

**Broadland Flood Alleviation Project:
Planning Application for Compartment 9 Phase 2
(Acle Bridge to Bridge Farm)**
Report by Senior Waterways and Recreation Officer

Summary: This report provides members with a summary of Broadland Environmental Services Ltd's (BESL's) planning application for Phase 2 of the flood defence works in Compartment 9 between Acle Bridge and Bridge Farm on the true left bank of the River Bure. The report also outlines officers' views on the planning application upon which members' comments are welcomed.

1 Background

- 1.1 Compartment 9 is located on the true left bank of the River Bure between Boundary Farm Dyke and Stokesby. The flood defences in the compartment are provided by approximately 8.5km of earth floodbanks which provide defences for approximately 1,800ha of agricultural land the majority of which is grazing marsh. The Compartment also contains residential properties and business premises including Bridges Stores and Electrical Testing Ltd at Acle Bridge. Planning permission for the majority of the works in the Compartment was granted by the Broads Authority in April 2011 but a section of flood defences between Acle Bridge and Bridge Farm was removed from the original planning application due to objections from the landowner. While accepting this approach the Broads Authority's Planning Committee requested that BESL submit a further planning application to deal with the section of flood defences at the earliest opportunity.
- 1.2 The landowners objections to the original application related to the distance of rollback proposed on his land and the fact that BESL's original planning application proposed the construction of a crest piled wall in front of the Electrical Testing premises rather than installing new piling and maintaining existing piles on the frontage as the flood defence.
- 1.3 Since that time there has been ongoing discussion between BESL and the landowner concerned and the works proposed in this planning application although similar in scope to BESL's original proposals have been agreed with the landowner.

2 The Proposed Works

- 2.1 The works detailed in the planning application comprise two discrete elements:

- (i) Rolling back the floodbank from the river's edge immediately downstream of the Electrical Testing premises to create a 7m rond between the river's edge and the toe of the floodbank. To facilitate this BESL is proposing to infill the existing soke dyke and excavate a new soke dyke and pond area in the marsh behind the bank (see drawing at appendix 1). The scale of the rollback has been reduced from the original design as this was one of the landowner's concerns. After the new rollback bank has established BESL is proposing to remove the existing piling on the frontage and reprofile the river's edge to create a vegetated rond. This element of the works will be dealt with in a separate planning application.
- (ii) In the area of the Electrical Testing premises to construct a timber clad crest pile wall running between the buildings and the boatyard basin linking the rollback bank with the road bridge abutments. In the area immediately adjacent to the bridge the wall will be covered with an earth bank and the surfacing graded to provide replacement car parking for the business (see drawing at appendix 2). The removal of frontage piling will be dealt with in a separate planning application.

3 Impact of the Proposals on Navigation and Mooring

- 3.1 The majority of the flood defence between Acle Bridge and Bridge Farm has a piled frontage which provides erosion protection to the bank. The area is identified in the Broads Authority's Moorings audit as private long term mooring, although no mooring has taken place in this area for some time. The landowner also currently maintains signs on the piling indicating that there is no public mooring available. Further, up to 70m of the piles immediately upstream of Bridge Farm are in such a dilapidated condition that the area is marked as a potential hazard to navigation and officers consider that mooring would not be advisable in this location.
- 3.2 In discussions with BESL the landowner has confirmed that he does not wish to use any of the piling for mooring or accept liability for its ongoing maintenance once the flood defence works are completed. This means that the piling will effectively be redundant once the rollback bank has established. BESL has therefore indicated that it will include the piling in a future application for piling removal in Compartment 9 once it is satisfied that the new flood defences have established.
- 3.4 Given the condition of some of the existing piling and the fact that the whole piled edge is likely to continue to deteriorate over time as the landowner does not wish take on liability for its ongoing maintenance officers accept that its eventual removal would be sensible.

