

LYME REGIS ENVIRONMENTAL IMPROVEMENT SCHEME

CREATIVE OPPORTUNITY

JUNE 2012



Dorset County Council



ARTIST'S BRIEF

1. SUMMARY

West Dorset District Council (WDDC) in partnership with Dorset County Council (DCC) is seeking to integrate creative approaches within Phase IV of the Lyme Regis Environmental Improvements Scheme, which is the proposed construction of a sea wall and slope stabilisation measures at Church Cliff and East Cliff to the east of the town (Appendix 1 – Planning Officers Report). Applications are invited from artists who have experience of working within multidisciplinary teams on large scale projects.

The commission is divided into three stages; each one subject to approval prior to commencement of the next stage. Provisionally, the maximum amount available for design fees and related expenses for all three stages is £25k. Subject to confirmation of funding following assessment of preliminary submissions, the intention is to integrate the selected artist's proposals into the main construction contract.

2. BACKGROUND

The beautiful coastal town of Lyme Regis, often described as 'the Pearl of Dorset', is situated on the Jurassic Coast World Heritage site and is world famous for its fossils and geology. The rocks in the cliffs at Lyme Regis represent layers from the oldest part of the Jurassic period and were laid down at the bottom of a deep sea between 200 and 195 million years ago. The quality of fossils and their abundance in these rocks means that the cliffs around Lyme Regis are recognised as the richest source of lower Jurassic giant marine reptiles, fish and insects. Small fossils are constantly being washed from the soft cliffs by the sea.

The Town has suffered from storm damage throughout its history. The geology and slopes steepened by coastal erosion have led to numerous landslides. The Lyme Regis Environmental Improvements Scheme was initiated by WDDC in the early 1990's, with the aim of implementing engineering works to ensure that the integrity of the Town's coast protection is maintained in the long term and to stabilise the coastal slopes, reducing the damage and disruption caused by ground movement.

The Town has a rich social heritage and has inspired famous authors and artists such as Jane Austen, Thomas Hardy, and JMW Turner, with the location continuing to inspire creative responses today as in the recent novel

by Tracy Chevalier on Mary Anning. The harbour wall 'The Cobb' was perhaps most famously portrayed in John Fowler's 'The French Lieutenant's Woman'

3. CONTEXT

DCC has a history of working in partnership with local authorities and key organisations in the County with the aim of encouraging the integration of artists into the design of new places and environmental schemes. Recent projects include the artist/architect team Sans Façon working in collaboration with DCC engineers on a new bridge for Charmouth and the renovation of Durlston Castle and Country Park which supported the early involvement of the artist Lulu Quinn, who worked on content development as an integral part of the design and architectural team.

Working in partnership with the Jurassic Coast team, the arts unit of DCC established the Public Art Code of Practice in 2010. The aim of which is to compliment the objectives behind the Jurassic Coast Arts Strategy and provide clear criteria and guidelines for projects taking place along the World Heritage site. The intention is to create opportunities for artists and craftspeople to contribute to the built and natural environment, through initiating and supporting projects which encourage quality and innovation with regard to the concept, context and medium used.

WDDC has been involved in a range of public art activity including public art project linked to the Wide Open Space initiative.

4. ENVIRONMENT

The natural environment contains many rare and important species of wildlife and vegetation (refer to Appendix 2 – 2006 Ecological Surveys Review, Section 4, HPR). Therefore any proposals must take into account the highly sensitive nature of the site and seek to not only compliment the setting but also help nurture a deeper understanding of its importance.

5. SCOPE OF WORKS

The coast to the east of Lyme Regis is subject to major landslides and erosion by wave action. As a result the coastline has receded to a point where the eastern side of the town and the main road and service routes into the town from the east are under threat. The underlying rock in this area is composed predominately of clays, with limestone bandings, which are subject to complex landslide systems.

The proposed works are the fourth of five phases of coastal protection, slope stabilisation and other environmental improvement works at Lyme Regis. The main aim is to protect the town, its infrastructure and its historic structures from the more serious effects of coastal erosion and associated ground movement.

Phase I of the development, completed in 1994, provided new sea defences at the eastern end of the town's seafront and dealt with the dilapidated sewerage system and crude sewage outfalls. Phase II, together with the viable parts of Phase III, completed in 2007, provided coastal defence and slope stabilisation works along the main town frontage and stabilised and improved Cobb Road. Phase IV, the current proposals, will improve the stability of the coastal landslip areas immediately to the east of the town at Church and East Cliffs. Phase V which is on hold, will be renovation and repair work to the Grade 1 listed Cobb structures.

The proposed Phase IV works comprise:

- A new sea wall
- Slope stabilisation
- Landscaping, habitat restoration and management

There are proposals for a new footpath from the sea wall to Charmouth Road Car Park and possible cliff top viewing areas, which will also provide new opportunities for integrating interpretation. These further enhancements are still subject to footpath dedication and diversion procedures. The proposed footpath is expected to be gravel path 2 metres wide, with steps on the steeper sections. The line has not been decided but is likely to be to the east of cultivated gardens/registered land (Appendix 3, Coastal Path Options Report, HPR 2009, Figure 6, Option 2b)

6. ARTIST'S BRIEF

The artist will be required to engage with the scheme as a whole and working closely with the project team, identify areas for artistic intervention which can be implemented within the main construction contract. The appointed artist will also be expected to take in to account the extensive consultation undertaken to date, the potential users and visitors of the space and how it will be viewed and used; thus developing a sense of place in order to enhance the immediate environment. The artist should be aware of the Jurassic Coast Arts Strategy, The Code of Practice and other relevant strategies and take cognisance of these when formulating ideas and concepts.

It is expected that the wider context and history of the location and the rich social and natural heritage of the site will strongly inform the final proposals. Due to the internationally recognised importance of the location and the standard of previous works, the highest quality will be expected from all aspects of the scheme. The artist should take into account how their proposals will function in a variety of weather conditions, be fit for purpose and envisaged usage, be low maintenance and robust and meet all requirements with regard to health and safety issues.

The Commission is divided into three distinct stages:-

Concept Design:

- The scope
- Overarching design concepts and design outline for specific interventions
- Evidence of how it meets all the requirements of the brief
- Indication of likely costings, any implications for planning permission
- Proposals for contributing to interpretation works

Detailed Design:

- A detailed delivery strategy, linked to the main contractors programme, with clearly identified milestones and trigger points
- Technical drawings, plans, models or other visual representations of the proposed design outcomes
- A fully costed budget including all fees, manufacturing/installation costs, ongoing revenue costs (e.g. maintenance costs)
- Details of manufacturers or other specialist contractors
- A costed maintenance schedule
- Plans for documentation

Implementation:

- Delivering the identified works either personally or overseeing others to carry out the work
- Overseeing all aspects of manufacturing and delivery to site including risk assessments, method statements, guarantees and insurance, and ensuring that delivery schedules are in place to avoid delays
- Close working with the Project Manager, the Supervisor and the main Contractor, including compliance with all site health and safety requirements

In addition the appointed artist will be expected to:

- Attend a full briefing in Dorchester at the beginning of the commission
- Attend a schedule of four meetings at Lyme Regis of the Steering Group to link with key milestones and trigger points for releasing payments
- Take part in a press launch on site
- Undertake documentation of the process and produce a maintenance plan
- Revisit the site as part of a post-project review

7. PROJECT MANAGEMENT

WDDC will be the Client. WDDC standard terms and conditions will apply (Appendix 4). The overall project is managed by WDDC. The Supervising Consultant is Halcrow. The main contractor is Dean and Dyball/Birse, with URS as their detailed design consultant.

