

# **GAWLER RIVER FLOODPLAIN MANAGEMENT AUTHORITY**

## **NOTICE OF SPECIAL MEETING**

Notice is hereby given pursuant to Clause 6.8 of the Charter that a Special Meeting of the Gawler River Floodplain Management Authority has been called for:

**DATE:**           **Thursday 21 March 2019**

**TIME:**           **2 pm**

**PLACE:**       **Council Chambers at the Playford Civic Centre, Playford Boulevard.  
City of Playford**

The purpose of this Special Meeting is to consider alteration to the draft 2019/20 GRFMA Budget in relation to the Inspection report on condition of the Lower Level Outlet Pipe and Stilling Basin at the Bruce Eastick North Para Flood Mitigation Dam. The report recommends remedial repairs be undertaken on these items and the current draft 2019/20 Budget does not contain provision for such repairs.

Please find enclosed a copy of the Agenda for the meeting.



David Hitchcock  
EXECUTIVE OFFICER

# **GAWLER RIVER FLOODPLAIN MANAGEMENT AUTHORITY**

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## **S P E C I A L M E E T I N G A G E N D A**

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Committee      **Gawler River Floodplain Management Authority**  
To Be Held      **2pm Thursday 21 March 2019**  
Location        **Council Chambers at the Playford Civic Centre, Playford Boulevard.  
City of Playford**

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1.    **WELCOME**  
    To Board Members and Deputy Board Members present.
2.    **PRESENT**  
    Please sign the Attendance Register.
3.    **APOLOGIES**
4.    **APPOINTMENT OF OBSERVERS**
5.    **Draft 2019/20 GRFMA Budget and repair to Lower Level Outlet Pipe and Stilling Basin at the Bruce Eastwick North Para Flood Mitigation Dam**
6.    **CLOSURE**

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## Special Meeting Report

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Committee	<b>Gawler River Floodplain Management Authority</b>
Meeting Held	<b>Thursday 21 March 2019</b>
Report Name	<b>5. Draft 2019/20 GRFMA Budget and repair to Lower Level Outlet Pipe and Stilling Basin at the Bruce Eastwick North Para Flood Mitigation Dam</b>

### RECOMMENDATION

#### **That the GRFMA:**

- 1. Receive a verbal update;**
- 2. Endorse amendment of the draft 2019/20 GRFMA budget to include the amount of \$50,000 capital works for repair to the Lower Level Outlet Pipe and Stilling Basin at the Bruce Eastick North Para Flood Mitigation Dam;**
- 3. Request the Executive Officer to provide a copy of the amended draft Budget to constituent Councils, by 31 March 2019, for consideration and approval; and**
- 4. Following receipt of constituent council feedback considers adoption of the GRFMA draft Business Plan and Annual Budget at the June 2019 meeting.**

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The draft 2019/20 budget and draft 2019-2022 GRFMA Business Plan were received at the 07/02/19 GRFMA meeting.

The meeting subsequently resolved;

*Following receipt of constituent council feedback considers adoption of the GRFMA draft Business Plan and Annual Budget at the June 2019 meeting. (GRB10/19)*

At the same 07/02/19 meeting the Board also resolved;

*That the GRFMA accept the quotation of \$14,540 from REMO Contractors for dewater and inspection of the Low-Level Outlet Pipe at the Bruce Eastick North Para Flood Mitigation Dam and authorises the Executive Officer authority to undertake the works within variation costs not exceeding 10%at same meeting resolved inspection. (GRB11/19)*

The draft Business Plan and Annual Budget are required to be provided to Councils by 31 March, 2019. The draft 2019/20 Budget and draft 2019-2022 GRFMA Business Plan have not yet been sent to constituent councils pending consideration at the 15/3/19 GRFMA Audit Committee meeting.

In accordance with resolution GRB 11/19 work has now been completed for dewater and inspection of the Low-Level Outlet Pipe (LLOP) at the Bruce Eastick North Para Flood Mitigation Dam.

The formal report on the inspection outcomes identified the following matters requiring attention.