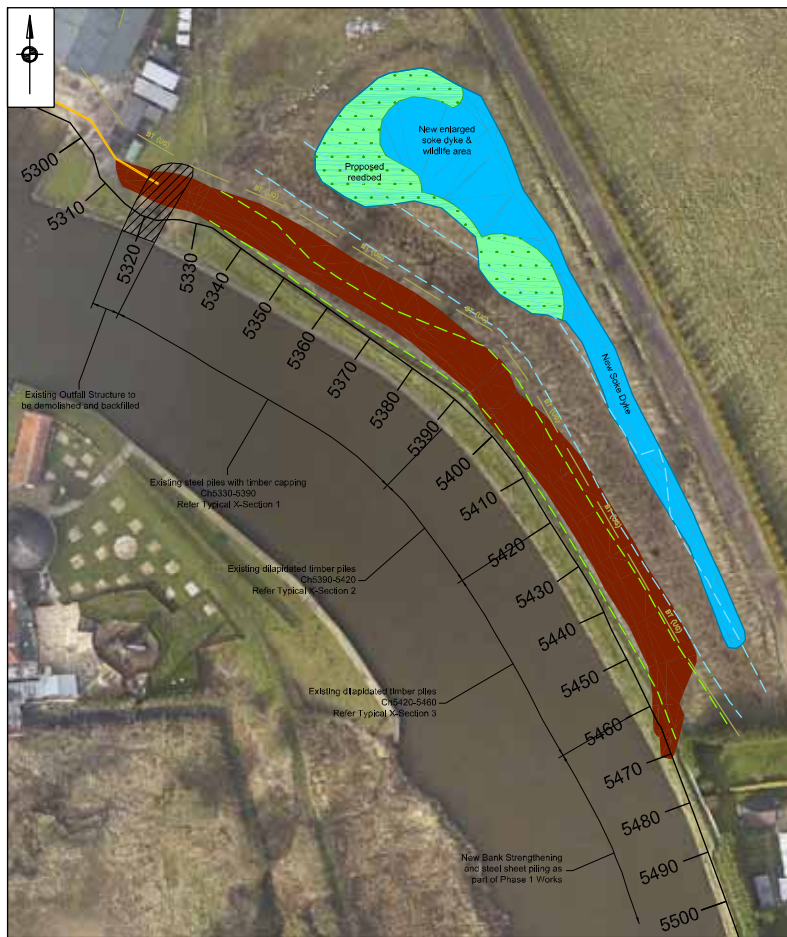
4 Conclusions

- 4.1 Officers are mindful of the fact that the proposals in this planning application have been developed in consultation with the landowner and welcome the fact that this application will complete the flood defence works for Compartment 9. Provided that matters relating to the methodology of piling removal, channel marking and erosion monitoring post piling removal are covered by appropriate planning conditions officers do not propose to object to this application.

Background papers: Nil

Author: Adrian Clarke
Date of report: 9 February 2012

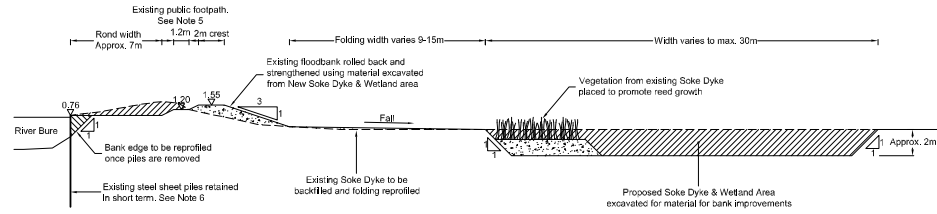
Appendices: APPENDIX 1 Plan detailing rollback works.
APPENDIX 2 Plan detailing crest pile wall



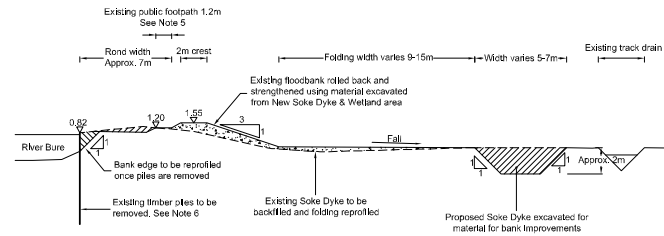
AERIAL PLAN OF ROLLBACK WORKS
SCALE 1:500