The commission is being advised by Maggie Bolt Associates on behalf of DCC.

The Artist's proposals will be integrated into the main contract programme.

8. MAINTENANCE

All artworks will have a defined life expectancy of at least 60 years and the Artist will provide care and maintenance plans and advice on de-commissioning, if appropriate. It is important that the work can be maintained at no or low cost but in line with the Artist's recommendations.

9. BUDGET

The maximum value of the commission is **£25,000 exclusive of VAT** to include all fees, design, time, research, engagement and consultation. The fee will be issued in three stage payments, with a separate agreement for each of the stages outlined above. The Client reserves the right to terminate the commission at the end of each stage.

Provisional budget allowances for Artist's Fees are:

- Concept Design - £ 5000.00
- Detailed Design - £10,000.00

- Implementation - £10,000.00

10. ARTIST'S PROFILE

The Artist should have proven skills and experience of:-

- working creatively in multi disciplinary teams alongside project managers, landscape architects, engineers and contractors
- working on large scale schemes, preferably with an environmental focus
- costing schemes and managing budgets
- compliance with public realm requirements and constraints
- familiarity with technical aspects of public realm works and public protocols
- good project and time management skills

11. SELECTION CRITERIA

As well as possessing the skills and experience outlined above the following criteria will be used for shortlisting and final selection:

- Breadth and quality of previous work
- Conceptual thinking and the ability to translate ideas into practical schemes
- The ability to communicate well, and work as part of a team
- The ability to present visual ideas in a clear, compelling and interesting manner
- Evidence that the work can be carried out within the fees and time available

12. TIMETABLE

Shortlisting will take place on Tuesday 24th July 2012 and the shortlisted artists will be invited to attend a site visit on 26th July. Please note, if you wish to make an independent site visit you must remain within publicly accessible areas only.

Interviews will be held in Dorchester on Tuesday 31st July 2012.

We hope to be able to make an appointment shortly after this date and the artist will be required to start work by the end of August with the aim of completing the Detailed Design Stage by 29th March 2013. The main engineering scheme is scheduled between March 2013 and March 2015.

13. TO APPLY

If you wish to apply please respond by submitting one paper copy of your application by 12 noon on Monday 23rd July to:

Cleo Evans
Arts Officer
Dorset County Council
Cultural Services: Arts
County Library HQ
Colliton Park
Dorchester, Dorset DT1 1XJ

DCC regrets that it is unable to acknowledge receipt of applications and would advise that if you have not been contacted by the end of day, 24th July, then your application has been unsuccessful. Applications cannot be returned unless accompanied by an S.A.E.

Your response should contain:

- A letter stating your interest, your ability to meet the aims of the brief and its timetable, a outline response to the brief and how you would approach the project
- Your CV/Resume (if applying as a partnership/team, please supply individual documentation)
- Maximum of ten images of recent relevant commissions accompanied by some context as to the commission including commissioner, site, size of artists' budget and timescale. Print outs and/or images on a CD will be accepted.

Up to four artists will be shortlisted by the Steering Group comprising:

Nick Browning, Technical Services Manager, WDDC
Andrew Bradley, Management Engineer - Programme Management, DCC
Maggie Bolt, Maggie Bolt Associates on behalf of DCC
Cleo Evans, Arts Officer, DCC

At interview, the artists will be asked to make a short presentation on their work and how they would approach the brief. This will be a competitive interview process and we will not be looking for Design Concepts at this stage.

WDDC does not undertake to accept any submission and will not pay the costs of preparing a submission. Shortlisted artists will be paid reasonable travel expenses to and from the site visit and interview.

USEFUL LINKS

www.jurassiccoast.com

www.dorsetforyou.com

www.ruralrecreation.org.uk/wideopenspace.html

www.dorsetforyou.com/lyme

www.dorsetforyou.com/planningapplications
(WDDC planning ref 1/D/10/000077)

www.publicartonline.org.uk/resources/practicaladvice/policiesguidance

www.maritimemix.2012.com

ATTACHED

Appendix 1 – Planning Officers Report

Appendix 2 – 2006 Ecological Surveys Review, Section 4, HPR

Appendix 3 – Coastal Path Options Report, HPR 2009, Figure 6

Appendix 4 - WDDC standard terms and conditions

LYME REGIS ENVIRONMENTAL IMPROVEMENT SCHEME

Appendix 1

Application Number: 1/D/10/000077 Full

Registration Date: 15 January, 2010

Application Site: LAND AT CHURCH CLIFF & EAST CLIFF, LYME REGIS

Proposal: Phase 4 of coast protection & slope stabilisation measures to protect the East of Lyme Regis including 390m of new sea wall, rock revetment, slope stabilisation works, landscaping & other environmental mitigation measures

Applicant: West Dorset District Council

Ward Members: Cllr P Hicks, Cllr D Turner

Case Officer: Andrew Martin

1. Summary Recommendation

1.1 (a) That the Appropriate Assessment presented in Appendix 1 to this report be accepted as meeting the requirements of Regulation 48(1) of The Conservation (Natural Habitats, &c.) Regulations 1994;

(b) That the report presented in Appendix 2 to this report be accepted as meeting the requirements of Section 28G of the Wildlife and Countryside Act 1981 (as amended); and

(b) That planning application 1/D/10/000077 be approved subject to conditions:

2. Description of development

Background to the scheme

2.1 This planning application relates to the fourth of five phases of coastal protection and other environmental improvement works at Lyme Regis, promoted by West Dorset District Council. The main aim is to protect the town, its infrastructure and its historic structures from the more serious effects of coastal erosion and associated ground movement.

2.2 Phase I of the development, completed in 1994, provided new sea defences at the eastern end of the town's seafront and, in partnership with South West Water, dealt with the dilapidated sewage system and crude sewage outfalls. Phase II, together with the viable parts of Phase III, provided coastal defence and slope stabilisation works along the main town frontage and, with Dorset County Council funding, stabilised and improved Cobb Road. Phase IV, the current proposals, will improve the stability of the coastal landslip areas immediately to the east of the town at Church and East Cliffs. Phase V will involve renovation and repair work to the grade I listed Cobb structures.

- 2.3** The coast to the east of Lyme Regis is subject to major landslides and erosion by wave action. As a result the coastline has receded to a point where the eastern side of the town and the main road and service routes into the town from the east are under threat. The underlying rock in this area is composed predominantly of clays, with limestone bandings, which are subject to complex landslide systems. These systems are advancing towards the town over a broad front, with cracks migrating across Timber Hill at around 150 AOD to minor landslips just above the foreshore of the site.
- 2.4** Cliff top recession and cliff toe recession from coastal erosion since the mid 19th century have already resulted in the loss of the former London – Exeter road between Lyme Regis and Charmouth and several properties on the east side of the town, including the former gas works. Without intervention it is estimated that about 144 houses, Charmouth Road Car Park, much of Charmouth Road and Church Street and major underground pipes and cables are at risk of destruction or serious structural damage within 50 years. A few properties are expected to be lost within 5 years. Many other properties would suffer structural damage, loss of services or loss of access. Failure of the existing Church Cliff sea wall, which has an estimated residual life of about 10 years, would be accompanied by landslips that would immediately threaten several properties and Church Street. The consequences of this sort of failure would be very disruptive to the town and would be very difficult and expensive to control.

