

MUNDESLEY AND CROMER PHASE 2 COASTAL MANAGEMENT SCHEMES

Summary: The report seeks to provide an update as to the development and progress of the Cromer Phase 2 and Mundesley Coastal Management Schemes. There is a need to move forward with delivery of the schemes as soon as is practical to meet the Environment Agency Capital programme timeframes and in order to better protect homes, communities and infrastructure. The report sets out recommendations to enable both schemes to proceed with minimal delays.

Options considered: **Option 1 - Do not proceed:** This option would cease all progression of work and inform funding bodies to reallocate funds to other priorities. The communities of Cromer and Mundesley would not benefit from the coastal protection afforded by the schemes. Such an option would not deliver the intent of the Shoreline Management Plan policies for these locations. Option Discounted.

Option 2 - Seek protection measures further to the proposal: This option would seek to delay delivery in order to seek to raise significant further funds for additional protection measures. This could inadvertently lead to the loss of the government grant and damage to the localities in the intervening years of seeking to make further arrangements. Option Discounted.

Option 3 -Continue with proposed scheme: this option would see the continuation of the scheme as proposed, seeking to maximise on protection to communities and assets. Recommended Option.

Conclusions: There is a need to move forward expediently with the delivery of the Mundesley and Cromer Phase 2 Coastal Management Schemes to deliver continued and enhanced protection to communities in the timeframes the funding is available.

Design and consenting is progressing with construction anticipated to start in autumn 2022, subject to consents and budget.

Due to increases in construction costs across the industry, there is a need to continue to minimise cost and maximise funding to enable the delivery of the most beneficial schemes possible.

Recommendations: **Cabinet resolves to:**

- a) Support the continued approach of the

Mundesley and Cromer Phase 2 Coastal Management Schemes.

- b) Support of the appointment of Mott MacDonald to complete detailed design and consenting via the Dynamic Purchasing System and additional scope identified to complete the supporting Environmental Impact Assessments.
- c) Approve construction via the Local Authority SCAPE framework.
- d) Approve the submission of applications for consents and licences
- e) Delegate to Director of Place and Climate Change with Portfolio Holder consultation to approve quotations, tenders, funding applications, access agreements and contractual appointments/variations to allow for timely progression of the schemes

Reasons for

Recommendations:

To enable continued and timely progression for the Mundesley and Cromer Phase 2 Coastal Management Schemes.

LIST OF BACKGROUND PAPERS AS REQUIRED BY LAW

(Papers relied on to write the report, which do not contain exempt information and which are not published elsewhere)

- Mundesley Outline Business Case- June 1018
- Cromer Coast Protection Scheme Project Appraisal Report – July 2012

Cabinet Member(s) Cllr Angie Fitch-Tillett	Ward(s) affected Mundesley Cromer
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1. Introduction

- 1.1 The Mundesley and Cromer Phase 2 Coastal Management Schemes seek to deliver the current and adopted 'Hold the Line' Shoreline Management Plan Policies. The implementation of the schemes will seek to continue the reduce

erosion risk to properties, land and infrastructure whilst also seeking to begin to make the locations more resilient to storms and climate change.

- 1.2 The Cromer Coastal Protection Scheme was granted funding approval by the Environment Agency in 2012 and Phase 1 was completed between 2013 to 2014. The first phase also incorporated repairs following the 2013 Storm Surge. Phase 2 was included in the original proposal. The scheme seeks to better protect from erosion risk 758 residential properties.
- 1.3 The Mundesley Coastal manage Scheme was granted technical and funding approval in 20XX. Funding for this scheme is under the more recent Partnership Funding and therefore it includes Environment Agency Funds, North Norfolk District Council capital allocation alongside contributions from Anglian Water and Mundesley Parish Council. The scheme seeks to better protect from erosion risk 510 residential properties.
- 1.4 Both schemes are now progressing through design and consenting and are being jointly delivered to maximise on efficiencies in the pre-construction and the construction phases.
- 1.5 This report provides an update as to progress, seeks to reaffirm the approach set out in the October 2018 Cabinet report, ratify decision made to date and to delegate authorities to enable timely and expedient progression to construction.

2. Background

- 2.1 The soft cliffs and beaches of the north Norfolk coast have been susceptible to coastal change for thousands of years. Over the past 150 years coast protection measures have sought to reduce erosion and protect assets. Periodically defences require investment to maintain condition and to counter changes to the conditions on the coast, two key variables are described below and need to be considered for the coastal management at Cromer and Mundesley now and into the future.
- 2.2 Beaches provide the primary defence to our coastline and the level (height and steepness) of the beaches naturally fluctuate between seasons and years. However, the ongoing trend is that the levels of our beaches are reducing, thus the protection they provide is also reducing. This observation is common across the soft cliffs and beaches of the east coast, particularly in areas where there are defences such as Cromer and Mundesley. Falling beach levels increase the depth of water closer inshore and does not allow for the energy of the waves to be dissipated. This leads to larger, more powerful waves breaking onto the beaches, defences and cliffs which increases day to day wear and creates direct damage alongside overtopping of the defences.
- 2.3 Overtopping of defences can also carry debris from the beach onto the promenades as can be demonstrated during recent storms, but also in larger events can lead to erosion of the cliffs behind the defences, such as in 2013. As beach levels lower, there is more turbulence in the water adjacent to the sea wall, this creates additional scour and leads to further and ongoing beach lowering. As such, coastal protection schemes need to consider how they can seek to slow beach loss and dissipate wave energy against defences.

