

**Construction and Maintenance Work Programme
Progress Report**

Report by Head of Construction and Maintenance

Summary: This report sets out the progress made in the delivery of the 2012/13 Construction and Maintenance Section work programme to date and updates members on project delivery.

1 Construction and Maintenance Programme 2012/13: Progress

- 1.1 The progress of the Construction and Maintenance work programme is described in this report. As agreed with members, a further detailed breakdown shows that up to the end of February 2013, 46,386m³ of sediment has been removed from the Rivers and Broads, and the details of quantities and costs achieved so far are set out in Appendix 1. This represents 93% of the programmed target of 50,000m³.
- 1.2 Since the last committee report of 28 February, the pumping element of Salhouse Broad Spit reclaim project has been completed. Between the geo-textile bags and the infill behind, this area has had over 11,000m³ of sediment deposited. The third phase of this project has begun, whereby a 50m run of alder poles are being used as the retaining structure and again, sediment is infilled in the void. Phase three has less capacity for sediment at approximately 500m³. This element has suffered delays due to issues with high water levels in the Middle Bure area.
- 1.3 Mudpumping work at Heigham Sound has progressed well with the soke dyke on the marsh adjacent to Candle Dyke now full. Using the mud pump to deposit the sediment and an additional pump over pumping the water from the dyke creating a 'draw through', we were able to achieve a fill rate of over 90% within the dyke and achieve 10,000m³ of sediment disposal. The next stage is to allow the material to dry before digging a drainage channel, smaller than the existing dyke. This work is expected to take place over the summer of 2013.
- 1.4 Whilst the contracted mud pump and associated pipe work is out in the Heigham Sound we have secured an agreement with Natural England (NE) to continue pumping at Heigham. This agreement is whilst water temperatures remain below 8 degrees due to issues around prymnesium. We have started to pump material into the gabion basket enclosure at Duck Broad. The plan to fill the 12,000m³ void uses a number of dredging techniques from mudpumping to traditional grab dredging, due to the layout of the void and the constraints the locations imposes. This void will be filled over the next few

dredging seasons due to time restrictions imposed by NE and to minimise disruption to boating traffic.

- 1.5 Piling works at Beccles has progressed with the 60m South Side mooring completed. The contractors, Drake Towage, have also worked on the previously closed North side, which is now also complete and ready for use. The contractors have been supervised by Authority staff to ensure compliance to processes and procedures and Health and Safety standards have been maintained. The area has been re-piled, new capping and whaling, and mooring posts added, making this a safe and attractive 24 hour mooring.

2 Maintenance Team

- 2.1 The maintenance team have continued to work to priorities set in the works programme and a selection of some of the navigation projects they have been involved which are described within this report.
- 2.2 Ranworth Staithe mooring refurbishment has been completed with 31 meters of capping and whaling replacement and new mooring posts added.
- 2.3 Moorings along the Ant and upper Bure have had woodchip replaced and any voids filled ready for the start of the season.
- 2.4 Phase 2 of St Benet's access enhancement commenced at the beginning of March. Maintenance staff will be initially surfacing the path from the 24hr moorings to the gatehouse, completing the path around the gatehouse and mill, and installing new estate fencing. Materials and plant are all funded from the HLF grant received by the Norfolk Archaeological Trust, with the staff time being the Authority's in-kind contribution.

3 Environment and Design Team

- 3.1 Environment Officers (EO's) have been overseeing the bank stabilising work at Womack Island. Using 'Nicospan' protection and reed planting, contractors have effectively working to complete this project.
- 3.2 EO's have also been out with Operations Technicians, supervising the scrub removal work at Whitlingham Marshes (work we do on behalf of Anglian Water) and Decoy Carr as well as identifying bank side trees for removal at Cockshoot Broad.
- 3.3 With Hall Fen being purchased we have been working with the new owners to secure the management plan for this site and hope to get their agreement to continue with the important work on this historic fen site.

4 Dockyard Development

- 4.1 The workshop element of the new development has been completed allowing the electricians to install the containment for power and Information Technology within the ceiling void. Work has also been focussed on the first

floor office and meeting room areas, with plastering and first fixing taking place. At this stage work is due to continue up to the end of April, with the Construction and Maintenance team moving in over May and June.

5 Fitter Projects

- 5.1 The trial post of a Small Plant and Equipment Fitter was evaluated as being successful and the Management Team has agreed to recruit a new member of staff to join the Fitters team to fulfil this function on a permanent footing. This post will be responsible for maintaining and servicing all the chainsaws, Brush Cutters, Pole Saws, Grinders, out board motors and other smaller hand held devices (totalling over 400 items) as well as maintaining the Hand Arm Vibration database and conducting Portable Appliance Testing (PAT) in accordance to Health and Safety legislation. The recruitment process will take place over April 2013.

6 Prisma

- 6.1 Prisma projects, like Salhouse Spit and Duck Broad continue to make good progress. Other innovative trials using dewatering and reuse initiatives are being developed. We continue to work with our European partners, sharing knowledge, data and experiences. The next partnership meeting will be in May, where budget, project updates and the 'Major Modification' will be discussed.

Background papers: Nil

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Broads Plan ref: NA1.1

Appendices: APPENDIX 1 – Dredging progress April to February 2012/13

Dredging Progress April 2012 to end February 2013

APPENDIX 1

Project Title	Project Element	Active dredging duration (weeks) Actual Apr-Feb/ Planned	Volume Removed m ³		Actual project cost ¹ £ (Apr 12-Feb 13)	Planned dredge cost (£ per m ³)	Planned annual project cost ¹ £
			Planned 2012-13	Actual (Apr-Feb 2012/13)			2012 -13
Heigham Sound	Navigation Channel	11/20	12,000	7,500	145,730	12.50	150,000
<i>Comments – mudpumping started active pumping on 17/12/12, Note actual cost includes mobilisation and site preparation</i>							
Lower Bure	Continuation from 2011/12 programme	25/24	20,000	21,343	171,716	6.95	139,000
<i>Comments – Scare Gap & Six Mile House setbacks completed</i>							
Middle Bure	Island Strengthening at Salhouse Broad	17/18	12,000	11,543	249,520	16.66	200,000
<i>Comments – Geotextile bag fill completed in November. Lagoon area currently being backfilled and alder pole piling being installed</i>							
River Chet	Hardley Flood to Nogdam End	12/12	6,000	6,000	25,310	6.33	38,000
<i>Comments – Started first week of November, sediment placed on rond and folding areas on track to complete as programmed</i>							
TOTAL			50,000	46,386	592,276		527,000

¹ – actual project cost includes staff time, BA plant time and budgetary expenditure (equipment hire, mitigation works, consumables etc) to date