The current proposals

- 2.5** The current proposals essentially involve three main components:
- A new sea wall;
 - Slope stabilisation; and
 - Landscaping, habitat restoration and management.
- 2.6** The next few sections of this report present a brief summary of the proposals, highlighting the main features. However, this is a complex scheme, and the full application is accompanied by a considerable amount of detail, all of which is available to view on www.dorsetforyou.com. The six volumes of documents submitted in support of this proposal contain the following information:

Volume 1

Planning application forms, Supporting Planning Statement and a non-technical summary of the Environmental Statement (full details of which are contained within Volume 3 of the documentation);

Volume 2

Drawings of the proposed works;

Volume 3

Environmental Statement (ES), November 2009 and prepared by High-Point Rendel Ltd. (HPR);

Volume 4

Landslip Recession Scenarios (2009 Update), September 2009 prepared by High-Point Rendel Ltd. (HPR);

Volume 5

Coast Protection Options Report, March 2007 prepared by High-Point Rendel Ltd. (HPR);

Volume 6

Preliminary Design Report 2009 update (including Revised Scheme), September 2009 prepared by High-Point Rendel Ltd. (HPR);

New sea wall

- 2.7** The new sea wall will extend for 390 metres, and will effectively appear as a replacement for the existing wall, which dates from the 1950s. The existing wall will in fact remain and be encased in the new structure, which at this stage is envisaged to be constructed from in situ mass concrete. The present wall has a crest height of between +5.29 and +6.16m above Ordnance Datum and in terms of hydraulic performance the submitted documentation concludes that the wall has “*performed satisfactorily with only occasional overtopping.*” The replacement wall is currently shown with a crest height of +0.65m above Ordnance Datum, which is considered to provide an appropriate margin allowing for predicted sea level rises. The replacement will project out from the base of the cliff significantly further than the existing structure – by as much as 5m in some of the cross-sections. However, the bulk of this projection is at base, where the new wall employs a new, more efficient profile. The new wall will also have much deeper foundations, in order to reduce the risk of undercutting, which is evident in many places on the existing structure.
- 2.8** The top of the new wall will feature a continuous walkway with a width of 3m to allow occasional usage by authorised maintenance and emergency vehicles as well as safe pedestrian and wheelchair access. Paving for the sea wall access will be mesh reinforced concrete slab. A continuous seat feature will be provided on the cliff side of the paving. This will act as a dwarf wall preventing spillage of cliff debris onto the walkway; it will also discourage public access to the cliff itself. In extreme weather conditions this dwarf will reduce the impact on the toe of the cliff from any overtopping of the main wall. There will be three sets of steps providing access to the beach.
- 2.9** The western end of the new wall will abut Church Cliff jetty. At this point a 3m wide ramp is to be provided to provide a convenient pedestrian link from the Phase 1 works to the top of the new sea wall. The existing ramp to the beach, which has a gradient of 1 in 6 (17%), will be replaced by a new ramp with a gentler gradient of 1 in 12 (8%).
- 2.10** The eastern end of the new wall will exhibit a short return into the notch of the cliff that has been carved by historic wave action. This will also provide space at the termination of the walkway for maintenance and emergency vehicles to turn. The proposed coast protection at the eastern end of the wall has been minimised to comprise rock armour only at the east end return of the new sea wall. No foreshore protection to the toe of the cliff is proposed beyond that point. Erosion will continue in the area to the east allowing the cliff to recede naturally.
- 2.11** The westernmost of the existing groyne, numbered 1 to 4, are constructed of sheet steel piling between steel box piles with timber planking now almost entirely lost. These will be removed down to natural rock level.
- 2.12** The more easterly groyne, numbered 5 to 17, comprise a concrete base

with vertical steel posts supporting horizontal timber planking. These will be removed down to natural rock/foreshore level between the existing sea wall and a point 4m seawards of the toe of the new sea wall to allow a foreshore access maintenance route. Further seawards, all timberwork will be removed and any projecting steelwork cut back down to the concrete base.

Slope stabilisation

- 2.13** Slope stabilisation involves a combination of techniques, each of which is described briefly below.
- 2.14** Dowel piles, also known as stabilising piles, are used to stabilise active landslips. The dowel piles are installed through the unstable slip mass and embedded in the stable strata beneath, from where they derive resistance that enables them to stabilise the moving landform above.
- 2.15** Soil nails are tension carrying elements, consisting of steel or fibre-reinforced plastic rods that are driven into the ground at inclinations below horizontal. They are categorised as a “passive” slope stabilisation system, in that they are not pre-stressed. The tension in soil nails occurs as a response to subsequent slope movement. The heads of soil nails are usually connected to steel bearing plates or reinforced concrete pads on the slope surface.
- 2.16** Pile retaining structures generally comprise a line of bored reinforced concrete piles constructed with small gaps between adjacent piles. The size of this space is determined by the nature of the soils and the diameter of the piles and is typically 200 to 500mm. If required, the top of the piles can be tied together with a capping beam.
- 2.17** Sub-horizontal drilled drains, also known as horizontal drains or raking drains, are small diameter drains (75 – 100mm) installed into the ground at gradients which are typically a few degrees above horizontal. These features are used to remove excess water which can act as a lubricant in the sorts of active landslip present in this part of Lyme Regis.
- 2.18** Trench drains are installed by excavating trenches downslope to shallow depths, typically 2 – 3m, then backfilling them with granular material. The drains act to reduce groundwater pressures of soils close to the ground surface.
- 2.19** Toe drains are similar to trench drains, but they are excavated at the toe of a slope, along the dip direction. They are generally deeper than trench drains and have to be backfilled with concrete as opposed to granular material. The purpose of toe drains is to drawdown the groundwater table at, or near, the toe slope.
- 2.20** Cut-off drains are deep continuous drains installed at specific locations to intercept groundwater flow into the landslide – effectively “cutting off” the supply of water that lubricates the landslide. Cut-off drains are usually located at, or near, the crest of a slope or the head of an existing landslide.
- 2.21** What follows is a brief description of how these various techniques will be employed across the principal landslide areas as they are identified in Figure 3.2 of the submitted Environmental Statement.

Lower Coastal Slope

Church Cliff Flats and Church Cliff

- 2.22** The landslide areas, *Church Cliff Flats and Church Cliff*, are about 115m in total length and are located close to the south-western boundary of the Phase IV study area. The coastal slopes are about 23m high and are highly vegetated. The failure mechanisms of the coastal slopes consist of shallow failures.
- 2.23** The proposed stabilisation measures in this area comprise a grid of reinforcing soil nails. The soil nails incorporate a steel mesh and a soil retention system placed over the full height of the coastal slope. In addition, sub-horizontal drilled drains and toe drains will be installed from a level above the proposed new sea wall.

Cedar Cottage

- 2.24** The landslide area *Cedar Cottage* is about 40m in length and consists of bowl shaped garden areas, sloping gently towards the sea with mature vegetation and a very steep frontal slope. The failure mechanism is believed to be translational failures and shallow failures of the steep coastal slopes.
- 2.25** The proposed stabilisation measures in this area comprise soil nailing over the full height of the coastal slope, the installation of sub-horizontal drilled drains and toe drains and a grid of dowel piles near the crest of the slope.

East Cliff Lane

- 2.26** The *East Cliff Lane* landslide is about 90m in length and has a crest elevation of about 23m AOD. It consists of a steep and densely vegetated coastal slope with some landslide benches. The area directly above the existing sea wall is heavily vegetated and includes tipped garden waste.
- 2.27** The proposed stabilisation measures in this area are similar to those proposed to deal with the *Cedar Cottage* landslip.

