#### SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

**REPORT TO:** Portfolio Holder for Environmental Services 10 March 2011

**AUTHOR/S:** Executive Director, Operational Services/ Drainage Manager

#### **COVELL'S DRAIN STUDY**

### **Purpose**

- 1. To advise that the first draft of the Flood Risk Assessment (FRA) report on Covell's Drain has been produced by WS Atkins for the Council and the Environment Agency (EA), and to propose that the FRA report, when released for publication by the EA, is communicated to local organisations, in order to seek their views.
- 2. This is not a key decision because it is a proposal to consult widely before a decision is recommended. However, the implication of the issues raised within the report may be key because:
  - It is likely to result in the Council incurring expenditure which is significant having regard to the Council's budget for the service or function to which the decision relates.
  - It is likely to be significant in terms of its effects on communities living or working in an area of the District comprising two or more wards, namely Swavesey and Fen Drayton.
  - It is of such significance to a locality, the Council or the services that it provides that the decision-taker is of the opinion that it should be treated as a key decision.

and it was first published in the August 2010 Forward Plan.

#### Recommendations

3. That the Portfolio Holder agrees to the circulation of the Covell's Drain Flood Risk Assessment report, as soon as it is available for publication, to local organisations as set out in paragraph 22 of this report to seek their views prior to the Council making a decision as to the way forward.

# **Background**

- 4. The eastern embankment of Covell's Drain has been the source of difficulties since the late 1970's. In the early 1980's, following guidance from the Great Ouse River Division of Anglian Water (the Environment Agency's predecessor organisation) the Council raised the eastern banks of Covell's Drain to a minimum level of 19.5 ft AOD (5.944 metres AOD). In common with most embankments along watercourses in this part of Cambridgeshire, settlement and slippage occurred to the raised embankment over a period of time due to the nature of the soils used to create it. Maintenance works to re-grade and level the banks took place over a number of years but eventually serious deterioration occurred. The movement along the embankments made maintenance work difficult and dangerous and, following very heavy rainfall, a serious breach in the bank occurred during Easter 1998.
- 5. The Easter 1998 breach caused a great deal of controversy between the Council and the local Internal Drainage Board (IDB) as well as the local landowner and the Parish

Council. Water levels did not subside for a number of months and eventually the Council engaged a contractor to carry out reinstatement works to the bank.

- 6. In Autumn 2000, the Council was approached by the local landowner (Mr J Johnson) with a request to carry out repairs to the section of embankment immediately to the south of the Bailey bridge for a distance of approximately 500 metres. Serious deterioration of the landward side of the embankment had occurred and it was only a matter of time before a substantial further breach would take place, which, in all probability would prove more catastrophic and costly than the Easter '98 breach.
- 7. An ad hoc meeting of the Council's Land Drainage Working Group (now defunct) was called by the then chairman Cllr Shepperson and the group agreed the Council should reconstruct the embankment subject to the landowner providing suitable materials for the works. The landowner was advised to obtain consent from the Environment Agency to import materials and to outline the extent of the works to be undertaken.
- 8. Drawings were passed to the Environment Agency outlining the works and Exemption Certificates were issued by the Agency to the landowner to allow the works to proceed. Copies of the certificates were provided to the Council.
- 9. As it turned out, the contractor supplying the materials actually carried out the reconstruction works as a suitable machine was available for spreading and compaction. The finished embankment height was estimated to be approximately 100mm (4") above the original level. However, this was deemed reasonable at the time as further settlement and consolidation would take place over a number of years. All reconstruction works were undertaken at no cost to the Council.
- 10. In Autumn 2001, the Council carried out maintenance works to remove various slips and bulges along the channel face of the embankment. The resultant materials were placed on top of the embankment, which is normal maintenance work practice. This had the affect of further raising the embankment height.
- 11. On 4 January 2003 a serious breach occurred immediately to the north of the old railway line (now Cambridge Guided Busway). This was the second breach in a five-year period and it highlighted the precarious nature of the remaining sections of embankment over a distance of about 1.5 km. Unless serious repair works were undertaken it was only a matter of time before further breaches would occur. As a result, the local landowner continued to import large quantities of materials in order to improve the condition of the embankments. The District Council, County Council and the Environment Agency were all aware these works were taking place and no objections were raised. The landowner claimed he had the consent of the EA to undertake the works (through the exemption certificates) and it was only when a neighbouring landowner on the Fen Drayton side of the watercourse complained about the height of the banks that the EA called for the works to cease.
- 12. Following complaints from residents and the Fen Drayton Parish Council as well as correspondence from the Environment Agency, the Council's Land Drainage Advisory Group considered the matter on 14 October 2005. This meeting agreed to the request of the Environment Agency to lower certain sections of the embankment to allow water from the river Ouse to spill into the Swavesey floodplain, but was conditional on the Environment Agency indemnifying the works, which, as it turned out, was not acceptable to the Agency.

