



**ACT**  
Government

Chief Minister, Treasury and  
Economic Development

## Freedom of Information Publication Coversheet

The following information is provided pursuant to section 28 of the *Freedom of Information Act 2016*.

FOI Reference: CMTEDDFOI 2019-113

Information to be published	Status
1. Access application	Published
2. Decision notice	Published
3. Documents and schedule	Published
4. Additional information identified	No
5. Fees	Waived
6. Processing time (in working days)	40
7. Decision made by Ombudsman	N/A
8. Additional information identified by Ombudsman	N/A
9. Decision made by ACAT	N/A
10. Additional information identified by ACAT	N/A

**From:** [Hill, Libby](#)  
**To:** [CMTEDD FOI](#)  
**Subject:** FOI request - [REDACTED] - Isabella Pond, Monash  
**Date:** Thursday, 16 May 2019 10:34:09 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
**Importance:** High

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Dear CMTEDD Colleagues,

The EPSDD FOI Team has received the below request from [REDACTED] seeking documents relating to Isabella Pond for the period from the 1 November 2018 – 8 April 2019 as identified in the below scope.

We have carried out extensive searches with line areas in the Directorate, and have been advised to seek clarification from CMTEDD in the event your Directorate may hold documents relevant to [REDACTED] request (I have been advised that these particular documents identify IFCW have oversight and maybe held by your Directorate).

Thank you so much for your assistance.

Kind regards,

**Libby Hill**

**Freedom of Information/Records Officer**

Information & Knowledge Management

Governance and Legal Services Branch

Environment, Planning and Sustainable Development Directorate | ACT Government

Phone: 02 620 71720 | Email: [libby.hill@act.gov.au](mailto:libby.hill@act.gov.au)

Level 2, Dame Pattie Menzies House North Building | GPO Box 158 Canberra ACT 2601 |

[www.environment.act.gov.au](http://www.environment.act.gov.au) | [www.planning.act.gov.au](http://www.planning.act.gov.au)

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**From:** [REDACTED]  
**Sent:** Monday, 8 April 2019 10:53 AM  
**To:** EPSDFOI <[EPSDFOI@act.gov.au](mailto:EPSDFOI@act.gov.au)>  
**Cc:** [REDACTED]  
**Subject:** FOI re Isabella Pond, Monash

Good morning

I write to request under the *Freedom of Information Act 2016* documents related to Isabella Pond (at Monash) restoration, remediation, water quality, costs and cost overruns, contract

management, project management, delays and maintenance since 1 November 2018.

This may include, but is not limited to, ministerial correspondence, briefings, correspondence, updates, maintenance reports, invoices, contracts, contract variations, cost overruns, quotes and meeting minutes.

I ask that all fees and charges be waived [REDACTED]  
and this information is in the public interest.

Should you require any further information or clarification about my request, please contact [REDACTED]  
[REDACTED]

Regards  
[REDACTED]

[REDACTED]

**From:** [REDACTED]  
**To:** [CMTEDD FOI](#)  
**Subject:** RE: Freedom of Information request - CMTEDDFOI 2019-113 - Clarification of Scope  
**Date:** Tuesday, 21 May 2019 11:26:47 AM

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Good morning Simon,

Thank you for the email.

We are seeking documents in relation to the wetlands and associated work.



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**From:** McPhan, Simon **On Behalf Of** CMTEDD FOI  
**Sent:** Thursday, 16 May 2019 4:25 PM  
**To:** [REDACTED]  
**Subject:** Freedom of Information request - CMTEDDFOI 2019-113 - Clarification of Scope

UNCLASSIFIED

Good Afternoon [REDACTED]

I refer to your recent Freedom of Information request regarding Isabella Pond, which was transferred from EPSDD to CMTEDD today.

I wish to clarify if you are seeking documents in relation to the works that were undertaken at Isabella Pond in relation to the wetlands and associated work, or for the engineering works with the weir.

Kind regards,

**Simon McPhan | Freedom of Information Coordinator | Information Access Team |**  
Phone: 02 6205 3102 | [simon.mcphan@act.gov.au](mailto:simon.mcphan@act.gov.au)  
**Chief Minister, Treasury and Economic Development Directorate | ACT Government**  
Level 2, Canberra Nara Centre | GPO Box 158 Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)



**ACT**  
Government

Chief Minister, Treasury and  
Economic Development

Our ref: CMTEDDFOI 2019-113

[REDACTED]

via email: [REDACTED]

Dear [REDACTED]

### **FREEDOM OF INFORMATION REQUEST**

I refer to your request submitted under section 30 of the *Freedom of Information Act 2016* (the Act), transferred from the Environment, Planning and Sustainable Development Directorate (EPSDD) to the Chief Minister, Treasury and Economic Development Directorate (CMTEDD) on 16 May 2019.

Specifically, you are seeking: *“documents related to Isabella Pond (at Monash) restoration, remediation, water quality, costs and cost overruns, contract management, project management, delays and maintenance since 1 November 2018.”*

#### **Authority**

I am an Information Officer appointed by the Director-General under section 18 of the Act to deal with access applications made under Part 5 of the Act.

#### **Timeframes**

In accordance with section 40 of the Act, CMTEDD is required to provide a decision on your access application by 15 July 2019.

#### **Decision on access**

Searches were completed for relevant documents with 152 documents being identified that fall within the scope of your request.

I have included as **Attachment A** to this decision the schedule of relevant documents. This provides a description of each document that falls within the scope of your request and the access decision for each of those documents.

I have decided to grant access in full to 37 documents and partial access to 115 documents as I consider them to contain information that would, on balance, be contrary to the public interest to disclose under the test set out in section 17 of the Act.

My access decisions are detailed further in the following statement of reasons and the documents released to you are provided as **Attachment B** to this letter.

In accordance with section 54(2) of the Act a statement of reasons outlining my decisions is below.

details on how public money was spent during the construction and rectification works on the wetlands and surrounding area. I consider that the release of this information would ensure effective oversight of expenditure of public funds.

However, when considering these factors against the factor favouring non-disclosure, I am satisfied that the protection of an individual's right to privacy, especially in the course of dealing with the ACT Government, is a significant factor as the parties involved have provided their personal information for the purposes of delivering the Isabella Wetlands project. This, in my opinion, outweighs the benefit which may be derived from releasing the personal information of the individual's involved in this matter. These individuals are entitled to expect that the personal information they have supplied, including names and signatures, as part of this process will be dealt with in a manner that protects their privacy.

The second factor I have identified as relevant in considering your access application is the prejudice that could occur in releasing trade secrets, business affairs or research of an agency or person. In the case of *Re Mangan and The Treasury* [2005] AATA 898 the term 'business affairs' was interpreted as meaning 'the totality of the money-making affairs of an organisation or undertaking as distinct from its private or internal affairs'. Some documents contain hourly rates, monthly rates, on-costs and management fees for works conducted by contractors and sub-contractors on the project. I consider the release of the detailed information could harm the business affairs of the third parties by revealing information that could be used by competitors to undercut these contractors.

Having applied the test outlined in section 17 of the Act and deciding that release of personal information and business affairs information contained in the documents is not in the public interest to release, I have chosen to redact this specific information in accordance with section 50(2). Noting the pro-disclosure intent of the Act, I am satisfied that redacting only the information that I believe is not in the public interest to release will ensure that the intent of the Act is met and will provide you with access to the majority of the information held by CMTEDD within the scope of your request.

The schedule included at Attachment A lists the documents that contain information that I consider, on balance, to be contrary to the public interest to disclose under the test set out in section 17 of the Act.

#### **Access to documents**

Pursuant to section 38(6) of the Act, I am required to defer access to information considered to be of concern to identified third parties in circumstances where I have not agreed with their views on release. In accordance with the Act, I am required to withhold 599 of the 719 pages of this request. The remaining 120 pages which are not subject to deferral are at Attachment B.

The identified third parties may apply for review of my decision within 20 working days after it is published on the CMTEDD disclosure log, or a longer period allowed by the Ombudsman.

Should you have any queries in relation to your request please contact me by telephone on 6207 7754 or email [CMTEDDFOI@act.gov.au](mailto:CMTEDDFOI@act.gov.au).

Yours sincerely,

A handwritten signature in black ink, appearing to be 'DR', written in a cursive style.

Daniel Riley  
Information Officer  
Information Access Team  
Chief Minister, Treasury and Economic Development Directorate

15 July 2019



**ACT**  
Government

Chief Minister, Treasury and  
Economic Development

## FREEDOM OF INFORMATION REQUEST SCHEDULE

NAME	WHAT ARE THE PARAMETERS OF THE REQUEST	Reference NO.
	Documents related to Isabella Pond (at Monash) restoration, remediation, water quality, costs and cost overruns, contract management, project management, delays and maintenance since 1 November 2018	CMTEDDFOI 2019-113

Ref No	Page number	Description	Date	Status	Reason for Exemption	Online Release Status
1	1-3	Email chain	1-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
2	4-8	Attachments to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
3	9-10	Email chain	1-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
4	11-13	Email chain	1-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
5	14-16	Email chain	1-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
6	17	Email chain	1-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
7	18-19	Attachment to previous email	31-Oct-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
8	20	Email	4-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
9	21	Email	6-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
10	22-33	Attachment to previous email	30-Oct-18	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
11	34	Email chain	6-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes

12	35	Email chain	7-Nov-2018	Full release	N/A	Yes
13	36-59	Attachments to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy Schedule 2 2.2(a)(xi) – Business affairs	Yes
14	60	Email	6-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
15	61-72	Email and photos	8-Nov-2018	Full release	N/A	Yes
16	73-85	Email and photos	8-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
17	86-87	Email chain	8-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
18	88-89	Attachments to previous email	Unknown	Full release	N/A	Yes
19	90	Email	8-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
20	91	Email	8-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
21	92-146	Attachment to previous email – Contract report	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy Schedule 2 2.2(a)(xi) – Business affairs	Yes
22	147-154	Email and photos	8-Nov-2018	Full release	N/A	Yes
23	155-179	Email and photos	9-Nov-2018	Full release	N/A	Yes
24	180-186	Email and photos	9-Nov-2018	Full release	N/A	Yes
25	187	Email chain	8-Nov-2018	Full release	N/A	Yes
26	188-189	Email chain	8-Nov-2018	Full release	N/A	Yes
27	190	Email chain	8-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
28	191	Email chain	8-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
29	192-203	Email and photos	8-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
30	204-205	Email chain	12-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
31	206	Attachment to previous email	Unknown	Full release	N/A	Yes

32	207	Email chain	12-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
33	208-210	Email chain	12-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
34	211-212	Email chain	13-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
35	213-215	Email chain	12-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
36	216-218	Email chain	13-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
37	219	Email chain	13-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
38	220	Attachment to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy Schedule 2 2.2(a)(xi) – Business affairs	Yes
39	221-222	Email chain	14-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
40	223-234	Attachment to previous email – Project close-out report	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
41	235-236	Email chain	14-Nov-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
42	237-238	Attachments to previous email (further attachments at reference 152)	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
43	239-241	Email chain	14-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
44	242-259	Attachments to previous email (further attachments at reference 152)	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
45	260-261	Email chain	22-Nov-2018	Full release	N/A	Yes
46	262	Email chain	22-Nov-2018	Full release	N/A	Yes
47	263-265	Email chain	29-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
48	266	Email chain	29-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
49	267-268	Attachment to previous email – Certificate of Operational Acceptance	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
50	269-271	Email chain	30-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
51	272-275	Attachments to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes

52	276-279	Attachment to previous email Non-conformance/corrective action report and photos	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
53	280	Email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
54	281-283	Attachment to previous email – Pond and Wetlands Consolidation program and methodology	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
55	284	Attachment to previous email – Project timeline	Unknown	Full release	N/A	Yes
56	285-287	Email chain	13-Dec-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
57	288-290	Email chain	18-Dec-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
58	291-293	Email chain	7-Jan-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
59	294-295	Attachment to previous email – Spillway rating curve	Unknown	Full release	N/A	Yes
60	296-300	Email chain	8-Jan-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
61	301-302	Email chain	18-Jan-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
62	303	Email	29-Jan-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
63	304	Attachment to previous email – Water lowering plan	Unknown	Full release	N/A	Yes
64	305	Attachment to previous email – Weir elevations concrete outline	Unknown	Full release	N/A	Yes
65	306-308	Email chain	30-Jan-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
66	309-311	Email chain	30-Jan-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
67	312-319	Attachments to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
68	320-321	Email chain	31-Jan-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
69	322-325	Email chain	1-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
70	326-328	Attachment to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
71	329-330	Email chain	4-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes

72	331-333	Email chain	4-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
73	334-337	Email chain	6-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
74	338-339	Email chain	7-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
75	340-342	Email chain	9-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
76	343-345	Email chain	11-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
77	346-350	Email chain	11-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
78	351-353	Email chain	15-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
79	354-359	Email chain	18-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
80	360-364	Email chain	18-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
81	365-366	Email chain	19-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
82	367	Email chain	19-Feb-2019	Full release	N/A	Yes
83	368-372	Email chain	20-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
84	373	Email chain	20-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
85	374	Email chain	21-Feb-2019	Full release	N/A	Yes
86	375	Email chain	22-Feb-2019	Full release	N/A	Yes
87	376-377	Email chain	1-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
88	378-380	Email chain	8-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
89	381-384	Attachments to email	Unknown	Full release	N/A	Yes
90	385-391	Email chain	12-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
91	392-394	Email chain	20-Mar-2019	Full release	N/A	Yes

92	395-397	Email chain	20-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
93	398-401	Email chain	21-Mar-2019	Full release	N/A	Yes
94	402-407	Email chain	21-Mar-2019	Full release	N/A	Yes
95	408-426	Attachments to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
96	427-428	Email chain	22-Mar-2019	Full release	N/A	Yes
97	429	Email chain	27-Mar-2019	Full release	N/A	Yes
98	430	Email	27-Mar-2019	Full release	N/A	Yes
99	431-434	Attachment to previous email – Consultation monitoring certification	20-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
100	435	Email	27-Mar-2019	Full release	N/A	Yes
101	436-512	Attachment to previous email – Isabella Weir dam safety inspection report	Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
102	513	Email	27-Mar-2019	Full release	N/A	Yes
103	514-517	Attachment to previous email – Design certification	21-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
104		Attachment to previous email – Isabella Weir dam safety inspection report	Mar-2019	Partial release	Removed – Duplicate of document 101	No
105	518-528	Email chain	28-Mar-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
106	529	Email	29-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
107	530-532	Email chain	1-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
108	533-535	Attachments to email – photos	Unknown	Full release	N/A	Yes
109	536-538	Email chain	2-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
110	539-541	Attachments to email	Unknown	Full release	N/A	Yes
111	542-545	Email chain	5-Apr-2019	Full release	N/A	Yes

112	546-547	Attachment to previous email – Certificate of consolidation commencement	5-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
113	548-551	Email chain	10-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
114	552-553	Email chain	16-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
115	554-563	Attachments to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
116	564-566	Email chain	16-Apr-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
117	567-568	Email chain	16-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
118	569	Email	17-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
119	570-581	Email chain	17-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
120	582-585	Attachment to email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
121	586	Email	18-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
122	587-589	Attachment to previous email	Unknown	Full release	N/A	Yes
123	590	Email	16-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
124	591	Email	30-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
125	592-595	Email chain	1-May-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
126	596-601	Meeting minutes	1-Apr-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
127	602-607	Meeting minutes	14-May-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
128	608	Email	15-May-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
129	609-627	Attachment to email – Landscaping specification Isabella Weir	Unknown	Full release	N/A	Yes
130	628	Email chain	16-May-2019	Full release	N/A	Yes
131	629-656	Attachment to previous email – Procurement plan minute	Unknown	Full release	N/A	Yes

132	657	Email chain	16-May-2019	Full release	N/A	Yes
133	658-663	Attachment to email - Signed Minute – Procurement board submission for Isabella Weir	3-Aug-2016	Full release	N/A	Yes
134	664-668	Email chain	17-May-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
135	669-670	Email chain	2-Nov-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
136	671-672	Attachment to email – Prohibition notice	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
137	673	Email chain	6-Dec-2018	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
138	674-686	Attachments to previous email	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
139	687	Email chain	4-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
140	688-689	Attachment to email – Monthly WHS report	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
141	690-691	Email chain	5-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
142	692	Attachment to email – Monthly WHS report	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
143	693-694	Email chain	7-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
144	695	Attachment to email – Monthly WHS report	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
145	696	Email chain	13-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
146	697	Attachment to email – Monthly WHS report	Unknown	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy	Yes
147	698-699	Invoice	18-Dec-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy Schedule 2 2.2(a)(xi) – Business affairs	Yes
148	700-701	Invoice	21-Jan-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy Schedule 2 2.2(a)(xi) – Business affairs	Yes
149	702-703	Invoice	18-Feb-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy Schedule 2 2.2(a)(xi) – Business affairs	Yes
150	704-705	Invoice	19-Mar-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy Schedule 2 2.2(a)(xi) – Business affairs	Yes
151	706-715	Invoice	9-May-2019	Partial release	Schedule 2 2.2(a)(ii) – Personal privacy Schedule 2 2.2(a)(xi) – Business affairs	Yes

152	716-719	Attachments to email at reference 41	Undated	Full release	N/A	Yes
<b>Total No of Docs</b>						
152						

**From:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Sent:** 01/11/2018 1:02 PM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Subject:** FW: SLA Watermain - Adjacent to Isabella Weir - survey error in WAE corrected [SEC=UNCLASSIFIED]  
**Attachments:** 15-004075-163+\_K.pdf, WAE WATERMAIN OCT22 DTG.DWG, WAE WATERMAIN OCT22 DTG.12DAZ,  
 FW: WAE, Isabella Weir

Nick,

For your info.

Regards,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502 | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)**  
 Capital Works, Transport Canberra and City Services Directorate | **ACT Government**  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

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**From:** [Sch 2 2.2(a)(ii)]@pes.net.au [Sch 2 2.2(a)(ii)]@pes.net.au  
**Sent:** Thursday, 1 November 2018 11:40 AM  
**To:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Cc:** [Sch 2 2.2(a)(ii)]@pes.net.au  
**Subject:** FW: SLA Watermain - Adjacent to Isabella Weir - survey error in WAE corrected

Stuart

As discussed, I will follow up this afternoon with a phone call to [Sch 2 2.2(a)(ii)].

Regards

[Sch 2 2.2(a)(ii)]  
 Professional Engineering Service Pty Limited ACN 057 633 897  
 Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project  
 Mobile [Sch 2 2.2(a)(ii)]

---

**From:** [Sch 2 2.2(a)(ii)]@pes.net.au  
**Sent:** Thursday, 1 November 2018 11:37 AM  
**To:** [Sch 2 2.2(a)(ii)]@iconwater.com.au  
**Subject:** FW: SLA Watermain - Adjacent to Isabella Weir - survey error in WAE corrected

Hi [Sch 2 2.2(a)(ii)]

Have you had a chance to consider the below please?

Regards

[Sch 2 2.2(a)(ii)]  
 Professional Engineering Service Pty Limited ACN 057 633 897  
 Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project  
 Mobile [Sch 2 2.2(a)(ii)]

---

**From:** [Sch 2 2.2(a)(ii)]@pes.net.au  
**Sent:** Friday, 26 October 2018 10:03 AM  
**To:** [Sch 2 2.2(a)(ii)]@iconwater.com.au  
**Cc:** [Sch 2 2.2(a)(ii)]@iconwater.com.au; 'Oxborrow, Stuart' <Stuart.Oxborrow@act.gov.au>;

'Taylor, Nick' <[Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)>

**Subject:** SLA Watermain - Adjacent to Isabella Weir - survey error in WAE corrected

Sch 2 2.2(a)(i)

Guideline found that the survey pickup of the pipeline was inaccurate due to equipment issues. They have vacuum excavated and again measured the XYZs of numerous locations on the pipeline. A new WAE is attached for your consideration please.

Complying clearances to services are shown. A low point does exist - I have attached [Sch 2 2.2\(a\)\(ii\)](#) from Calibre Consulting's advice on that issue based on the originally submitted plan is attached - clearly the low point is far less pronounced than originally thought.

There is a section where pipe slope is a little over 5% which according to Icon Water's specifications may need a trench stop. However, I request that Icon Water waive the need for a trench stop because it is only a short run at a slope only just within the range.

For your consideration.

Regards

[Sch 2 2.2\(a\)\(ii\)](#)

Professional Engineering Service Pty Limited ACN 057 633 897

Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project

Mobile [Sch 2 2.2\(a\)\(ii\)](#)

---

**From:** [Sch 2 2.2\(a\)\(ii\)](#) <[Sch 2 2.2\(a\)\(ii\)@guidelineact.com.au](mailto:Sch 2 2.2(a)(ii)@guidelineact.com.au)>

**Sent:** Friday, 26 October 2018 7:30 AM

**To:** [Sch 2 2.2\(a\)\(ii\)](#) <[Sch 2 2.2\(a\)\(ii\)@pes.net.au](mailto:Sch 2 2.2(a)(ii)@pes.net.au)>

**Cc:** Oxborrow, Stuart <[Stuart.Oxborrow@act.gov.au](mailto:Stuart.Oxborrow@act.gov.au)>

**Subject:** SLA Watermain

Hi [Sch 2 2.2](#),

As discussed, upon resurveying the water main an error was found in the original pick up. The GPS pickup was nearest the tree canopy nearest Ch .

I apologise for the recent delay. Attached is the WAE main and the Survey file as picked up by Kerry Surveys.

Can you please re-issue the attached to ICON water for review?

Kind regards,

[Sch 2 2.2\(a\)\(ii\)](#) | **Project Manager | Isabella Weir Upgrade**

16B Bass Street, Queanbeyan NSW 2620

PO Box 537, Queanbeyan NSW 2620

E: [Sch 2 2.2\(a\)\(ii\)@guidelineact.com.au](mailto:Sch 2 2.2(a)(ii)@guidelineact.com.au)

M: [Sch 2 2.2\(a\)\(ii\)](#)




---

**From:** [Sch 2 2.2\(a\)\(ii\)](#) <[Sch 2 2.2\(a\)\(ii\)@calibregroup.com](mailto:Sch 2 2.2(a)(ii)@calibregroup.com)>

**Sent:** Thursday, 25 October 2018 1:46 PM

To: Sch 2 2.2(a)(ii)  
Cc: Sch 2 2.2(a)(ii) @pes.net.au  
Subject: RE: WAE WATERMAIN

Sch 2 2.2(a)

See attached updated WAE. Long section looks much better.



Sch 2 2.2(a)(ii)  
Principal Engineer - Urban Development  
T Sch 2 2.2(a)(ii)  
D  
M  
E Sch 2 2.2(a)(ii)@calibregroup.com

Level 6, 121 Marcus Clarke Street, Canberra City, ACT, 2601

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Sch 2 2.2(a)(ii) @calibregroup.com>

Sent:15/10/2018 11:49 AM

To:'Sch 2 2.2(a)(ii) @pes.net.au>

Subject:FW: WAE, Isabella Weir

Attachments:15-004075-163+\_J.pdf

Hi Sch 2 2.2(a)(ii)

See attached copy of updated WAE drawing sent to Guideline this morning. As discussed, there is an existing scour valve on the 300mm dia main on the southern side of the bridge just near the connection to the new main. This existing scour valve will drain the new main down to the level of about IL577.515 which means that about 70m of this new 300mm dia main will not fully drain by this existing scour valve which corresponds to about 5,000L of water in the pipe. Whilst this is not strictly in line with Icon Water standards, it is not uncommon that water mains cannot fully drain. On smaller dia mains less than 300mm dia scour valves are not provided at all meaning that typical water main networks are not fully drained prior to undertaking any repairs. For this short section of main the pressure head of water can be drained out, and Icon Water would have to implement a maintenance procedure that they adopt on typical estate mains when maintenance occurs on this short section of main.

The alternative is to install a scour valve at the low point of the new main. This scour valve would be 2.5m deep and could not drain out by gravity due to location of existing trees preventing trenching of the outlet pipe so would need to be a Type 2 with a riser only to allow the main to be pumped out.

Regards



Sch 2 2.2(a)(ii)

Principal Engineer - Urban Development

T Sch 2 2.2(a)(ii)

D

M

E Sch 2 2.2(a)(ii)@calibregroup.com

Level 6,121 Marcus Clarke Street, Canberra City, ACT, 2601

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Please consider the environment before printing this e-mail.

From: Sch 2 2.2(a)(ii)

Sent: Monday, 15 October 2018 10:47 AM

To: Sch 2 2.2(a)(ii) @guidelineact.com.au>

Subject: RE: WAE, Isabella Weir [Filed 15 Oct 2018 10:47]

Sch 2 2.2(a)

See attached updated WAE plan.

Regards



Sch 2 2.2(a)(ii)

Principal Engineer - Urban Development

T Sch 2 2.2(a)(ii)

D

M

E Sch 2 2.2(a)(ii)@calibregroup.com

Level 6,121 Marcus Clarke Street, Canberra City, ACT, 2601

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Please consider the environment before printing this e-mail.

---

**From:** Sch 2 2.2(a)(ii) <[redacted]@guidelineact.com.au>  
**Sent:** Friday, 12 October 2018 7:03 AM  
**To:** Sch 2 2.2(a)(ii) <[redacted]@calibregroup.com>  
**Subject:** RE: WAE, Isabella Weir

Hi [redacted]

Thanks for the update.

Have a good weekend.

Kind regards,

[redacted]

---

**From:** Sch 2 2.2(a)(ii) <[redacted]@calibregroup.com>  
**Sent:** Thursday, 11 October 2018 6:00 PM  
**To:** Sch 2 2.2(a)(ii) <[redacted]@calibregroup.com>  
**Subject:** RE: WAE, Isabella Weir

[redacted]

I have forward this on to get updated but we will not be able get it out until Monday morning.

Regards



Sch 2 2.2(a)(ii)  
**Principal Engineer - Urban Development**  
 T [redacted]  
 D [redacted]  
 M [redacted]  
 E [redacted]@calibregroup.com

Level 6,121 Marcus Clarke Street, Canberra City, ACT, 2601

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Please consider the environment before printing this e-mail.

---

**From:** Sch 2 2.2(a)(ii) <[redacted]@guidelineact.com.au>  
**Sent:** Thursday, 11 October 2018 12:43 PM  
**To:** Sch 2 2.2(a)(ii) <[redacted]@calibregroup.com>  
**Subject:** WAE, Isabella Weir

Hi [redacted]

We've had an onsite meeting to try and close out the WAE for this water main.

[redacted] from ICON had two main gripes, one was that the between CH 1.461 and CH 12.011 the pipe grade is 18.2%. No action is required at the moment from Calibre.

The second concern came from that the pipe as it passes over the services requires that the WAE show clearly the clearances between services. The original design from Calibre had this information and they'd like it shown again.

Can you use the data provided to work out the theoretical Invert of the pipe as it passes over each of the services?

Please call me should you have any queries.

The target for the revised drawing is COB tomorrow, can you confirm this is achievable?

Kind regards,

Sch 2 2.2(a)

**Sch 2 2.2(a)(ii) | Project Manager | Isabella Weir Upgrade**

16B Bass Street, Queanbeyan NSW 2620

PO Box 537, Queanbeyan NSW 2620

E: [Sch 2 2.2\(a\)\(ii\):@guidelineact.com.au](mailto:Sch 2 2.2(a)(ii):@guidelineact.com.au)

M: Sch 2 2.2(a)(ii)



- NOTES:** 8 of 719
- REFER TO DRAWING 15-004075-140+ FOR NOTES AND LEGEND.
  - REFER TO DRAWING 15-004075-160+ FOR STRUCTURE SCHEDULE TABLE.
  - 300Ø 45° BEND THRUST BLOCKS PIERS IN ACCORDANCE WITH TYPICAL DETAIL.
  - A. CONNECT TO EXISTING WATER BY ICON WATER AT CONTRACTOR'S EXPENSE REFER TO DRAWING 15-004075-140+ FOR DETAILS.

**LEGEND**

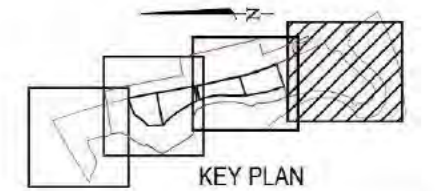
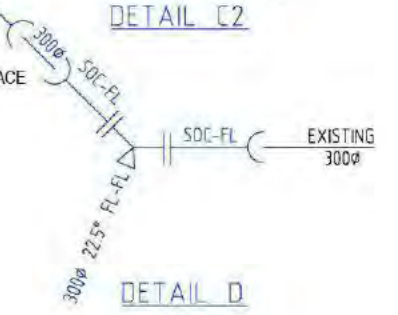
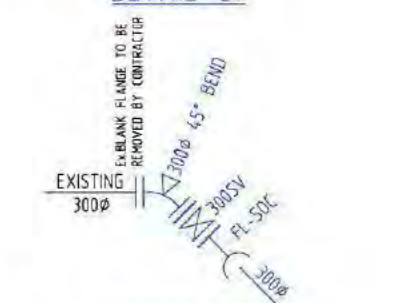
— W — WATER MAIN CONSTRUCTED BY WEIR UPGRADE CONTRACTOR AND HANDED OVER TO ICON WATER.