East Cliff Main Slip

- 2.28** The *East Cliff Main Slip*, including the Allotments west area, is about 100m in length and is located south of Charmouth Road Car Park. The coastal slope is partly vegetated and comprises two principal landslide benches with steep scarps at the rear of each bench and a steep frontal slope above the existing sea wall. At the rear of the *East Cliff* landslide areas there are piles installed as part of the Urgent Advanced Works in 2003. This area consists of shallow translational failures on a pre-existing shear surface.
- 2.29** No works are proposed within the *East Cliff Main Slip*. However, further uphill from the coastal slopes, within the vicinity of Urgent Advanced Works an arrangement of pile walls with steel ties is proposed to protect the car park whilst the *East Cliff Main Slip* continues to degrade under natural processes.

East Cliff Main Slip Scarp

- 2.30** The *East Cliff Main Slip Scarp* is located to the west of the main slip landslide area. The steep side scarp is about 10m high, and is typically at an approximate average gradient of 40 degrees above the horizontal. The failure mechanism in this area comprises shallow circular slip surfaces within mudslide material and separate circular slips within disturbed lias.
- 2.31** The proposed (revised) stabilisation measures for this area comprise soil nailing to provide lateral support to the side scarp and some limited drainage.

Middle Coastal Slopes

- 2.32 The middle coastal slopes are artificially terraced to accommodate the football ground and Charmouth Road Car Park. Allotment gardens exist to the east. There are built-up areas to the south and west. This area consists of translational block slides of elongate mudslides. In addition, there is ground heave along the northern boundary of the car park and an overturned gabion retaining wall. These are likely to be due to failure of the fill slope immediately downslope of the football ground.
- 2.33 The proposed stabilisation measures are to reconstruct (a) the existing cut-off drain along Spittles Lane in order to drawdown local groundwater to improve the stability of the local slope, and (b) the cut-off drain on the northern side of the car park.

Upper Coastal Slope

- 2.34 The upper coastal slopes comprise Timber Hill and the Meadows, which extend northwards from Spittles Lane and are largely undeveloped, featuring pasture/grazing land, areas of wet flushes and woodland.
- 2.35 Although various engineering options have been proposed and evaluated for this area, they are all likely to significantly affect the local ecology. Consequently, for the moment, work has been deferred in this area, and the applicant's consultants are recommending that the area continues to be monitored using existing and additional instrumentation.

Allotment areas

- 2.36 The lower coastal slopes located seaward of the allotments and to the east of the *East Cliff Main Slip* have been termed *Allotment Areas west and east*. The area includes the near vertical unprotected sea cliff east of the existing sea wall. Here, sea cliff recession is continuing and would lead to more widespread landsliding and outflanking of the proposed works in the *East Cliff Main Slip* area. This would potentially result in a 95% probability of complete loss of property, services and infrastructure within the next 10 to 28 years.
- 2.37 The proposed stabilisation measures are to provide pile walls with steel ties from the eastern end of the existing Urgent Advance Works to a distance of approximately 60m across the middle coastal slope allotments.

Landscaping, habitat restoration and management.

- 2.38 In summary, these proposals will comprise the following:
- Church Cliff: rapid establishment of vegetation cover to stabilise soils on the steep slope following the engineering works
 - East Cliff western side scarp: rapid establishment of vegetation cover to stabilise soils on the steep slope following the engineering works
 - East Cliff western scarp temporary working areas: reinstatement by replacing natural topsoils removed with their seedbank intact.
 - East Cliff northern boundary: reinstatement after engineering works by replacing natural topsoils removed with their seedbank intact.

Evolution of the “Revised Scheme”

- 2.39** There are various references in these documents, and in the representations we have received, to the “*Preferred Scheme*” and the “*Revised Scheme*”. Briefly, the Preferred Scheme evolved out of various preliminary options that were consulted on between 2005 and 2007. And in that scheme the *East Cliff Main Slip* landform was to be regraded to form more regular terraces. A series of deep counterfort drains running downslope were intended to drain the upper landform, to reduce slippage potential, and a small area of piling was proposed in the car park and allotments at the upper edge. The western side of East Cliff was also to be regraded into a new reinforced earth buttress landform.
- 2.40** The mitigation design for the *East Cliff Main Slip* included creation of artificial surface water bodies and a maintenance regime involving regular vegetation clearance and surface scarification, in attempt to emulate the existing landslip and seepage habitat conditions, without compromising the preferred engineering goals of drying and stabilising the area.
- 2.41** The Preferred Scheme for the sea wall included a rock armour apron along its toe and a further 60m of rock armour revetment extending east along the foot of the unprotected cliffs. It also included a path linking Charmouth Road Car Park and the sea wall walkway.
- 2.42** Support from the public for the Preferred Scheme was positive. However, a number of concerns were raised by Natural England and Dorset County Council relating to possible adverse effects on the Special Area of Conservation (SAC), the Site of Special Scientific Interest (SSSI) and the World Heritage Site (WHS). These concerns were discussed at a series of meetings during 2008 and 2009, and eventually resulted in the Revised Scheme, which is the subject of the current application. The principal changes are the exclusion of (i) the majority of the East Cliff Main Slip works, (ii) most of the rock armour and (iii) the East Cliff link path. The land above East Cliff will, instead, be stabilised with continuous pile walls along the upper edge of the slip and the western flank will be stabilised with soil nailing into the existing landform. Rock armour will be restricted to infilling of the eroded cliff foot immediately behind the eastern end of the sea wall.

Other regulatory responsibilities

- 2.43** The proposed works fall within the West Dorset Coast Site of Special Scientific Interest (SSSI). This SSSI is part of the Sidmouth to West Bay Special Area of Conservation (SAC). The proximity of these sites means that determination of any application should be undertaken with regard to Section 28 of the *Wildlife and Countryside Act 1981* (as amended) and the requirements of the Habitats Regulations, in particular Regulations 48 and 49.

Regulation 48(1) states that:

“A competent authority [i.e. local planning authority], before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which-

a) is likely to have a significant effect on a European site in Great Britain (either alone or in combination with other plans or projects), and

b) is not directly connected with or necessary to the management of the

site,

shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives".

2.44 Natural England considers that these works are likely to significantly effect the Sidmouth to West Bay SAC and, given that the proposals are not directly connected with (or necessary to) the management of the site, they have advised that an appropriate assessment is necessary. Your officers have sought the assistance of Dr Philip Sterling, the Natural Environment Manager at Dorset County Council, in completing the required assessment and his report is contained within Appendix 1 to this report. Further reference will be made to this in the *Planning Issues* section of this report.

2.45 In addition to the protection afforded European sites, where SSSIs are involved, Section 28G of the *Wildlife and Countryside Act 1981* (as amended) includes a duty on public bodies, including local planning authorities, to *"take reasonable steps, consistent with the proper exercise of the authority's functions, to further conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest"*. Once again, your officers have sought the assistance of Dr Sterling in ensuring that our statutory responsibilities are met in this regard, and his report into this requirement is contained within Appendix 2 to this report.