- 13. On 24 January 2006, following further representations from a variety of residents and interest groups, the Council's Land Drainage Advisory Group again considered the position. The meeting heard representations from a variety of residents and landowners, the Swavesey and Fen Drayton Parish Councils, the Swavesey Internal Drainage Board (IDB) and the Environment Agency. Having heard the sharply contrasting views on how the issue of the raised embankments should be resolved, the Advisory Group decided to recommend to Cabinet that no action should be taken until the Fen Drayton Lakes Study was completed. The Advisory Group could then revisit the problem with a higher level of technical advice available to assist the decision making process. On 31 October 2006 the Advisory Group considered a report outlining the limitations of the proposed Fen Drayton Lakes study. The Group advised that no further action should be taken until the report was published.
- 14. Due to the limitations of the Lakes study there were no suitable findings that offered technical guidance on the Covell's Drain embankments. However, detailed modelling was available for the estimation of the extent of flooding along the Ouse and a report was taken to Cabinet on 13 November 2008 recommending a retrospective Flood Risk Assessment (FRA) in order to assess the impact of the raised eastern embankments on the local communities. The Environment Agency was very anxious to bring the issue to a close and offered to part fund the FRA in conjunction with the Council.
- 15. Cabinet agreed to the part funding proposal and instructed officers to vire £25,000 from savings that resulted from the revised budget for 2008/09.
- 16. The FRA study was given consideration by the EA throughout 2009 in an attempt to carry out the works in-house. However, in February 2010 it was eventually decided to procure the study through consultants using the Agency's established procurement procedures. Work on the report took place throughout 2010 and the consultants met with Swavesey Parish Council, Fen Drayton Parish Council and the Swavesey IDB. Preliminary findings were discussed with the EA and the Council in Autumn 2010 leading to the production of the first draft in February 2011.
- 17. Up until late February 2011, it had been hoped to circulate the final draft FRA report to the H&ES Portfolio Holder at this meeting, but the report remains the property of the EA and cannot be circulated until its final version is agreed by the EA. The EA advises that it hopes to be in a position to release the report for publication within the next few weeks, and Council officers are liaising with the EA to encourage release at the earliest opportunity.

#### **Considerations**

- 18. The consultants WS Atkins produced the first draft of the Covell's drain study on 17 February 2011 and the report outlines the methodology used, the data supplied by the EA, the different scenarios examined and the limitations of the findings. The draft contains some minor factual errors and spelling mistakes that need to be corrected before the final draft can be accepted. Additionally, the EA needs to validate the technical data before it can accept the findings in full.
- 19. Both the Council and the EA need to give due consideration to the findings outlined in the report before arriving at any decisions on the way forward. A number of different scenarios are examined and the flooding patterns are complex. It will be very important to take clear advice from the EA to inform any decisions on whether works to the embankments are required.

- 20. The legal ramifications of whether or not to make alterations to the embankments will also need to be given due consideration. Legal advice obtained in the past will now need to be reviewed in the light of the technical evidence contained within the report.
- 21. It has always been considered that consultations with the local communities were a vital part of the process in arriving at any future decisions. The views of the Fen Drayton and Swavesey Parish Councils and the Swavesey IDB will, therefore, need to be canvassed. It is proposed that the final FRA report be circulated to these local organisations and posted on the Council's website for a six week consultation period with consultation responses and a recommendation for further action being reported to the appropriate Council decision making body at the earliest opportunity.

# **Options**

- 22. There are two basic options available;
  - a. Do nothing and avoid any future expenditure. This is possible but is likely to have future legal and political implications for the Council as the local communities will continue to disagree on the most appropriate form of flood protection
  - b. Consider the technical and legal implications of the final draft of the report and undertake a full consultation process with the EA and the local communities before making a final decision

## **Implications**

23. The final decision on how to deal with the findings of the FRA report is likely to have financial and legal implications for the Council. Very careful consideration will need to be given to how these risks are managed. At the same time, a solution that will minimise the risk of flooding to both communities will need to be developed and, if possible, agreed as the way forward.

24.	Financial	Expenditure on the preferred option may be required in the future. This will depend on the results of consultations with the EA and the local community.
	Legal	The final draft of the FRA report will outline the impact of the raised eastern embankment on the parish of Fen Drayton and legal advice will form a crucial aspect of the Council's ultimate decision.
	Staffing	None
	Risk Management	Financial as outlined above
	Equality and Diversity	None
	Equality Impact	No
	Assessment completed	Not applicable in this case
	Climate Change	No

### **Consultations**

25. Fen Drayton and Swavesey Parish Councils and the Swavesey IDB have all been given the opportunity to express their views to the consultants, WS Atkins, through

meetings or visits to the consultant's offices. The EA has also been directly involved in the process.

# **Effect on Strategic Aims**

26. The recommended option and the past consultations are in line with the Council's aim to be a listening Council by engaging with the local community. The final decisions on the implementation of the report will endeavour to create an environment offering the maximum level of protection from flooding. This will help ensure a safer and healthier place to live. Consultations will also provide a 'voice for rural life' and allow the local community to express their preferences and concerns.

## **Conclusions / Summary**

27. The production of the FRA report is an opportunity to seek a solution to this long-running saga and to reassure the local community on their levels of protection from future flooding.

**Background Papers:** the following background papers were used in the preparation of this report:

Land Drainage Advisory Group Meetings on following dates;-22 October 2001; 16 September 2003; 14 December 2004; 14 October 2005; 24 January 2006; 31 October 2006 and Cabinet on 13 November 2008.

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