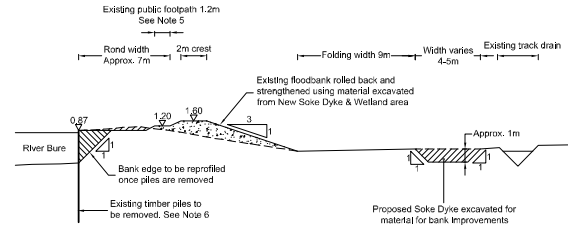
PHOTOGRAPH 1 SHOWING EXISTING STEEL SHEET PILES WITH TIMBER CAPPING TO BE RETAINED IN SHORT TERM
(CHAINAGE 5330 - 5390m)



TYPICAL X-SECTION 1
ROLLBACK CH5330 - 5390m
SCALE 1:200



TYPICAL X-SECTION 2
ROLLBACK CH5390 - 5420m
SCALE 1:200



TYPICAL X-SECTION 3
ROLLBACK CH5420 - 5460m
SCALE 1:200



PHOTOGRAPH 2 SHOWING EXISTING DILAPIDATED STEEL SHEET PILES TO BE REMOVED
(CHAINAGE 5390 - 5460m)

Key:

- PROPOSED ROLLBACK BANK
- PROPOSED SOKE DYKE AND WILDLIFE POND
- PROPOSED CREST PILED WALL
- UNDERGROUND BT CABLES
- EXISTING BANK OUTLINE
- EXISTING SOKE DYKE OUTLINE

Notes:

1. NO DIMENSIONS TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. ALL LEVELS IN METRES ABOVE ORDNANCE DATUM.
4. POSSIBLE BURIED CABLE(S), NOT ON SERVICE PLANS. CAT SCAN TO CONFIRM EXACT LOCATION.
5. EXISTING PUBLIC FOOTPATH ROUTE TO BE DELINEATED BY 1.2m HIGH CHAIN LINK FENCING, TO MATCH EXISTING.
6. REMOVAL OF PILES TO BE SUBJECT TO A FURTHER PLANNING APPLICATION. ALL PILES TO BE REMOVED BY 2015, UNLESS AN ALTERNATIVE AGREEMENT IS IN PLACE.

SAFETY HEALTH AND ENVIRONMENT INFORMATION	
IN ADDITION TO THE HAZARDOUS RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS:	
KEY CONSTRUCTION RISKS -	
<ul style="list-style-type: none"> • Risk of Road Traffic: Accidents when lighting or leaving the M/A/104 • Conflict with public/other road/road users • Conflict with business users • Risk of overhead/unrecorded services in the area - contractor to undertake full site investigation before breaking ground • Risk of working near water • Risk of Waste Disease 	

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Rev	By	CHKD	Apprd	Date	Decision

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Project
BROADLAND FLOOD ALLEVIATION PROJECT