3. Main planning issues

- The principle of development;
- Visual impact;
- Heritage Assets;
- Ecological impacts, with specific regard to the local planning authority's obligations under Regulation 48(1) of the Habitat Regulations and Section 28G of the Wildlife and Countryside Act 1981;
- Residential amenity;

4. Statutory Consultations

Parish/Town Council

4.1 *"Recommend approval. The Committee however expressed regret that the beach was not to be replenished as part of the scheme with, as a consequence, the potential loss of the popular beach walk to Charmouth."*

Highway Authority

4.2 *"The Highway Authority raises no objections to the proposals and are content that the construction plan and methodology is sufficient to protect the Public Highway and road safety considerations."*

Highways Agency

4.3 No objection.

Environment Agency

4.4 No objection subject to conditions and informatives.

Natural England

4.5 No objection subject to conditions.

Senior archaeologist, Dorset County Council

4.6 No objection, subject to a condition.

Rights of Way Officer, Dorset County Council

4.7 No objection.

English Heritage

4.8 Recommend that the application be determined in accordance with national and local policy guidance, and on the basis of your specialist conservation advice.

5. Other consultations

5.1 None.

6. Other representations

6.1 We have received eight letters of representation from six separate properties. One letter is explicitly in support of the scheme, but asks two questions:

- Could vegetation be removed from the top of Church Cliffs to open up the public view of the Jurassic Coast?
- Could a suspended pathway be provided from Charmouth Road Car Park to the Long Entry access? This would provide a safer pedestrian access than negotiating the narrow and congested pavements of Church Street.

The other seven letters are not critical of the scheme as a whole, but raise a number of detailed concerns. And because many of these are specific to individual properties, that is how they are summarised below:

Squires Mead

- Walls or wooden fence should be provided on property boundaries to make clear that there is no access to the beach through private properties.

Bay View Cottage

- Access gates proposed to service manholes on private land are totally unacceptable. They raise potential security and privacy risks.
- Eastern boundary of Bay View Cottage should be securely fenced. And fencing should enclose all land attached to the property, which has been continuously cultivated as such for 175 years.
- Proposed viewing area is likely to become more of a recreational area, with all of the attendant noise, litter and vandalism. Bay View Cottage already experiences problems from the common boundary it shares with Charmouth Road Car Park. If a recreational area is approved it should be provided with a “substantial fenced buffer zone” between it and Bay View Cottage.
- Temporary access road should be ploughed up and densely planted when it is finished with to prevent it being used as a route down to the sea. The post and rail fence detailed on the proposed drawings will be inadequate to prevent direct access to the beach;
- Will we be financially compensated for the loss of home grown fruit and vegetables resulting from summer working?
- We expect the outside of our house to be cleaned up after the dust from the works has settled.
- Need reassurance that Japanese Knotweed will be properly dealt with.

Albany Guest House

- Want an assurance that there will be secure fencing between Albany

and Bay View Cottage.

- We do not want gates into our property; it makes us feel insecure.

Quambi

- Concerned about proposals to install maintenance gates.
- Close boarded fences should replace all boundary hedges.
- Concerned about the reduction of rock armour from the “preferred” scheme.

Cedar Cottage

- Concerned about reduced screening due to loss of planting on the undercliff.
- Extremely concerned about the disturbance from increased public use of the new sea wall, which is to become an accessway for its entire length and only a short distance below the end of Cedar Cottage and other properties.
- Reinstatement proposals for planting do not closely reflect existing species.
- There will be a significant effect on the privacy and amenity of Cedar Cottage through noise and increased public access, together with a dramatic alteration to the visual amenity of the garden, both as a place of enjoyment and a place of work.

Copies of the letters of representation are available to view at Mountfield and in the Members Room at Stratton House and on the website - www.dorsetforyou.com.

7. Human Rights

7.1 Article 6 - Right to a fair trial.

7.2 Article 8 - Right to respect for private and family life and home.

7.3 The first protocol of Article 1 Protection of property

8. Relevant Planning History

| App. No | Type | Proposal | Decision | Date | Officer |
|----------------|-------------|--|-----------------|-------------|----------------|
| 1/W/03/001785 | FUL | Carry out coast protection & slope stabilisation works, comprising beach replacement, new sea wall, promenade, jetties, rock armour breakwaters, slope strengthening, installation of drainage system, earthworks, landscaping & ancillary works | A | 11 May 2004 | GH |

9. The Development Plan

Regional Planning Guidance for the South West (RPG 10) Draft Regional Spatial Strategy (July 2008)

- Policy VIS 1: Expressing the vision;
- Policy VIS2: Principles for future development;
- Policy SS21: Coastal areas;
- Policy EN1: Landscape and biodiversity;
- Policy EN3: The historic environment;

Policy EN4: Quality in the built environment;
Policy RE2: Flood risk.

The Bournemouth, Dorset and Poole Structure Plan (adopted 13 July 2000)

Environment Policy G;
Environment Policy H;
Environment Policy J;
Environment Policy K;
Environment Policy L;
Environment Policy Q;

The West Dorset District Local Plan (adopted July 2006)

Policy SA1 (Area of Outstanding Natural Beauty);
Policy SA2 (Heritage Coast protection);
Policy SA3 (Landscape Character Areas);
Policy SA8 (Protection of Sites of International Importance for Nature Conservation);
Policy SA9 (Protection of National Nature Reserves and Sites of Special Scientific Interest);
Policy SA12 (Species Protection);
Policy SA13 (Protection of Regionally Important Geological and Geomorphological Sites (RIGS));
Policy SA20 (Settings of Listed Buildings);
Policy SA21 (Protection of Character or Appearance of Conservation Areas);
Policy SA24 (Sites of Regional or County Archaeological Significance);
Policy AH5 (Slope Instability (Landslide) Policy for the Lyme Regis and Charmouth Area);
Policy AH6 (Development on Contaminated Land);
Policy AH8a (Development with Potential to Generate Pollution, Noise, Vibration, or Unpleasant Emissions);
Policy AH14 (Road Safety);
Policy SS1 (Development Within the Towns and Rural Areas);
Policy SS3 (Development Outside Defined Development Boundaries);
Policy TRAN 1 (Access to the Strategic Highway Network);
Policy TRAN 8 (Cyclists and Pedestrians);
Policy TRAN 12 (Travel Plans);
Policy IN1 (Service Infrastructure);
Policy IN3 (Access for People With Disabilities);
Policy IN 6 (Public Art);
Policy DA1 (Retention of Trees, Hedgerows and Other Important Landscape Features);
Policy DA2 (Landscape Schemes);
Policy DA3 (The Scale and Form of Settlements and the Pattern of Streets and Spaces);
Policy DA6 (Privacy, Daylight and General Amenity);
Policy DA7 (Detailed Design and Materials);

10. Supplementary planning documents

- 10.1** West Dorset Landscape Character Assessment (February 2009).
- 10.2** West Dorset Design Guidelines (2009);

11. Supplementary planning guidance

- 11.1** None.

12. Other Material Planning Considerations

12.1 Conservation Area Appraisals

Lyme Regis Conservation Area Appraisal.

12.2 Central Government policy

Planning Policy Statement 1: Delivering Sustainable Development;
Planning Policy Statement 9: Biodiversity and Geological Conservation;
Planning Policy Guidance 13: Transport;
Planning Policy Guidance 15: Planning and the Historic Environment;
Planning Policy Guidance 16: Archaeology and Planning;
Planning Policy Guidance 20: Coastal Planning;
Planning Policy Guidance Note 23: Planning and Pollution Control;
Planning Policy Statement 25: Development and Flood Risk.

13. Planning issues

The principle of development

- 13.1** These proposals are a necessary response to problems of coast erosion and land instability which, if unchecked, threaten lives, homes, tourism, employment and the quality of the built and natural environment. Essential development of this nature is explicitly supported by Structure Plan Environment Policy L, and Central Government Guidance expressed through *Planning Policy Guidance 20 (PPG20): Coastal Planning*. However, both of these policy documents acknowledge that “*the impact on the environment and on the natural movement of material along the coast*” is an important planning consideration that needs to be weighed in the balance. These issues are fully explored in the Environmental Statement (ES) that accompanies this planning application.