**PIPE MATERIALS**

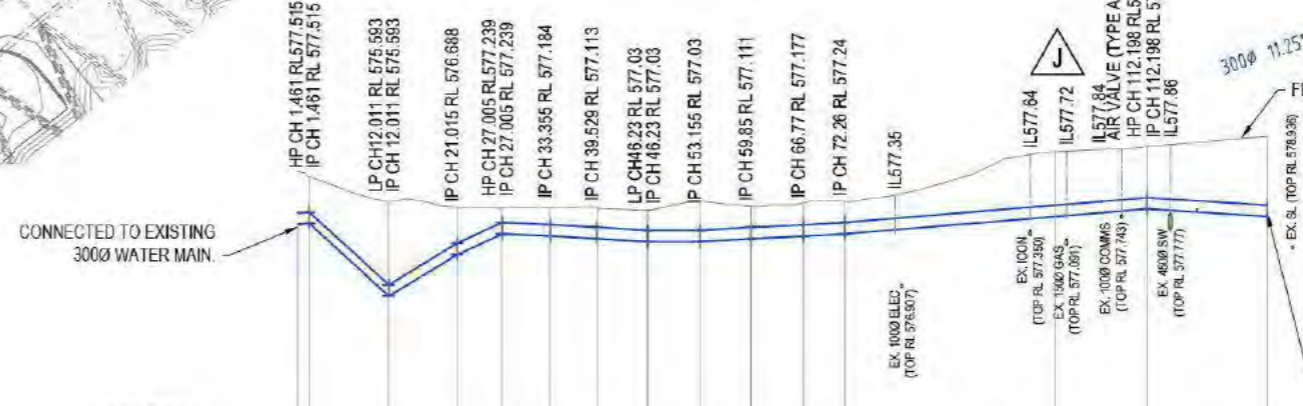
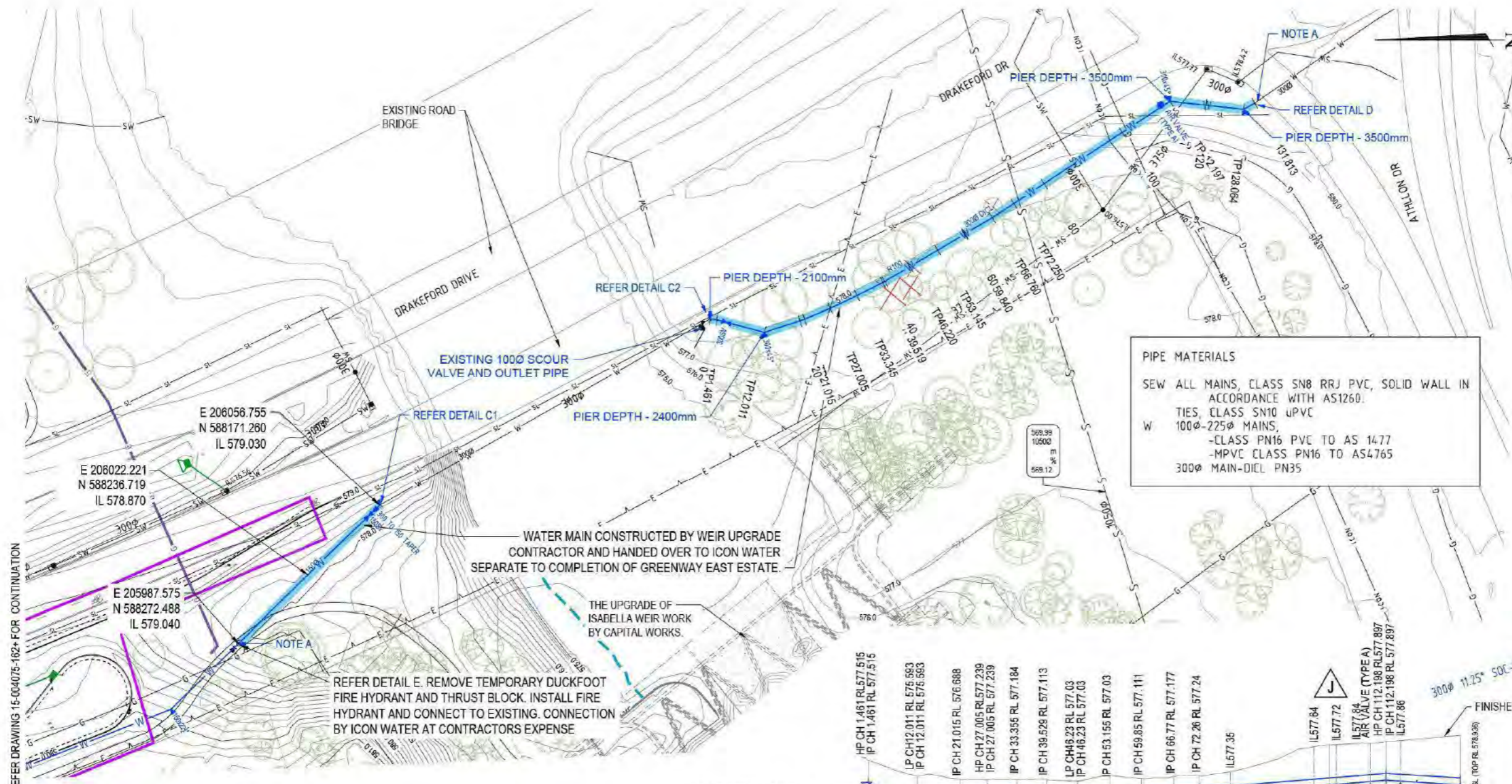
SEW ALL MAINS, CLASS SN8 RRJ PVC, SOLID WALL IN ACCORDANCE WITH AS1260.

W 100Ø-225Ø MAINS,  
-CLASS PN16 PVC TO AS 1477  
-MPVC CLASS PN16 TO AS4765

300Ø MAIN-DICL PN35

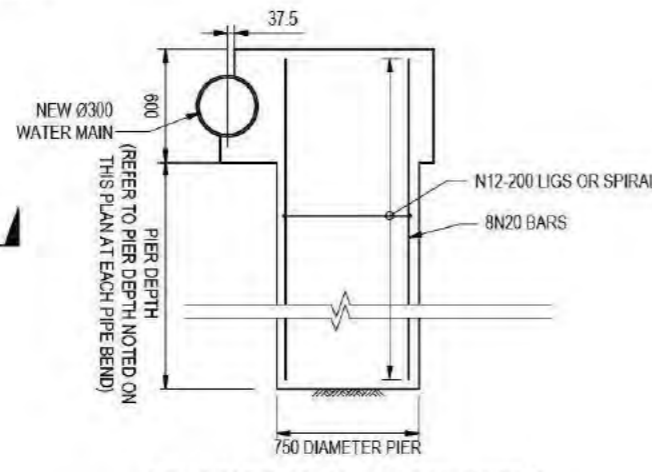
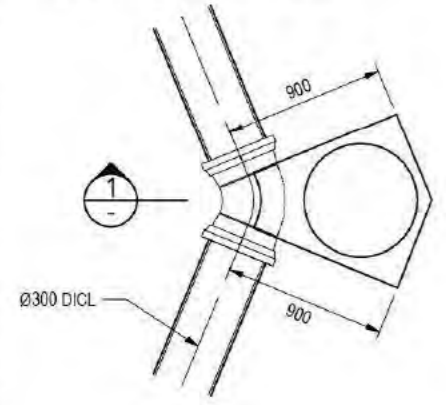


ORIGINAL SURVEY PROVIDED BY LAND DATA SURVEYS  
DATE OF SURVEY APRIL 2011



LENGTH (RADIUS)	GRADE	HORIZONTAL GEOMETRY	DATUM RL 569
			DESIGN PIPELINE
			INVERT LEVELS
			FINISHED SURFACE
			DEPTH TO PIPELINE INVERT
			CHAINAGES

- PIER NOTES:**
- BORED PIER DETAILS SHOWN HAVE BEEN BASED ON EMBEDMENT INTO 50KPa GROUND FOR FULL DEPTH
  - ALL WORKMANSHIP AND MATERIALS COMPLY WITH AS2159 AND AS3600
  - CONCRETE STRENGTH  $f_c = 32\text{mPa}$
  - COVER TO REINFORCEMENT AT 70mm



**TYPICAL DETAIL - PIER THRUST BLOCKS**  
SCALE 1:20

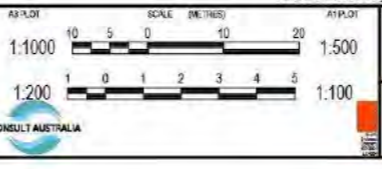
HORIZ SCALE: 500  
VERTICAL SCALE: 1:100

**300mm DI CL WATERMAIN**  
SCALE 1:500H, 1:100V

REV	ISSUE	DESIGN	DRAWN	CHECK	APPROVED	DATE	AMENDMENT DETAILS
1	ISSUE	JK	JK	JK	JK	15/03/2011	NOTE AND DETAIL ADDED
2	ISSUE	JK	JK	JK	JK	21/03/2011	UPDATED WORK AS EXCLUDED
3	ISSUE	JK	JK	JK	JK	01/04/2011	UPDATED WORK AS EXCLUDED
4	ISSUE	JK	JK	JK	JK	01/04/2011	NOTE AMENDED, COORDS AND LEVELS ADDED
5	ISSUE	JK	JK	JK	JK	01/04/2011	AMENDED FOR WAC COMMENTS
6	ISSUE	JK	JK	JK	JK	15/03/2011	INDICATIVE L/S OF WATERMAIN ADDED AT EX SERVICE LOCATIONS

WAC No: 2018/5280

PROJECT No:



ACT  
Sustainable  
Business, Environment

Greenway East  
DETAIL DESIGN

calibre  
CONSULTING

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STAGE 1 SEWER AND WATER  
SHEET 04 OF 04

DRAWING NUMBER: 15-004075-163+  
WHEEL: J

**From:** "Taylor, Nick"  
**Sent:** 01/11/2018 12:40 AM  
**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Subject:** RE: Defect List, Wetlands Civil Works [SEC=UNCLASSIFIED]

This reflects the walkabout from yesterday

---

**From:** Oxborrow, Stuart  
**Sent:** Wednesday, 31 October 2018 4:51 PM  
**To:** Taylor, Nick <Nick.Taylor@act.gov.au>  
**Cc:** McGrath, Michael <Michael.McGrath@act.gov.au>  
**Subject:** FW: Defect List, Wetlands Civil Works [SEC=UNCLASSIFIED]

Nick,

For your info.

Regards,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502 | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)**  
 Capital Works, Transport Canberra and City Services Directorate | ACT Government  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

---

**From:** Sch 2 2.2(a)(ii) <[REDACTED]@pes.net.au>  
**Sent:** Wednesday, 31 October 2018 3:28 PM  
**To:** Lambert, Antonie <[Antonie.Lambert@act.gov.au](mailto:Antonie.Lambert@act.gov.au)>  
**Cc:** Oxborrow, Stuart <[Stuart.Oxborrow@act.gov.au](mailto:Stuart.Oxborrow@act.gov.au)>; Taylor, Nick <[Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)>; Sch 2 2.2(a)(ii) <[REDACTED]@pes.net.au>  
**Subject:** FW: Defect List, Wetlands Civil Works

Antonie

Thanks for coming out to site today.

As requested, please find attached the list as compiled by Sch 2 2.2(a)(ii).

Regards

Sch 2 2.2(a)(ii)

Professional Engineering Service Pty Limited ACN 057 633 897  
 Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project  
 Mobile Sch 2 2.2(a)(ii)

---

**From:** Sch 2 2.2(a)(ii) <[REDACTED]@guidelineact.com.au>  
**Sent:** Wednesday, 31 October 2018 3:01 PM  
**To:** Sch 2 2.2(a)(ii) <[REDACTED]@pes.net.au>  
**Subject:** Defect List, Wetlands Civil Works


Hi Sch 2 2.2(a)(ii)

Thanks for your help taking the pictures again. Please see attached the defect list from today's walk.

Please note that Defect 4 and 5 have not been caused by constructing outside the details as specified on the drawings and specification. **Can you please confirm what action, if any, you wish Guideline to complete?**

The area at the V-Notch cannot be accessed without high risk of damage to the existing ground and plants. The ground is saturated and machine access is not advisable.

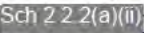
Happy to discuss any of the above to help find a solution.

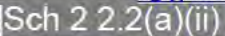
Kind regards, 

**Sch 2 2.2(a)(ii) | Project Manager | Isabella Weir Upgrade**

16B Bass Street, Queanbeyan NSW 2620

PO Box 537, Queanbeyan NSW 2620

E: @[guidelineact.com.au](mailto:guidelineact.com.au)

M: 



**From:** "Taylor, Nick"  
**Sent:** 01/11/2018 12:41 AM  
**To:** Sch 2 2.2(a)(ii) @pes.net.au  
**Cc:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Subject:** RE: Isabella wetland [SEC=UNCLASSIFIED]

Great work, I've spoken with Stuart and he'll give direction on this matter today.

Regards Nick

---

**From:** Sch 2 2.2(a)(ii) @pes.net.au  
**Sent:** Wednesday, 31 October 2018 4:25 PM  
**To:** Taylor, Nick <Nick.Taylor@act.gov.au>  
**Cc:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>; Sch 2 2.2(a)(ii) @pes.net.au  
**Subject:** FW: Isabella wetland

Nick

This is the clincher! See yellow highlights below.

Regards

Sch 2 2.2(a)(ii)

Professional Engineering Service Pty Limited ACN 057 633 897  
 Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project  
 Mobile Sch 2 2.2(a)(ii)

---

**From:** Sch 2 2.2(a)(ii) @alluvium.com.au  
**Sent:** Friday, 30 June 2017 12:15 PM  
**To:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Cc:** Sch 2 2.2(a)(ii) @alluvium.com.au; Taylor, Nick <Nick.Taylor@act.gov.au>; Sch 2 2.2(a)(ii) @alluvium.com.au; Sch 2 2.2(a)(ii) @pes.net.au; Sch 2 2.2(a)(ii) @guidelineact.com.au; Crocker, Leigh <Leigh.Crocker@act.gov.au>; McGrath, Michael <Michael.McGrath@act.gov.au>  
**Subject:** RE: Isabella wetland

Hi Stuart,

Yes we can confirm that your email below is the agreed way forward.

Regards

Sch 2 2.2(a)(ii) | Alluvium Consulting

Sch 2 2.2(a)(ii)

@alluvium.com.au

www.alluvium.com.au | Level 1, 105-115 Dover St, Cremorne, VIC 3121 | [LinkedIn](#) | [Twitter](#) | [Blog](#)




---

**From:** Oxborrow, Stuart [<mailto:Stuart.Oxborrow@act.gov.au>]  
**Sent:** Thursday, 29 June 2017 5:31 PM  
**To:** Sch 2 2.2(a)(ii)  
**Cc:** Sch 2 2.2(a)(ii); Taylor, Nick; Sch 2 2.2(a)(ii); Sch 2 2.2(a)(ii) @pes.net.au; Sch 2 2.2(a)(ii) @guidelineact.com.au; Crocker, Leigh; McGrath, Michael  
**Subject:** RE: Isabella wetland

Hi Sch 2 2.2(a)(ii)

Thanks for visiting the site yesterday. Based on your reply of 26/06 attached to the meeting invitation (attached), our discussions on site yesterday, and your email below of 28/06 I believe the following is the agreed way forward.

- **Use of pond sediment as general fill for the wetlands.**

- The sediment can be used exclusively as general fill for the wetland (ie without blending with clean fill from the weir embankment). The 5% settlement criteria nominated on the drawings can be managed by topping up the topsoil if any consolidation of the sediment does occur.

- **Use of sediment as topsoil.**

- In principle, Alluvium have no objection to the sediment being used as topsoil. However, the sediment should be tested for the properties in the two last dot points below (highlighted), and a comment and recommendation provided by GLA's agronomist. The agronomist should consider the suitability of the proposed "topsoil" material for the various vegetation species identified for planting within the wetland area. The agronomist should also consider the suitability of the "topsoil" material when saturated, given a significant proportion will be under water.
- Regarding potential contamination of the sediment. Based on the findings of Alluvium's earlier contamination study ie *"There were no heavy metal readings that exceeded the NEPM HIL (National Environment Protection Measure - Health Investigation Level). This indicates that any spoil removed from the pond would be likely to be suitable for landscaping soil within the site"*, no additional contamination testing is required.
- Guideline to take additional sediment samples from other areas in the pond to determine if these areas could also be used for topsoil.
- Upon receipt of the test results and recommendations from the agronomist, Alluvium to make final decision on the use of the sediment as topsoil. Alluvium to advise EPA of their decision / recommendation.

- **Capping layer.**

- The 300mm capping layer /clay liner is not really required to prevent the wetland ponds draining since the adjacent Isabella Pond will be full also – except in the very rare case when Isabella Pond is drained. The proposal to reduce the thickness of the capping layer to 150mm (except for the 3:1 areas) is acceptable, provided the material is workable. Zone 2 material from the weir can be used (without blending the Zone 1 clay material).

Can you please confirm your agreement to the above, and/or make any amendments you feel necessary.

Thanks,

Stuart Oxborrow

Senior Engineer

Phone 02 6207 4502 Mobile 0401 333 179 Fax 02 6205 3909

Civil Infrastructure & Capital Works Branch | Chief Minister, Treasury and Economic Development Directorate | ACT Government

Level 3 Annex, Macarthur House 12 Wattle Street Lyneham ACT 2602 | PO Box 818 Dickson ACT 2602

**From:** [Sch 2 2.2(a)(ii)] @alluvium.com.au

**Sent:** Wednesday, 28 June 2017 1:12 PM

**To:** Oxborrow, Stuart

**Cc:** [Sch 2 2.2(a)(ii)]; Taylor, Nick; [Sch 2 2.2(a)(ii)] pes.net.au; [Sch 2 2.2(a)(ii)] @guidelineact.com.au

**Subject:** Isabella wetland

Hi Stuart,

This email is a follow up to the site meeting this morning. We understand that Guideline have collected a number of samples for testing the suitability of the sediment as topsoil. This includes a sediment only sample plus other separate samples that include a "blended" topsoil material.

Sediment has been tested previously for contaminants on two separate occasions, once by Alluvium and once by SMEC. A summary of the Alluvium results is shown below. Both the SMEC and Alluvium reports came to a similar conclusion that the material could be suitable for design purposes.

- *There were no heavy metal readings that exceeded the NEPM HIL (National Environment Protection Measure - Health Investigation Level). This indicates that any spoil removed from the pond would be likely to be suitable for landscaping soil within the site.*
- *If the spoil was to be disposed of to a landfill, according to the ACT Waste Standard (2000), the heavy metal concentrations in the sediment from this pond are below "CT2" values, and therefore it is likely that the material would be classified as "Solid Waste" which incurs a disposal charge of \$135.15/tonne (ACT Government 2014b). Levels of lead and zinc were higher at Isabella Pond than site averages. Lead was 10% higher than the average, and zinc 25%- though both metals were still below investigation levels. See Figure 33. Average sediment heavy metal concentrations per site for a comparison of sites. There were no levels of cadmium detected at Isabella Pond (limit of reporting is 0.4 mg/kg).*

In terms of sediment to produce topsoil the existing sediment will need to be analysed for a range of parameters (see below) and recommendations made for reuse or remediation undertaken by a soil agronomist. The agronomist should consider the suitability of the proposed "topsoil" material for the various vegetation species identified for

planting within the wetland area. The agronomist should also consider the suitability of the "topsoil" material when saturated, given a significant proportion will be under water.

- Zinc, Nickel, Manganese, Copper, Chromium, Arsenic, Aluminium, Benzo(a)pyrene TEQ (LOR)
- pH, Salinity (EC), Chloride, Nitrate Nitrogen (NO<sub>3</sub>), Ammonium Nitrogen, Total Nitrogen, Phosphorus (Olsen), Phosphorus (Colwell), Phosphorus Buffer Index (PBI-Col), Available Potassium, Potassium (Amm-acet), Calcium, Magnesium, Sodium, Calcium/Magnesium Ratio, Sulphur, Organic Carbon, Organic Matter

Regards

Sch 2 2 2(a)(ii) | Alluvium Consulting

Sch 2 2 2(a)(ii)

Sch 2 2 2(a)(ii) | @alluvium.com.au

www.alluvium.com.au | Level 1, 105-115 Dover St, Cremorne, VIC 3121 | [LinkedIn](#) | [Twitter](#) | [Blog](#)



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**From:** "Taylor, Nick"  
**Sent:** 01/11/2018 3:44 AM  
**To:** Sch 2 2.2(a)(ii) @pes.net.au  
**Subject:** RE: Isabella wetland Clay Capping Layer [SEC=UNCLASSIFIED]

Good work Sir

---

**From:** Sch 2 2.2(a)(ii) @pes.net.au  
**Sent:** Thursday, 1 November 2018 12:10 PM  
**To:** Lambert, Antonie <Antonie.Lambert@act.gov.au>  
**Cc:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>; Taylor, Nick <Nick.Taylor@act.gov.au>; Sch 2 2.2(a)(ii) @pes.net.au  
**Subject:** Isabella wetland Clay Capping Layer

Hi Antonie

At our inspection yesterday, you expressed some concern regarding the current water level and by implication, the clay capping layer's effectiveness on the Isabella Wetlands.

The email trail below with the wetland designer confirms my advice to you yesterday that the clay capping layer had the primary function of providing a material which allowed the underlying material to be shaped in accordance with the design. However, the clay capping layer is a low permeability material, and on the rare future occasions when the central Isabella Pond is empty, it will provide a level of water retention in association with underlying materials, the retaining walls and the high prevalent water table.

The highlighted text below confirms the designer's involvement and agreement regarding the clay capping layer.

For your information and to provide better understanding of the design intent.

Regards

Sch 2 2.2(a)(ii)  
 Professional Engineering Service Pty Limited ACN 057 633 897  
 Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project  
 Mobile Sch 2 2.2(a)(ii)

---

**From:** Sch 2 2.2(a)(ii) @alluvium.com.au  
**Sent:** Friday, 30 June 2017 12:15 PM  
**To:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Cc:** Sch 2 2.2(a)(ii) @alluvium.com.au; Taylor, Nick <Nick.Taylor@act.gov.au>; Sch 2 2.2(a)(ii) @alluvium.com.au; Sch 2 2.2(a)(ii) @pes.net.au; Sch 2 2.2(a)(ii) @guidelineact.com.au; Crocker, Leigh <Leigh.Crocker@act.gov.au>; McGrath, Michael <Michael.McGrath@act.gov.au>  
**Subject:** RE: Isabella wetland

Hi Sch 2 2.2(a)(ii)  
 Yes we can confirm that your email below is the agreed way forward.

Regards

Sch 2 2.2(a)(ii) | Alluvium Consulting

Sch 2 2.2(a)(ii)

Sch 2 2.2(a)(ii) | alluvium.com.au

www.alluvium.com.au | Level 1, 105-115 Dover St, Cremorne, VIC 3121 | [LinkedIn](#) | [Twitter](#) | [Blog](#)




---

**From:** Oxborrow, Stuart [<mailto:Stuart.Oxborrow@act.gov.au>]  
**Sent:** Thursday, 29 June 2017 5:31 PM  
**To:** Sch 2 2.2(a)(ii)

**Cc:** Sch 2 2.2(a)(ii); Taylor, Nick; Sch 2 2.2(a)(ii) @pes.net.au; Sch 2 2.2(a)(ii) @guidelineact.com.au; Crocker, Leigh; McGrath, Michael

**Subject:** RE: Isabella wetland

Hi Sch 2 2.2(a)(ii)

Thanks for visiting the site yesterday. Based on your reply of 26/06 attached to the meeting invitation (attached), our discussions on site yesterday, and your email below of 28/06 I believe the following is the agreed way forward.

- **Use of pond sediment as general fill for the wetlands.**
  - The sediment can be used exclusively as general fill for the wetland (ie without blending with clean fill from the weir embankment). The 5% settlement criteria nominated on the drawings can be managed by topping up the topsoil if any consolidation of the sediment does occur.
- **Use of sediment as topsoil.**
  - In principle, Alluvium have no objection to the sediment being used as topsoil. However, the sediment should be tested for the properties in the two last dot points below (highlighted), and a comment and recommendation provided by GLA's agronomist. The agronomist should consider the suitability of the proposed "topsoil" material for the various vegetation species identified for planting within the wetland area. The agronomist should also consider the suitability of the "topsoil" material when saturated, given a significant proportion will be under water.
  - Regarding potential contamination of the sediment. Based on the findings of Alluvium's earlier contamination study ie *"There were no heavy metal readings that exceeded the NEPM HIL (National Environment Protection Measure - Health Investigation Level). This indicates that any spoil removed from the pond would be likely to be suitable for landscaping soil within the site"*, no additional contamination testing is required.
  - Guideline to take additional sediment samples from other areas in the pond to determine if these areas could also be used for topsoil.
  - Upon receipt of the test results and recommendations from the agronomist, Alluvium to make final decision on the use of the sediment as topsoil. Alluvium to advise EPA of their decision / recommendation.
- **Capping layer.**
  - The 300mm capping layer /clay liner is not really required to prevent the wetland ponds draining since the adjacent Isabella Pond will be full also – except in the very rare case when Isabella Pond is drained. The proposal to reduce the thickness of the capping layer to 150mm (except for the 3:1 areas) is acceptable, provided the material is workable. Zone 2 material from the weir can be used (without blending the Zone 1 clay material).

Can you please confirm your agreement to the above, and/or make any amendments you feel necessary.

Thanks,

Stuart Oxborrow

Senior Engineer

Phone 02 6207 4502 Mobile 0401 333 179 Fax 02 6205 3909

Civil Infrastructure & Capital Works Branch | Chief Minister, Treasury and Economic Development Directorate | ACT Government

Level 3 Annex, Macarthur House 12 Wattle Street Lyneham ACT 2602 | PO Box 818 Dickson ACT 2602

**From:** Sch 2 2.2(a)(ii) @alluvium.com.au

**Sent:** Wednesday, 28 June 2017 1:12 PM

**To:** Oxborrow, Stuart

**Cc:** Sch 2 2.2(a)(ii); Taylor, Nick; Sch 2 2.2(a)(ii); Sch 2 2.2(a)(ii) @pes.net.au; Sch 2 2.2(a)(ii) @guidelineact.com.au

**Subject:** Isabella wetland

Hi Stuart,

This email is a follow up to the site meeting this morning. We understand that Guideline have collected a number of samples for testing the suitability of the sediment as topsoil. This includes a sediment only sample plus other separate samples that include a "blended" topsoil material.

Sediment has been tested previously for contaminants on two separate occasions, once by Alluvium and once by SMEC. A summary of the Alluvium results is shown below. Both the SMEC and Alluvium reports came to a similar conclusion that the material could be suitable for design purposes.

- *There were no heavy metal readings that exceeded the NEPM HIL (National Environment Protection Measure - Health Investigation Level). This indicates that any spoil removed from the pond would be likely to be suitable for landscaping soil within the site.*

- *If the spoil was to be disposed of to a landfill, according to the ACT Waste Standard (2000), the heavy metal concentrations in the sediment from this pond are below "CT2" values, and therefore it is likely that the material would be classified as "Solid Waste" which incurs a disposal charge of \$135.15/tonne (ACT Government 2014b). Levels of lead and zinc were higher at Isabella Pond than site averages. Lead was 10% higher than the average, and zinc 25% - though both metals were still below investigation levels. See Figure 33. Average sediment heavy metal concentrations per site for a comparison of sites. There were no levels of cadmium detected at Isabella Pond (limit of reporting is 0.4 mg/kg).*

In terms of sediment to produce topsoil the existing sediment will need to be analysed for a range of parameters (see below) and recommendations made for reuse or remediation undertaken by a soil agronomist. The agronomist should consider the suitability of the proposed "topsoil" material for the various vegetation species identified for planting within the wetland area. The agronomist should also consider the suitability of the "topsoil" material when saturated, given a significant proportion will be under water.

- Zinc, Nickel, Manganese, Copper, Chromium, Arsenic, Aluminium, Benzo(a)pyrene TEQ (LOR)
- pH, Salinity (EC), Chloride, Nitrate Nitrogen (NO<sub>3</sub>), Ammonium Nitrogen, Total Nitrogen, Phosphorus (Olsen), Phosphorus (Colwell), Phosphorus Buffer Index (PBI-Col), Available Potassium, Potassium (Amm-acet), Calcium, Magnesium, Sodium, Calcium/Magnesium Ratio, Sulphur, Organic Carbon, Organic Matter

Regards

Sch 2 2.2(a)(ii) [Alluvium Consulting](#)

Sch 2 2.2(a)(ii)

Sch 2 2.2(a)(ii) [@alluvium.com.au](mailto:@alluvium.com.au)

[www.alluvium.com.au](http://www.alluvium.com.au) | Level 1, 105-115 Dover St, Cremorne, VIC 3121 | [LinkedIn](#) | [Twitter](#) | [Blog](#)




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**From:** Sch 2 2.2(a)(ii) @pes.net.au  
**Sent:** 01/11/2018 11:03 AM  
**To:** Sch 2 2.2(a)(ii) @guidelineact.com.au  
**Cc:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>; "Taylor, Nick" <Nick.Taylor@act.gov.au>; Sch 2 2.2(a)(ii) @pes.net.au; Sch 2 2.2(a)(ii) @envirolinks.com.au  
**Subject:** FW: Isabella Notes 31.10.18  
**Attachments:** 1552\_Site Visit Summary\_IsaPnd\_31.10.18.pdf

Sch 2 2.2(a)

Sch 2 2.2(a) inspection report from yesterday is attached.

For your use in managing the wetland soft landscaping.

Regards

Sch 2 2.2(a)(ii)

Professional Engineering Service Pty Limited ACN 057 633 897  
 Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project  
 Mobile Sch 2 2.2(a)(ii)

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**From:** Sch 2 2.2(a)(ii) @envirolinks.com.au  
**Sent:** Thursday, 1 November 2018 10:24 AM  
**To:** Sch 2 2.2(a)(ii) @pes.net.au; Sch 2 2.2(a)(ii) @pes.net.au  
**Subject:** Isabella Notes 31.10.18

Sch 2 2.2(a)(ii)

Please find attached some notes and comments from my walk around site yesterday. I hear the weir will soon be completed and valves shut too allow the water to fill the pond again. Any maintenance of the wetlands will become increasingly difficult once they fill with water. Please encourage both Guideline and Ables to get on top of these issues promptly in the hope that we can get it on consolidation before the pond fills.