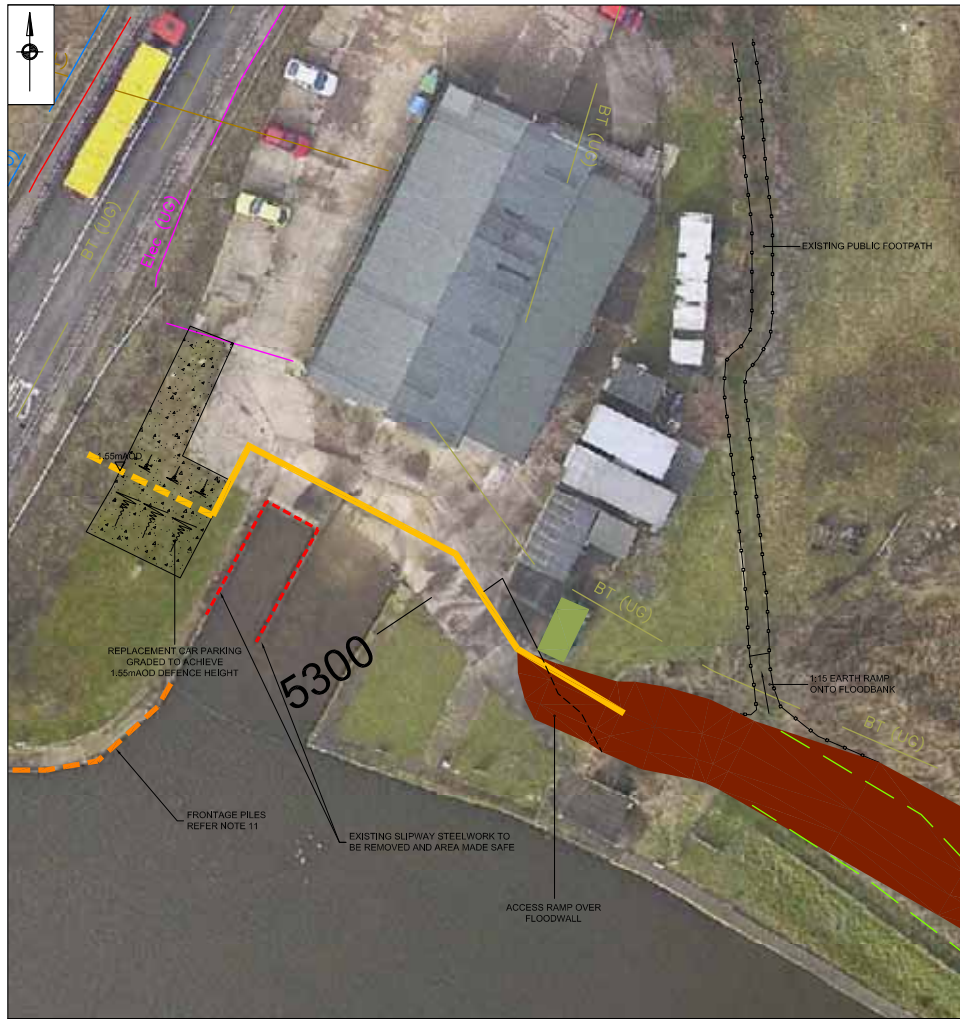
Drawing
COMPARTMENT 9 - PHASE 2
RIVER BURE
DETAILED PLAN
ELECTRICAL TESTING
ROLLBACK & SECTIONS

Drawn by: L MERSEY Date: 20/01/12
Checked by: H HUSBANDS Date: 20/01/12
Approved by: K MARSH Date: 20/01/12

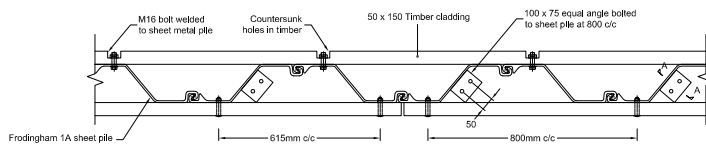
Drawing No.	Revision
WNC0BY/450/004	0

Drawing Scale: AS SHOWN AT A1

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 User: j.mersey Date: 24/01/12 11:55 AM



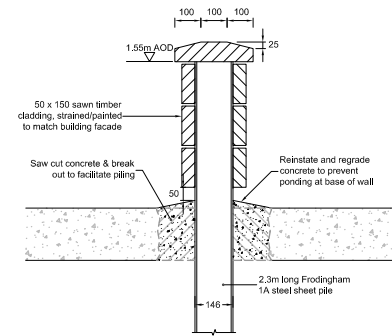
AERIAL PLAN SHOWING LINE OF FLOODWALL
SCALE 1:200



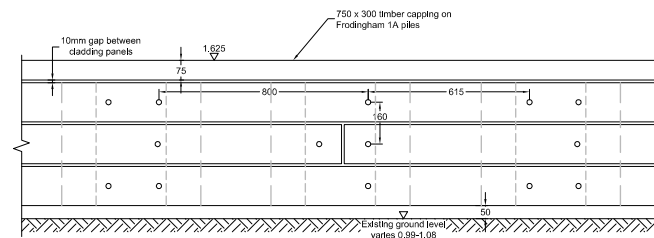
PLAN OF WALL WITH CAPPING REMOVED
SCALE 1:10