Visual impact

- 13.2** Considering the new sea wall first, the proposal is for a simple, functional structure, which the ES describes as understated, so as to “*distract as little as possible from the grandeur of the Black Ven clifffscape.*” This is regarded as a more appropriate response to its context than a repeat of the “*massive and traditional*” approach adopted for Phase I, adjoining the Cobb.
- 13.3** Your officers would concur with this conclusion. The setting of the sea wall will appear as largely undeveloped in most views, and a more “delicate” approach is justified. We feel that the sinuous and uncluttered form of the proposed wall responds appropriately to this context. In many ways the new wall apes what exists, although engineering imperatives mean that it will be taller and will project further from the cliff base – and this will inevitably make it more prominent, particularly just after it is completed and before it has had a chance to weather. The rock armour at the extreme eastern end of the wall will appear as an alien feature, but this *revised scheme* reduces this feature to the minimum necessary. The removal of the redundant groynes will be a significant visual enhancement.
- 13.4** The submitted drawings indicate that there is the potential to integrate traditional materials into the walkway that will run along the top of the wall. At the moment the details of this are unrefined, but can be resolved through the imposition of a condition.
- 13.5** Turning to the proposed landscaping, the proposals will involve extensive loss of trees and shrubs on Church Cliff and on the western side of East Cliff. The ES makes the point that this loss of vegetation has not currently been quantified because the woody vegetation has not been surveyed to the level

of individual trees and much will depend on the methods devised and employed by the eventual contractor. The ES confirms that although the contractor will be *“directed to retain as much woody vegetation as possible along the top of Church Cliff, the extent will depend on the method of implementing the engineering works and health and safety issues which cannot be reasonably predicted.”* However, the overall landform will remain the same, albeit that most of the affected surfaces (most of which are currently concealed by vegetation) will change from irregular terrain to relatively smooth finishes. The majority of the landform of the East Cliff main slip would remain undisturbed, although the unsightly twin surface water collector drain pipes that currently run down the middle of East Cliff will be re-routed around the western edge of the slip and grassed over.

- 13.6** During the construction period, and immediately after, the proposed works are likely to have a significant visual impact, most noticeably from the end of Gun Cliff Walk and Church Cliff foreshore. However, this impact will be quickly mitigated as new landscaping takes hold, and whilst this will have a more manicured appearance than at present it will not appear unnatural.

- 13.7** The Council’s Senior Landscape Officer comments on the proposal as follows:

“The scheme has been carefully designed to retain as much of the existing character and varied habitat of the east cliff landscape as possible. The new seawall is a simple, solid structure of appropriate scale and design for this location. I have some comments on the landscaping details of this scheme, however I am satisfied that these can be resolved at the later detailed design stage of the scheme. It is my understanding that these landscape detail comments can be addressed under a landscaping condition.

The detailed design issues I would like to consider as conditions include final surface levels, and reinstated landform profiles/contours, sea wall detail and relationship with cliff face, final planting details and boundary treatments to adjoining properties. Providing that the detail comments can be addressed at a later stage of design I am able to support these proposals.”

Heritage Assets

- 13.8** The Council’s Design and Conservation Officer comments that *“This application has been through an extensive pre-application process and all the major issues have been addressed with respect to boundary wall treatment, setting of the Grade A listed Parish Church of St Michael and priority given to the objective of preserving or enhancing the character or appearance of the Lyme Regis Conservation Area. The Lyme Regis Conservation Area Appraisal adopted 2004 makes reference to the valuable open space of the Parish Churchyard with its social and historic significance and important views down Church Street, Monmouth Street and across town. These views will be preserved in the proposals to enclose the churchyard with a simple post and rail fence.”* There is, of course, the other overriding issue that without this scheme many buildings at the eastern end of the town, including the Grade A listed Parish Church could be lost to coastal erosion within 50 years.

- 13.9** English Heritage has recommended that the application be determined in accordance with national and local policy guidance, and on the basis of our

specialist conservation advice. And the Senior archaeologist at Dorset County Council raises no objection to the scheme, subject to the imposition of a condition requiring archaeological observation and recording to take place during groundworks.

Ecological considerations

- 13.10** This application raises complex ecological issues, which have been the subject of months of discussion in the lead-in period to this planning application. And Members will appreciate from earlier sections of this report that the *revised scheme* which forms the basis of this application has been heavily influenced by input from Natural England, with the result that Natural England has confirmed that it now has no objection to the proposed works – subject to the imposition of the conditions recommended in the two reports prepared by Dr. Sterling on behalf of the Council in its role as local planning authority – contained within Appendices 1 and 2 to this report.
- 13.11** The report contained at Appendix 1 was prepared with the intention of forming the “*appropriate assessment*” that we are required to make under Regulation 48 of the Habitat Regulations. It is a necessarily technical document, but Natural England has confirmed its agreement to the conclusions and the recommendation section of this report asks Members to accept Dr. Sterling’s report as meeting the local planning authority’s requirements under Regulation 48(1) of The Conservation (Natural Habitats, &c.) Regulations 1994.
- 13.12** The report contained at Appendix 2 was prepared with the intention of meeting our obligations under the Wildlife and Countryside Act. Natural England has confirmed its agreement to the conclusions of this report as well, and the recommendation section of this report asks Members to accept Dr. Sterling’s report as meeting the local planning authority’s requirements under Section 28G of the Wildlife and Countryside Act 1981 (as amended);
- ### **Residential amenity**
- 13.13** The letters we have received from immediate neighbours to the proposed scheme raise a range of issues – many of which are not material planning considerations. Concerns about access arrangements to private gardens for future maintenance responsibilities and the fine detail of how private boundaries are to be enclosed are matters that will need to be resolved with the Council in its role as promoter of the scheme – not as local planning authority. However, some of the other concerns which have been raised do have a bearing on the planning merits of the case.
- 13.14** The proposed “*viewing area for car park users*” to the south of Charmouth Road Car Park is causing concern. The perception is that this facility will become a general “recreational” area, rather than just a viewing platform, and will adversely affect the amenity of adjoining neighbours through noise, litter and vandalism. If it is to proceed then the occupants of Bay View Cottage have asked that they be protected by a “*substantial fenced buffer zone*” within the viewing area.
- 13.15** It is commonplace to see areas of public open space immediately abutting the boundaries of private residences, and there is nothing particularly unusual about the current proposals in that regard. And a viewing area in this location would be a fabulous public amenity, offering tremendous views of the Jurassic Coast, with easy access from Charmouth Road Car Park. There are no details

of how this area is to be laid out at present, but there appears to be no practical reason why it should not also provide for easy disabled access.