The weeds on the northern wetland are the main concern at this point and replanting.  
 Kind regards,

Sch 2 2.2(a)(ii) BArch (Hons) (BDes)

Landscape Architect

5/61 Dundas Court PHILLIP ACT 2606 | P 02 6281 6066 | Sch 2 2.2(a)(ii) @envirolinks.com.au | www.envirolinks.com.au

**2018 AILA ACT Landscape Architecture Award for Cultural Heritage**

Reserve Wills

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## Site Visit Minutes correspondence

**Project:** 1552 – Isabella Pond

**Summary by:** [Sch 2 2.2\(a\)\(ii\)](#)

**Summary No:** 17

**Location:** Isabella Pond

**Minute distribution:** [Sch 2 2.2\(a\)\(ii\)](#)

**Date:** Wednesday 31.10.18













**Time:** 1:00pm – 2:00pm

### Southern Wetland:

1.	Weed spraying has been effective. Monitor the fortnightly spraying team to ensure that the spray and ratios are having a continued effect and that they are hitting all affected areas. As we are now in a growing season, the weed spray is most effective as the plants absorb the poison faster.
2.	The grass around the wetlands also needs to be maintained. Brushcut/mow the existing grass within the sites boundaries to ensure the site is both well maintained and safe.
3.	As the weir wall is soon to be completed and the valves shut to fill the pond again, a team should be sent to finalise any re-plants required in the southern wetland. There are minimal areas, but still some spots where damage has occurred and should be re-planted.

### Northern Wetland: Refer to following page for image references

1.	The bird netting around the sediment basin at the eastern end has been severely damaged and collapsed in places. It appears that any debris/rubbish that comes down through the stormwater is getting caught in the netting and damaging it. Guideline advised that the bird netting for that area will be removed.
2.	There is a build up of leaf litter, soil and rubbish around the sediment basin. This will need to be cleared out to allow for re-plants as there are a few bare areas within the banks of the sediment basin.
3.	The weir between the sediment basin and the remained of the northern wetland has suffered from washout. The jute matting surrounding both the weir rocks and the log roost need to be re-pinned or extra pins added to ensure this doesn't continue with every heavy flow. Plants should be planted along the washout area to help stabilise.
4.	The weeds on the northern wetland are getting out of hand. To avoid a repeat of the southern wetland I encourage the spraying team to pay particular attention to the northern wetland while the wetland is dry and eligible for spraying. The worst areas are around the edges of the bird netting and rock wall. However the whole wetland is in need of weed management. These weeds need to be controlled. Luckily the plants are growing rapidly and are easily identifiable amongst the weeds, which should result in minimal plants deaths from accidental spraying.
5.	There are large bare patches all over the northern wetland that need re-planting. More bare areas may become apparent following the spraying.
6.	The grass around the wetlands also needs to be maintained. Brushcut/mow the existing grass within the sites boundaries to ensure the site is both well maintained and safe.

1 & 2.			
3.			
4.			
5.			

**From:** "Taylor, Nick"  
**Sent:** 04/11/2018 10:10 PM  
**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Subject:** RE: Duck and Wildlife Management [SEC=UNCLASSIFIED]

Who'll be the inspector/Supervisor ?

---

**From:** Oxborrow, Stuart  
**Sent:** Wednesday, 31 October 2018 10:56 AM  
**To:** McGrath, Michael <Michael.McGrath@act.gov.au>  
**Cc:** Taylor, Nick <Nick.Taylor@act.gov.au>  
**Subject:** FW: Duck and Wildlife Management [SEC=UNCLASSIFIED]

Michael,

For your info.

Regards,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502 | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)**  
 Capital Works, Transport Canberra and City Services Directorate | ACT Government  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

---

**From:** Sch 2 2.2(a)(ii) <[REDACTED]@guidelineact.com.au>  
**Sent:** Tuesday, 30 October 2018 4:34 PM  
**To:** Sch 2 2.2(a)(ii) <[REDACTED]@pes.net.au>  
**Cc:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Subject:** Duck and Wildlife Management

Hi [REDACTED]

As requested, I've drafted a Wildlife management plan for the Isabella Ponds. The management plan will be in place whilst the consolidation period is active.

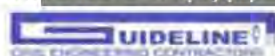
Attached is the management plan draft and proposed signage for your information.

Please provide any feedback by COB Thursday 1/11/18 to ensure we can have the signs made up ASAP.

Kind regards,

[REDACTED]

**Sch 2 2.2(a)(ii) | Project Manager | Isabella Weir Upgrade**  
 16B Bass Street, Queanbeyan NSW 2620  
 PO Box 537, Queanbeyan NSW 2620  
 E: Sch 2 2.2(a)(ii) <[REDACTED]@guidelineact.com.au>  
 M: Sch 2 2.2(a)(ii) <[REDACTED]>



**From:** "Sch 2 2.2(a)(ii)" <[redacted]@pes.net.au>  
**Sent:** 06/11/2018 6:14 PM  
**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>; "Sch 2 2.2(a)(ii)" <[redacted]@guidelineact.com.au>  
 "Sch 2 2.2(a)(ii)" <[redacted]@guidelineact.com.au>; "Sch 2 2.2(a)(ii)" <[redacted]@guidelineact.com.au>  
 "Sch 2 2.2(a)(ii)" <[redacted]@guidelineact.com.au>; "Webber, Simon" <Simon.Webber@act.gov.au>; "Sch 2 2.2(a)(ii)" <[redacted]@alluvium.com.au>; "Sch 2 2.2(a)(ii)" <[redacted]@smec.com>; "McGrath, Michael" <Michael.McGrath@act.gov.au>; "Sch 2 2.2(a)(ii)" <[redacted]@pes.net.au>; "Sch 2 2.2(a)(ii)" <[redacted]@pes.net.au>; "Sch 2 2.2(a)(ii)" <[redacted]@pes.net.au>; "Sch 2 2.2(a)(ii)" <[redacted]@pes.net.au>; "Sch 2 2.2(a)(ii)" <[redacted]@envirolinks.com.au>  
**Cc:** "Crocker, Leigh" <Leigh.Crocker@act.gov.au>; "Smith, Darren" <Darren.Smith@act.gov.au>  
**Subject:** IWW Closeout Meeting minutes  
**Attachments:** Minutes CloseoutWorkshop 30 Oct 18.docx, Minutes CloseoutWorkshop 30 Oct 18.pdf

All attendees  
 (and apologies FYI)

Attached are draft minutes of last week's Closeout Workshop.

Please respond promptly with corrections if you identify anything wrong or odd. I plan to issue the final version of Friday.

Regards

"Sch 2 2.2(a)(ii)"

Director, Professional Engineering Service Pty Ltd  
 3/6 St Georges Crescent, Drummoyne NSW 2047  
 Phone 02 9181 2960, Mobile [redacted]





## GC21 Project Close-out Workshop

### Isabella Weir and Wetlands project

Client: ACT Government, Chief Minister, Transport Canberra and City Services (TCCS) – Land Release Infrastructure (LRI) section

Contractor: Guideline ACT

Contract number: 2017.22501.330

**Tuesday 30 October 2018 at 12:30pm**

**at**

**Nature Conservation House, Belconnen, ACT**

Facilitator and Minutes: Sch 2 2.2(a)(ii)

Sch 2 2.2(a)(ii)



**Close-out Workshop** ref GC21 Clause 70

**MINUTES**

**Welcome by Facilitator**

Facilitator [REDACTED] (PES) welcomed participants and described the objective of the Workshop being to wrap up the process of monitoring the project as per the GC21 contract. The start up meeting sets up the criteria for assessment of the project and the close out meeting is to determine the success of the project based on these criteria: The purpose of the workshop is to

- Provide a realistic assessment of overall performance by the workshop participants.
- Review the management processes of the contract.
- Collect and provide feedback to the parties on things such as design, the contract documents, communication and co-operative contracting strategies and relationships, with the aim of enabling participants to improve the overall communication and management process for any future contracts

**Introduction of Participants**

The workshop was attended by representatives of the various parties involved in the management of the contract and delivery of the project. Participants were:

Name	Organisation / Position (for context)	Contacts
Sch 2 2.2(a)(ii)	Professional Engineering Service Pty Limited: Facilitator	Sch 2 2.2(a)(ii)
	Guideline ACT P/L Contractor's Authorised Person	
	Guideline ACT P/L Contractor's Senior Executive	
	IFCW Civil Senior Procurement Officer	
	Alluvium Wetlands designer	
	SMEC Weir Designer	
<b>Stuart Oxborrow</b>	TCCS-LRI Client's Representative	Stuart.Oxborrow@act.gov.au 0419 333179
<b>Michael McGrath</b>	TCCS-LRI Senior Manager, Client's Representative	michael.mcgrath@act.gov.au 0403 939920
Sch 2 2.2(a)(ii)	TCCS-LRI Surveillance Officer	Sch 2 2.2(a)(ii)
Sch 2 2.2(a)(ii)	IFCW Acting Principal's Senior Executive	Sch 2 2.2(a)(ii)
<b>Nick Taylor</b>	IFCW Senior Project Officer	Nick.Taylor@act.gov.au 6207 0118
Sch 2 2.2(a)(ii)	Professional Engineering Service Pty Limited Principal's Authorised Person after 8 Nov 18	Sch 2 2.2(a)(ii)
	Professional Engineering Service Pty Limited Principal's Authorised Person	
	Envirolinks Design Landscaping Surveillance Officer	

Apologies: Darren Smith: Principal's Senior Executive  
Leigh Croker: TCCS-LRI Leigh.Crocker@act.gov.au



## Opening Statements

*describing each organisation's overview of the contract and the project*

### ACT TCCS-LRI - Principal - Michael McGrath

Isabella Weir and Wetlands Project is a complex project with considerable stakeholder management. The project team has successfully engaged and incorporated community and Commonwealth Healthy Waterways requirements. The way in which the project has been delivered has minimised the impact on the adjacent community while maximising the future amenity for that community.

The wetlands has had great success in improving water quality and habitat rehabilitation including:

- Carp removal for water quality improvement minimising invasive species mitigation
- Slurry and soil substrate removal from the pond; and
- Reuse of removed sediment across project with Guideline exhibiting great innovation in this area

The team has managed risk well throughout the construction stage of the project. The need to manage a Dam Safety Emergency Plan and all of the additional requirements of the new ACT Dam Safety Code have been discharged efficiently and effectively. While careful thought was given to the staging and safety needs of the project at the design stage, the willingness and ability of the team to put safety at the forefront of everyone on site is acknowledged.

The whole team has had a "what is best for project" as issues have arisen and needed to be resolved. The team has drawn on the strengths and abilities of members in the development of solutions to issues. The team anticipated issues and sought to proactively implement strategies to minimise the potential impact of these issues. Good examples include the workshops with the concrete placers and the concrete suppliers to make them aware of the needs of the project and our expectations.

Working relationships were strong throughout the project. Overall project attitudes and behaviours have been positive and desired. Continued open communication ensured behaviours and attitudes were maintained in a beneficial way. It was the strength of these relationships that enabled the "hard conversations" to be held. This was evident when we needed to modify the mix design and incorporate design changes.

Good use of the provisions of the GC21 contract meant that early warnings were given and the cooperative way that the team worked meant that the impact on quality, time and cost have been well managed. This was recognised and the scores given in the regular Team Performance and Evaluation Monitoring reflect this recognition.

This has been a complex project well delivered that all team members should be pleased to have on their work history.

### Guideline ACT – Contractor's Authorised Person Sch 2 2.2(a)(ii)

Sch 2 2.2(a)(ii) started late on the project and re-learned Canberra. Thanks for the opportunity.

Sch 2 2.2(a)(ii) review of history was illuminating showing hurdles met by the team and addressed.

On site he recognises project pride from ground level to the top.

Clear goals are given to all. Some aspects are challenging (such as quick changes in water levels).

Wants to walk away recognising a job well done, safe and on time.

### Guideline ACT – Contractor Sch 2 2.2(a)(ii)

Project for Guideline commences late 2016. For them it was a targeted project and since being awarded is their signature project.

Sch 2 2.2(a)(ii) recognises all elements of the team.

The job works due to good communications. Sometimes it isn't easy but the job is done.


**ACT TCCS-LRI - Principal - Nick Taylor**

The Isabella Weir/Wetland has run for over four years from concept to completion, and most have survived the process, which is usually a good indicator of a successful project.

All projects have their specific challenges, and we have had ours as a team at the concept, planning, design, procurement, and construction. These challenges have been overcome, and most of the people present here along with their organisations help have seen the project through to a successful outcome, and most important of all with relationships intact.

On behalf of IFCW we would like to thank our client (Partnering Directorate) for allowing IFCW to be inclusive in many aspects of the project, to the PAP and his team for allowing us to work closely to overcome any issues, to the design team and especially to Sch 2 2 2(a)(ii) for carrying this project through the design and construction period, and to the contractor who has been resilient and steadfast in their approach. Thank you to Leigh Crocker and his team for introducing his immense knowledge in many aspects of the project to help it to a successful conclusion.

We should also thank those who have contributed to the project who have moved on.

IFCW has learnt many lessons, and will take those lessons on to better improve our performance for future projects.

**ACT PES - Principal's Authorised Person - Sch 2 2 2(a)(ii)**

My description of the project is a heavy engineering project conducted in a high-risk environment. That is, it is a massively reinforced concrete structure located in a creek with a propensity for flash flooding. It is a piece of civil infrastructure which is exceedingly difficult to repair, so the design and construction was carried out to achieve a nominal 100 year design life.

The wetlands were similarly high-risk because of construction in a creek, but were not technically challenging as the weir was.

I joined the project 10 April 2017 which was about 2 months after the contract was awarded.

Weather was extremely kind to the project with drought conditions persisting throughout the contract period. A number of rainfall events affected progress, but less than what might be expected in an "average" season.

It has been a pleasure to work with Guideline ACT Pty Ltd and its team. Similarly, the relationship between Professional Engineering Service Pty Ltd and the ACT Government in provision of PAP services (from my viewpoint) has been positive and fruitful. PAP relationships with SMEC and Alluvium have been cordial and effective.

High points and Issues for Improvement are documented later in this report. The opening statements did draw comment on an all parties difficulty with the Watermain relocation.

**ACT SMEC - Designer - Sch 2 2 2(a)(ii)**

The whole team should be proud.

Enjoyed the cooperative efforts of Client, PES, Guideline etc.,

**ACT Alluvium - Wetlands design - Sch 2 2 2(a)(ii)**

Noted initial design can't always be accurate.

Worked through issues constructively.

## Recap of planning made in Startup Workshop

**A GC21 Startup Workshop was held followed by an Inception Meeting.**



The Startup Workshop provided planning for the monthly Evaluation and Monitoring meetings using the model GC21 Performance Evaluation template: with rating system running from 1: unsatisfactory to 5: excellent.

The contract objectives adopted for the construction contract implementation in the context of the GC21 Team Performance Evaluation process (GC21 model Attachment 2 plus several items relevant to roadworks in ACT:

<b>Criterion and Contract Clause Reference</b>	<b>Concepts Guiding Measurement</b>
<p><b>Communication and Contract Relations</b></p> <p>3 co-operation between parties            4 duty not to hinder performance            5 early warning            6 evaluation and monitoring            13 – 20 compliance with ACT Government Requirements            16 and Schedule 11: industrial relations management            31 – 34 Subcontractor, Supplier and Consultant performance</p>	<p><i>Open, honest, transparent and timely communication at all levels (early warning).</i></p> <p><i>Solutions oriented. Key is communications; sharing information</i></p> <p><i>Avoid surprises.</i></p> <p><i>Discuss first, confirm in writing. Context is relevant</i></p> <p><i>Timely response to an issue / reporting</i></p> <p><i>Avoiding repeats</i></p> <p><i>It isn't only when something is going wrong</i></p> <p><i>Effective Leadership including giving clear priorities when needed</i></p> <p><i>Enjoy working together. Celebrate successes</i></p>
<p><b>Time</b></p> <p>25 time management            54 extensions of time            69 Completion by Contractual Completion Dates</p>	<p><i>Contractor to plan program carefully and update regularly. (it belongs to Contractor)</i></p> <p><i>Achieve conforming initial program and updates</i></p> <p><i>Weekly/monthly site level assessment tracking site progress</i></p> <p><i>Planning and coordination to meet GC21 milestones</i></p> <p><i>Programming performance influences other elements. Eg</i></p> <p><i>SMEC construction certification</i></p> <p><i>Attention to community advice, briefing Minister;</i></p> <p><i>Environmental – for site inspection; seasonality of rainfall, temperature</i></p> <p><i>Managing WHS risks – Risk Register must be constantly reviewed and updated; Immediate reporting on WHS incidents</i></p>
<p><b>Cost</b></p> <p>52 Variations            61 Prepayment            63, 65 payments, final payment</p>	<p><i>ACT want contractors to make reasonable profit, not lose money so they can do more jobs</i></p> <p><i>Contractor wants ACT to achieve Value for Money; look for innovations to reduce costs</i></p> <p><i>Each party looks to the interests of the other.</i></p> <p><i>Note less time → lower costs and other benefits such as traffic impact reduction</i></p> <p><i>Costing of changed elements</i></p> <p><i>Progress claims and payment agreed and on time</i></p>
<p><b>Quality</b></p> <p>17 quality standards            42-45 Design requirements            43, 44, 48 fitness for purpose            46 innovation            50 Faults, Defects rectification            69 defect-free Completion            71 after Completion            Schedule 12: Quality Management Requirements</p>	<p><i>Avoid repeated nonconformances; many lots with NCR with repeat dispositions.</i></p> <p><i>Close out NCRs promptly.</i></p> <p><i>Practical application of specification and TECs.</i></p> <p><i>Experience of the team – in application of QA</i></p> <p><i>Effective RFI process</i></p> <p><i>Compliance with contractual requirements leading to Lot conformance – survey, testing, records</i></p> <p><i>SMEC verification process</i></p> <p><i>Discuss issues ahead of time</i></p> <p><i>Supervision of Subcontractors</i></p> <p><i>CAR response – avoid issues</i></p>



<b>Criterion and Contract Clause Reference</b>	<b>Concepts Guiding Measurement</b>
<p><b>Safety</b></p> <p>15 work health and safety management Schedule 10: Work health &amp; safety</p>	<p><i>Note that the site is unforgiving</i></p> <p><i>Safety not just implementation – planning and proactive monitoring.</i></p> <p><i>Management of modified scope has safety being considered</i></p> <p><i>Keep all stakeholders informed of critical incidents.</i></p> <p><i>No cover ups: be honest</i></p> <p><i>Reports need to be properly researched and recorded. Being complete and accurate leads to improvement</i></p> <p><i>Culture of Safety is REAL. Do the workers believe?</i></p> <p><i>Treat everyone the same – all must comply</i></p> <p><i>13 week cycle for Active Certification Audits.</i></p>
<p><b>Claims and Issue Resolution</b></p> <p>Sched 5 Valuer 72 Claim resolution 73, 74 Issue resolution 75, Sched 6 Expert Determinations</p>	<p><i>Resolve issues and claims early and at an appropriate level – initially at site with elevation to SE as needed.</i></p> <p><i>Fair and reasonable proposals and assessments</i></p> <p><i>Meeting the contractual information requirements</i></p> <p><i>Advice that a claim is coming</i></p> <p><i>Framework for recording and processing claims</i></p> <p><i>Notification under Clause 5 can lead to discussion and recording before change status is agreed.</i></p> <p><i>Timely resolution and closeout.</i></p>
<p><b>Environment</b></p> <p>18, 29 energy &amp; water conservation, waste management, resource conservation, pollution reduction, protection of environment, healthy work environment</p> <p>Schedule 13: Environmental management</p>	<p><i>Communication key to planning, getting adequate advice</i></p> <p><i>Allocate time for inspections and actions resulting from inspection</i></p> <p><i>Effective action on issues</i></p> <p><i>Take issues seriously → plan to deal with issues before they arise if possible: incorporate in Contractors work planning.</i></p> <p><i>Early action is most effective</i></p> <p><i>Controls need to change as the site changes</i></p> <p><i>Certifications required under CEMP</i></p>
<p><b>Community / Stakeholder Relations</b></p>	<p><i>Local residents are sensitive. Need to be notified of anything affecting them. (Communicate through Client).</i></p> <p><i>High level of Political interest; wish to get involved.</i></p> <p><i>Make communications part of the day-to-day processes, planning</i></p> <p><i>Avoidance of repeat complaints.</i></p> <p><i>Toolbox method for talking to community - anticipating the issues</i></p> <p><i>Communicate traffic planning</i></p> <p><i>Facilitate providing information for meetings with stakeholders</i></p> <p><i>Public perception of pond and wetlands and fauna management: informing community on reasons actions are being done.</i></p> <p><i>Interface with adjacent projects</i></p>
<p><b>Traffic</b></p>	<p><i>Relationship with RoadsACT – manage TTMs</i></p> <p><i>Be mindful of approval lead time.</i></p> <p><i>Advising road users of coming restrictions / staging</i></p> <p><i>Advise RoadsACT early of running late; and of incidents</i></p> <p><i>Adequate provision for pedestrians and cyclists</i></p>

The Inception Meeting addressed the planning elements of a Preconstruction Meeting. It was particularly valuable on this project as it assisted GLA's comprehension of pre-commencement requirements on an ACT contract under GC21 – this being their first contract using these. The meeting was timed just before the normal Christmas Closedown period which meant that GLA could use otherwise quiet time for constructive planning.



## GC21 Concepts

The Facilitator revisited the GC21 general conditions provisions and elements applicable to relationship concepts: Tools used to define and monitor performance include the, start up workshop and monthly monitoring of performance against the determined GC21 performance criteria. Key aspects of GC21 are early warning, co-operation in all matters, and duty to not hinder the performance of each party.

Contract references for the co-operation clauses are:

- Clauses 1 – 6 dealing with roles and relationships and guiding the application of the cooperation concept.
- In particular, Clause 6 – Evaluation and Monitoring
- Clause 32 – Start-up Workshop
- Clause 66 – Close-out Workshop.

## Issues and Opportunities

**Positive points** PT notes led discussion

- Communication between the PAP and CAP was particularly effective with a (as I perceive) joint commitment to “best-for-project” decision-making.
- Guideline demonstrated real ability to plan and build the project with genuine commitment to programming and quality processes.
- The temporary walls were a particularly effective means to building the weir widening.
- Guideline demonstrated honesty and fair-dealing in all matters of contractual variation.
- Effective communication between the designers and PAP (both Weir and Wetlands) allowed “Principal’s Representative”/PAP/CAP/designer interaction to solve design and construction problems relatively quickly.
- Consistency in the Principal’s team from start to finish helped communications and dealing with issues.
- The weir widening was an unusual and technically challenging structure. It has been satisfying both organisationally and personally to meet that challenge.
- MM: Getting expectations to the people doing the building was done well: and understanding why something was done communicated to the coal face. NT noted that people on the job don’t have as strong a background in (specialist) understanding.
- Acknowledged that the contractor is responsible for all work: Can’t assign to QA subcontractors.

**Comment on Neutral Issues for the project:**

- Specifications are difficult to use in the way they are set out: some difficult to read with references needing to be resolved between plans, standard ACT specifications, the Technical Exemption Clauses, and numerous standards. It is understandable to have a level of complexity because a weir widening is well outside of business-as-usual, but the level of integration could be improved.

The setout is different to other States’ models.

The Construction Report is a large requirement but well specified.

**Issues for improvement - for project:**

- Watermain work was added as a Variation Order and caused huge issues.
  - Contractors should deal with bodies such as Icon Water directly. Involving the PAP as a mandated go-between indicates a misunderstanding of the role of PAP on the part of the service authorities. PAP is part of the Principal’s team and subject to direction by the Principal (in contrast to the Superintendent under AS2124-type contracts). Involving the PAP in this way creates the possibility of Principal-induced delays to the contractor.



- The water main has absorbed inordinate amounts of time from all parties for many different reasons. I suggest a specialised contractor or sub-contractor dealing directly with Icon Water would have been more effective.
- MM: agrees with aim to seek to make this sort of work the responsibility of others, as early works (like the Gas Main) or excised from the site.
- ZD: Shouldn't define the project because of difficulties like this. The issue is the responsibility of the project and could have been managed better: it received less attention as priority appeared less than other project elements. Poor design is only an excuse. Professional management should cope.
- The extensive Quality Control process undertaken by the Operational Acceptance (et. al) team is inconsistent with the Quality Assurances processes inherent to the GC21-based (or AS2124 if that is used) contract. I suggest these post-construction quality control processes be abandoned, or at least very explicitly specified and costed if they must persist.
  - JS: It is important to know that the Validation Requirements are there variously.
  - ZD: Certification is more difficult than it needs to be
- Presence of the Principal's Senior Executive on-site every (say) 2 months would be a helpful means of providing an informal channel to communicate any issues that could be "headed-off" before they become critical. This project was not in great need of this due to effective on-site communications and sustained good will.
- Completion Amount under the GC21 should not be used. It is an unnecessary imposition on contractors where bank undertakings are already in place to guarantee performance.

#### **Issues for improvement – general:**

- The quality specification utilised is not specific enough and relies too heavily on the AS/NZ/ISO quality standards. I suggest adoption of the NSW Roads and Marine Services or the Qld Transport and Main Roads' quality standards (and move to their new standards as those organisations invest to develop updated standards).
- Payment should be explicitly linked to passed lots under the quality system. In my experience, this takes additional administrative effort, but is well worthwhile and is the only thing that really drives real improvement in quality systems. Implementation of this would need to be strongly up-front in tender briefings etc.

#### **GC21 Performance Evaluation meetings**

JS- GC21 requires that the performance of the team is tracked and reviewed.

PT- Provided record of the scoring at each meeting.

This meeting discussed the final trends observed and provided comment on performance within each performance measure.

#### **Evaluation & Monitoring learnings**

*discussing trends, success factors, difficulties*

The performance evaluation and monitoring process outlined in GC21 and as planned at Startup was applied in regular meetings and the trend of results was tracked on the detail provided by PT.

The scoring sheet prepared for each evaluation and monitoring meeting provides justifications for results – whether scored high or low

Appendix 2 shows a summary of the project's Evaluation Meeting Scoring and trend graphs for each measure.

Reiterated that scoring at evaluation meetings is intended to be subjective showing how the project is performing from each individual's point of view. The result of this is having the pressure one (+) person has in a measure field being reflected in a poorer score. If an issue discovered within a month tends to draw a score down reducing the average on the indicator measure. The meeting gives the opportunity to discuss and share the individual's impressions. Issues were always dealt with promptly.



The GC21 process of cooperation and has been demonstrated by the responses following each meeting: while there is a generally level trend. Trends are generally level with positive scores, and any drops were addressed promptly.

<b>Communications and Contract Relations</b>	The project benefitted from enthusiastic and consistent interaction throughout: the parties being committed to work cooperatively and communicate effectively.
<b>Time</b>	Well managed by GLA: with forecasting and working to it. Programs were genuine and compliant.  NT kept a Risk Register which showed 6-7 weeks behind at one stage. Time was recovered by being innovative and thoughtful.  Eg when the Client looked at some requirements and asked if they were necessary a practical approach with some changes was applied.  NT: The acceptance of the original RFT to change construction period was commendable.  Wetlands progress has been slower than desired due to priority being given to the Weir: could have been better.
<b>Cost</b>	Client side: Unanticipated large increase due to steel cost: quantity estimate was inaccurate and its discovery should have been earlier: PSC briefs for items like estimating could be tightened.  Variations: GLA claims were fair and reasonable. Client dealt fairly with GLA and the job went to expectation.
<b>Quality</b>	QA requires focus on Checklists → doing things right rather than putting things right. ie need to effectively manage the process. Planning was good.  Attention to Validation Requirements was familiar and applied.
<b>Safety</b>	Active Certification Process drove close scrutiny and all had favourable results. (Michael Whitehouse)  There were 2 Prohibition Notices (one unlucky due to timing and the other unfortunate) NT was able to negotiate to mitigate effect.  When visiting site the Client observes safety is always paramount. The site was always neat and tidy and this improves the attitude to safety.
<b>Claims and Issue Resolution</b>	Were always resolved early in a well planned process with quick communications between all parties: Client, design and construction.
<b>Environment</b>	In ACT environmental performance is closely scrutinized.  The project built early trust with the EPA.
<b>Community / Stakeholder Relations</b>	Appropriate effort (good communications) was put in up front.  Appropriate planning to keep material movements within the site helped.  GLA were effective and IFCW gave solid support.
<b>Traffic</b>	Site was not particularly challenging for traffic as there was little on road impact apart from accesses and signage – both well done.  Management of cycle interface was effective.

## **NEW CONCERNS, SOLUTIONS and INNOVATIONS**

The issues were identified in the opening statements and other detailed comments above.



## Closing statements

- Benefits of the Workshop
- Aspirations for the project

### **ACT TCCS-LRI** - Principal - Michael McGrath

Isabella Weir and Wetlands Project is a complex project delivered using GC21 in the way intended.  
All who worked on the project should be proud to have on their work history.

### **ACT TCCS-LRI** - Principal - Nick Taylor

A point of difference has been established on this project – going the extra mile.  
Demonstrated advantages of good communications.

### **ACT PES** - Principal's Authorised Person - Sch 2 2.2(a)(i)

Offered construction proverbs:

- Not to look for perfection, just excellence.
- Contractors approach is always to solve the next problem.
- Many were involved in depth. Applause goes to those in the work arena: Guideline.

### **Guideline ACT** – Contractor's Authorised Person Sch 2 2.2(a)(ii)

Had 8 months on site and learned a lot.  
Enjoyed the experience.  
Good communications. Sometimes it isn't easy but the job is done.

### **ACT IFCW Civil - Senior Procurement Officer** - Simon Weber

The whole team worked hard.  
Resolved issues. Success has opened the market to those less able than GLA.  
GLA has proved their capability to take on complex jobs.

### **ACT Alluvium** - Wetlands design - Sch 2 2.2(a)(ii)

This job is different in scope to most.  
Came to the project late in its development and able to introduce design innovations.

