imitation of geological strata. A footbridge, forming part of the upper terrace of Royal Esplanade and overlooking the sea, crosses the pathway. The footway is grooved in imitation of crazy paving.

EXTERIOR: at the upper level of the pathway the sides are formed by low boulders forming a rockery. As the path descends the sides become stepped and include planting troughs. The upper walkway bridges the path by means of a single arch and beyond this the Pulhamite sides gradually diminish in height and blend into the natural cliff face to the west and join with the concrete blocks of a reinforcing wall to the east.

Legacy

The contents of this record have been generated from a legacy data system.

Legacy System number:

172076

Legacy System:

LBS

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Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

End of official listing

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