- 13.16** Neighbours' concerns that this area might become a general recreational area are understandable, but would be weak grounds for refusing this planning application. And their concerns could be addressed to some degree in the detailed landscaping scheme that is being recommended as a condition of planning permission. Also, your officers do not feel that it would be in the general public interest for this area to become an equipped playground for example – that would not sit comfortably with the idea of this being a place to quietly appreciate the scenery. And so it is being recommended that the permitted development rights that would otherwise allow play equipment to be installed without planning permission be removed in this case. That is not to say that it would never be allowed; it is just bringing it within the control of the local planning authority.
- 13.17** Concern has also been expressed by the occupants of Cedar Cottage, East Cliff, about the potential for disturbance from the public walkway proposed along the top of the new sea wall. The submitted drawings show this walkway positioned approximately 16 metres east of Cedar Cottage's boundary, and approximately 65 metres from the property itself. And the sections suggest that the new walkway is never less than 10 metres below the level of Cedar Cottage's garden, if the limit of the garden is assumed to coincide with the "*boundary of unregistered land*" as it appears on the application drawings.
- 13.18** The new walkway will be another significant public amenity to be secured from this scheme, providing safe and level access along a 390 metre stretch of the cliff base, with stepped accesses to the beach providing an additional amenity and safe refuge for those caught out by the tide. The walkway will undoubtedly bring the general public closer to the rear of properties in Church Street, East Cliff and Ferndown Road, and this will become a constant occurrence as opposed to one which is currently dictated by the tides. Nevertheless, in your officers' opinion, any loss of amenity would not be significant in planning terms.

Other issues

- 13.19** The Town Council's response to this application expresses "*regret that the beach was not to be replenished as part of the scheme with, as a consequence, the potential loss of the popular beach walk to Charmouth.*"
- 13.20** This could not be grounds for refusing this planning application, but your officers have nevertheless sought a response from the Council's Technical Services Manager. He says:

"Keeping and improving the groynes to retain what is left of the beach at Church Cliff was considered as part of the investigations for the scheme and has been discussed at Lyme Regis Coastal Forum meetings. The existing groynes have never been very effective in retaining beach material and have had gaps cut at their landward end to improve pedestrian safety. At this location, beach replenishment and improved groynes would not be cost effective in coast protection and slope stabilisation terms, would have unacceptably high maintenance requirements and would cover or damage ecologically and geologically important foreshore ledges. Pedestrian access will be improved by the walkway on top of the new sea wall, with

staircases down to the foreshore.”

14. Summary

14.1 This planning application relates to the fourth of five phases of coastal protection and other environmental improvement works at Lyme Regis, promoted by West Dorset District Council. The main aim is to protect the town, its infrastructure and its historic structures from the more serious effects of coastal erosion and associated ground movement. The principle of this form of development is explicitly supported by Structure Plan Environment Policy L, and Central Government Guidance expressed through *Planning Policy Guidance 20 (PPG20): Coastal Planning*.

14.2 Despite the unquestionable need for these works, it is important that the proposed scheme does not damage, or destroy, the very things that it sets out to protect, which is why the direct and indirect effects on such things as the rich ecological, geological and heritage assets that surround and underlie this scheme have been given such painstaking attention in the evolution of this project. The scheme presented in this planning application has been shaped by, and has emerged from, extensive consultation with the public and relevant statutory agencies over several years. And the fact that the final scheme has overcome many complex issues, particularly those relating to the sensitive ecological nature of the site, is testament to the success of that inclusive approach.

15. Recommendation

15.1 (a) That the Appropriate Assessment presented in Appendix 1 to this report be accepted as meeting the requirements of Regulation 48(1) of The Conservation (Natural Habitats, &c.) Regulations 1994;

(b) That the report presented in Appendix 2 to this report be accepted as meeting the requirements of Section 28G of the Wildlife and Countryside Act 1981 (as amended); and

(b) That planning application 1/D/10/000077 be approved subject to conditions:

- i. Standard three years;
- ii. The preparation and implementation in full of a Construction and Environmental Management Plan (CEMP), to be submitted to and approved in writing by the Planning Authority prior to commencement of the development
- iii. The preparation and implementation in full of an Ecological and Landscape Management Plan, to be submitted to and approved in writing by the Planning Authority prior to commencement of the development
- iv. The supervision by a suitably qualified Ecological Clerk of Works of the development in accordance with the CEMP, and the Ecological and Landscape Management Plan
- v. No development to commence until a further detailed soft landscaping scheme has been submitted to and agreed in writing by the local planning authority.
- vi. No development to proceed until a surface and ground water drainage

scheme has been submitted to and agreed in writing by the local planning authority.

- vii.** No development to proceed until further details of the surfacing, railings, seats etc. to be used on the sea wall walkway have been submitted to and agreed in writing by the local planning authority.
- viii.** The applicant shall make arrangements for archaeological observation and recording to take place during groundworks. Details of these arrangements shall be submitted to and approved in writing by the local planning authority at least one month before any work commences on the development site.
- ix.** Removal of certain permitted development rights for the proposed viewing area to the south of Charmouth Road – specifically, Part 12 (Development by Local Authorities) to Schedule 2 of the Town and Country Planning (General Permitted Development) Order 1995 (as amended).

LYME REGIS ENVIRONMENTAL IMPROVEMENT SCHEME

Appendix 2

4.0 BASELINE CONDITIONS WITHIN THE ZONE OF INFLUENCE

4.1 Introduction

This section provides summaries of the ecological surveys carried out in 2006, and in each case the reader is directed to the accompanying report in the appendices, which provides full details of the survey.

4.2 Botanical Survey

The aims of a botanical survey of the study area carried out during a visit in July 2006 was to provide further detailed and updated baseline information obtained previously (EPR 1997, 2001, 2003) on important flora, vegetation and habitats (see **Annex 1**).

The habitat complex of the study area has been designated as a Special Area of Conservation (SAC) and is thus of International Value. The survey area includes an extensive area of the EU Habitats Directive Annex 1 Habitat 1230 Vegetated Sea Cliffs of the Atlantic and Baltic Coasts. The identification and mapping of this particular Annex 1 habitat is complicated because of the absence of any comprehensive description of soft sea cliff vegetation.

Timber Hill Meadows are part of the West Dorset Coast Site of SSSI and are of National Value.

The survey area includes four UK Biodiversity Action Plan Habitats:

- Maritime Cliffs and Slopes;
- Lowland Meadows;
- Rush Pasture; and
- Ancient and/or Species-rich Hedgerows.

In the absence of mitigation, the proposals could result in significant negative impacts to the flora and vegetation of the Annex 1 Habitat of the SAC.

Recommended mitigation includes restoring a vegetated surface on completion of works rather than a hard surface.

4.3 Intertidal Survey

An intertidal survey was carried out by Aquatronics Ltd on behalf of EPR within intertidal areas adjacent to East Cliff, and including Broad Ledge in July 2006 (see **Annex 2**).

The survey aimed to provide further detailed and updated baseline information on the intertidal biotopes and took place during a spring tide in order to maximise

access to the exposed intertidal areas. Standard methods were used to map biotopes and record species associated with the intertidal habitats recorded.

A diverse range of commonly occurring intertidal communities were recorded. The most important community present is the *Sabellaria alveolata* (Honeycomb Worm) reef community, which has a patchy presence on Broad Ledge and to the east of this area. The *Sabellaria alveolata* reefs are scarce in the UK and are of national importance, and hence have a UK BAP Habitat Action Plan.

Potential impacts were predicted to arise as a consequence of loss of parts of the shore and the biotopes present to land take, effects from sedimentation and wave action and the potential damage from mooring boats and barges.

Measures to avoid and mitigate potential impacts, in particular on the *Sabellaria alveolata* reef communities, will need to be considered during the design of the scheme.

4.4 Reptile Survey

A reptile survey was carried out on land to the east of Lyme Regis in 2006 (see **Annex 3**) in order to evaluate the status and distribution of local reptile populations.

The survey area includes a variety of habitat suitable for reptiles, with East Cliff containing very high quality reptile habitat. The survey area currently supports populations of Slow Worm, Viviparous Lizard, Grass Snake and Adder. The survey work conducted so far indicates the presence of a 'good' population of Slow Worms, whilst the other species have 'low' populations. The majority of reptiles were recorded on the East Cliff and Allotments West landslides, with lower densities present over the rest of the study area. As a whole, the assemblage of reptiles within the study area is considered to be of district importance.