### **Minutes/ Prepared by :**

#### **Facilitator** - Sch 2 2.2(a)(ii)

Minutes Closeout Workshop 30 October 2018  
Dated 6 November 2018



APPENDIX 1: GC21 Closeout Workshop Attendance Sheet

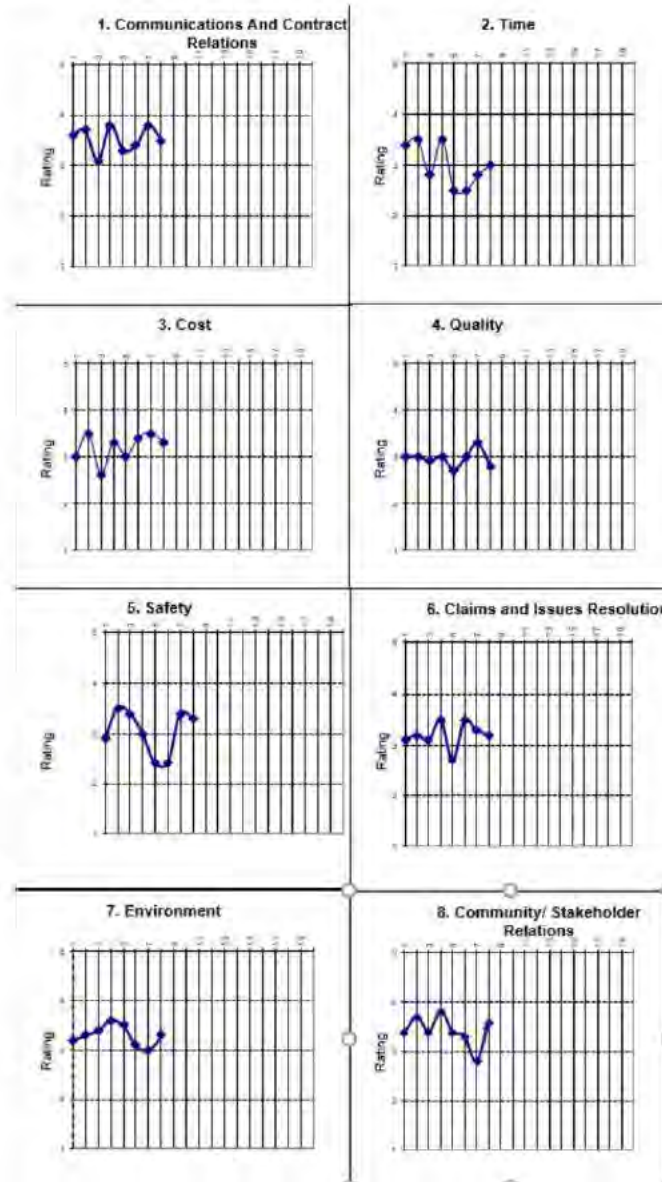
IWW Closeout

Name	Organization	Contact
Sch 2 2.2(a)(ii)	CLA Guideline Act P/L	Sch 2 2.2(a)(ii)
SIMON WEBBER Sch 2 2.2(a)(ii)	IFCW CIVIL ALLUVIUM SMEC	
Stuart Oxborrow MICHAEL M'GRATH	TCCS-LRI TCCS-LRI TCCS LRI	
Sch 2 2.2(a)(ii) Andrew Paterson NICK TAYLOR	IFCW IFCW	
Sch 2 2.2(a)(ii)	PES PES PES EnviroLinks Design.	



**APPENDIX 2: GC21 Evaluation Meeting Scoring Summary:**

Meeting	1. Communications And Contract Relations	2. Time	3. Cost	4. Quality	5. Safety	6. Claims and Issues Resolution	7. Environment	8. Community/ Stakeholder Relations	9. Traffic	
1	3.6	3.4	3.0	3.0	2.9	3.1	3.2	3.4	3.0	15-05-17
2	3.7	3.5	3.5	3.0	3.5	3.2	3.3	3.7	3.3	26-06-17
3	3.1	2.8	2.6	2.9	3.4	3.1	3.4	3.4	3.3	07-08-17
4	3.8	3.5	3.3	3.0	3.0	3.5	3.6	3.8	3.8	18-09-17
5	3.3	2.5	3.0	2.7	2.4	2.7	3.5	3.4	3.0	05-03-08
6	3.4	2.5	3.4	3.0	2.4	3.5	3.1	3.3	3.6	17-04-18
7	3.8	2.8	3.5	3.3	3.4	3.3	3.0	2.8	2.9	12-06-18
8	3.5	3.0	3.3	2.8	3.3	3.2	3.3	3.6	3.2	09-07-19



**From:** "Harris, KimM" <KimM.Harris@act.gov.au>  
**Sent:** 06/11/2018 8:11 AM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Subject:** RE: Isabella: Daily diaries and Photos 22 Oct to 26 Oct 2018 [SEC=UNCLASSIFIED]

All done ☺

Regards

*Kim Harris*

Kim Harris | Senior Project Officer | Civil Infrastructure & Capital Works Branch  
 Phone 02 6207 9361 | Fax 02 6207 5564 | Mobile 0466 026 015 | email KimM.Harris@act.gov.au  
 Infrastructure Finance and Capital Works | Chief Minister, Treasury and Economic Development Directorate | ACT Government  
 Level 2 Nature Conservation House, Cnr Benjamin Way and Emu Bank Belconnen 2617 | ACT Procurement, GPO Box 158 CANBERRA ACT 2601  
 | [www.act.gov.au](http://www.act.gov.au)

 Please consider the environment before printing this e-mail. **Be Green** - read on screen

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**From:** Taylor, Nick  
**Sent:** Tuesday, 6 November 2018 7:39 AM  
**To:** Harris, KimM <KimM.Harris@act.gov.au>  
**Subject:** FW: Isabella: Daily diaries and Photos 22 Oct to 26 Oct 2018 [SEC=UNCLASSIFIED]

Only If you have time .

Thanks Nick

---

**From:** [Sch 2 2.2(a)(ii) @pes.net.au] [Sch 2 2.2(a)(ii) @pes.net.au]  
**Sent:** Sunday, 4 November 2018 6:09 PM  
**To:** Taylor, Nick <Nick.Taylor@act.gov.au>; Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Cc:** [Sch 2 2.2(a)(ii) @pes.net.au]; [Sch 2 2.2(a)(ii) @pes.net.au]  
**Subject:** Isabella: Daily diaries and Photos 22 Oct to 26 Oct 2018

Nick and Stuart

As requested, please find a link below from which the project diaries and photos for the above period can be downloaded.

[https://www.dropbox.com/sh/cf0i6x9j5ylj99u/AAxDxSAjGeKKIZEbE2D\\_Zxaa?dl=0](https://www.dropbox.com/sh/cf0i6x9j5ylj99u/AAxDxSAjGeKKIZEbE2D_Zxaa?dl=0) (expiry 30 days)

Regards

[Sch 2 2.2(a)(ii)]

Professional Engineering Service Pty Limited ACN 057 633 897  
 Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project  
 Mobile [Sch 2 2.2(a)(ii)]

**From:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Sent:** 07/11/2018 5:06 PM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Cc:** "McGrath, Michael" <Michael.McGrath@act.gov.au>  
**Subject:** FW: Smec Billing [SEC=UNCLASSIFIED]  
**Attachments:** SMEC billing.xlsx, IWU -- Construction Monitoring Overrun of Hours and Billing, IWU Estimate to Complete

Nick,

As discussed, as shown on the attached spreadsheet Smec's explanation regarding the extra time they have spent on the project (see attached email of 10 August) is not consistent with their 'estimated fees to completion' summarised in their email of 02 October (also attached). It is also not clear from their summary of 10 August whether they propose to claim all the 'actual hours' referenced in Table 3, or whether this is just to demonstrate how much time has been spent on the project.

Please ask Smec to re-submit the summary report of 10 August, but with Table 3 clearly outlining the '*proposed total hours to be claimed to 30 October*' (rather than '*actual hours to date*'), with a clear statement saying that this is the full and final cost claim for all work up to 30 October. The difference between the original '*budgeted hours*' and the '*proposed total hours to be claimed*' in Table 3 should be consistent with the 'invoice summary sheet' submitted with the most recent progress claim. The report should justify the difference between the original '*budgeted hours*' and the '*proposed total hours to be claimed*'.

They should also include an updated forecast cost to Completion from 01 November onward, reflecting (amongst other things) the latest agreed first fill strategy.

Happy to discuss this with Smec if they further clarification.

Thanks

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502** | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)  
Capital Works, Transport Canberra and City Services Directorate | ACT Government  
GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

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**From:** McGrath, Michael  
**Sent:** Wednesday, 7 November 2018 12:03 PM  
**To:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>; Taylor, Nick <Nick.Taylor@act.gov.au>  
**Subject:** Smec Billing [SEC=UNCLASSIFIED]

Stuart, Nick

I have attached my spreadsheet of the current SMEC billing. The information of total billing from 18 July to 30 September is all over the place.

Regards

Michael

**Michael McGrath | Senior Program Manager – Land Release Infrastructure**  
**Phone 02 6207 1491** | Mobile 0403 939 920 | Email: [michael.mcgrath@act.gov.au](mailto:michael.mcgrath@act.gov.au)  
Capital Works, Transport Canberra and City Services Directorate | ACT Government  
GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

Item	Team Member	SMEC Total Hours to 18/7	INV 29/8	INV 30/9	SMEC Total Hours to 30/9	SMEC 18/7 + invoices	Difference f and G
15ii	Sch 2 2.2(a)(ii)						
15iii							
16							

**From:** "Sch 2 2.2(a)(ii) [REDACTED]@smec.com">  
**Sent:** 10/08/2018 5:14 AM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Cc:** "Sch 2 2.2(a)(ii) [REDACTED]@smec.com"; "Sch 2 2.2(a)(ii) [REDACTED]@smec.com">  
**Subject:** IWU – Construction Monitoring Overrun of Hours and Billing  
**Attachments:** Var 03 Proposal SPB 180810.pdf, GBell\_CasualTimeSheet\_Attachment 1.pdf, Attachment 2\_INV0105233.pdf, RFI and NCR Spreadsheet Isabella 2018\_08\_Attachment 3.pdf

Nick,

Attached is an explanation of the hours spent on this project so far and the projected costs to completion are attached in the enclosed letter and attachments along with a request to vary the contract to cover the overrun.

You will need a bit of time to read and absorb so it is probably probably a good idea if we schedule a catch up mid next week to discuss these and any other issues. Meanwhile please give me a call if you have any questions.

Regards,

Sch 2 2.2(a)(ii) [REDACTED]

Senior Structural Engineer

T Sch 2 2.2(a)(ii) [REDACTED]

E Sch 2 2.2(a)(ii) [REDACTED]@smec.com

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 www.smec.com

10/08/2018

Our Ref: 2017/6473/3002581/003 Var 03

Infrastructure, Finance Capital Works  
 Level 2 Nature Conservation House,  
 186 Emu Bank  
 BELCONNEN ACT 2617

Attn: Mr. Nick Taylor, Senior Project Manager

Dear Nick,

**RE: Contract No 2014.22501.313 – Isabella Weir Upgrade Design and Construction Monitoring Construction Phase Services**

As requested by IFCW SMEC has conducted a review of the time allocated to the construction phase services, including the fees invoiced and paid in good faith by IFCW. There has been a considerable overrun on the time spent by key staff members on the project. This has been due principally to the additional time spent on site visits by the Independent Verifier (IV). This additional time has come about due to the resources required to review, verify and approve significant materials and construction methodologies submitted by the Contractor through the PAP.

**Budgeted Hours**

Table 1 below identifies the allocated hours and agreed fees for the Construction Phase services.

*Table 1: Staff allocation and fees – general construction monitoring*

Item	Team member	Task	Allocated Hours	Hourly Rate	Fee
15i	Sch 2 2.2(a)(ii)	GC21 workshop/Contractor liaison/verification and regulatory plans	Sch 2 2.2(a)(xi)		
		GC21 workshop/Contractor liaison/verification and regulatory plans			
		GC21 workshop/Contractor liaison/Verification and Regulatory plans			
		Verification and Regulatory plans			
		Review of stability of partially constructed weir and cut-off walls			
		Review of stability of partially constructed weir and cut-off walls			
			<b>Subtotal</b>		<b>\$20,760.00</b>

Item	Team member	Task	Allocated Hours	Hourly Rate	Fee
15ii	Sch 2 2.2(a)(ii)	Weekly Site Attendance (4 hrs/week including site meetings)			Sch 2 2.2(a)(xi)
		PM			
		Daily Site Attendance (4 hrs/day for two weeks)			
		Foundation Preparation			
		Attendance at critical activities (e.g. foundation preparation, filter placement, etc)			
<b>Subtotal</b>					<b>\$72,000.00</b>
16	Sch 2 2.2(a)(ii)	First Filling Surveillance			Sch 2 2.2(a)(xi)
		First Filling Surveillance			
		Independent Review/Certification			
		Review of Construction report/final certification (Structural / Compliance)			
		Review of Construction report/final certification (Geotechnical)			
		Review of Construction report/final certification (Dam Engineering / Safety)			
		Review of Construction report/final certification (IR)			
<b>Subtotal</b>					<b>\$20,240.00</b>
<b>TOTAL</b>					<b>\$113,000.00</b>

The construction programme available to SMEC in June 2017 showed that the weir upgrade works were due for completion on 24 May 2018, a construction period of 55 weeks, with an allowance of three weeks for the Christmas/New year industry shutdown in 2017/18. No allowance was made for extensions of time due to inclement weather or changes in scope.

A provisional sum was allowed for the treatment of requests for information and ad hoc advice from the designers. Table 2 below shows the allowance made in March 2017 for this task.

Table 2: Staff allocation and fees – design related RFIs (Provisional Sum)

Item	Team member	Task	Allocated Hours	Hourly Rate	Fee
15iii	Sch 2 2.2(a)(ii)	Response to requests for information (RFIs)			Sch 2 2.2(a)(xi)
		Response to requests for information (RFIs)			
		Response to requests for information (RFIs)			
		Response to requests for information (RFIs)			
<b>Subtotal</b>					<b>\$30,640.00</b>

We noted at that time that the above hours and fees were a reasonable estimate of what would be required depending on the following factors:

1. Contractor performance (both time and quality)
2. Number of design RFIs to be reviewed and addressed
3. Encountered ground conditions

#### Actual Hours Spent on Construction Phase Services

Table 3 below contains a summary of hours spent by the SMEC team on the various tasks comprising the construction phase Services.

Table 3: Summary of Construction Phase Hours

Team member	Budgetted Hours					Actual Hours (to 18/07/2018)				
	15i	15ii	15iii	16.0	Total	15i	15ii	15iii	16.0	Total
Sch 2 2.2(a)(ii)	Sch 2 2.2(a)(xi)									
	88	400	128	68	668	63.65 (-24.3)	678.55 (+278.55)	385.3 (+257.3)	0	1127.5 (+511.5)

#### Notes:

1. Actual hours for item 15ii include time spent after 24 May 2018:

- a. Sch 2 2.2(a)(i): 5.6
- b. Sch 2 2.2(a): 12
- c. Sch 2 2.2(a)(ii): 43.8

2. Figures shown thus: (+5.9) indicate difference between budgeted and actual hours.

Table 3 indicates that SMEC has spent considerably more hours on tasks 15ii and 15iii than was anticipated at the beginning of construction and was budgeted. A significant portion of this overrun

has been the time spent by the Independent Verifier (IV) in providing advice and inspecting the works. Attachment 1 provides a detailed breakdown of the tasks undertaken by the IV throughout the course of construction.

### Invoicing

Attachment 2 contains the invoice summary up to and including invoice number INV0105233 issued on 27 June 2018.

There are two components to the overrun on task 15ii:

1. SMEC direct employees' time  
The overrun is a result of hours spent on site attendance and project management beyond 24 May 2018, the anticipated completion date. The overrun represents four hrs per week of Sch 2 2.2(a)(ii) time and one hour per week of Sch 2 2.2(a)(ii) time. While both of these staff members have spent considerably more hours than budgeted during the original construction period, IFCW has not been invoiced for these and we intend not to claim payment for them.
2. IV time  
The bulk of the overrun is the result of attendance at site by the IV to witness construction operations he considers critical to the satisfactory completion of the works. As an independent consultant the IV is expected to exercise independent judgement on his involvement in on-site construction methodologies and practices in order to satisfy himself that the final completed works meets both the design intent and the quality standards to meet ANCOLD and ACT Dam Safety Code provisions; and to protect the interests of the Principal.

Task 15iii is a provisional sum dependent upon the number of RFIs and NCAs passed to us by the Contractor and PAP. Attachment 3 shows the allocation of these hours to each of the RFIs and NCAs that SMEC has received. A large proportion of these costs can be attributed to a limited number of issues, namely:

1. Concrete mix design and trials.
2. Construction methodology for concrete walls, stripping times.
3. Zoned embankment materials approvals and changes to specification.
4. Concrete repair methodologies and materials.

SMEC has endeavoured to liaise with both the PAP and Contractor to resolve RFIs and NCAs in as efficient a manner as possible. Occasionally this has meant additional visits to site discuss directly with the Contractor and achieve solutions. Again the IV has been involved to a greater extent than was anticipated, but this is considered to be unavoidable in order to ensure that the works have not been unduly delayed and the IV is in a position to sign off the works at completion.

We therefore request your approval for a variation to the Fee to take into account the following:

1. Extended construction period (assumed completion is now due on 12 Oct 2018) by 20 weeks.
2. Additional time and site visits spent by the IV in resolving RFI's and materials approvals
3. SMEC project manager attendance at coordination meetings with PAP, TCCS and the Technical Regulator to prepare documentation for the Operating Certificate.
4. At the time of preparing our fee for task 16 the ACT Dam Safety Code had not been finalised (including the requirement for the first filling inspection to be equivalent to a Comprehensive Inspection and Report)

The estimated fees to completion (from 25 May 2018) are shown in Table 4 below:

Table 4: Estimated Fees to Complete

Item	Team member	Task	Allocated Hours	Hourly Rate	Fee to completion
15i					
<b>Task Completed</b>					
15ii	Sch 2 2.2(a)(ii)	Weekly Site Attendance from 25/05/2018 to 12/10/2018 (4 hrs/week including site meetings for 20 weeks)			Sch 2 2.2(a)(xi)
		PM			
		Attendance at critical activities (e.g. foundation preparation, filter placement, etc)			
16		First Filling Surveillance and report*			
		First Filling Surveillance and report**			
		Independent Review/Certification			
		Review of Construction report/final certification (Structural / Compliance)/ update design report/attendance at workshops & meetings related to operating certificate			
		Review of Construction report/final certification (Geotechnical)			
		Review of Construction report/final certification (Dam Engineering / Safety)			
		Review of Construction report/final certification (IR)			
<b>Subtotal</b>					<b>\$28,400.00</b>
<b>TOTAL</b>					<b>\$52,460.00</b>
<b>Additional Fee proposed</b>					<b>\$30,140.00</b>

\* Assumes a single visit by the dam safety engineer.

\*\* Assumes three visits at trigger points in water levels, and preparation of a surveillance report.

\*\*\* Assumes an additional 24 hours in attendance at workshops and meetings.

SMEC has been spending on average 5.4 hours per week on RFIs and NCAs over the course of the construction period. Although we anticipate that these will now taper off assuming an average of 5 hours per week on minor issues not requiring IV involvement for a further 12 weeks divided between Gangodagamage and Baker – this represents a Provisional Sum allowance of **\$12,000**.

Should you have any questions about this proposal, please do not hesitate to call Sch 2 2.2(a)(ii) on Sch 2 2.2(a)(ii).

Yours sincerely,

Sch 2 2.2(a)(ii)

Manager – Structures, ACT & Southern NSW

Date	Comment	Hrs	Task ID	Cumulative Totals				
				15i	15ii	15iii	16.00	SMEC
28-Apr-17	Giving advise on flood risk		15i	Sch 2 2.2(a)(xi)				
04-May-17	Verification Workshop		15i					
19-Jun-17	Preliminary Inspection (GB/ TG/ Sam B and Peter)		15ii					
29-Jun-17	Update GB for construction progress		15ii					
05-Jul-17			15i					
25-Jul-17	Concrete mix design (RFI 8)		15iii					
03-Aug-17	Concrete mix design (RFI 8)		15iii					
07-Aug-17	Initial discussion on foundation		15ii					
08-Aug-17	discussion - specification on foundation and concrete		16					
10-Aug-17	Foundation Inspection		15ii					
12-Aug-17	TG		15ii					
14-Aug-17	Zone 2 material		15iii					
15-Aug-17	Zone 2 material		15iii					
18-Aug-17	Report for site visit		15ii					
25-Aug-17	Foundation Inspection		15ii					
27-Aug-17	Inspection Report		15ii					
28-Aug-17	Draft report on Foundation inspection		15ii					
29-Aug-17	Draft report on Foundation inspection		15ii					
05-Sep-17	mix design		15iii					
06-Sep-17	Underfloor Drainage trench		15iii					
07-Sep-17	Concrete mix design		15iii					
11-Sep-17	RHS Cut off wall foundation inspection		15ii					
12-Sep-17	Zone 2 material (RFI 17)		15iii					
13-Sep-17	Concrete mix design		15iii					
14-Sep-17	Drainage under new labyrinth wall		15iii					
16-Sep-17	Drainage under new labyrinth wall		15iii					
17-Sep-17	Drainage under new labyrinth wall		15iii					
18-Sep-17	Site inspection report		15ii					
19-Sep-17	Site inspoection - discussion		15ii					
20-Sep-17	Zone 2 Material		15iii					
21-Sep-17	site inspection report on foundation inspection		15ii					
22-Sep-17	Zone 2 material (RFI 17)		15iii					
24-Sep-17	Zone 2 material (RFI 17)		15iii					
25-Sep-17	Zone 2 material (RFI 17)		15iii					
26-Sep-17	Site inspection report		15ii					
27-Sep-17	Zone 2 material (RFI 17)		15iii					
28-Sep-17	Zone 2 material (RFI 17)		15iii					
29-Sep-17	Zone 2 material (RFI 17)		15iii					
05-Oct-17	Zone 2 material (RFI 17)		15iii					
09-Oct-17	Zone 2 material (RFI 17)		15iii					
10-Oct-17	Zone 2 material (RFI 17)		15iii					
11-Oct-17	Design changes to abutment walls and labyrinth walls		SMEC					
12-Oct-17	Design changes to abutment walls and labyrinth walls		SMEC					
19-Oct-17	Site Inspection		15ii					
20-Oct-17	Site inspection report		15ii					
21-Oct-17	Site inspection report		15ii					

Date	Comment	Hrs	Task ID	Cumulative Totals				
				15i	15ii	15iii	16.00	SMEC
22-Oct-17	Site inspection report		15ii	Sch 2 2.2(a)(xi)				
26-Oct-17	Design changes to abutment walls and labyrinth walls		SMEC					
10-Nov-17	Design changes to abutment walls and labyrinth walls		SMEC					
11-Nov-17	revised updated drawings		SMEC					
13-Nov-17	concrete test results comments - temperature probes		15iii					
23-Nov-17	assess site photographs		15ii					
24-Nov-17	Concrete Curing/CNJ (RFI 39)		15iii					
27-Nov-17	Concrete Curing/CNJ (RFI 39)		15iii					
28-Nov-17	discussion with Phil		SMEC					
30-Nov-17	Left cut off wall concrete pour		15ii					
08-Dec-17	Crack mapping of left cut off wall - assessment review		15iii					
15-Dec-17	Left abutment concrete pour - instruction tyo Phil and Ken		15iii					
19-Dec-17	Discussion with Phil regarding concrete pour/cracking		15iii					
22-Dec-17	Concrete Pour - Inspection		15iii					
16-Jan-18			SMEC					
24-Jan-18	Concrete pour happened on 25th Jan 2018		15iii					
29-Jan-18	Site inspection to inspect south wingwall foundation		15ii					
07-Feb-18	repair (NCA 26)		15iii					
08-Feb-18	E mail confirmation on South wingwall foundation		15ii					
09-Feb-18	NCA 26 - concrete repair		15iii					
12-Feb-18	Concrete pour - Inspection		15ii					
13-Feb-18	NCA 26 - concrete repair		15iii					
26-Feb-18			SMEC					
27-Feb-18	Concrete Pouring Inspection		15ii					
28-Feb-18	Discussion on Concrete pour		15iii					
07-Mar-18			SMEC					
13-Apr-18	Site Inspection		15ii					
18-Apr-18	Discussion on Filter with Phil		15iii					
19-Apr-18	Discussion on Filter material		15iii					
06-May-18	Zones 5A, 5B & 5C materials		15iii					
11-May-18	Zones 5A, 5B & 5C materials		15iii					
12-May-18	Zones 5A, 5B & 5C materials		15iii					
14-May-18	wall		15ii					
21-May-18	HP 146		15iii					
23-May-18	construction methodology on Embankment fill		15iii					
25-May-18	HP 143 Filter material		15iii					
29-May-18	HP 143 Filter material		15iii					
31-May-18	HP 143 Filter material		15iii					
08-Jun-18	foundationinspection)		15ii					
20-Jun-18	inspection)		15ii					
03-Jul-18	5B & 5C filter issue		15iii					
05-Jul-18	5B & 5C filter issue		15iii					
06-Jul-18	5B & 5C filter issue		15iii					
09-Jul-18	Site inspection (foundation for blanket filter & discussions on 5B & 5C materials, also riprap placement)		15iii					
10-Jul-18	Further site visit and discussions with Thusitha on riprap and Zone 5C, prepare sketch of 5C grading.		15iii					

Date	Comment	Hrs	Task ID	Cumulative Totals				
				15i	15ii	15iii	16.00	SMEC
11-Jul-18	Discussions at home with Thusitha on Zone 5C & preparing for placement of first layer of chimney filter, email on same.		15iii	Sch 2 2.2(a)(xi)				
12-Jul-18	Discussions with S Baker & others on suitability of riprap to cope with flood flows.		15iii					
13-Jul-18	Discuss filter placement with P Tweddell		15iii					
19-Jul-18	Site inspection - digging first trench for Zone 5A chimney filter and placement of the Zone 5A in trench		15ii					
<b>Totals to 22 June 2018</b>		<b>239</b>		<b>7.75</b>	<b>116.75</b>	<b>101.00</b>	<b>0</b>	<b>13.00</b>



Member of the Surbana Jurong Group

**SMEC AUSTRALIA PTY LTD**  
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ACT Procurement  
 PO Box 158  
 Dickson ACT 2602

**INVOICE NO: INV0105233**Date: **29/06/2018**Our Reference: **3002581**

Your Reference:

Attention: Nick Taylor

Email: [nick.taylor@act.gov.au](mailto:nick.taylor@act.gov.au)**TAX INVOICE****Isabella Weir Upgrade - Construction Monitoring**

3002581	Service provided as per attached summary sheet	\$39,790.00
---------	--	-------------

	Subtotal	\$39,790.00
	Plus 10% GST	\$3,979.00
	<b>Total Amount Due</b>	<b>\$43,769.00</b>

If you have any questions regarding this invoice please contact: Vic Vigneswaran

TERMS: Due and payable within 30 days from date of invoice.