- 2.4 In addition to the lowering of beaches, due to climate change and isostatic adjustment, the sea levels on our coast are rising. This has been measured and on average sea levels are over 5cm higher now than they were in 1990. This trend is expected to continue (and potentially increase) according to the governments independent body, the Committee on Climate Change. Over time sea level rise will increase erosion and the pressure on protection measures.
- 2.5 As such the coast protection measures proposed seek to minimise the continued loss of beach, dissipate wave energy, protect locations where beach levels are very low and protect against damage where protection measures are overtopped during major storms.

3. Mundesley and Cromer (Phase 2) Coastal Management Schemes

- 3.1 The Mundesley and Cromer Phase 2 Coastal Management Schemes seek to deliver the current and adopted 'Hold the Line' Shoreline Management Policies. The implementation of the schemes will seek to continue to reduce erosion risk to properties, land and infrastructure whilst also seeking to begin to make the locations more resilient to storms and climate change.
- 3.2 Both Cromer and Mundesley have benefited from a number of phases of coastal protection measures for over 150 years. Defences have been maintained but require periodic investments to complete major repairs and improvements. These schemes seek to ensure the defences continue to provide a level of protection for the coming years in light of the condition of the current defences, the levels of the beaches and future sea level rise. With regards to the latter consideration should continue to be given to the future even after the proposed schemes to ensure both communities plan for the future.
- 3.3 The Cromer Coastal Protection Scheme was granted 100% funding approval by the Environment Agency in 2012 and Phase 1 was completed between 2013 to 2014. The first phase also incorporated repairs following the 2013 Storm Surge. Phase 2 was included in the original approval. The phase 1 and 2 of the scheme seeks to better protect from erosion risk 758 residential properties.
- 3.4 Subject to consenting and final costs, Cromer phase two scheme will seek to refurbish the timber groynes, install steel sheet piling and concrete foundation apron to a section historic flint defences in the east of the town, place rock armour on the western end of defences to assist with managing outflanking, construct a rock revetment in front of the sea wall to the west of the pier and install scour protection to the cliffs behind the sea wall between the pier and Melbourne.
- 3.5 The Mundesley Coastal Management Scheme was granted technical and funding approval in 20XX. Funding for this scheme is under the more recent Partnership Funding and therefore it includes Environment Agency Funds, North Norfolk District Council capital allocation alongside contributions from Anglian Water and Mundesley Parish Council. The scheme seeks to better protect from erosion risk 510 residential properties.

- 3.6 Subject to consenting and final costs, the Mundesley Scheme will seek to refurbish timber groynes, reface the section of sea wall, improve access between the beach café and the old lifeboat ramp, install scour protection on the cliff behind the sea wall at the main access slope, install rock protection for the lifeboat and Anglian Water pumping station, bolster the concrete block revetment to the west below the church (and properties) with rock armour and provide a stockpile of rock which can be later redeployed to assist with managing the timber revetments to the west of the village.

Both schemes are being jointly delivered to maximise on efficiencies in the pre-construction and the construction phases

3.7 **Progress and Next Steps**

- 3.8 Both schemes are now progressing through detailed design and consenting phases. A suitably qualified consultant was selected through a tendering process via the Coastal Partnership East Dynamic Purchasing System to support and deliver these phases of work.

- 3.9 Planning consent from the Local Planning Authority and a Marine Licence from the Marine Management Organisation will be required. Part of the process includes an Environmental Impact Assessment, Habitat Regulation Assessment, Water Framework Directive Assessment and Marine Conservation Area Assessment.

- 3.10 Following Environmental screening and scoping which is required under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, a number of additional topics have been identified which are recommended to be considered. As such the scope of work is being extended to ensure all environmental considerations are fully included. Both screening options for the planning authority and the Marine Management Authority have now been received.

- 3.11 The design of the scheme is nearing completion and has included discussions and input from Town and Parish Council's and the Local Liaison Groups formed of key local stakeholders. The Coastal Partnership East team have also provided detailed input on specific design requirements utilising knowledge of our coastal system.

- 3.12 It is anticipated that the design and consent/licence applications will be prepared for submission for late spring 2022.

3.13 **Construction Phase**

- 3.14 Dependent on how the consents progress and any budgetary considerations identified (see below), it is anticipated that works will commence in the autumn of 2022.

- 3.15 The Local Government SCAPE framework has been selected as the delivery mechanism for the construction of the scheme. This is currently being used effectively at the Lowestoft Flood Risk Management Scheme, currently being delivered by the Coastal Partnership East team.