In the absence of mitigation, the proposals could result in reptiles being harmed or killed during clearance of vegetation and soils, and negative impacts to reptile populations may occur as a consequence of mortality and habitat loss to land take.

Recommended mitigation includes translocation of reptiles away from the works area, enhancement of habitat in the local area to increase its suitability for reptiles, and restoration of areas worked to include habitat suitable for supporting reptiles, enabling translocated reptiles to recolonise after works cease.

4.5 Dormouse Survey

A Dormouse survey was carried out by EPR on land to the east of Lyme Regis in 2006 (see **Annex 4**) in order to establish whether Dormice were present in the study area.

The Dormouse survey was conducted in accessible areas of suitable habitat using nut search and nest tube methodologies. Suitable habitat for Dormice is present across the survey area within the hedgerows of The Meadows and, to a lesser extent, within scrub on the Town Dump. Some suitable areas of habitat within the survey area could not be accessed due to dense vegetation and steep cliffs.

Hazelnuts showing characteristic toothmarks of Dormice were found at two locations within hedgerows at The Meadows. Three Dormice were found occupying nest tubes, and one additional confirmed Dormouse nest and two possible Dormouse nests were also found. All Dormouse evidence within nest tubes was found in the hedgerows of The Meadows, with the exception of one possible nest on East Cliff.

Although Dormice are scarce and their populations are declining in Europe, and hence are recognised as a European Protected Species, in this part of southern England they are still relatively widespread. Therefore, the Dormouse population within the study area is considered to be of parish importance.

Potential impacts to Dormice as a result of the works would arise where suitable habitat is lost or fragmented. Fragmentation would be a significant issue should parts of the hedgerows in The Meadows be removed.

In order to mitigate the impacts of the works on Dormice, it is recommended that vegetation be cleared in a sympathetic manner under ecological supervision prior to work commencing. There is scope for the enhancement of suitable Dormouse habitat within the survey area, especially by increasing connectivity between areas of suitable habitat. Habitat loss as a result of the works should be restored after the works are complete. Any works which affect Dormice or their habitat would need to be carried out under a Defra licence from Natural England.

4.6 Invertebrate Survey

An invertebrate survey was carried out by Colin Plant Associates (UK) on behalf of EPR at the study area in 2006 (see Annex 5), with visits made in July and September.

Standard methods were used to sample and record invertebrates associated with the habitats present including overnight light-trapping on each occasion. Sufficient effort was used to enable an appraisal of the invertebrate value of the area to be made in order to update and compliment previous work.

A total of 354 species of terrestrial invertebrate were recorded during the survey. The key species recorded in the present survey were the Bee Wolf *Philanthus triangulum* RDB 2 (Vulnerable), four Nationally Notable (Na) species, and fourteen Nationally Notable (Nb) species. No BAP species, nor the two target species – Morris' Wainscot *Photedes morrissii* (a moth) and *Lasioglossum laticeps* (a mining bee), were recorded

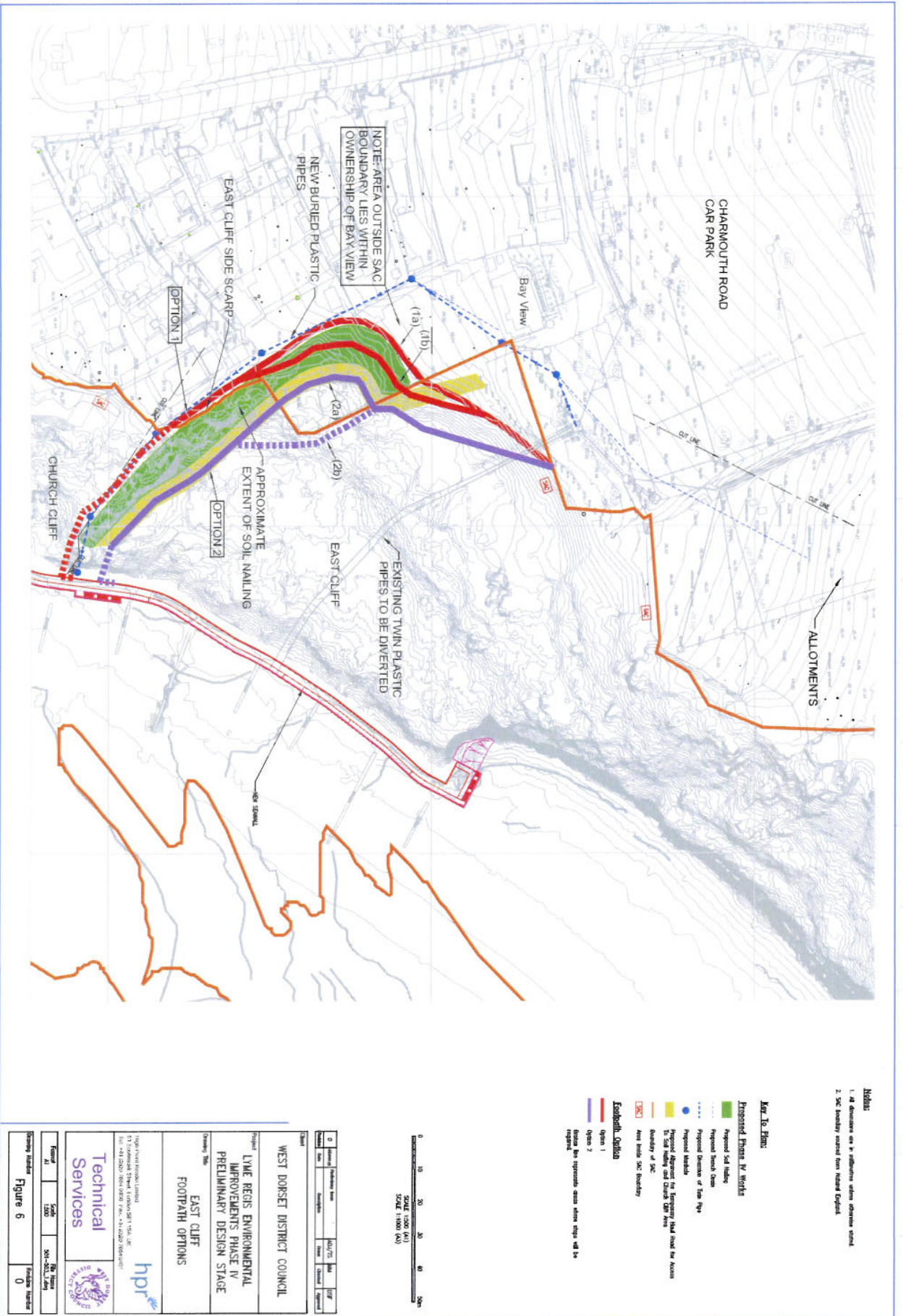
during this survey. In view of this and previous data the study area was evaluated as being of national importance for invertebrates.

Loss of habitat to land take and changes in habitat quality, for example as a result of drainage, is predicted to have an adverse impact on populations of important invertebrates.

Options for mitigation and enhancement include provision of scarce resources, including early seral habitat, in order to encourage the establishment of key nectar and larval food plants, and to provide areas of bare ground.

LYME REGIS ENVIRONMENTAL IMPROVEMENT SCHEME

Appendix 3



LYME REGIS ENVIRONMENTAL IMPROVEMENT SCHEME

Appendix 4