**REMITTANCE ADVICE****EFT DETAILS**

BANK: Sch 2 2.2(a)(xi)

BSB No:

ACCOUNT No:

ACCOUNT NAME: **SMEC Australia P/L**INVOICE NO: **INV0105233**TOTAL DUE: **\$43,769.00**

Please quote our invoice number as the payment reference.  
 Remittances should be emailed to [accounts.receivable@smec.com](mailto:accounts.receivable@smec.com)

**Isabella Weir Upgrade**  
**Invoice Summary Sheet / Variation Register**

SMEC Project No: 3002581

Item	Team member	Task	Allocated Hours	Rate	INV0094613		INV0098028		INV0101682		INV0105233		INV		Total		Amount Remaining	% Remaining				
					Date Sent		Date Sent		Date Sent		Date Sent		Date Sent		Invoiced to date	Remaining						
					Fee	Hrs Spent	Fee	Hrs Spent	Fee	Hrs Spent	Fee	Hrs Spent	Fee	Hrs Spent	Fee	Hrs Spent						
15i	Sch 2 2.2(a)(ii)	GC21 workshop/Contractor liaison/verification and regulatory plans																				
		GC21 workshop/Contractor liaison/verification and regulatory plans																				
		GC21 workshop/Contractor liaison/Verification and Regulatory plans																				
		Verification and Regulatory plans																				
		Review of stability of partially constructed weir and cut-off walls																				
		Review of stability of partially constructed weir and cut-off walls																				
		Weekly Site Attendance (4 hrs/week including site meetings)																				
		PM																				
		Daily Site Attendance (4 hrs/day)																				
		Foundation Preparation																				
Foundation Preparation																						
Attendance at critical activities (e.g. foundation preparation, filter placement, etc)																						
15iii		Response to requests for information (RFIs)																				
		Response to requests for information (RFIs)																				
		Response to requests for information (RFIs)																				
		Response to requests for information (RFIs)																				
		Response to requests for information (RFIs)																				
		Response to requests for information (RFIs)																				
		Response to requests for information (RFIs)																				
		Response to requests for information (RFIs)																				
16		First Filling Surveillance																				
		First Filling Surveillance																				
		Independent Review/Certification																				
		Review of Construction report/final certification																				
		Review of Construction report/final certification																				
		Review of Construction report/final certification																				
		Review of Construction report/final certification																				
		Independent Review																				
Var 01		Wall Design Verification																				
<b>Sub-Total</b>																						
<b>GST</b>																						
<b>Total (inc GST)</b>																						

Sch 2 2.2(a)(xi)

**Notes**  
 \* Designer, CAD who has worked on RFI 39

Isabella Weir Upgrade - Task Summary and Status

For Month Ending: 31/07/18

Legend	
Text in Blue	For CWD/PAP to action
Text in Green	For SMEC to action
Text in Black	Closed items since previous meeting

RFI

Open/Close	Item No.	RFI No.	Date Generated	Date Received by SMEC	PAP Officer	SMEC Action Officer	Title	Brief Description	Value \$	Latent Condition?	SMEC Cost	Date Completed	Status / Progress from SMEC	Additional Comment/Issues
	001				Sch 2 2.2(a)(ii)		Concrete Mix design approval	Approval of concrete mix design	Sch 2 2.2(a)(xi)			End of May	Closed	
c	002		26/04/2017	26/04/2017			Revised Peak Particle Velocity (PPV) required	During post tender discussions it was agreed to monitor the vibration of the existing labyrinth during the initial demolition of the half cycle. Please provide a Peak Particle Velocity suitable for these works. Note: GLA believe the current value for Item 17 of the special conditions of contract at 5mm per second is too small.		No	N	11/05/2017	Closed	INV0092680&92681
c	003	2	4/05/2017	9/05/2017			Embankment excavation staging	GLA propose to conduct the excavation of the embankment simultaneously with the install/ construction of the temporary walls . Based on the technical memos from 1/5/17 on dam safety and existing wall stability, along with the current revision 3 program, it will be beneficial to the project timeline if the proposal is accepted. The attached sketch shows the excavation starting from the downstream extreme and works east toward the cut off walls. It is proposed that excavation cannot encroach inside 6m from the existing cut off walls until the temporary walls are completed		No	N	11/05/2017	Closed	INV0092680&92681
c	004	08	3/07/17	3/07/17			Weir Wall Vertical Alignment	Delete the Taper to abutment walls . Contractor propose to eliminate the change of angle to the rear of the abutment walls that changes from the 1 in 10 grade to a consistent 300mm thick wall, the Contractor's proposed option to allow a continuous 1 in 10 grade from the bottom to the top of the abutments.		No	N	6/07/2017	Closed	INV0092680&92681
c	005	11	13/07/17	13/07/17			Demolition some section of the existing buttress	In order to construct steel and new labyrinth slab as per dwg 150 and not create an additional joint through the low labyrinth slab, Contractor need to undertake some demolition of the existing buttress.		No	N	18/07/2017	Closed	INV0092680&92681
c	006	12	19/07/17	21/07/17			Requesting details for setting out on new walls. Model details not match with drawing details.	The control line coordinates that are in the model should be used along with the slightly adjusted bearing. As everything is set out from the control line this should then fit in with the structure that is on site, allowing for construction tolerances. The most important consideration is to match in with the as built structure.		No	Y	21/07/2017	Closed	
c	007	13	24/07/17	28/07/17			Requesting details on the construction joint and Contraction joint as per drawing number 152, 161 and 112	Water bars placed on all vertical contraction joints and all construction joints please refer full details to Respond to RFI		No	Y	27/07/2017	Closed	
c	008						Concrete test results approval	Approval of concrete mix design		No	N		Closed	002222 invoiced in INV0092680&92681, 002222 in INV0094613
c	009	15	2/08/17	23/08/17			Starter bar arrangement for Cut off wall	From discussions with SMEC ( Steve B) the attached sketch shows the new starter bar arrangement		No	N	3/08/2017	Closed	INV0094613
c	010	15B	24/08/17	24/08/17			Starters for cut off walls lap length and safety	agreed on the proposed detail which was proposed by the GL		No	N	25/08/2017	Closed	INV0094613
c	011	16	3/08/17	3/08/17			Alternative water stopper	Requestin alternative product for the water stoppers		No	N	3/08/2017	Ongoing	INV0094613
c	012	17	24/08/17	24/08/17			Request change for zone 2 material and its specification	Discussion ongoing		No	N		Ongoing	INV0094613
c	013	20	25/08/17	25/08/17			Acceptance for dowels to be round 24 dia galv bars 600mm long and should be sleeved on the second pour side.	accepted the dowels to be round 24 dia galv bars 600mm long and should be sleeved on the second pour side.		No	Y	8/09/2017	Closed	
c	014	22	28/08/17	28/08/17			Super rib forming for CJ in slab staging	SMEC consider that this product is not appropriate for use in this situation. As discussed, despite the claim, in the literature provided, that it is appropriate for water retaining structures we consider that the restrictions on placing and compacting concrete adjacent to the Super-rib are not conducive to achieving good quality well compacted concrete close to the CJ.		No	N	29/08/2017	Closed	INV0094613
c	015	23	6/09/17	6/09/17			abutment wall pour staging and jointing	GL propoesd pour methodology is acceptable		No	N	6/09/2017	Closed	INV0094613
c	016	24	5/09/17	5/09/17			Cut off walls joints proposal	proposed arrangement and therefore wish to retain the lengths between CJs as shown on the drawings		No	N	18/09/2017	Closed	INV0094613
c	017	25	5/09/17	5/09/17			Rebar in abutment walls	Accepted		No	N		Closed	INV0094613
c	018	26	5/09/17	5/09/17			Water or membrane curing			No	N	6/09/2017	Closed	INV0094613
c	019	27	11/09/17	11/09/17			existing labyrinth dimension set out clarification	existing labyrinth dimension set out clarification		No	N	7/09/2017	Closed	INV0094613
c	020	32	14/09/17	14/09/17			Return wall RL and start slope	RL is confirmed as 575.3 and dimension from gridline B/H is confirmed as 1970 mm.		No	N	14/09/2017	Closed	
c	021	33	12/10/17	12/10/17			Slab L Bars changes as discussed on site	agreed on remove L on 2 and 3 bars where conjunction six bars.		No	N	12/10/2017	Closed	
c	022	37	20/11/17	20/11/17			Discrepancy between SMEC and Alluvium Drawings for NWL of isabella pond	SMEC and Alluvium confirmed that the levels are corrects in the drawings		No	N	20/11/2017	Closed	
c	023	39	23/11/17	23/11/17			discussion on proposed CNJ and curing time for the concrete. Urgent meetin was held to discuss this issue	Meeting was held on 27 November 2017 . SPB, VV and GB were attended to the meeting.		No	N	18/12/2017	Closed	
c	024	41	30/11/17	1/12/17			Alteration of starter bars, hook bars and two starter bars affecting the shutter on labyrinth wall	PT, JH and SPB have agreed the solution as per RFI 41 agreed		No	N	1/12/2017	Closed	



Other Requests

Item No.	Date Request	Requested By	SMEC Action Officer	Title	Description	Value \$	Invoiced	Current Invoiced	SMEC Cost	Date Closed	Status from SMEC's System	Additional Comments / Actions
1	42872	HP 12	Sch 2 2.2(a)(ii)	Review of modified Ready Mix concrete design		Sch 2 2.2(a)(xi)			n	closed		
2	42856	HP 13	Sch 2 2.2(a)(ii)	concrete mix design modified for 320kg/m <sup>3</sup>					n	closed		
3	Feb-18	Micheal Mcgrath	Sch 2 2.2(a)(ii)	concrete - Specification for all the alterations					n	closed		
4	19/04/2018	Stuart Oxborrow	Sch 2 2.2(a)(ii)	Request Further details and confirmation with TCCS	Details has been send it to Stuart, confirmation has been made with TCCS after having discussion with Ross Schofield.				n	closed		
5	20/04/2018	Stuart Oxborrow	Sch 2 2.2(a)(ii)	Requesting information on Monitoring devices	Information has been send to SO and PAP				n	closed		
6	17/4/2018	Nick Talyer	Steve Baker	Workshop - construction	Attending to the meeting <a href="#">Sch 2.2(a)(ii)</a> and <a href="#">Sch 2.2(a)(ii)</a>				n	closed		
7	22/05/2018	Sch 2 2.2(a)(ii)	Sch 2 2.2(a)(ii)	Construction Methodology for Embankment Fill	Methodology has been accepted with practical suggestions				n	closed		
8			Sch 2 2.2(a)(ii)	5A Filter Material	Material acceptance - Designer/ Independent Vefirier				n	Ongoing		
9			Sch 2 2.2(a)(ii)	5B Filter Material	Material acceptance - Designer/ Independent Vefirier				n	Ongoing		
10	11/5/2018		Sch 2 2.2(a)(ii)	Zone 1 Material	Material acceptance - Designer/ Independent Vefirier				n	closed		
11	22/5/20018		Sch 2 2.2(a)(ii)	Zone 2 Material	Material acceptance - Designer/ Independent Vefirier				n	closed		
12	01/05/2018		Sch 2 2.2(a)(ii)	Design change due to change in site condition and observation	Sketches have been issued/ updated drawings				n	closed		
13	08/05/2018	Leigh Crocker	Sch 2 2.2(a)(ii)	First fill and temporary walls - Meeting	Attending to the first fill, Preparation of documentation for both first fill during the construction and inspection procedure during construction				n	Ongoing		
14	24/07/2018	Sch 2 2.2(a)(ii)	Sch 2 2.2(a)(ii)	5C Filter Material	Accepted with some alteration				n	closed		
15	24/07/2019		Sch 2 2.2(a)(ii)	Filter Replacement 5A / 5B / 5C and RR	Accepted with some alteration/ maintain records for varification				n	closed		

140 230 200 350 140 180 180 230 200 140

RFI No Generated By Contractor				Sch 2 2.2(a)(ii)	CAD	For Month Ending: 31/07/18
				Sch 2 2.2(a)(xi)		
001		Sch 2 2.2(a)(xi)	Concrete Mix design approval			
002			Revised Peak Particle Velocity (PPV) required	26/04/2017		
003	2		Embankment excavation staging	4/05/2017		
004	08		Weir Wall Vertical Alignment	3/07/2017		
005	11		Demolision some section of the existing buttress	13/07/2017		
006	12		Requesting details for setting out on new walls. Model details not match with drawing details.	19/07/2017		
007	13		Requesting details on the construction joint and Contraction joint as per drawing number 152, 161 and 112	24/07/2017		
008			Concrete test results approval			
009	15		Starter bar arrangement for Cut off wall	2/08/2017		
010	15B		Starters for cut off walls lap length and safety	24/08/2017		
011	16		Alternative water stopper			
012	17		Request change for zone 2 material and its spcification	24/08/2017		
013	20		Acceptance for dowels to be round 24 dia galv bars 600mm long and should be sleeved on the second pour side.	25/08/2017		
014	22		Super rib forming for CJ in slab staging	28/08/2017		
015	23		abutment wall pour staging and jointing	6/09/2017		
016	24		Cut off walls joints proposal	5/09/2017		
017	25		Rebar in abutment walls	5/09/2017		
018	26		Water or membrane curing	5/09/2017		
019	27		existing labyrinth dimension set out clarification	11/09/2017		
020	32		Return wall RL and start slope	14/09/2017		
021	33		Slab L bars	12/10/2017		
022	37		Discripancy between SMEC and Alluvium Drawings for NWL of isabella pond	20/11/2017		
023	39		discussion on proposed CNJ and curing time for the concrete. Urgent meetin was held to discuss this issue	23/11/2017		
024	41		Alteration of starter bars, hook bars and two starter bars affecting the shutter on labyrinth wall	30/11/2017		
025	42		Installation and maintenance issues of the stop logs	4/12/2017		
026	42. a		Requesting further details on penstock stoplogs.	29/01/2018		
027	47		Hot weather pours	18/12/2017		
028	48		Acceptance for the valve DN450	17/01/2018		
029	50-1		modification of Reo	18/01/2018		
030	50-2		Modification of Reo	19/01/2018		
031	54		Milsalignment of abutment wall and cutoff wall	8/02/2018		
032	55		Alteration of the reinforcements	9/02/2018		
033	58		Handrail over wingwall -	22/02/2018		

Sch 2 2.2(a)(xi)

034	59	Sch 2 2.2(a)(xi)	Water stop in souther curved abutment wall and wingwall construction joint	23/02/2018	Sch 2 2.2(a)(xi)														
035	60		Pour 14 cut off wall footing blinding level	7/03/2018															
036	64		Splice length	16/03/2018															
037	71		Gate Valve	27/04/2018															
038	73		Shear key of Existing slab	24/05/2018															
039	75		Ligs and Labyrinth Reinforcement	30/05/2018															
040	77		Waterstop Epoxy	30/05/2018															
041	78		stainless steel cover plate	30/05/1930															
042	79		Labyrinth wall reinforcement	14/06/2018														31/06/2018	
043	81		PD 1 Fence	2/07/2018															
044	82		PD 1 Fence	3/07/2018															
045	83		Use of Existing Waterstop	11/07/2018															
046	84		Cog Bar , Labyrinth wall	12/07/2018															
047	86		U Bar for Labyrinth wall	16/07/2018															
048	47.b		Access Platform Detail	20/07/2018															
049	87		Safety Davit arm location	20/07/2018															
050	88		N32 Bar downstream	20/07/2018															
038		\$18,280.00				43	0	5	27.5	8	0	1	0	8					

Not Included in July Inw

230 140 230 230 230 230 350 350 140 180 150 230 200 180 150 140 1.1

				Sch 2 2.2(a)(ii)												For Month Ending: 31/07/18	Senior Engineer	Engineer	CAD Drafter	Subcontractor
				RV2971	SB12341	SB10939	PD2051	RW1983	MB12099	GB5991	EL6476	TG11461	RS2700	PO13513	LK10570	PEng	SnrEng	Eng	CAD	Subby
1	Sch 2 2.2(a)(xi)	0/01/1900	Review of modified Ready Mix concrete design	Sch 2 2.2(a)(xi)																
2		#N/A	concrete mix design modified for 320kg/m <sup>3</sup>																	
3		#N/A	concrete - Specification for all the alterations																	
4		#N/A	Request Further details and confirmation with TCCS																	
5		#N/A	Requesting information on Monitoring devices																	
6		#N/A	Workshop - construction																	
7		#N/A	Construction Methodology for Embankment Fill																	
8		#N/A	5A Filter Material																	
9		#N/A	5B Filter Material																	
10		#N/A	Zone 1 Material																	
11		#N/A	Zone 2 Material																	
12		#N/A	Design change due to change in site condition and observation																	
13		#N/A	First fill and temporary walls - Meeting																	



14	Sch 2 2.2(a)(xi)	#N/A	Footing level is approximately 100 -200 mm higher than design level Requesting acceptance for the repair material
22		#N/A	
23		#N/A	
26		#N/A	
27		#N/A	
28		#N/A	
29		#N/A	
30		#N/A	
31		#N/A	
		#N/A	
		#N/A	

Sch 2 2.2(a)(xi)	RV2971	Sch 2 2.2(a)(ii)	230	
	SB12341		140	
	SB10939		230	
	PD2051		320	
	RW1983		230	
	MB12099		230	
	GB5991		350	
	EL6476		350	
	TG11461		140	
	RS2700		180	
	PO13513		150	
	LK10570		230	
	PEng		230	For Month Ending: 31/07/18
	SnrEng		180	Senior Engineer
Eng	150	Engineer		
CAD	140	CAD Drafter		
Subby	1.1	Subcontractor		

**From:** 'Sch 2 2.2(a)(ii)' <[REDACTED]@smec.com>  
**Sent:** 02/10/2018 1:48 AM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Cc:** 'Sch 2 2.2(a)(ii)' <[REDACTED]@smec.com>; 'Sch 2 2.2(a)(ii)' <[REDACTED]@smec.com>  
**Subject:** IWU Estimate to Complete  
**Attachments:** Estimate to complete 181002.pdf, 3002581 Isabella Weir Upgrade Invoice Summary End of Sept.pdf

Nick,

As discussed last week here is an estimate of fees to completion.

The timing of most of the activities (and hence monthly billing) really hinges around the timing of the first fill, which I have assumed would be in October for the purposes of this exercise.

Regards,

Sch 2 2.2(a)(ii)

Senior Structural Engineer

T +Sch 2 2.2(a)(ii)

E Sch 2 2.2(a)(ii)@smec.com

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SMEC (Member of the Surbana Jurong Group)

Suite 2, Level 1, 243 Northbourne Avenue, Lyneham, ACT, 2602, Australia

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Isabella Weir Upgrade Construction Monitoring  
 Estimate of Fees to Completion

57 of 116  
 2018

Item	Description	Team member	Estimated Hours	Rate	Fee
	<i>Hours yet to be invoiced for Aug/Sept (incl GST), (Refer attached Invoice Summary Sheet):</i>				\$ 24,444.00
	<b>Oct-18</b>				
15ii	Weekly Site Attendance	Sch 2 2.2(a)(xi)			
	PM				
	IV				
16	First Filling Surveillance and report				
	First Filling Surveillance and report				
	Independent Review/Certification				
	Review of Construction report/final certification (Structural / Compliance)/ update design report/attendance at workshops & meetings related to operating certificate				
	Review of Construction report/final certification (Geotechnical)				
	Review of Construction report/final certification (Dam Engineering / Safety)				
	Review of Construction report/final certification (IR)				
15iii	Response to RFIs				
	Response to RFIs				
	Response to RFIs				
	Response to RFIs				
	GST				
	<b>Total October 2018</b>				<b>\$ 27,544.00</b>

Isabella Weir Upgrade Construction Monitoring  
 Estimate of Fees to Completion

58 of 116  
 2018

Item	Description	Team member	Estimated Hours	Rate	Fee
	<b>Nov-18</b>				
15ii	Weekly Site Attendance				
	PM				
	IV				
16	First Filling Surveillance and report				
	First Filling Surveillance and report				
	Independent Review/Certification				
	Review of Construction report/final certification (Structural / Compliance)/ update design report/attendance at workshops & meetings related to operating certificate				
	Review of Construction report/final certification (Geotechnical)				
	Review of Construction report/final certification (Dam Engineering / Safety)				
	Review of Construction report/final certification (IR)				
15iii	Response to RFIs				
	Response to RFIs				
	Response to RFIs				
	Response to RFIs				
	GST				
	<b>Total November 2018</b>				<b>\$ 16,742.00</b>
	<b>NB: Timing of all activities under task number 16 are dependent upon when first filling actually occurs.</b>				
	<b>Total to Completion(incl GST)</b>				<b>\$ 68,730.00</b>

Isabella Weir Upgrade  
 Invoice Summary Sheet / Variation Register  
 SMEC Project No: 3002581

Item	Team member	Task	Allocated Hours	Rate	Invoice No		INV0098028		INV0101682		INV0105233		INV		INV		INV		Total Hrs	Total				
					Date Sent		20/12/17		5/04/18		27/06/18		28/08/18		30/09/18		Invoiced to date	Remaining		%				
					Fee	Hrs Spent	Fee	Hrs Spent	Fee	Hrs Spent	Fee	Hrs Spent	Fee	Hrs Spent	Fee	Hrs Spent					Fee	Hrs Spent		
15i	Sch 2 2.2(a)(ii)	GC21 workshop/Contractor liaison/verification and regulatory plans GC21 workshop/Contractor liaison/verification and regulatory plans GC21 workshop/Contractor liaison/Verification and Regulatory plans Verification and Regulatory plans  Review of stability of partially constructed weir and cut-off walls Review of stability of partially constructed weir and cut-off walls																						
15ii	Sch 2 2.2(a)(ii)	Weekly Site Attendance (4 hrs/week including site meetings) PM  Daily Site Attendance (4 hrs/day)  Foundation Preparation  Foundation Preparation  Attendance at critical activities (e.g. foundation preparation, filter placement, etc)																						
15iii	Sch 2 2.2(a)(ii)	Response to requests for information (RFIs) Response to requests for information (RFIs) Response to requests for information (RFIs) Response to requests for information (RFIs) Response to requests for information (RFIs) Response to requests for information (RFIs) * Response to requests for information (RFIs) Response to requests for information (RFIs) * CAD Response to requests for information (RFIs)																						
16	Sch 2 2.2(a)(ii)	First Filling Surveillance First Filling Surveillance Independent Review/Certification Review of Construction report/final certification Review of Construction report/final certification Review of Construction report/final certification Review of Construction report/final certification Independent Review																						
Var 01		Wall Design Verification																						
<b>Sub-Total</b>																								
<b>GST</b>																								
<b>Total (inc GST)</b>																								

Sch 2 2.2(a)(xi)

Notes  
 \* Designer, CAD who has worked on RFI 39

\$28,479.00

**From:** 'Sch 2 2.2(a)(ii)' [redacted]@smec.com>  
**Sent:** 06/11/2018 11:26 PM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Cc:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>; 'Sch 2 2.2(a)(ii)'@pes.net.au"  
'Sch 2 2.2(a)(ii)'@pes.net.au>; 'Sch 2 2.2(a)(ii)' [redacted]@smec.com>  
**Subject:** Isabella weir Upgrade First Fill Inspection and report

Nick,

We expect Isabella Pond to reach FSL today given its current water level and weather forecast. Consequently we will arrange for the first fill inspection next week.

Is the weir now in possession of TCCS? If so we will contact Mynul to arrange someone to operate the valve for us during the inspection.

Regards,

'Sch 2 2.2(a)(ii)' [redacted]

Senior Structural Engineer

T'Sch 2 2.2(a)(ii)' [redacted]

E:'Sch 2 2.2(a)(ii)' [redacted]@smec.com

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**From:**"Taylor, Nick"

**Sent:**08/11/2018 5:45 AM

**To:**"Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>

**Cc:**"McGrath, Michael" <Michael.McGrath@act.gov.au>

**Subject:**AFTER RAIN EVENT ISABELLA WEIR/WETLANDS [SEC=UNCLASSIFIED]

**Attachments:**IMG\_0984.jpg, IMG\_0985.JPG, IMG\_0986.jpg, IMG\_0987.jpg, IMG\_0988.jpg, IMG\_0989.jpg, IMG\_0990.jpg

STUART

IMG 0984: SHOWING POND AREA INFRONT OF GTP SOUTHSIDE

IMG 0985: GERNRAL SHOWING POND FROM SOUTHERN EMBANKMENT

IMG 0986: SHOWING RE-ESTABLISHMENT OF FLORA AND FORNA

IMG 0987: SHOWING TREE FLOATING IN POND

IMG0988: SHOWING ACCESS TRACK USED BY GLA INTO POND FROM SOUTHERN EMBANKMENT WILL REQUIRE GRASSING

IMG0989: SHOWING DRY CULVERT SECTION RUNNING UNDER ISABELLA DRIVE FROM UPPERSTRANGER INTO SOUTHERNWETLAND

IMG 0990: SHOWING INTERMEDIATE POOL S2 SECTION IWC -02 UNDERSIDE OF JUTE MESH DAMP AND POOL FULL TO INVERT LEVEL OF PITS

IMG0991: SHOWING INLET POOL S1 SECTION IWC-02 POOL FULL TO INVERT LEVEL OF PIT

Nick Taylor | Senior Project Officer | Civil Infrastructure

**Phone 02 6207 0118** | Mobile 0451 449 331 [Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)

Infrastructure Finance Capital Works Chief Minister, Treasury and Economic Development Directorate ACT Government

Level 2 Nature Conservation House, 186 Emu Bank Belconnen 2617 | ACT Procurement, GPO Box 158 CANBERRA ACT 2601 | [www.act.gov.au](http://www.act.gov.au)























**From:** "Taylor, Nick"

**Sent:** 08/11/2018 5:14 AM

**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>

**Cc:** "McGrath, Michael" <Michael.McGrath@act.gov.au>

**Subject:** AFTER RAIN EVENT YESTERDAY PHOTOS AND OBSERVATION CONDUCTED WITH **Sch 2 2.2(a)(ii)**  
[SEC=UNCLASSIFIED]

**Attachments:** IMG\_0968.jpg, IMG\_0969.jpg, IMG\_0970.jpg, IMG\_0971.jpg, IMG\_0972.jpg, IMG\_0973.jpg,  
IMG\_0974.jpg, IMG\_0975.jpg

Stuart Apologies for the small delay more to follow, please be advised I've used Alluvium General Arrangement plan to indicate approx. locations.

IMG 0968: DURING ACTUAL RAIN EVENT ON THE 7/11/18

IMG 0969: DITTO

IMG 0970: Northern Wetland water level equalised with pond level

IMG 0971: WATER LEVEL UNDER DRAKEFORD DRIVE LOOKING BACK AT WEIR

IMG 0972: NORTH/WETLAND SECTION IWC-03

IMG 0973: NORTH/WETLAND SECTION IWC-04

IMG 0974: NORTH/WETLAND SECTION1WC04/05

IMG 0974: NORTH/WETLAND SECTION1WC-05

IMG 0975: NORTH/WETLAND SECTION IWC- 06 COLLAPSED NETTING COLLECTING DEBRI/**SHOULD MAYBE REMOVE TO AVOID ANY FUTURE CHALLENGES WITH DEBRI OR WILDLIFE**

Nick Taylor | Senior Project Officer | Civil Infrastructure

**Phone 02 6207 0118** | Mobile 0451 449 331 [Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)

Infrastructure Finance Capital Works Chief Minister, Treasury and Economic Development Directorate ACT Government

Level 2 Nature Conservation House, 186 Emu Bank Belconnen 2617 | ACT Procurement, GPO Box 158 CANBERRA ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

























**From:** [Sch 2 2.2(a)(ii)]@pes.net.au  
**Sent:** 08/11/2018 12:05 PM  
**To:** "[Sch 2 2.2(a)(ii)]@guidelineact.com.au"  
**Cc:** "Taylor, Nick" <Nick.Taylor@act.gov.au>; "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>; [Sch 2 2.2(a)(ii)]@pes.net.au  
**Subject:** FW: Duck and Wildlife Management [SEC=UNCLASSIFIED]  
**Attachments:** Book1.xlsx, Isabella Ponds Wildlife Management Plan.pdf

[Sch 2 2.2(a)]

Nick Taylor called me from site about 11:45 am today. There are some distressed ducks under the netting in the northern wetland.

Also the Principal is considering:

- Removal of portions of the netting on the most upstream section of the northern wetland (which has effectively been destroyed by the two most recent rainfall events); and
- Perhaps leaving the netting open at strategic locations which wildlife inherently find and exit to freedom. (The "pointy ends" of the netted area where animals are funnelled to may work, but at some risk of plant damage by ducks etc.)

Regards

[Sch 2 2.2(a)(ii)]

Professional Engineering Service Pty Limited ACN 057 633 897  
 Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project  
 Mobile [Sch 2 2.2(a)(ii)]

---

**From:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Sent:** Monday, 5 November 2018 12:21 PM  
**To:** [Sch 2 2.2(a)(ii)]@pes.net.au  
**Cc:** Taylor, Nick <Nick.Taylor@act.gov.au>; McGrath, Michael <Michael.McGrath@act.gov.au>; [Sch 2 2.2(a)(ii)]@pes.net.au  
**Subject:** RE: Duck and Wildlife Management [SEC=UNCLASSIFIED]

[Sch 2 2.2(a)]

This plan addresses all the issues we raised at the last meeting so is acceptable. Please advise [Sch 2 2.2(a)(ii)]

Can you please ask [Sch 2 2.2(a)] to confirm who will be the inspector undertaking the inspections.

Thanks,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502 | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)**  
 Capital Works, Transport Canberra and City Services Directorate | ACT Government  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

---

**From:** [Sch 2 2.2(a)(ii)]@guidelineact.com.au]  
**Sent:** Tuesday, 30 October 2018 4:34 PM  
**To:** [Sch 2 2.2(a)(ii)]@pes.net.au  
**Cc:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Subject:** Duck and Wildlife Management

Hi [Sch 2 2.2(a)]

As requested, I've drafted a Wildlife management plan for the Isabella Ponds. The management plan will be in place whilst the consolidation period is active.

Attached is the management plan draft and proposed signage for your information.

Please provide any feedback by COB Thursday 1/11/18 to ensure we can have the signs made up ASAP.

Kind regards,

Sch 2.2.2(a)

**Sch 2.2.2(a)(ii) | Project Manager | Isabella Weir Upgrade**

16B Bass Street, Queanbeyan NSW 2620

PO Box 537, Queanbeyan NSW 2620

E: [Sch 2.2.2\(a\)\(ii\).@guidelineact.com.au](mailto:Sch 2.2.2(a)(ii).@guidelineact.com.au)

M: Sch 2.2.2(a)(ii)



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# INJURED WILDLIFE?



PLEASE REPORT TO:

- ACCESS Canberra 13 22 81
- OR
- ACT Wildlife 0432 300 033
- OR
- RSPCA ACT 02 6287 8100

# Isabella Ponds Wildlife Management Plan

## During Consolidation Period

### Purpose:

This management plan has been developed to detail the steps Guideline will adopt during the consolidation period to manage the risk to wildlife in and around the newly constructed wetlands.

### Methodology:

- Guideline ACT supervision will inspect the Isabella Wetlands site at not more than 1 month intervals. Notification will be forward via email to the PAP following each inspection of the site. Any remediation works required to the site will be summarised in each notification.
- Guidelines subcontractor, Able's Landscaping will continue to monitor the wetlands during the 6month consolidation period. The site will be inspected at no more than 2week intervals during the 6 month consolidation period.
- During any one of these inspections, the Bird Netting will be checked for security and any defects to the netting be made good prior to the inspector leaving site.
- Should any wildlife be affected by the netting, i.e. Trapped underneath netting or caught in the netting, the animal will be freed as long as in the act of freeing the animal, no additional harm is caused to the animal or person conducting the rescue or inspection.

#### ACT Wildlife Organisations

- In the event that the animal cannot be freed without increasing its stress, the supervisor is to contact one of the below Professional organisations that are trained and setup to assist with injured wildlife in the ACT:
  - ACCESS Canberra 13 22 81
  - OR
  - ACT Wildlife 0432 300 033
  - OR
  - RSPCA ACT 02 6287 8100
- Signage will be placed 50m intervals on the temporary fence to promote that the public contact the above organisations should they see any wildlife in distress.
- These signs will be in place until the bird netting is removed from site.

**From:** 'Sch 2 2.2(a)(ii)'  
**Sent:** 08/11/2018 2:19 PM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Cc:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Subject:** Isabella weir

Nick,

As discussed today

Signs missing.

Project signs needs to be removed.

Cleaning of the house of the resident.

Ducks trapped in netting.

Removing of nets upstream on the NE corner.

Southern wetlands not being filled by upper stranger pond (possible healthy waterways project may have some impact on this).

Two small noticeable islands poking through the current water level.

Small areas of landscaping not completed.

Regards

Sch 2 2.2(a)(ii)

Sent from my iPhone

**From:** Sch 2 2.2(a)(ii)@pes.net.au  
**Sent:** 08/11/2018 11:51 AM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Cc:** "Sch 2 2.2(a)(ii)@pes.net.au"; "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>; "Sch 2 2.2(a)(ii)@pes.net.au"; "Sch 2 2.2(a)(ii)@pes.net.au"  
**Subject:** Isabella: PAP's October 2018 Monthly Report  
**Attachments:** Isabella Mthly Rep October 2018 Final with attachments.pdf

Nick

Please find attached my report for October 2018.

For your perusal, and please call Sch 2 2.2(a) if any queries.