4. **Corporate Plan Objectives**

4.1 These schemes contribute to the following Corporate Plan Objective:

- WE WILL DELIVER BY... continuing to take a lead role nationally in coastal management initiatives recognising our position as a “frontline” authority in meeting the challenge of rising sea levels

4.2 The schemes contribute to the Annual Action Plan objectives:

- Continue to implement local actions to manage the coast
- Continue to implement local actions to manage the coast, including: adaptation, maintenance of defences and innovative coastal management schemes.

5. Financial and Resource Implications

The Cromer Coastal Management Scheme has 100% Environment Agency Grant in Aid Funding to a value of £3,934,000 for phase 2. During the delivery of Phase 1 the 2013 storm surge caused additional damage and therefore the repairs were incorporated into this phase of works. It was understood at the time that these additional costs should not form part of the grant in aid but as separate emergency funding as per other locations on the coast. As such there is the potential for a case to be made for additional funds.

The Mundesley Coastal Management Scheme was technically approved by the Environment Agency and £2,905,000 Flood and Coastal Erosion Risk Management Funds were granted alongside Partnership Funding from Mundesley Parish Council (£20,000), Anglian Water (£250,000) and NNDC (£300,000).

Since the Environment Agency approvals of both schemes construction costs across the industry have increased due to a number of factors such as inflation, BREXIT, COVID and wider market forces. Coupled with additional needs in the scope of work at Cromer, estimated construction costs are currently higher than the allocated budgets. This is no reason to slow progression of design or consenting as there are opportunities to complete ‘value engineering’ to minimize on cost as far as possible. This will be supported by reassessing the cost:benefit ratios for the schemes to see if there is any potential for additional funding under the current Environment Agency partnership funding calculator.

6. Legal Implications

The intertidal zones where some protection assets are located and where deliveries of rock armour will be placed via sea transport are owned by The Crown Estate (TCE). NNDC has an existing lease with the TCE which allows

for coastal protection works and contact will be made prior to starting work for information and courtesy.

The works will be completed as far as possible with minimal disturbance to the locality, however ongoing liaison with communities and businesses (including the fishing fraternity) will continue.

Contracts entered into are being completed through adopted tendering processes and/or frameworks which comply with the relevant requirements for Local Government.

There may be a need to enter into agreements such as those for access or storage compounds.

7. Risks

The project has a detailed risk register which is reviewed and updated. Key risks have been set out below alongside mitigating activities.

<i>Risk detail (design phase <u>only</u>)</i>	<i>Impact 1-5</i>	<i>Likelihood 1-5</i>	<i>Proximity 1-5</i>
<i>No float in programme for delays</i>	3	4	5
<i>Change in design due to the PAR and OBC being 'out of date'</i>	3	4	5
<i>Delay/complications in receiving the various consents</i>	4	3	5
<i>Additional surveys being needed to complete the detailed design phase</i>	4	4	5
<i>Increase in costs</i>	3	4	2
<i>Need for additional funding</i>	3	3	2
<i>Significant increase in material costs and lead in times</i>	4	5	5

8. Sustainability

The schemes are seeking to deliver the adopted Shoreline Management Plan policies for the sustainable management of the North Norfolk Coast. The SMP was one of the first second generation SMPs to adopt an approach to move towards a more naturally functioning coastal system.

Environmental Impact Assessments are being completed for both schemes.

9. Climate / Carbon impact

Carbon calculations are now becoming part of how coastal management construction schemes are assessed. These will be the first schemes

delivered by NNDC where carbon calculations are being completed. Through the delivery of the scheme there will be opportunities to seek to reduce carbon emissions. This will begin to benchmark how we manage and measure carbon in our operations and will assist with driving forward carbon reductions.

The coast will become under increasing pressure from climate change, through sea level rise, increased storminess and increased rainfall. There will be an increasing need as time progresses to invest more in coastal protection where the coastline is to be held. This in turn will necessitate changes to how the coast may look and be used in the future. Where the coast continues to be 'hold the line', there will be impacts on wider areas of the coast where they are reduced or no protection. As such, moving forwards there is a need to also facilitate transition of these locations to enable adaptations and ultimately increased resilience for individuals' communities, infrastructure and the natural environment.

10. Equality and Diversity

The Mundesley scheme provides opportunities to improve access along a stretch of promenade and also in one location from the sea wall onto the beach. This in turn will improve an alternative access for the adopted England coast path.

Opportunities to provide educational learning and placements will be explored with the construction contractors through Social Value opportunities.

11. 17 Crime and Disorder considerations

None identified

12. Conclusion and Recommendations

There is a need to move forward expediently with the delivery of the Mundesley and Cromer Phase 2 Coastal Management Schemes to deliver continued and enhanced protection to communities in the timeframes the funding is available.

Design and consenting is progressing with construction anticipated to start in, subject to consents and budget, in autumn 2022.

Due to widespread increases in construction costs there is a need to continue to minimise cost and maximise funding to enable the delivery of the most beneficial schemes possible.

It is recommended that Cabinet resolves to:

- a) Support the continued approach of the Mundesley and Cromer Phase 2 Coastal Management Schemes.
- b) Support of the appointment of Mott MacDonald to complete detailed design and consenting via the Dynamic Purchasing System and additional scope identified to complete the supporting Environmental Impact Assessments.
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