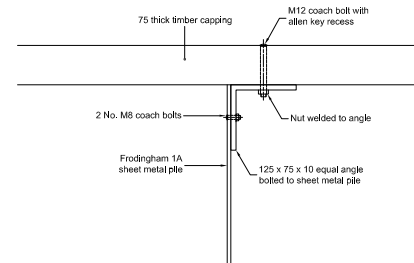
PHOTOGRAPH 1 SHOWING SIMILAR FLOODWALL CONSTRUCTED AT REEDHAM



TYPICAL SECTION THROUGH FLOODWALL
SCALE 1:10



FRONT ELEVATION OF TIMBER CLADDING
SCALE 1:10



**SECTION A-A
PILE TO CAPPING CONNECTION DETAIL**
SCALE 1:5

Key:

- PROPOSED ROLLBACK BANK
- PROPOSED CREST PILED WALL
- OVERHEAD ELECTRICITY CABLES
- UNDERGROUND ELECTRICITY CABLES
- UNDERGROUND BT CABLES
- POTABLE WATER PIPE
- OUTLINE OF EXISTING BANK

Notes:

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2. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. ALL LEVELS IN METRES ABOVE ORDNANCE DATUM. LEVELS & EXACT ALIGNMENT OF FLOODWALL TO BE CONFIRMED ON SITE.
4. **POSSIBLE BURIED CABLE(S). NOT ON SERVICE PLANS. CAT SCAN TO CONFIRM EXACT LOCATION.**
5. ALL WELDS TO BE IN ACCORDANCE WITH SPECIFICATION CLAUSE 3.20.
6. ALL CONCRETE SHALL BE SULPHATE RESISTING PORTLAND CEMENT AND CONTAIN GGBS IN ACCORDANCE WITH SPECIFICATION CLAUSES 2.15 & 4.3.
7. ALL FIXINGS TO BE HOT DIPPED GALVANISED AND IN ACCORDANCE WITH SPECIFICATION CLAUSES 2.42 & 2.84.
8. ALL TIMBER SHALL BE C16 TANAISED SOFTWOOD AND IN ACCORDANCE WITH CLAUSE 2.124.
9. SAWN TIMBER CLADDING TO HAVE 5MM 45° CHAMFERS TO ALL EXTERNAL EDGES.
10. PAINTS USED ON CLADDING (COLOUR TO BE AGREED), TO SPECIFICATION CLAUSE 2.26.5. WATER BOURNE PAINT ONLY. MINIMUM OF 2 COATS TO BE APPLIED.
11. REMOVAL OF PILES TO BE SUBJECT TO A FURTHER PLANNING APPLICATION. ALL PILES TO BE REMOVED BY 2015, UNLESS AN ALTERNATIVE AGREEMENT IS IN PLACE.

SAFETY HEALTH AND ENVIRONMENT INFORMATION	
IN ADDITION TO THE HAZARDS RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS:-	
KEY CONSTRUCTION RISKS -	
<ul style="list-style-type: none"> • Risk of Road Traffic Accidents when joining or leaving the A47/A1054 • Conflict with public / other navigational river users • Conflict with business users • Risk of overhead / unsecured services in the area - contractor to undertake full site investigation before breaking ground • Risk of working near water • Risks of Wells Disease 	

FOR
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Rev	By	Check	Approved	Date	Description

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Project: **BROADLAND FLOOD ALLEVIATION PROJECT**

Drawing: **COMPARTMENT 9 - PHASE 2
RIVER BURE
DETAILED PLAN
ELECTRICAL TESTING SITE
FLOODWALL & SECTIONS**

Drawn by: L MERSEY Date: 20/01/12
 Checked by: H HUSBANDS Date: 20/01/12
 Approved by: K MARSH Date: 20/01/12

Drawing No. **WNC0BY/450/003** Revision: **0**

Drawing Scale: AS SHOWN AT A1