Regards

Sch 2 2.2(a)(ii)

Professional Engineering Service Pty Limited ACN 057 633 897

Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project

Mobile Sch 2 2.2(a)(ii)

# Excellence in Engineering, Management & Quality



**Professional Engineering Service Pty Ltd**

ABN 27 057 633 897

**CONTRACT MONTHLY REPORT No 14  
(October 2018)**

## **ISABELLA WEIR UPGRADE AND WETLANDS**

**CONTRACT: 2017.22501.330**

**ACT GOVERNMENT – PROCUREMENT AND CAPITAL WORKS**

**CONTRACTOR: GUIDELINE (ACT) Pty Ltde**





**Procurement and Capital Works  
Isabella Weir Upgrade and Wetlands.**

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**Procurement and Capital Works  
Isabella Weir Upgrade and Wetlands.**

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Isabella Weir Upgrade and Wetlands.**

**1. General**

**1.1. Introduction**

This report is the fourteenth report for the project which was awarded to Guideline (ACT) Pty Ltd on 10 February 2017. The report focuses on work carried out in October 2018.

Please see Section 10 and Attachment 13 for a project forecast cost at completion.

**1.2. Headlines**

Progress Highlights for October 2018

- **WEIR**
  - The last labyrinth wall section was poured
- **WETLANDS**
  - Continuing plant weeding and watering
- **WATERMAIN**
  - Request for Provisional Certificate of Operation issued from Icon Water on-going

**1.3. Contractual Milestones:**

Milestone Name	Milestone Details	Original Completion Date	Revised Completion Date	Actual Date [Programme Date Rev. 15]
Milestone 1	Statutory approvals including dilapidation survey, development and approval of Construction Environmental Management Plan (CEMP) and Aquatic Environmental Management Plan (AEMP), Traffic Control Plans (TCP), waterways works licence, Dam Safety Emergency Plan (DSEP) and all other approvals and licenses required prior to commencement of work in order to deliver the Works	7 April 17	27 April 17	27 April 17



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Milestone Name	Milestone Details	Original Completion Date	Revised Completion Date	Actual Date [Programme Date Rev. 15]
Milestone 2	<p>Enabling works for the Isabella Weir and Wetlands component of the Works including the following:</p> <ul style="list-style-type: none"> <li>• site establishment</li> <li>• erection of Traffic Control Plans (TCPs)</li> <li>• installation of temporary environmental controls relocation of flow gauge from Isabella Weir to Tuggeranong Weir</li> <li>• establishment of pond drainage equipment</li> <li>• drainage of Isabella Pond</li> <li>• relocation of fauna from Isabella Pond</li> <li>• Lowering of Tuggeranong Pond</li> <li>• design of temporary components of the Works geotechnical investigations for weir and wetlands work</li> <li>• construction of temporary haul roads</li> <li>• fencing of Upper Stanger Pond, drainage of Upper Stanger Pond and relocation of fauna. Temporary</li> <li>• Watering of pond flora until pond filling, as required by CEMP.</li> <li>• Weed identification survey (refer to AEMP)</li> <li>• Fish survey (refer to AEMP)</li> </ul>	19 May 17	6 Jun 17	6 Jun 17
Milestone 3	All contract Works required west of the eastern most point of Drakeford Drive bridge, excluding landscaping. (Weir Upgrade)	22 Jun 18	22 Nov 18	[31 Oct 18]
Milestone 4	All landscaping works west of the eastern-most section of Drakeford bridge, including consolidation. (Landscaping around weir)	21 Dec 18	23 May 19	[26 April 19]
Milestone 5	All contract Works required east of the eastern-most point of Drakeford Drive bridge, excluding landscaping including landscaping up to the time of TCCS acceptance for "consolidation". **	3 Nov 17	5 Jul 18	31 Oct 18
Milestone 6	All the landscaping works "consolidation period" for east of eastern-most section of Drakeford Drive bridge. ** plus dryland grassing for whole project	4 May 18	3 Jan 19	[23 Jan 19]

**Notes:**

- "East of the eastern most point of Drakeford Drive bridge" is the wetlands area.
- \*\* Milestones 5 and 6 have effectively been amended by common usage during the contract as marked.



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**1.4. Key Project Contacts:**

Person	Organisation	Email	Mobile
Sch 2 2.2(a)(ii) Principal's Authorised Person (PAP) and Surveillance Officer for wetland works	PES	Sch 2 2.2(a)(ii)@pes.net.au	Sch 2 2.2(a)(ii)
Stuart Oxborrow Project Manager	TCCS	Stuart.Oxborrow@act.gov.au	
Nick Taylor Senior Project Officer	PCW	Nick.Taylor@act.gov.au	
Sch 2 2.2(a)(ii) Project Manager and CAP	Guideline (ACT)	Sch 2 2.2(a)(ii)@guidelineact.com.au	
Sch 2 2.2(a)(ii) Trainee Engineer	Guideline (ACT)	Sch 2 2.2(a)(ii)@guiedlineact.com.au	
Sch 2 2.2(a)(ii) Foreman	Guideline (ACT)	-	



**Procurement and Capital Works  
Isabella Weir Upgrade and Wetlands.**

**2. Project Progress**

**2.1. Completed works**

Milestone Name	Milestone Details	Percent Complete (Time-based from works program)	Remarks
Milestone 1	Statutory approvals including dilapidation survey, development and approval of Construction Environmental Plan (CEMP) and Aquatic Environmental Management Plan (AEMP), Traffic Control Plans (TCP), waterways works licences required prior to commencement of work in order to deliver the Works.	100%	Completion was granted for actual completion date of 27 March 17. (Contractual date is 27 April 17)
Milestone 2	Enabling works for the Isabella Weir and Wetlands component of the Works including the following: <ul style="list-style-type: none"> <li>- site establishment</li> <li>- erection of Traffic Control Plans (TCPs)</li> <li>- Installation of temporary environmental controls</li> <li>- relocation of flow gauge from Isabella Weir to Tuggeranong Weir</li> <li>- establishment of pond drainage equipment</li> <li>- drainage of Isabella Pond</li> <li>- relocation of fauna from Isabella Pond</li> <li>- Lowering of Tuggeranong Pond</li> <li>- design of temporary components of the Works</li> <li>- geotechnical investigations for weir and wetlands work</li> <li>- construction of temporary haul roads</li> <li>- fencing of Upper Stanger Pond, drainage of Upper Stanger Pond and relocation of fauna. Temporary watering of pond flora until pond filling, as required by CEMP.</li> <li>- weed identification survey (refer to AEMP)</li> <li>- fish survey (refer to AEMP)</li> </ul>	100%	Completion was granted for actual completion date of 2 June 17. (Contractual date is 6 June 17)
Milestone 3	All contract Works required west of eastern-most point of Drakeford Drive bridge, excluding landscaping. (Weir Upgrade)	99.9%	Milestone 3 effectively covers the Weir Upgrade works Waiting on ACT Government approval of WAE drawings and documentation



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Milestone 4	All landscaping works west of the easternmost section of Drakeford Drive bridge, including consolidation. (Landscaping around weir)	0%	Landscaping around weir. Minor works commencing August 2018 Works 95% complete to apply for soft landscaping consolidation component approx. Dec 18.
Milestone 5	All contract Works required east of the eastern-most point of Drakeford Drive bridge, <del>excluding landscaping</del> including landscaping up to the time of TCCS acceptance for "consolidation". **	100%	The Wetland works excluding landscaping.
Milestone 6	All the landscaping works "consolidation period" for east of the easternmost section of Drakeford Drive bridge.**	58%	Wetland planting, establishment and reinstatement of surrounding areas. Contractor: Landscaping consolidation period
Project Overall	All works based on progress claim to date (financially based including approved variations)	97.8%	Up to 30 September 2018 Claim No 21

- "East of the eastern most point of Drakeford Drive bridge" is the wetlands area.
- \*\* "Practical Completion" is not a concept defined in the General Conditions of Contract (GC21). Milestone 5 is in the broad sense "Practically Complete". Acceptance by TCCS is not complete.
- \*\* Milestones 5 and 6 have effectively been amended by common usage during the contract as marked.

\* Milestone definition redefined for practical programming purposes only. Contract definition unchanged.

**2.2. Planned Works – in the next month**

Refer attached program as updated on 25 July 2018 (Revision 15), **Attachment – 6**  
Planned works in the next month per the program include:

- WEIR
  - Remove precast temporary wall panels
  - Apply anti-graffiti paint to remaining surfaces
  - Remove temporary access tracks
  - Complete access track on Southern Weir
  - Rip rap works on southern and northern downstream
  - Complete defect remediation works
- WETLANDS
  - Weed Management - ongoing
  - Consolidation Program – ongoing
- WATERMAIN
  - Continued request for Provisional Certificate of Operation issued by Icon Water



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### **3. Work Health and Safety**

#### **3.1. Site induction**

Site inductions are conducted every morning (as needed) by Guideline as the Principal Contractor and controller of the site. All visitors are accompanied to site by inducted individuals.

#### **3.2. Incidents**

The Monthly WHS + Enviro Report is attached - See **Attachment 1**

One incident occurred 12 October 2018 involving head bump on scaffold.

All incidents are reviewed in the fortnightly Progress Meetings. Actions arising are followed up.

#### **3.3. Lost Time Injuries (LTIs)**

Two LTIs have been reported to date. Nil LTI occurred in October 2018.

#### **3.4. Temporary Traffic Management (TTM)**

Surveillance – PAP monitors TTM on site on a daily basis and takes up any issues arising with Project Manager.

TTMs have been limited to the Monash bicycle path crossing in September 2018.

Nearby public roads are monitored for mud and stones. Clean-up is as necessary. A vacuum broom is available at short notice if required. The vacuum broom has been used as needed.

TTM approvals – None to report this month.

#### **3.5. Contractor's WH&S Plan**

In place and operational.

#### **3.6. Surveillance Reports**

Daily surveillance by the PAP and Structural surveillance by the SO – diary records are forwarded to the Principal in digital format on a weekly basis including photographs, videos and a diary.

Safety walkthroughs are conducted by Guideline on a weekly basis. PAP attends a sample of these. WH&S observations and issues (if any) are recorded in the daily diary.

#### **3.7. Audit of Contractor's Compliance with WH&S Plan**

Refer PAPs Audit Schedule, **Attachment 2**

The project is effectively disestablished early November 2018. No further audits are intended at this time.



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## 4. Quality

### 4.1. Quality Assurance

Hold Point register – refer **Attachment 3**

ITPs are being progressively reviewed by Guideline and PAP to ensure contractual and statutory compliance.

Non-conformances (NCR) – to date there have been 83 NCRs raised. Refer NCR register, **Attachment 12**. (The contractor advised 8 Nov 2018 that no new NCRs have been raised.)

Quality has been managed cooperatively through the Contractor's NCR system. PAP has not yet needed to issue a Corrective Action Request (CAR).

### 4.2. Surveillance

Surveillance daily diaries are completed on daily basis and records are kept electronically.

The daily diaries and photographic records are submitted weekly to the Principal.

### 4.3. Audits

Survey audits – PAP uses the services of an independent surveyor to jointly undertake survey to check claimed quantities and survey quality control in general, Lonergan Surveying Pty Ltd. PAP engages surveyor as required.

Quality Systems and Compliance audits – refer Audit Schedule. Refer **Attachment 2**

### 4.4. Quantity Agreement Records

Quantity Agreement Sheet (QAS) records are agreed between PAP and CAP as needed.



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## **5. Environment**

### **5.1. Rainfall**

A permanent Bureau of Meteorology pluviometer is operational nearby to the project in the suburb of Isabella Plains - data from this instrument is relied upon for project records. Monthly summaries from the BOM website are included in project records. See Rainfall register (BOM monthly summaries) – **Attachment 4**

### **5.2. Environmental Protection Agency**

- Guideline maintains a regular liaison with the EPA, primarily discussing discharge turbidity and silt retention.
- No issues to report

### **5.3. Surveillance**

PAP/SOs report any environmental issues on site during undertaking site surveillance. No issues to report since possession of site was granted.



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## **6. Request For Information (RFI)**

### **6.1. General**

The number of RFIs received to date is 100. All are closed out.

### **6.2. RFI Register**

Refer **Attachment 5**



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## 7. Program

### 7.1. Current Program

The current program is an update from Guideline dated 25 July 2018 (Revision 15) which is included in **Attachment 6**

### 7.2. Program Risks

- Acceptance by Icon Water of the water main for Provisional Operational Acceptance is taking more time than expected.
- Acceptance by the Asset Management section of TCCS of the Wetland Civil Works is taking more time than expected.



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## **8. Extension of Time (EOT)**

### **8.1. EOT Register**

23 EOTs have been applied for. All have been formally determined.  
Refer **Attachment 7**.

### **8.2. Wet Weather EOT Claims**

None current.

### **8.3. Other EOT Claims**

- Nil



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**9. Payment and Cash Flow**

**9.1. Payment Certificates**

Twenty-two payment certificates have been issued to date for claims up to end October 2018  
The October 2018 claim was received 1 November 2018.  
See Payment Certificate register – refer **Attachment 8**

**9.2. Contractor's Cash Flow**

Forecast cashflow information has been provided by Guideline - refer **Attachment 9**

**9.3. Completion Amount**

An alternative process to return \$200,000 of the \$300,000 completion amount prior to full completion has been agreed between Contractor's Senior Executive and Principal's Senior Executive.



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## **10. Variations, Revised Contract Price and Estimated Final Cost**

### **10.1. Variations**

Refer Variation register – **Attachment 10**

### **10.2. Revised Contract Price – (30 October 2018)**

The revised Contract Price including measured quantity variations is \$14,338,688.43 (ex GST).

### **10.3. Financial Risk / Estimated Final Cost Analysis**

See **Attachment 13** for an analysis of risk and estimated final cost. The **likely** final contract price is \$14,369,134.57 (ex GST). Note that items with funding external to the project (for example, the LDA water main works) are included in this expected cost at completion. Costs are estimated and subject to adjustment based on physical conditions.



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**11. Project Communications**

- 11.1. See Attachment 11 for Communications Register. The register lists relevant interactions with the public and others which are site-related.
- 11.2. Site communications have been amicable with all stakeholders.



**Procurement and Capital Works  
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**12. PES Staffing on Site This Month**

Position	Name	Attendance (Months)	Remarks
Principal's Authorised Person (PAP)	Sch 2 2.2(a)(ii)	Full time since 10 April 17	
Project Director		As required	
Surveillance Officer (SO) – Bridge works		2.5 d/wk	Last day on project 23/10/18



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**13. Attachments**

<b>Attachment 1 –</b>	<b>Monthly WHS + Enviro Report</b>
<b>Attachment 2 –</b>	<b>Audit Schedule</b>
<b>Attachment 3 –</b>	<b>Hold Point Register</b>
<b>Attachment 4 –</b>	<b>Rainfall Register</b>
<b>Attachment 5 –</b>	<b>RFI Register</b>
<b>Attachment 6 –</b>	<b>Works Program</b>
<b>Attachment 7 –</b>	<b>EOT Register</b>
<b>Attachment 8 –</b>	<b>Payment Certificate Register</b>
<b>Attachment 9 –</b>	<b>Contractor's Cash flow</b>
<b>Attachment 10 –</b>	<b>Variation Register</b>
<b>Attachment 11 –</b>	<b>Communications Register</b>
<b>Attachment 12 –</b>	<b>NCR Register</b>
<b>Attachment 13 –</b>	<b>Financial Risk / Estimated Final Cost Analysis</b>
<b>Attachment 14 –</b>	<b>Weir Concrete Pour Plan</b>

## MONTHLY WHS &amp; ENVIRO REPORT FORM

The information provided below should only relate to the month stated

Project Name – Isabella Weir Upgrade		Project No - 616	Report for the month of – October 2018
<b>1. lead indicators and statistics</b>			
No. of personnel inducted to site	5	No. of GLA Safety inspections completed	4
No. of days worked	21	No. of Confined Space Entry Permits issued	0
No. of employee (GLP, GLA) man hours worked	1,1149.5	No. of Pre-Excavation Checklists issued	0
No. of Subcontractor/other man hours worked	1425	No. of GLA Env. Checklists completed	4
No. of Hot Works Permits issued	3	No. of entries in Water Discharge Record	0
No. of Pre-Starts completed	21	No. of entries in Waste Management Plan Register	0
<b>2. Toolbox Talks carried out</b>			
Date	Subject		
12/10/18	Selecting the Correct Tool for the Job		
18/10/18	Removal of all equipment in and around Weir		
25/10/18	Sharps Found, Dealing with Sharps		
26/10/18	GLA 2.2.3 Incidents Procedure		
<b>3. Other meetings, audits and additional to systems inspections where WHS or ENVIRO is formally discussed, e.g. Site meetings, WHS meetings, consultative committee meetings, compliance checks, client audits, OFSC, Active Certification and or external audits</b>			
Date	Detail		
06/10/18	GLA Site Meeting		
12/10/18	Project Progress Meeting (CMTEDD, GLA, PES and SMEC)		
13/10/18	GLA Site Meeting		
20/10/18	GLA Site Meeting		
26/10/18	Project Progress Meeting (CMTEDD, GLA, PES and SMEC)		
27/10/18	GLA Site Meeting		
27/10/18	Dam Regulation Meeting (CMTEDD, GLA, PES, TCCS and SMEC)		
27/10/18	Close Out Meeting (CMTEDD, GLA, PES, SMEC, ALLUVIUM and ENVIROLINKS)		
<b>4. Worksafe Reportable Incidents</b>			
Date	Detail		
N/A	N/A		
<b>5. Lost Time Injury (LTIs) incident</b>			
Date	Detail		
N/A	N/A		
<b>6. Other incidents</b>			
Date	Detail		
10/10/18	Flood Damage to Submerged Pump		
12/10/18	GLA Employee struck his head on scaffold		
24/10/18	Sharps Found at Weir		
25/10/18	Telehandler damaged Excavator cabin screens		
26/10/18	ABCC Site Visit (just for conversation)		
<b>7. Are there any new risks which could be added to the Company Risk Register?</b>			
Date	Detail		
N/A	N/A		
<b>8. Any other significant event (training, site visits, other notes)</b>			
Date	Details		
19/10/18	Full Company Training Day		
<b>9. Other notes</b>			

Project Engineer Completing the Report

Sch 2 2.2(a)(ii)	Sch 2 2.2(a)(ii)	02 / 11 / 2018
Name	[Redacted]	Date

Doc No.: GLA-SF-2.2-24	Revision: 1	Page 1 of 2
Approved by: Managing Director	Date: December 2017	

Guideline ACT considers the use of the incident numbers or LTIs as measures of WHS performance unreasonable and counterproductive to the WHS of workers. This information is Commercial in Confidence and must not be passed onto any other party.

## Isabella Weir Upgrade and Wetlands Project

### PAP Audit Schedule

As at 15 June 2018



Item	Description	Audit Purpose	Timing	Remarks/Date
1	Quality and Environment Audit No.1	Primarily a Systems Audit but with random check for evidence of implementation.	Prior to commencement of structural concrete.	Completed 23/6/17; WH&S was excluded and Quality/Environment focused on due to Principal's Active Certification Audit conducted 31 May 2017.
2	Quality and Environment Audit No. 2	QE Compliance audit	Early in critical structural concrete construction. Construction Lot / test result process to be the primary focus.	29 November 2017. Audit completed by two auditor-qualified senior PES staff <small>CONFIDENTIAL</small> Sch 2 2.2(a)(ii).
5	Work Health and Safety Audit No. 1	WHS Plan - Compliance Audit	Completed by Kaizen Management Services Pty Ltd	Superseded by Active Certification Audit 14 February 2018 of Guideline and PES
6	Work Health and Safety Audit No. 2	WHS Plan - Compliance Audit	17 August 2018	Active Certification Audit conducted.
7	Other Audit as identified by Contractor performance	To be advised	To be advised	Based on risk

Note that audit dates may be amended based on performance/need.

## Isabella Hold Point Register

Guideline Submitted Hold Point No.	Clause	Witness / Hold Point Description	Guideline Submitted Date	PAP Release	Notes
8	2.04.5	Commencement of weir demolition work	7/04/2017	28/04/2017	
9	9.09.1 (j)	Supply of Plants by Contractor	13/04/2017	21/07/2017	
11	2.03.6	Weir Dilapidation Report	1/05/2017	1/05/2017	
12	15.4.01	Concrete mix compliance	12/05/2017	17/05/2017	
13	15.18.2.3	Proposed Concrete Mix Designs	16/05/2017	17/05/2017	
14	15.10.07.2	Bearing Capacity of Wetland Retaining Wall foundations confirmed by Geotech. Engineer - southern wetland	17/05/2017	17/05/2017	
15	1.06.6	Qualifications of Traffic Controllers	30/05/2017	2/06/2017	
16	15.7.01.1	Placement of concrete for southern wetland foundation	30/05/2017	2/06/2017	
17	15.7.01.1	Placement of concrete for northern wetland foundation	31/05/2017	3/07/2017	
18	15.10.07.2	Bearing Capacity of Wetland Retaining Wall foundations confirmed by Geotech. Engineer - southern wetland	7/06/2017	3/07/2017	
19	15.7.01.1	Notification that Northern wetland footings for Rock Concrete blocks are ready for inspection prior to pouring	27/07/2017	3/08/2017	
20	2.12	Southern Embankment Foundation	27/07/2017	Revised version released 11/8/17	
21	2.12	Northern Embankment Foundation	27/07/2017	Release withdrawn. Location yet to be presented for inspection on 12/9. Released 21/9/17	
22	2.12A	Geotech Report for southern cutoff wall foundation	14/08/2017	25/08/2017	
23	15.18.2.3	Additional concrete trial mix designs	15/08/2017	16/08/2017	
24	3.05.1	Commencement of Excavation for Stormwater Drainage - proposed pipe product - balancing pipe between wetland ponds	23/08/2017	25/08/2017	
25	3.05.1	Commencement of Excavation for Stormwater Drainage - proposed pipe product - RCP on outlet and around pits	23/08/2017	24/08/2017	
26		Approval of curing compound	25/08/2017	25/08/2017	
27		Southern Abutment Wall Foundation	28/08/2017	28/08/2017	
28		Southern Cutoff Wall Footing Pre-pour Inspection	28/08/2017	29/08/2017	U-bars at ends needed.
29		Southern Wetland Wall Foundation Ch 171 to 2017	29/08/2017	29/08/2017	
30		Southern Weir Foundation Report	30/08/1930	21/09/2017	Error in report corrected, with SMEC for acceptance 11/9/17
31		Southern Weir Foundation Inspection	30/08/2017	30/08/2017	
32		Southern Wetland Retaining Wall Foundation Ch171-127	30/08/2017	30/08/2017	
33		Southern Wetland Retaining Wall Foundation Ch171-127	1/09/2017	1/09/2017	
34		Southern Wetland Footing Pre-pour	6/09/2017	6/09/2017	
35		Southern Wetland Retaining Wall Mass Concrete 2nd Lift	6/09/2017	6/09/2017	
36		Waterslop Material conformance	6/09/2017	21/09/2017	Already approved via RFI016
37		Southern Embankment Dental Concrete	6/09/2017	11/09/2017	
38		Southern Embankment Foundation Abutment Return	8/09/2017	21/09/2017	Unable to fully inspect 8/9/17
39		Northern Embankment Foundation Abutment Cutoff Wall	8/09/2017	21/09/2017	Unable to fully inspect 8/9/17
40		Weir Additional Construction Jointing	17/09/11	21/09/2017	
41		Northern Embankment Foundation Inspection	12/09/2017	12/09/2017	
42		Northern abutment dental concrete placement.	22/09/2017	20/11/2017	
43		Southern Wetland Foundation Inspection Ch 87 - 33	14/09/2017	14/09/2017	Clarification provided 8/11/17
44		Northern Abutment Wall Foundation Inspection	21/08/2017	26/09/2017	Sketch defining area requested from GLA 24/8/17 - received 26/9/17
45	ACT 3.05.1	HP045 Material Compliance for Wetland Offtake Pits	27/09/2017	27/09/2017	
46	ACT 15.14	Northern Wetland foundation inspection for mass concrete backfill 0 - 140	4/10/2017	20/11/2017	Inspected by <a href="#">Scri 222(a)(m)</a> as OK
47	ACT 15.18.2 / RMS B80 5.2	Formwork Certification	4/10/2017	13/11/2017	Seeking appropriate design and certification. On-going critical issue.
48		Not used			
49		SWL1 Baffle Pit Foundation - south	13/10/2017	21/11/2017	Inspected by <a href="#">Scri 222(a)(n)</a> - OK
50		NWL2 Baffle Pit Foundation - north	13/10/2017	21/11/2017	Inspected by <a href="#">Scri 222(a)(n)</a> - OK
51		Northern Wetland foundation Inspection Ch 140-300	13/10/2017	21/11/2017	Inspected by <a href="#">Scri 222(a)(n)</a> - OK
52		Base for Baffle Pit SWL1 ready to pour	17/10/2017	18/10/2017	
53		Walls First lift for Baffle Pit SWL1 ready to	17/10/2017	18/10/2017	
54		Southern Abutment Wall Footing 2nd Pour (MAJOR)	13/10/2017	19/10/2017	Note a number of conditions in the HF all fulfilled.
55	ACT HP 15.7	Reinforcement prior to placement of concrete in northern abutment wall (Stage 1)	26/10/2017	26/10/2017	
56		Material conformance for Penslock Gates	6/11/2017	8/11/2017	
57		PAP Endorsement of ITM for Athlön Dr. watermain works	27/10/2017	27/10/2017	
58		Reinforcement prior to placement of concrete in northern abutment wall (Stage 2)	31/10/2017	31/10/2017	
59		Bedding Sand Quality	6/11/2017	6/11/2017	
60		Southern Wetlands Foundation Inspection	10/11/2017	21/11/2017	As per RFI031 response
61		Stormwater Line SP1 to SWL1	8/11/2017	21/11/2017	
62		Stormwater Line SWL1 to SP2	8/11/2017	21/11/2017	
63		Stormwater Line SP3 to SP4	8/11/2017	21/11/2017	
64		Stormwater Line SP4 to SP5	8/11/2017	21/11/2017	
65		Stormwater Line SP5 to SP6	20/11/2017	21/11/2017	
66		Northern Wetland Retaining Wall Foundation Inspection	13/11/2017	13/11/2017	
66a		Proposed rock for Storm Water Outlets	10/11/2017	17/11/2017	
67		Northern Wetland Wall foundation inspection Ch 510 to 533	14/11/2017	21/11/2017	
68		Proposed existing sediment as topsoil	20/11/2017	21/11/2017	
69		Southern Cutoff Wall Pre-pour (MAJOR)	17/11/2017	17/11/2017	Complex Hold Point blinding needed to be extended after 21/11/17
70		NWL1 Baffle Pit Base	21/11/2017	7/12/2017	
71		Stormwater line SP7 - SP8	24/11/2017	15/12/2017	
72		Stormwater line SP9 - SP10	24/11/2017	15/12/2017	

## Isabella Hold Point Register

Guideline Submitted Hold Point No.	Clause	Witness / Hold Point Description	Guideline Submitted Date	PAP Release	Notes
73		Stormwater line SP10 - SP11	24/11/2017	20/12/2017	
74					
75					
76					
77		Southern Abutment and End Wall Formwork Design	24/11/2017	13/12/2017	
78		Southern Abutment central straight section Formwork Design	24/11/2017	20/12/2017	
79		Roost log supply and placement	18/01/2018	18/01/2018	
80		Habitat log supply and placement	18/01/2018	18/01/2018	
81		Placement of Concrete northern abutment cut-off wall footing 1st pour	29/11/2017	29/11/2017	
82		Placement of Concrete in southern abutment cut-off walls WL1 and WL3	30/11/2017	30/11/2017	
83		Northern Wetlands NWL1 baffle pit walls 1st lift	8/12/2017	20/12/2017	
84		Northern Wetlands Foundation Inspection 0 to 400	12/12/2017	12/12/2017	
85		Concrete Pour Left abutment return wall	13/12/2017	14/12/2017	
86		South Abutment Wall straight section as-construction formwork / steel	20/12/2017	20/12/2017	
87		Southern Wetlands ready to place topsoil notification	15/1/18	16/01/2018	
88		Placement of Drainage Rockwork	16/01/2018	16/01/2018	
89		Northern wetlands earthworks foundation inspection	22/01/2018	23/01/2018	
90		Certificate Structural Inspection Pour 7	29/01/2018	29/01/2018	
91		Stormwater Line Northern Wetlands	30/01/2018	30/01/2018	
92		Rock viewing platform	29/01/2018	30/01/2018	
93		Materials for water main system	31/01/2018	26/02/2018	
94					
95		Watermain trench excavation	6/02/2018	7/02/2018	
96					
97					
98		South wing wall foundation report	6/02/2018	7/02/2018	
99		Northern abutment wall and end wall formwork documentation	2/02/2018	12/02/2018	
100					
101		Northern abutment wall and end wall pour 6	9/02/2018	12/02/2018	
102					
103		Southern Wetland Planting	15/02/2018	14/06/2018	
104					
105		Northern wing wall foundation report	28/02/2018	3/04/2018	
106		Pour 12 concrete placement	23/02/2018	23/02/2018	
107		Pour 5 formwork documentation	26/02/2018	26/02/2018	
108		Pour 5 Concrete pour documentation	26/02/2018	26/02/2018	
109		Pour 11 Formwork documentation	1/03/2018	4/03/2018	
110		Pour 9 Formwork documentation	1/03/2018		
111		Pour 11 Concrete Placement	1/03/2018, 5/3/2108	5/03/2018	Responded negatively 1/3/18
112					
113		Pour 5 Buttress Concrete Placement	5/03/2018	5/03/2018	
114		North weir wing wall footing	13/03/2018	14/03/2018	
115		South Wing Wall formwork design certification	13/03/2018	13/03/2018	
116		Pour 13 Reinforcement Inspection	14/03/2018	14/03/2018	
117		Pour 13 Formwork as-constructed certification	14/03/2018	14/03/2018	
118					
119					
120					
121		Pour 13B South wingwall "stitch" pour fwk and reo inspect	4/04/2018	5/04/2018	
122		Pour 13B South wingwall "stitch" pour fwk cert	5/04/2018	5/04/2018	
123		Pour 8 Northern Curved Wall Formwork Design	22/03/2018	22/03/2018	
124		Pour 8 Reinforcing inspection	22/03/2018	22/03/2018	
125		Pour 8 Northern Curved Wall as-constructed Formwork Certification	22/03/2018	22/03/2018	
126		Pour 15 North Wing Wall Formwork Design	6/04/2018	11/04/2018	
127		Pour 15 Concrete Placement	11/04/2018	11/04/2018	
128		Pour 15 as-constructed formwork certification	12/04/2018	12/04/2018	
129		Pour 10 Formwork Design	16/04/2018	16/04/2018	
130					
131		Pour 10 As-constructed Formwork Certification	19/04/2018	19/04/2018	
132		Water main pier placement of concrete (2 close to roundabout)	5/04/2018	5/04/2018	
133		Pours 9 and 11 Formwork design documentation	23/04/2018	24/04/2018	
134		Pour 9 Placement of Concrete	24/04/2018	24/04/2018	
135		Pour 9 as constructed certification of formwork	26/04/2018	26/04/2018	
136					
137		Pour 15B Placement of Concrete	24/04/2018	24/04/2018	
138		Pour 15B as-constructed certification of formwork	26/04/2018	26/04/2018	
139		Construction Methodology, Embankment Backfill	9/05/2018	31/05/2018	
140		Zone 1 embankment material qualities	11/05/2018	22/05/2018	
141		Zone 2 embankment material qualities	11/05/2018	22/05/2018	
142		Zone 5A filter material qualities	22/05/2018	31/05/2018	
143		Zone 5B filter material qualities	24/05/2018	5/07/2018	Originally not accepted and second proposal not accepted, but accepted with conditions 5 July 2018
144		Zone 5C filter material qualities	23/07/2018	25/07/2018	Accepted with "select rip rap" condition
145		Foundation preparation inspection	16/05/2018	17/05/2018	
146		Dental Foundation Report (right, pour 2)	22/05/2018	24/05/2018	
147					
148		Placement of Dental Concrete nth upper slab	16/05/2018	17/05/2018	