### *3. Summary of Findings and Recommendations*

*This section outlines the summary of the findings and provides recommendations for remedial actions considering existing condition and site's operation and maintenance manual.*

*Discharge pipe coating Inspection of the LLOP showed the following defects and as such the epoxy coating is considered compromised and needs patching repair as soon as practically possible.*

- Bubbles formed underneath the epoxy film*
- Scratches due to debris travelling through the pipe*
- Total and spot failure of the epoxy at some locations leading to corrosion and pitting of base material*
- Damaged epoxy at the weld line location, leading to pitting of the weld*
- The thickness of the steel pipe is exposed at both upstream and downstream ends and corrosion of the base material has started.*

*The O&M Manual recommends using Jotun Marathon or approved equivalent as per manufacturers specifications. Despite the Jotun Marathon not meeting design life expectations, it is proposed for patched remedial works to maintain consistency of material and binding. However, based on the wide spread of the defects, local patching of the epoxy coating might not be time/cost effective, as such we encourage the principal to investigate full replacement of the epoxy coating. Full replacement of the epoxy coating can be performed using more efficient sandblasting and coating equipment which is expected to lead to shorter execution timeframe and better quality of the epoxy coating. In this case we recommend using International Interline 975 as per SA Water TS15 and Interline 982 primer. The primer will enable a more robust coating outcome. International Interline 975 is potable water approved so has no downstream water quality impacts.*

*Inlet Chamber wall Concrete Delamination - Hammer impact tests on the inlet chamber surfaces proved concrete delamination around the inlet pipe which needs to be repaired to minimize reinforcement exposure to the elements. This delaminated section needs to be removed and reinstated using BASF MasterEmaco S 5400CI or similar in accordance with the product specification. It's also recommended to patch the porous concrete surfaces and chipped corners*

*Damaged Handrail around inlet chamber - Handrails around the inlet chamber are damaged and/or missing and needs to be reinstated. Also missing/Damaged grout underside of the base plates should be reinstated,*

*Damaged Concrete blocks in downstream stilling basin. - Four of the existing Concrete blocks which were located at the downstream stilling basin have been dislocated due to failure of their anchorage into the concrete floor of the stilling basin. Although this area was excluded from the inspection scope of work, we can comment that this failure could;*

- *Damage the concrete and potentially expose the reinforcement of the stilling basin floor through reduced cover and introduction of the water into the footing through failed anchor tubes.*
- *Increase erosion at downstream river embankments*

*Further investigation and remedial action is recommended – commencing with dewatering and desludging to view the extent of the damage.*

At request of the Executive Officer, onsite inspection by an independent specialist abrasive blasting and industrial coatings company was facilitated to obtain a cost indication for repairs recommended in the report.

Cost indications (not quotation or tender) are in the order of \$45,000 to \$50,000 which consists

\$25,000.00 for:

- High pressure water blast (5000PSI minimum)
- Abrasive blast all damaged and corroded areas Class 2.5
- Abrasive whip blast all good coating for adhesion
- Apply 1 coat of Jotun Marathon to all bare metal DFT 200-250microns
- Apply 1 full coat of Jotun Marathon all over DFT 200-250microns
- Spark test after 5-day cure

\$5,000 for delamination repair, handrail repairs, repairs to sites where concrete blocks have been dislocated. (price depending on how much repair work needs doing to the concrete base).

\$8,650 for cleaning of debris and rocks currently in the stilling pond.

\$5,000 Repeat process of dewatering the stilling basin water and clean the pipe as before. (Basin most likely to refill over winter).

The works are considered as capital maintenance costs and as such the current 2018/19 GRFMA budget does not have provision (funds) to undertake the recommended repairs.

The GRFMA Charter provides:

*11.5 The Authority must submit to each Constituent Council for approval, any proposed amendment to the budget that provides for an additional contribution by the Constituent Councils.*

On the basis of clause 11.5 it is considered it would be more appropriate to include any decision to undertake the repair works in the 2019/20 GRFMA Budget process.

Separately attached. - Revised 2019/20 draft GRFMA Budget and formal LLOP inspection report with recommendations.