## Isabella Hold Point Register

Guideline Submitted Hold Point No.	Clause	Witness / Hold Point Description	Guideline Submitted Date	PAP Release	Notes
149		Placement of Dental Concrete, Pour 2	21/05/2018	22/05/2018	
150		Dental Pour 3	21/05/2018	25/05/2018	
151		Foundation Inspection left upstream under labyrinth	7/06/2018	8/06/2018	
152		Placement of Dental Concrete (area as for HP 151)	7/06/2018	8/06/2018	
153		Placement of Concrete - Pour 16 lower right labyrinth slab	13/06/2018	14/06/2018	
154					
155		Foundation preparation inspection (south labyrinth wall)	6/07/2018	6/07/2018	
156		Foundation inspection reports - left pre-placement of dental concrete	11/07/2018	12/07/2018	
157		Placement of Concrete - Pour 17 upper right labyrinth slab	19/06/2018	20/06/2018	
158		Supply of Mulch	22/06/2018	22/06/2018	
159		Spreading of Topsoil after testing (wetlands)	22/06/2018	22/06/2018	
160		Placement of Topsoil (Northern Wetland)	22/06/2018	22/06/2018	
161		Spreading Topsoil in Grassed Areas	22/06/2018	22/06/2018	
162		Placement of order for bird netting	28/06/2018	29/06/2018	
163		Planting Setout	28/06/2018	29/06/2018	
164		Rock armouring downstream of weir	9/07/2018	9/07/2018	
165		South dental concrete placement	11/07/2018	12/07/2018	
166		Labyrinth wall formwork design certification	12/07/2018	20/07/2018	
167		Foundation Inspection report (2) South Dental Concrete	20/07/2018	20/07/2018	
168		Pour 20 Placement of Concrete	25/07/2018	25/07/2018	
169		Pour 21 Placement of Concrete	2/08/2018	15/08/2018	
170		Pour 18 steel prior to placement of concrete	2/08/2018	6/08/2018	
171		Pour 18 Certification of as-constructed formwork	2/08/2018	7/08/2018	
172		Pour 19 Placement of Concrete	30/08/2018	31/08/2018	
173		Pour 19 Formwork Final Certification	30/08/2018	31/08/2018	
174		Pour 23 Placement of Concrete	5/09/2018	5/09/2018	
175		Pour 23 Certification of Formwork	12/09/2018	12/09/2018	
176		Spreading of Topsoil in Grassed Areas_1	29/08/2018	29/08/2018	
177		Pour 22 Placement of Concrete	12/10/2018	12/10/2018	
178		Pour 22 Formwork Certification	15/10/2018	15/10/2018	
179		Spreading of Topsoil in Grassed Areas_2	7/09/2018	7/09/2018	
180		Wet Well placement of concrete	18/09/2018	18/09/2018	
181		Spreading of Topsoil in Grassed Areas 3	14/09/2018	14/09/2018	
182		Penstock upstream of 450 valve on weir	19/09/2018	25/09/2018	
183		Spreading of Topsoil in Grassed Areas 4	24/09/2018	24/09/2018	
184		Spreading of Topsoil in Grassed Area 5	25/09/2018	25/09/2018	
185		Installation of Embankment Instruments	16/10/2018	16/10/2018	
186		Rectification of Defective Methodology	17/10/2018	31/10/2018	
187		Spreading topsoil in Greassed Areas - 6	23/10/2018	1/11/2018	
188		Spreading Topsoil in Grassed Area - 7	1/11/2018	1/11/2018	

# Tuggeranong, Australian Capital Territory

## October 2018 Daily Weather Observations



Date	Day	Temps		Rain mm	Evap mm	Sun hours	Max wind gust			9am					3pm						
		Min	Max				Dirn	Spd	Time	Temp	RH	Cld	Dirn	Spd	MSLP	Temp	RH	Cld	Dirn	Spd	MSLP
		°C	°C					km/h	local	°C	%	eighths		km/h	hPa	°C	%	eighths		km/h	hPa
1	Mo	0.4	22.3	0			NNE	35	14:39	12.1	57		NNE	4	1029.1	21.2	29		N	17	1023.1
2	Tu	1.3	24.9	0			NNW	30	13:50	14.8	49		NW	6	1027.4	24.2	26		NNE	15	1021.6
3	We	6.7	17.0	0			NNW	33	11:01	14.0	58		NNE	2	1019.5	14.1	82			Calm	1016.8
4	Th	9.7	14.0	2.2			S	33	23:51	10.9	80		S	15	1018.6	13.2	82		S	9	1016.8
5	Fr	8.5	16.0	0.4			ESE	41	15:17	11.2	65		S	19	1024.5	12.7	61		ESE	24	1023.2
6	Sa	7.1	19.0	0			NE	30	16:17	11.8	53		SSE	15	1025.2	18.2	36		NE	17	1020.4
7	Su	2.7	21.2	0			SSW	33	11:52	11.0	61		S	11	1024.2	19.4	39		ESE	13	1019.8
8	Mo	10.8	24.1	0			SE	31	12:38	13.3	67		SSW	11	1020.1	23.2	25		ENE	9	1015.6
9	Tu	6.0	24.3	0.4			WNW	33	15:25	12.2	84			Calm	1015.6	23.3	27		WNW	20	1011.2
10	We	9.9	12.4	11.0			ESE	39	16:15	10.1	96		S	13	1018.2	11.2	72		S	15	1019.1
11	Th	6.0	14.6	2.0			ESE	35	10:22	8.7	72		S	17	1024.4	13.6	51		ESE	13	1023.1
12	Fr	8.2	15.4	0			E	35	16:31	10.5	66		ESE	17	1027.3	14.6	53		E	19	1024.7
13	Sa	7.9	20.4	0.2			ESE	35	15:59	10.3	88		W	6	1026.6	18.4	44		E	17	1022.5
14	Su	9.9	18.3	0			NE	37	10:22	13.9	72		ENE	11	1026.8	16.2	63		ENE	19	1024.3
15	Mo	11.4	23.2	0.4			NNE	43	14:51	14.6	75		E	11	1025.8	21.8	46		NE	20	1021.2
16	Tu	14.5	24.4	0			ENE	37	16:52	16.6	69		NE	9	1022.2	23.8	45		NE	15	1017.3
17	We	13.9	22.3	0			N	31	14:48	15.9	77			Calm	1017.1	21.5	50		NNW	17	1013.9
18	Th	13.5	25.1	0.6			WNW	39	13:07	14.8	84		NNW	11	1017.2	24.1	38		NW	20	1014.7
19	Fr	5.3	27.3	0			NW	35	10:22	15.3	63		WNW	6	1018.3	26.4	24		NW	19	1014.1
20	Sa	10.4	24.5	0			NW	61	11:08	15.5	65			Calm	1013.7	18.6	73		WNW	6	1010.7
21	Su	6.5	21.7	10.2			ENE	33	19:15	11.8	63		S	15	1016.9	20.0	41		NNW	13	1013.7
22	Mo	7.4	25.8	0			N	30	12:44	13.6	71		NE	2	1017.8	25.1	26		NNW	15	1013.6
23	Tu	4.3	28.3	0			NW	44	11:23	14.6	51		W	2	1015.5	26.7	21		WNW	20	1011.7
24	We		21.4	0			E	41	16:17	14.0	60		S	7	1019.9	20.4	39		NNE	11	1017.8
25	Th		25.1	0			WNW	33	16:45	13.0	64		ENE	9	1021.2	23.0	35		NNW	13	1014.6
26	Fr	8.4	26.1	0			NNW	39	14:40	14.8	57		W	7	1016.8	25.3	23		NNW	17	1012.2
27	Sa	7.6	27.5	0			NW	44	13:56	14.5	63		NW	9	1013.9	24.9	26		NW	26	1008.9
28	Su	8.6	24.0	0			ENE	35	18:11	13.0	49		S	11	1016.8	23.1	19		NE	4	1013.5
29	Mo	6.2	23.8	0			ENE	43	17:32	11.4	66		SSE	6	1018.5	21.8	35		N	13	1015.1
30	Tu	11.4	28.2	0			NW	41	14:33	16.6	63		NNW	9	1018.6	27.6	13		WNW	19	1014.3
31	We	5.7	30.8	0			ENE	39	19:22	17.6	35		SW	2	1019.9	29.9	14		WNW	19	1016.2
<b>Statistics for October 2018</b>																					
Mean		7.9	22.4							13.3	65			8	1020.6	20.9	40			15	1017.0
Lowest		0.4	12.4							8.7	35			Calm	1013.7	11.2	13			Calm	1008.9
Highest		14.5	30.8	11.0			NW	61		17.6	96		S	19	1029.1	29.9	82		NW	26	1024.7
Total				27.4																	

Observations were drawn from Tuggeranong (Isabella Plains) AWS (station 070339)

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## ISABELLA WEIR UPGRADE PROJECT

## PAP's Request for Information Register

RFI Number	Title	Date received	Status	Date responded to Contractor	Comments
8	Weir Wall Vertical Alignment	3/07/2017	Closed	17/07/2017	Informal response 7/7/17, confirmed 17/7/17
9	Wetland Pipe Outlet Foundation Level	5/07/2017	Closed	18/07/2017	Informal response 7/7/17, confirmed 17/7/17
10	Cover to Anchor Bars in wetland retaining walls	5/07/2017	Closed	6/07/2017	GLA Proposal Accepted
11	abutment wall buttress demolition for new work construction	13/07/2017	Closed	14/07/2017	Dealt with urgent "partial demolition of abutment wall buttresses" 14/7/17. Further response on construction joint locations sent 18/7/17
12	Weir Setout Mismatch	19/07/2017	Closed	25/07/2017	Informal response 23/7/17, confirmed 25/7/17
13	Weir Joint Types	24/07/2017	Closed	27/07/2017	Partial response made 26/7/2017 prior to full closure the next day.
14	Plants suitable for existing pond topsoil	1/08/2017	Closed	21/08/2017	To advise pH sought and type of lime.
15	Cut off Wall Starter Bars Amendment	2/08/2017	Closed	3/08/2017	
15A	Cut off wall starter bars amendment A	14/08/2017	Closed	14/08/2017	
15B	Cut off wall starters and lap W/L1 safety	24/08/2017	Closed	24/08/2017	
16	Alternative Water Stop Product	3/08/2017	Closed	3/08/2017	
17	Use of General Fill in Downstream face of Weir Embankment	9/08/2017	Closed	27/09/2017	Forwarded to SMEC 9/8/2017, under consideration - SMEC's senior geotech engineer <a href="#">Sch 2.2.2(a)(ii)</a> Inspected 6/9/17
18	Pressure Relief Pipe	4/09/2017	Closed	19/09/2017	Forwarded to SMEC 4/9/2017
19	Changes to W/L1 cut off wall reinforcement	25/08/2017	Closed	7/09/2017	Confirmation of accepted change from 23/8/17
20	Clarification of Dowels	25/08/2017	Closed	7/09/2017	Confirmation of clarification made 23/8/17
21	Pour procedure for sloped section of cut-off wall / Stepped surface	25/08/2017	Closed	7/09/2017	Confirmation of accepted procedure/change advised 23/8/17
22	Use of super rib form for CI in slab staging	28/08/2017	Closed	29/08/2017	Discussed with <a href="#">Sch 2.2.2(a)(ii)</a> 28/8, emailed SMEC to respond 29/8
23	Proposed pour sequence for walls and jointing	5/09/2017	Closed	6/09/2017	
24	Cutoff Wall Joints Proposal	5/09/2017	Closed	18/09/2017	Sent to SMEC 5/9/17
25	Rebar in Abutment Walls	5/09/2017	Closed	7/09/2017	
26	Water or Membrane Curing	5/09/2017	Closed	24/09/2017	Sent to SMEC 5/9/17; matter resolved at Concrete Specification Meeting 13/9/17
27	Existing labyrinth dimension set out clarification	11/09/2017	Closed	27/09/2017	Sent to SMEC 11/9/17
28	Concrete backfill to high flow bypass	11/09/2017	Closed	24/09/2017	Amended by GLA 12/9; Resolved and advised verbally, 12/9.
29	Pedestrian access to retaining walls	11/09/2017	Closed	24/09/2017	Informal advice to GLA 15/9/17
30	Use of rock fill in wetland foundation	13/09/2017	Closed	13/09/2017	
31	Foundation proof rolling wetlands	12/09/2017	Closed	28/09/2017	Sent to Alluvium 13/9/17; Discussion SO/PT/JH 18/9; PT/JH 26/9; Amended wording with SO/SC for consideration 27/9, agreed 28/9
32	Confirmation of RL and Distance in Plan 3002402-155E	14/09/2017	Closed	18/11/2017	Informal response of 14/9/2017 confirmed.
33	Slab L bar changes	18/10/2017	Closed	20/11/2017	Agreed and done - missing form from GLA sought 18/11/17
34	Weed potential/control for Pond Material-based topsoil	21/10/2017	Closed	17/01/2018	Resolved late November 2017.
35	Excavated rock reuse as Zone SC	21/10/2017	Closed	17/01/2018	<a href="#">Sch 2.2.2(a)(ii)</a> discussed 20/11/17 - RFI was amended.
36	Pond Junction Pits use of Capital Pre-casters 900 x 900	6/11/2017	Closed	18/11/2017	Informal advice to GLA 14/11/2017.
37	Isabella Pond Confirm NWL	20/11/2017	Closed	20/11/2017	
38	Capping Material Requirements	20/11/2017	Closed	20/11/2017	
39	Review of CNI and curing requirements	22/11/2017	Closed	18/01/2018	Resolved 30 November 2017.
40	Topsoil amendments clarification	19/01/2017	Closed	19/01/2018	
41	Reo Bar modifications in abutments	30/11/2017	Closed	17/01/2018	
41a	Additional reo bar modifications in abutment	14/02/2018	Closed	15/02/2018	With SMEC 14 Feb 18.
42	Stoplog assembly details	1/12/2017	Closed	19/01/2018	
42a	Stoplog assembly details - further information	29/01/2018	Closed	7/02/2018	With SMEC 29/1/18
42b	Access platform details	16/02/2018	Closed/Re-opened/Closed	23/05/2018 / 10/8/2018 / 7/9/18	Prof. Engineer Certification moved to fabricator's engineer as variation.
43					
44	Steel Seat Colour	13/12/2017	Closed	19/12/2017	Set as "Interpon Excel colour: Shale Grey (GP184A)" 16 Jan 2018.
45	Reo bar modifications in return amend and labyrinth return walls	7/12/2017	Closed	12/12/2017	SMEC confirmed 11/12
46	Scour Valve actions? And Alignment change to avoid trees	15/12/2017	Closed	9/10/2018	Preliminary advice issued 18 Dec 2017
47					
48	Substitution of different brand DN450 Valve	17/01/2018	Closed	23/01/2018	With SMEC for advice 17/1/18
49	Location of Air Valve	16/01/2018	Closed	23/01/2018	Stuart Oxborrow sent on to Calibre 16/1/18
50	Reo bar modifications in northern return wall	18/01/2018	Closed	19/01/2018	
50a	Reo bar modifications in northern return wall - request to use 16 mm bar at top	19/01/2018	Closed	23/01/2018	With SMEC for advice late 19/1/18
51	Substitute macrophyte planting	8/02/2018	Closed	18/02/2018	
52	Change in bends and thrust block required for Watermain	8/02/2018	Closed	29/03/2018	Relevant updated plan supplied 1 March 2018.
53	Proposed change to type of isolation valve in air valve pit	8/02/2018	Closed	29/03/2018	Effective response 20 Feb 2018.
54	Southern abutment and cutoff wall intersection	9/02/2018	Closed	20/02/2018	With SMEC 9/2/18, discussed PT/YG 12/2/18
55	Labyrinth return wall and abutment shutter	9/02/2018	Closed	9/02/2018	
56	Sediment pond base level	19/02/2018	Closed	21/02/2018	Alluvium consulted.
57	Northern wetland weir construction joint	22/02/2018	Closed	22/02/2018	

## ISABELLA WEIR UPGRADE PROJECT

## PAP's Request for Information Register

RFI Number	Title	Date received	Status	Date responded to Contractor	Comments
58	Handrails over wing walls	22/02/2018	Closed	28/02/2018	
59	Waterstop in southern curved abutment wall and wing wall construction joint	23/02/2018	Closed	23/02/2018	
60	Northern wetland weir unsuitable foundation material	28/02/2018	Closed	1/03/2018	
60-1	Pour 14 cut-off wall footing blinding level	7/03/2018	Closed	9/03/2018	With SMEC 7 Mar 18, asked SMEC to reconsider 8 Mar 18
61	Northern wetland weir starter bar spacing	1/03/2018	Closed	1/03/2018	
62	Duck netting size change	2/03/2018	Closed	2/03/2018	
63	Anti-graffiti Coating on Weir	14/03/2018	Closed	21/03/2018	With Principal 14/3/18
64	Splice length in right abutment wall curved section	16/03/2018	Closed	19/03/2018	Informal advice given 16/3/18.
66	Hydrotite used as water stop in Wing Wall / Abutment Wall construction joint	20/03/2018	Closed	23/03/2018	Applies to left and right
67	Concrete Wall Cracks	20/03/2018	Closed	27/03/2018	
68	Additional information regarding thrust blocs for Water Main	23/03/2018	Closed	1/05/2018	
69	Drawing details not matching	12/04/2018	Closed	12/04/2018	
70	Details of Water Main	23/04/2018	Closed	1/05/2018	
71	450 dia gate valve	27/04/2018	Closed	1/05/2018	RFI Cancelled
72	Medium duty fence wetlands	18/05/2018	Closed	18/05/2018	
73	Shear key of existing slabs	22/05/2018	Closed	24/05/2018	
74	Welding of reinforcement	22/05/2018	Closed	22/05/2018	
75	Ligs and Labyrinth Reinforcement	29/05/2018	Closed	30/05/2018	
76	Seat Position Amendment, Wetlands	29/05/2018	Closed	30/05/2018	
77	Waterstop Epoxy	30/05/2018	Closed	30/05/2018	
78	Laps for Base Slab Steel	30/05/2018	Closed	31/05/2018	
79	Stainless steel cover plates	5/06/2018	Closed	15/06/2018	
80	Labyrinth wall reinforcement	14/06/2018	Closed	15/06/2018	
81	Head wall fence relocation	2/07/2018	Closed	2/07/2018	
82	Requested change to Type PD1 Fencing on Weir	2/07/2018	Closed	3/07/2018	
83	Use of existing waterstop	11/07/2018	Closed	12/07/2018	
84	Cog bars, labyrinth walls reinforcement	12/07/2018	Closed	17/07/2018	
85	Mowing strip	13/07/2018	Closed	13/07/2018	
86	U Bars for Labyrinth Wall	16/07/2018	Closed	16/07/2018	Discussed on-site 16/7/2018
87	Safety davit location	20/07/2018	Closed	2/08/2018	
88	N32 Bars, Downstream Key	20/07/2018	Closed	25/07/2018	
89	Extent of hard stand areas at abutment walls	27/07/2018	Closed	1/08/2018	
90	Slump for Labyrinth Wall Concrete	31/07/2018	Closed	6/08/2018	
91	Zone 1 Backfill Shortfall left embankment	31/07/2018	Closed	1/08/2018	
92	Pedestal 450 Gate Valve reinforcement	3/08/2018	Closed	7/08/2018	
93	Stoplog frame shear connectors	7/08/2018	Closed	10/08/2018	
94	Access track scope	17/08/2018	Closed	19/09/2018	
95	Mooring ring dimensions	22/08/2018	Closed	22/08/2018	
96	Plan dimensions of gravel pad behind right abutment wall	23/08/2018	Closed	23/08/2018	
97	Guar Gum for Spray Grass	10/09/2018	Closed	19/09/2018	
98	Use of HB40 for Tie-bolt Patching	19/09/2018	Closed	21/09/2018	
99	CNI Detail - Fraying due to movement	26/09/2018	Closed	16/10/2018	
					Not used.
101	V-Notch Weir Erosion	31/10/2018	Closed	1/11/2018	Alluvium responded 1/11/18. Seeking price from GLA to install erosion matting.

ID	Task Name	Duration	Start	Actual Start	Finish	Actual Finish	2019					
							Q2	Q3	Q4	Q1	Q2	Q3
1	Preliminaries	96 days	Thu 17/11/16	Thu ...	Fri 28/04/17	NA						
14	Milestone 2	44 days	Mon 27/03/17	Mon...	Thu 1/06/17	NA						
30	Milestone 3	352 days	Mon 1/05/17	Mon...	Wed 31/10/18	NA	Milestone 3					
31	EOT 17	1 day	Fri 5/10/18	Fri 5...	Fri 5/10/18	Fri ...	EOT 17					
32	EOT 18	0 days	Tue 9/10/18	Tue ...	Thu 11/10/18	Thu...	EOT 18					
33	EOT 19	6 days	Fri 12/10/18	NA	Fri 19/10/18	NA	EOT 19					
34	EOT 20	0 days	Wed 31/10/18	NA	Wed 31/10/18	NA	EOT 20					
35	Demolition Stage 2 quarter cycle labyrinth both sides	7 days	Tue 2/05/17	Tue 2/05...	Wed 10/05/17	Wed 10/...						
36	Establishment of whole site temporary access	20 days	Tue 2/05/17	Tue 2/05...	Tue 30/05/17	Tue 30/...						
37	Earthworks upstream of weir enabling temporary wall	10 days	Tue 2/05/17	Tue 2/05...	Fri 19/10/18	NA	Earthworks upstream of weir enabling temporary wall					
38	temp wall anchors and footings	30 days	Tue 9/05/17	Tue ...	Thu 22/06/17	Thu...						
39	temp wall panel manufacture	30 days	Mon 1/05/17	Mon...	Wed 14/06/17	We...						
40	Temporary works to pond area	10 days	Tue 2/05/17	Tue ...	Tue 16/05/17	Tue...						
41	Construction of temporary walls	10 days	Fri 23/06/17	Fri 2...	Thu 6/07/17	Thu...						
42	Excavation complete	60 days	Fri 23/06/17	Fri 2...	Thu 30/11/17	NA						
43	Demolition of Northern Cut off wall	5 days	Mon 17/07/17	Mon...	Mon 24/07/17	Mo...						
44	Demolition of Southern Cut off wall	5 days	Mon 17/07/17	Mon...	Mon 24/07/17	Mo...						
45	Geotechnical investigation of Weir Abutments	26 days	Fri 4/08/17	Fri 4/08...	Mon 11/09/17	Mon 11/...						
46	Foundation preparation (excludes PQ grouting works)	33 days	Fri 4/08/17	Fri 4/08...	Wed 20/09/17	Wed 20/...						
47	Construct cut off wall base south	12 days	Fri 11/08/17	Fri 1...	Tue 29/08/17	Tue...						
48	Construct abutment footings and shear keys south	26 days	Mon 4/09/17	Mon 4/09...	Fri 13/10/17	Fri 13/...						
49	Construct abutment footings and shear keys north	20 days	Mon 9/10/17	Mon 9/10...	Fri 3/11/17	Fri 3/1...						
50	Construct cut off wall base north	10 days	Mon 6/11/17	Mon...	Mon 20/11/17	Mo...						
51	Construct cut-off walls	67.5 days	Mon 30/10/17	Mon...	Thu 26/04/18	Thu...	Construct cut-off walls					
52	Construct wing walls	51 days	Tue 6/02/18	Tue ...	Fri 4/05/18	Fri ...	Construct wing walls					
53	Construct abutment walls	85.6 days	Mon 16/10/17	Mon...	Fri 23/03/18	Fri ...	Construct abutment walls					
54	Realign Northern temporary walls	0 days	Wed 18/04/18	Wed...	Wed 18/04/18	We...	Realign Northern temporary walls					
55	Demolish existing abutments	21 days	Wed 4/04/18	Wed...	Tue 29/05/18	Tue...	Demolish existing abutments					
56	Construction of Northern labyrinth	67 days	Mon 14/05/18	Mon...	Wed 22/08/18	NA	Construction of Northern labyrinth					
57	Construction of Southern labyrinth	45 days	Thu 5/07/18	Thu ...	Thu 18/10/18	NA	Construction of Southern labyrinth					



Task Summary External Milestone Inactive Summary Manual Summary Rollup Finish-only Critical Split

Split Project Summary Inactive Task Manual Task Manual Summary Deadline Progress

Milestone External Tasks Inactive Milestone Duration-only Start-only Critical

ID	Task Name	Duration	Start	Actual Start	Finish	Actual Finish	2019					
							Q2	Q3	Q4	Q1	Q2	Q3
58	Backfill Northern (RHA) Abutment	17 days	Fri 1/06/18	Fri 1...	Wed 27/06/18	We...	Backfill Northern (RHA) Abutment					
59	Backfill Southern (LHA) Abutment	25 days	Mon 7/05/18	Mon...	Thu 2/08/18	NA	Backfill Southern (LHA) Abutment					
60	D/S Rockwork (Northern Side)	5 days	Fri 3/08/18	NA	Fri 10/08/18	NA	D/S Rockwork (Northern Side)					
61	D/S Rockwork (Southern Side)	5 days	Mon 22/10/18	NA	Fri 26/10/18	NA	D/S Rockwork (Southern Side)					
62	Remove temporary walls	6 days	Fri 19/10/18	NA	Fri 26/10/18	NA	Remove temporary walls					
63	Landscaping	10 days	Mon 15/10/18	NA	Fri 26/10/18	NA	Landscaping					
64	<b>Milestone 4</b>	<b>111 days</b>	<b>Fri 26/10/18</b>	<b>NA</b>	<b>Fri 26/04/19</b>	<b>NA</b>	<b>Milestone 4</b>					
65	Weir Landscaping consolidation	26 ewks	Fri 26/10/18	NA	Fri 26/04/19	NA	Weir Landscaping consolidation					
66	<b>Milestone 5</b>	<b>284 days</b>	<b>Mon 27/03/17</b>	<b>Mon...</b>	<b>Wed 20/06/18</b>	<b>NA</b>	<b>Milestone 5</b>					
67	EOT 17	0 days	Fri 25/05/18	NA	Fri 25/05/18	NA	EOT 17					
68	EOT 18	0 days	Wed 23/05/18	Wed...	Wed 23/05/18	We...	EOT 18					
69	EOT 19	0 days	Fri 1/06/18	NA	Fri 1/06/18	NA	EOT 19					
70	EOT 20	0 days	Thu 14/06/18	NA	Thu 14/06/18	NA	EOT 20					
71	Preparation of Wetland Wall Foundations	25 days	Fri 2/06/17	Fri 2/06...	Mon 10/07/17	NA	Preparation of Wetland Wall Foundations					
72	Procurement of Mass Blocs	40 days	Mon 27/03/17	Mon...	Fri 26/05/17	Fri ...	Procurement of Mass Blocs					
73	delievery of mass blocs	77 days	Fri 28/04/17	Fri 2...	Fri 18/08/17	Fri ...	delievery of mass blocs					
74	Construction of Wetland Walls	93 days	Wed 14/06/17	Wed...	Fri 6/04/18	Fri ...	Construction of Wetland Walls					
75	Backfill Wetland walls	68 days	Mon 28/08/17	Mon...	Tue 10/04/18	NA	Backfill Wetland walls					
76	Excavate sediment from wetland area	26 days	Wed 27/09/17	Wed 27/0...	Fri 3/11/17	Fri 3/1...	Excavate sediment from wetland area					
77	Preparation of Wetland Fill areas	44 days	Mon 6/11/17	Mon...	Tue 10/04/18	NA	Preparation of Wetland Fill areas					
78	topsoil	32.75 days	Mon 6/11/17	Mon...	Mon 30/04/18	Mo...	topsoil					
79	Plant procurement	44 ewks	Mon 27/03/17	Mon...	Mon 29/01/18	Mo...	Plant procurement					
80	Landscaping	36 days	Thu 26/04/18	Thu ...	Wed 20/06/18	We...	Landscaping					
81	<b>Milestone 6</b>	<b>116 days</b>	<b>Wed 25/07/18</b>	<b>Wed...</b>	<b>Wed 23/01/19</b>	<b>NA</b>	<b>Milestone 6</b>					
82	EOT 17	0 days	Thu 22/11/18	NA	Thu 22/11/18	NA	EOT 17					
83	EOT 18	0 days	Tue 20/11/18	Tue ...	Tue 20/11/18	Tue...	EOT 18					
84	EOT 19	6 days	Wed 21/11/18	Wed...	Thu 29/11/18	NA	EOT 19					
85	EOT 20	0 days	Mon 10/12/18	NA	Mon 10/12/18	NA	EOT 20					
86	Wetlands Landscaping consolidation	26 ewks	Wed 25/07/18	Wed 25/0...	Wed 23/01/19	NA	Wetlands Landscaping consolidation					



Task		Summary		External Milestone		Inactive Summary		Manual Summary Rollup		Finish-only		Critical Split
Split		Project Summary		Inactive Task		Manual Task		Manual Summary		Deadline		Progress
Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		Critical		

## Isabella Weir Upgrade and Wetlands Project

**Extension of Time Register**

EOT No.	Description	Date Received by PAP	Date Determined by PAP	Comments
1	Design of Temporary Walls	8-Mar-17	29-May-17	Seeking two-week EOT.
2	Draining Upper Stranger Pond and Isabella Pond affected by 17 mm rain on 30 March 2017	20-Apr-17	29-May-17	Seeks completion date same as that sought from EOT1
3	Draining Isabella Pond affected by 12 mm rain on 9 April 2017	20-Apr-17	29-May-17	Seeks completion date same as that sought from EOT1
4	Unable to commence demolition due to Dam Regulatory Plan not approved	21-Apr-17	29-May-17	Seeks completion date same as that sought from EOT1
5	Redraining of Isabella Pond due to 13 mm of rain on 25 April 2017	26-Apr-17	29-May-17	Seeks completion date same as that sought from EOT1
6	2 days of wet weather 19 May 17 and 22 May 17	2-Jun-17	21-Jun-17	Granted for wet-affected working days 22, 23 May 2017
7	Planting-based adjustment of milestones	21-Jul-17	3-Sep-17	Claims 7 and 8 considered together
8	Retaining wall design delay	27-Jul-17	3-Sep-17	Further information received 7/8/17
9	3d of wet weather 31/7 to 2/8/2017	14-Aug-17	3-Sep-17	Notice received 2/8/17. Claim made 14/8/17
10	Incident Weather Aug - Oct 2017	15-Nov-17	19-Jan-18	
11	Incident Weather Nov 2017	15-Nov-17	21-Jan-18	
12	EOT and NOTICE OF DELAY for weir design changes	19-Jan-18	19-Mar-18	Delay claim also resolved.
13	Wet weather 25, 16 Nov 2017	19-Jan-18	20-Mar-18	
14	Wet weather 1-3 December 2107	19-Jan-18	20-Mar-18	
15	Wet weather 23-24 January 2018	30-Jan-18	20-Mar-18	
16	Wet weathr 30 January 2018	1-Feb-18	20-Mar-18	
17	Wet weather 25, 26 February 2018	2-Mar-18	20-Mar-18	
18	Wet weather 4-5 May and 11-12 May 2018	15-May-18	18-May-18	
19	Wet weather 15-17 June 2018	25-Jun-18	17-Jul-18	
20	Wet weather 28 June 2018	28-Jun-18	17-Jul-18	
21	Wet weather 31 June 2018 to 14 July 2018	14-Aug-18	22-Aug-18	
22	Wet weather 31 August 2018 and 7 September 2018	11-Sep-18	11-Sep-18	
23	Wet weather in September 2018	31/10/2018	5-Nov-18	

## Isabella Weir Upgrade and Wetland Project

### Payment Certificate Register

Original Contract Value (ex GST) \$13,155,544.49

As at 5 November 2018

Certificate Number	Date of Progress Claim	Amounts in Certificate EXCL. GST				Cumulative Total Payment (ex-GST)	Percentage of Original Contract Value	* Revised Contract Price (ex-GST)
		Contract Price	Variations	Completion Amount Deduction #	Certificate Total			
1	27/02/2017							
2	1/04/2017							
3	1/05/2017							
4	31/05/2017							
5	8/06/2017							
6	30/06/2017							
7	31/07/2017							
8	31/08/2017							
9	28/09/2017							
10	31/10/2017							
11	30/11/2017							
12	14/12/2017							
13	2/02/2018							
14	28/02/2018							
15	31/03/2018							
16	30/04/2018							
17	31/05/2018							
18	30/06/2018							
19	31/07/2018							
20	31/08/2018							
21	30/09/2018							
22	31/10/2018							
	Total	\$13,022,397.21	\$1,219,410.62	\$213,500.59	\$14,028,307.25			

#### Notes:

\* Revised Contract Price including unclaimed approved variations, see Variation Register

# See Clause 64 of GC21 General Conditions of Contract - reimbursable to Contractor on Completion

# Payment 19 includes correction of an earlier overpayment



## ISABELLA WEIR AND WETLANDS PROJECT - VARIATION REGISTER

Variation Number	Title	Date proposal issued	Date sent to Principal	Principal Approved (for > \$10k)	PAP's Formal Approval/Rejection Letter	Extra/Over (Qty change) Pending Approval Value	New Item Pending Approval Value (excl GST)	Extra/Over (Qty change) Approved Value	New Item Approved Value (excl GST)	Comments
VO 01	Concrete trial mixes	Ordered by PAP's email 5/5/17. Claimed 16/5/17	Cost information received 16 May 17	Normally N/A for < \$10k 25 May 17	25/05/2017					Sch 2 2.2(a)(xi) Original two trial mixes completed at contractor's cost. Concrete mix TM330284 was approved 5 May 2017. The Principal prefers use of a lower shrinkage concrete which this variation facilitates. VO 01 Amended adds to Concrete Trial Mixes at the same rate agreed for VO 01.
VO 01 Amended	Additional concrete trial mixes	Ordered by PAP 9/8/17	N/A	N/A	9/08/2017					
VO 02	Shared path for pedestrians	Agreed by Day Works: Stop/slow et al. by email 5/4/17 (Sch 2 2.2(a)(xi)) to John Hite	21/04/2017	25/05/2017	25/05/2017					On-going work - cost based on timesheet signed-off with PAP further details to changes in scope to be resolved as per letter PAP to CAP 25Jan18
VO 03	LDA services	14/06/2017		16/10/2017	22/03/2018					
VO 03a	Extra/Over Costs for LDA Services	23/01/2018	N/A	N/A	22/03/2018					
VO 03b	Icon Water Connection Costs - Provisional Sum	14/06/2018	N/A	N/A	27/03/2018					
VO 03c	LDA Thrust blocks and day works	23/05/2018	Approved Progress Meeting Minutes 5Mar18	5/03/2018	5/06/2018					Day works portion is concerning additional service location works not previously claimed.
VO 03d	LDA Day Works - Air Valve Pit Drain	27/06/2018	N/A	N/A	29/06/2018					Originally approved in error for \$3348. "Unapproved" by agreement 7 Sept 2018.
VO 03e	LDA Day Works - Air Valve Finishing Works	27/07/2018	N/A	N/A	30/07/2018					Final Variation for VO03 AMENDED downwards by 939.08 as per email PAP to CAP 17/9/18 1:53pm.
VO 04	Dilapidation reports	NOT USED	N/A	N/A						NOT USED - confirmed with John Hite 25/5/2017
VO 05	Tree protection measures	NOT USED								NOT USED - confirmed with John Hite 25/5/2018
VO 06	Rubbish removal as Day Works	N/a	26/05/2017	26/06/2017	25/05/2017					Work complete. See email ordering work - Stuart Oxborrow to Sch 2 2.2(a)(xi) 5Apr2017 9:42am.
VO 07	Fauna removal assistance	As per Item 10 of Post Tender Discussion Minutes 20 January 2017	N/A	N/A	16/06/2017					Work complete.
VO 08	Extra over 204P1.2 Removal of Nominated Trees (PQ)	24-Apr-17	19/06/2017	26/06/2017	4/07/2017					Work complete - see Progress Meeting minutes 10Apr17 for initial agreement.
VO 09	Fence realignment for site security	15-May-17	N/A	N/A	20/07/2017					Work complete.
VO 10	Costs to dewater due to regulatory plan not approved	28-Apr-17	20-Jun-17	26/06/2017	4/07/2017					
VO 11	EO pay item 03P10 flow measurement	16-May-17	20-Jun-17	29/06/2017	4/04/2018					Extra Over to Schedule PS Item 03P10, originally approved 4 July 2017; Amendment due to error reading subcontractor quotation approved 4 April 2018.
VO 12	Survey drone costs each month	16May17, revised Sch 2 2.2(a)(xi)	8Jun17, then after more info, 16Jun17	19/06/2017	19/06/2017					First claim agreed by Principal and Paid in PP4: Sch 2 2.2(a)(xi) high resolution image to be emailed to Principal monthly.
VO 13	Additional clean of upstream labyrinth slab	26-Sep-17	N/A	N/A	26/09/2017					Claim foreshadowed only - no claim received. Basis is that slab was previously cleaned, verifier missed window of opportunity to inspect.
VO14	EO pay item for payments to ACT Gov't Environment, Planning and Sustainable Development	N/A	N/A	N/A	N/A					Progressively approved as approved in Progress Meetings
VO15	Sediment removal for temporary access tracks	3-Jul-17	6-Jul-17	11-Jul-17	11/07/2017					Negotiated outcome, utilises Clause 41 Site Conditions of GC21
VO16	Proposed topsoil from Sediment Area 3 (testing costs)	3-Jul-17	N/A	N/A	31/07/2017					
VO17	Removal of mass concrete under existing retaining wall	21-Jul-17	N/A	N/A	31/07/2017					Unexpected concrete excavation - valued by dayworks
VO18	Mass concrete foundation for wetland outlet baffle pits	16-Oct-17	N/A	N/A	7/11/2017					see also RFI09
VO19	Re-establishment for Tree Removal	31-Jul-17	N/A	N/A	1/08/2017					Principal directed that these trees not be cleared until EPBC concerns were resolved. EPBC concerns were unknown to the contractor at tender time.
VO20	Drakeford Drive Bridge Stonepitching Repairs	28/11/2017		22/12/2017	1/02/2018					VO liaising with Mynul to obtain approval to proceed - funding from outside project.
VO21	U-Bar Reinforcement in Left Weir Cutoff Wall Footing Ends	26-Sep-17	N/A	N/A	26/09/2017					Missing detail in plans found at 11th hour and steel added
VO22	Green Cut toop of dental/blinding concrete (for weir only)	28-Sep-17	N/A	N/A	4/04/2018					Day works estimate converted to lump sum by agreement
VO23 and VO23a	Concrete temperature gradient testing	27-Nov-17	N/A	N/A	20/12/2017					
VO24	Extra over Mass Concrete Retaining Wall Rev 1	31-Jan-18	N/A	N/A	27/03/2018					Progress Meeting minutes approved the dimensional change and consequential cost.
VO25	Screening general fill stockpile	30-Oct-17	3/11/2017	7/11/2017	7/11/2017					
VO26	Import clay capping stockpile costs	5-Feb-18	6/02/2018	13/03/2018	13/03/2018					see QAS 8914
VO27	Shade cloth (hoarding) safety rectification	29-Sep-17	N/A	N/A	5/04/2018					
VO28	Extra over wetlands foundation	31-Jan-18	N/A	N/A	28/03/2018					

## ISABELLA WEIR AND WETLANDS PROJECT - VARIATION REGISTER

Variation Number	Title	Date proposal issued	Date sent to Principal	Principal Approved (for > \$10k)	PAP's Formal Approval/Rejection Letter	Extra/Over (Qty change) Pending Approval Value	New Item Pending Approval Value (excl GST)	Extra/Over (Qty change) Approved Value	New Item Approved Value (excl GST)	Comments
VO29	Extra over removal of existing concrete floodway	31-Jan-18	N/A	N/A	28/03/2018					Sch 2 2.2(a)(ii)
VO30	Extra over dental concrete up to October 2017	31-Jan-18	N/A	N/A	28/03/2018					
VO31	Negative for un-used foundation items	31-Oct-17	N/A	N/A	7/11/2017					Submitted as part of Progress Claim 10, October 2017 / Approved as per Payment Certificate
VO32	Delays to southern cut-off wall	5-Dec-17	N/A	N/A	4/04/2018					
VO33	Extra over gal anchorage bar retaining wall	31-Jan-18	N/A	N/A	28/03/2018					
VO34	Shade cloth (hoarding) fixing October	7-Nov-17	N/A	N/A	5/04/2018					
VO35	Tree watering October 2017	30-Oct-17	N/A	N/A	5/04/2018					
VO35.1	Tree watering November 2017	25-Oct-17	N/A	N/A	5/04/2018					
VO36	EOT12 Delay Costs	14-Mar-18	14/03/2018	14/03/2017	20/03/2018					As per exchange of letters 13, 14 March 2018
VO37	GPT Rectification Works	15-Dec-17		22/12/2017	1/02/2018					
VO38	Pay Item 905P1.1 Topsoiling Adjustment	24-Jan-18	N/A	N/A	28/03/2018					Saving due to change of topsoil specification
VO39	Tie bolt hole waterproofing	5-Feb-18	28/03/2018	5/04/2018	12/04/2018					
VO40	CNJ Impacts	30-Nov-17	N/A	N/A	5/04/2018					
VO41	Shade cloth November costs	5-Dec-17	N/A	N/A	5/04/2018					
VO42	Modification to fence with shade cloth	25-Jan-18	N/A	N/A	28/03/2018					
VO43	Fix shade cloth fence in storm	31-Jan-18	N/A	N/A	28/03/2018					
VO44	Tree watering December 17 and January 18	1-Feb-18	N/A	N/A	28/03/2018					Principal approved via Progress Meetings
VO45	Lighting tower hire	1-Feb-18	N/A	N/A	28/03/2018					
VO46	Wetland lockable gate not in tender	15-Feb-18	21/05/2018	22/05/2018	22/05/2018					In discussion with GLA 28/3/18
VO47	EO sediment from Isabella pond	1-Feb-18	N/A	N/A	27/03/2018					Principal approved via Progress Meetings
VO48	EO wetlands fill area subgrade	1-Feb-18	N/A	N/A	28/03/2018					
VO49	EO Rock Outlet to existing SW in wetlands	1-Feb-18	N/A	N/A	28-Mar-18					
VO50	Additional costs due to client changes to concrete joints	9-Mar-18	9-Mar-18	22-Mar-18	22-Mar-18					See related EOT12/Delay Costs resolution
VO52	Tree Watering February to April	30-Apr-18	N/A	N/A	10-May-18					See April 18 progress pay certificate for Guideline Memoranda
VO53	Extra Over Offtake Pits	30-Apr-18	N/A	N/A	9-May-18					Number of pits in schedule incorrect.
VO54	Extra Over DGB20 and DGB40, Wetland Access	30-Apr-18	N/A	N/A	9-May-18					Gravel for northern wetland access track to sediment pond
VO55	Extra Over Tree roost sourced from off-site	30-Apr-18	N/A	N/A	10-May-18					Qty in schedule mis-matched with plans
VO56	Additional rock armouring at northern wetlands	4-May-18	N/A	N/A	1-Jun-18					
VO57	Additional survey - digital model of weir zoned embankment	INCLUDED IN VO58								
VO58	Construction report - additional content	19-Jun-18	21-Jun-18	27-Jun-18	3-Jul-18					
VO59	Tree Watering May 2018	30-May-18	N/A	N/A	5-Jun-18					On-going dayworks
VO60	Green cut blinding layers	30-May-18	N/A	N/A	5-Jun-18					
VO61	E/O Pay Item 212P9 Excavation below foundation level	30-May-18	N/A	N/A	12-Jun-18					
VO62	E/O Pay Item 212P2.1 Dental Concrete	30-May-18	N/A	N/A	12-Jun-18					
VO63	E/O Pay Item 1505P2.1 Supply & Installation of Blinding Concrete	3-Jul-18	N/A	N/A	N/A					Concrete delivery dockets
VO64	Work to effect Filter Layer Design Change	27-Jun-18	N/A	N/A	N/A					Work associated with lowering of 5A and 5B filter layers including removal of aborted Zone 2 placement and clean of underlying rock.
VO65	Sediment load out	3-Jul-18	N/A	N/A	Dayworks Memo. 8931					Approved by Principal in Progress Meeting - removal of material downstream of weir
VO66	Plug abandoned sewer main	10-Jul-18	N/A	N/A	10-Aug-18					
VO67	E/O Pay Item 212P9 Excavation Below Foundation Level (June 18)	3-Jul-18	N/A	N/A	QAS3501					
VO68	E/O Pay Item 212P2.2 Supply and Installation of Dental Concrete (June 18)	3-Jul-18	N/A	N/A	QAS3502					
VO69	TBC									
VO70	Green cutting concrete for Blinding/Dental	3-Jul-18	N/A	N/A	Dayworks Memo. 8932					
VO71	TBC									
VO72	E/O for Foundation Prep for Dental	30-Jul-18	N/A	N/A	13/08/2018					Also QAS3458
VO73	E/O Dental Concrete for Southern Labyrinth Wall Foundation	30-Jul-18	N/A	N/A	13/08/2018					Also QAS3459
VO74	Blinding concrete	30-Jul-18	N/A	N/A	13/08/2019					Also QAS3460
VO75	Green Cutting Concrete - southern weir	30-Jul-18	N/A	N/A	13/08/2018					
VO76	Zone 2 Load, Haul and Place	31-Jul-18	31/07/2018	22/08/2018	22/08/2018					Dayworks - Guideline estimate
VO77	Piezometer installation	16-Aug-18	16/08/2018	22/08/2018	22/08/2018					Item 1701P1.3 deleted, net effect
VO78	CCTV of Wetland Pipes	19-Sep-18	N/A	N/A	20/09/2018					Half of costs, as negotiated SO/PT/MT
VO79	Stop Log Epoxy	27-Aug-18	N/A	N/A	27/08/2018					
VO80	WAE for Wetlands (Principal Initiated Changes)	27-Aug-18	N/A	N/A	27/08/2018					This VO discussed PAP/CAP 27Aug18. Initial invoice from Coleman Engineering - amended down to this price. PAP considers acceptable.
VO81	E/O Removal and Stockpiling of Topsoil (PQ)	31-Aug-18	N/A	N/A	QAS3505					Additional qty to Item 205P1
VO81a	Stainless steel survey pins	20-Sep-18	N/A	N/A	20/09/2018					

ISABELLA WEIR AND WETLANDS PROJECT - VARIATION REGISTER

Variation Number	Title	Date proposal issued	Date sent to Principal	Principal Approved (for > \$10k)	PAP's Formal Approval/Rejection Letter	Extra/Over (Qty change) Pending Approval Value	New Item Pending Approval Value (excl GST)	Extra/Over (Qty change) Approved Value	New Item Approved Value (excl GST)	Comments
VO82	E/O Joint protections	19-Sep-18	20/09/2018	27/09/2018	27/09/2018					Sch 2 2.2(a)(ii) Stainless steel plates between new and old foundation slabs Professional Engineer design/certification Cost neutral - balances out schedule items not ordered Access to water height monitoring device through fence. As ordered in Progress Meeting.
VO83	Access platform for penstock	19-Sep-18	N/A	N/A	20/09/2018					
VO84	Design of Access Platform	19-Sep-18	N/A	N/A	20/09/2018					
VO85	Reverse out Pay Items 03P1 to 03P8, 03P11	28-Sep-18	N/A	N/A	N/A					
VO85a	Access door for ALS works	31-Oct-18	N/A	N/A	31/10/2018					
VO86	Shallow water signs	31-Oct-18	N/A	N/A	31/10/2018					

<b>TOTAL</b>	\$0.00	\$0.00	\$324,872.87	\$858,271.07
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<b>TOTAL PENDING APPROVAL</b>	<b>TOTAL \$0.00 APPROVED</b>	<b>\$1,183,143.94</b>
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<b>TOTAL VARIATION</b>	<b>\$1,183,143.94</b>
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Isabella Pond Precinct Improvement Works - Contact Register (all emails kept on file, if needed please ask)

DATE	INQUIRY/QUESTION	NAME	RECEIVED VIA	ACTION	ACTION BY	DATE CLOSED	Comments	
8 March 2017	Why are ponds being drained? Where is the water being pumped to?	Sch 2 2.2(a)(ii)	Access Canberra email	Leigh Crocker replied by email	Leigh Crocker	9-Mar-17		
9-Mar-17	Concern about ponds being drained for 18 months and location of ponds.		Phone call to LDA reception	Leigh Crocker called Ms Harris, supplied a map and discussed the project in general.	Leigh Crocker	8-Mar-17		
9-Mar-17	Will there be a safe walking track placed around the pond?		Email to ED inbox	Bonnie Jackson replied and working with project teams to seek further details.	Bonnie Jackson	22-Mar-17	Follow up emails were made to seek further information sent to TCCS. Will need to follow up	
9-Mar-17	Suggestion for sound wall to be constructed near Upper Stranger Pond to reduce noise on Drakeford Dr.		Email to ED inbox	Bonnie Jackson contacted via phone to discuss and provided email to project team for advice. Suggestion was provided to TCCS on 21 March.	Bonnie Jackson	Mar-17		
10-Mar-17	Questions about what will happen to birds and any animals that can't relocate themselves.		Email to ED inbox	Bonnie Jackson replied with information from the project area and Matt Betze from EPSD.	Bonnie Jackson	21-Mar-17		
10-Mar-17	Phone call about location of 'Upper Stranger Pond'		Phone via Access Canberra	Bonnie Jackson called back and explained location area.	Bonnie Jackson	14-Mar-17		
	Question about the location of 'Upper Stranger' pond.		Email to ED inbox	Bonnie Jackson replied with a map attached to email, also called to discuss other one phone.	Bonnie Jackson	14-Mar-17		
11-Mar-17	Question about when works are going to start.		Email to ED inbox	Bonnie Jackson replied stating that we are waiting on some final approvals.	Bonnie Jackson	21-Mar		
16-Mar-17								
20-Mar-17	Question about white ducks on Stranger Pond.		Email to ED inbox	Bonnie Jackson replied explaining that Stranger Pond won't be drained so ducks will be ok.	Bonnie Jackson	20-Mar-17		
22-Mar-17	Questions about: 1) What is happening to control odour 2) What consultation was undertaken around constructing the wetland at Isabella pond 3) What is being done to control the mosquitoes 4) What time will works start each day 5) What is happening with the sediment		Call to Access Canberra after receiving a calling card in the mall from a doorknocker. Bonnie conducted on 20 March.	Bonnie Jackson spoke with the person over the phone. Responses are being prepared to respond via email.	Bonnie Jackson and Project Area	23-Mar-17		
9-Apr-17	Questions 1. Given the now apparent shallowness of the Isabella and Upper Stranger Ponds because of silt build up, does the improvement include the removal of some of this silt to increase the depth and sustainability of the Ponds? 2. What care is being taken to stop the smaller carp moving into Stranger Pond? 3. What care is being taken to look after resident birds and other animals like turtles? 4. Is there any consideration being given to putting in a safe nesting spot for birds, in particular the ducks and swans, on the 2 Ponds, i.e. an island in the middle of each Pond? 5. Will Stranger Pond also be improved, with carp removed, and a safe nesting spot for birds included? 6. When is Access Canberra going to instigate a regular maintenance program for the areas around the Ponds?		Email to ED inbox	Email response from Bonnie Jackson with answers provided by Leigh and Stuart.	Bonnie Jackson and Project Area	Apr-17	need to follow up with TCCS about ongoing maintenance of ponds	
Apr-17	Question about blasting and if diasp survey was required at this residents house		Call through Access Canberra	Email and phone call from Bonnie	did project area organise diasp survey?	Apr-17		
8-May-17	John Hite contacted owners of houses at 7 Arnot Place and 8 Griffin Place, Mo-nash seeking to place vibration/noise monitoring devices in their yards		Face to face.	Landowners were more than happy to accommodate the devices.	John Hite	8-May-17	Entry added by Sch 2.2(a)(ii)	
8-May-17	Seeking progress reports re removal of shopping trolley and watering of reeds		Email to ED inbox	Reeds watered 10 May 17. To attempt to recover shopping trolley if not too expensive - previously left in middle of pond due to cost of recovery in deep mud.	Sch 2.2(a)(ii) / John Hite	30/05/2017 reeds watered; to check whether can walk on mud crust 12 May 17 - if not then trolley to be left in place.	Entry added by Sch 2.2(a)(ii)	

10-May-17	Noted that EPA's Health Chester received a complaint regarding noise last Wednesday night. The noise did not originate with the Isabella project. A roundabout asphalt resurfacing project was operating late that night.	Resident in vicinity of Isabella Drive and Clive Steele Avenue	Nil	Nil	N/a	Note
15-May-17	Mike McGrath at Progress Meeting that the additional interpretative signs are being read by cyclist and pedestrians.	Observation	Nil	Nil	N/a	Note
25-May-17	Loss of water view due to wetlands construction from nearby house.	Sch 2 2.2(a)(ii)	email to CMTEDD	Leigh Crocker called Sch 2 who explained the project. Sch 2 nevertheless registered that she was "... not a fan..."	Leigh Crocker	6-Jun-17 See email Leigh Crocker to Bonnie Jackson 6 June 17 4:18pm
7-Jun-17	Visit to site by Sch 2 2.2(a)(ii), her cameraman, Mike McGrath and Sch 2 2.2(a)(ii) to make video for project.	Site visit	Nil	Nil	N/a	Noted by Penni as successful.
23-Jun-17	Complaint by nearby resident of dust affecting his laundry on the clothes line.	Sch 2 2.2(a)(ii)	Approached Sch 2 2.2(a)(ii) and traffic controller Sch 2 2.2(a)(ii) at Monash bicycle path crossing.	Guideline made aware of the complaint 23 June 2017.	Sch 2 2.2(a)(ii) contacted and met Sch 2 2.2(a)(ii) 26 Jun 17	26/06/2017 Issue resolved.
30-Jun-17	Enquiry by Sch 2 2.2(a)(ii) as to whether Upper Stranger Pond has been restocked with native fish.	Sch 2 2.2(a)(ii)	email to Bonnie Jackson, EDCommunity@act.gov.au	Bonnie Jackson contacted Stuart Oxberrow, who ask Matt Bestzel what was to happen. Matt advised (4.7.17) that to be restocked in Spring when fingerlings become available.	CMTEDD	Response sent July 2017 Advised that cannot get native fish fingerlings until warmer season. Pond to be re-stocked at that time. (eg Nov 17)
Jul-17	Approach to Mike McGrath requesting that volunteers be used in the wetland planting.	ESPD	email to Bonnie Jackson, EDCommunity@act.gov.au	Mike McGrath advised that volunteers would not be used.	CMTEDD	Jul-17
6-Sep-17	Twitter message to ACT Government regarding "distressed" kangaroo in Drakeford Drive. Potentially affected by the project fencing by either Isabella Pond or the adjacent LDA development.	Sch 2 2.2(a)(ii)	Twitter and via email	Investigated whether site staff know of the incident - answer was no. Understood that no Twitter response was made.	CMTEDD	6/09/2017 Unknown whether adjacent to Isabella works or recently started LDA development further north on Drakeford Drive.
24-Oct-17	Email from Sch 2 2.2(a)(ii) advising of turtles crossing Isabella Drive, leaving the Isabella Pond site.	Sch 2 2.2(a)(ii)	Email addressed to John Hite	Guideline reminded to monitor and relocate turtles as much as is safe.	PAP/G Guideline	24/10/2017 PAP discussion with CAP 14/10.
13-Nov-17	Chief Minister regarding letter from school to protect turtles.	Sch 2 2.2(a)(ii)	Phone	Guideline asked to nominate "turtle-relocation" staff as per aquatic environmental management plan.	Done by phone and email. PAP to follow-up.	13/11/2017 (app) Mike McGrath advised PAP 13/11/17 that Chief Minister Andrew Barr has drafted a letter to the school. More intensive monitoring has not been asked for or implemented. All Guideline staff trained to relocate turtles and given role to specifically observe.
20-Nov-17	Letterbox drop regarding screening of material in the Monash Stockpile area.	PAP Drafted, ACT Gov't amended, Guideline delivered on Guideline Letterhead	Letterbox drop	As requested by Mike McGrath	ACT Gov't and Guideline	2/7/2017 May be an issue confusing Best Civil's adjacent work with Guideline's "gravel" screening work.
1-Nov-17	Various Concerns expressed regarding disruption of "Water span ..." at 01.	Sch 2 2.2(a)(ii)	email to EPD.BasinProject@act.gov.au received late Oct 17/ early Nov 17	Mike McGrath and Nick Taylor visit the Sch 2 2.2(a)(ii) at their residence to explain what the finished pond will look like.	CMTEDD	2-Nov-17 Generally, the construction looks "messy". Mike and Nick helped Sch 2 2.2(a)(ii) to understand what the pond will eventually look like. This was well received.
11-Jan-18	Mosquitoes worse at Upper Stranger Pond due to lack of fish in the pond	Sch 2 2.2(a)(ii)	email to edcommunity@act.gov.au 11Jan18 7:10pm	Mr Ferrari to be advised of fish fingerlings being added to pond on 18 Jan 18 and future additional stocking with fish.	Penny Gibson of CMTEDD	15-Jan-18 Added to register as per Mike McGrath's email 15 Jan 18 8:41 am
23-Jan-18	Social media comment by Guideline employee regarding project	Sch 2 2.2(a)(ii)	Internal ACT Gov't email	Guideline ACT will inform employees to not comment on project-related items	Sch 2 2.2(a)(ii) / John Hite	23/01/2018 10:22am As per email Oxberrow to Sch 2 2.2(a)(ii) 23/1/18
14-Feb-18	Worksafe observed working at heights and issued improvement notices to Guideline and Xmplar.	Worksafe, ACT Gov't	Written notice McGrath, Michael <Michael.McGrath@act.gov.au>	Guideline and Xmplar to respond as asked to Worksafe	Sch 2 2.2(a)(ii) (and Xmplar)	3/03/2018 Guideline's response sent to Nick Taylor 8 March 2018
21-Feb-18	Michael McGrath agreed to draft ACT Gov't Facebook page material for commencement of wetland planting.	Sch 2 2.2(a)(ii)	Noted for records	Not Applicable		21/02/2018 Photos cleared by Guideline with one declined, other planting photos submitted.
28-Mar-18	Advice regarding wetland bird nesting's effect on wildlife	Sch 2 2.2(a)(ii)	ACT Gov't internal email	Draft response to be sent to coms officers		
1-Mar-18		Sch 2 2.2(a)(ii)	ACT Gov't internal email	Noted - possible action.		

180226 FW Facebook comments SEC UNCLASSIFIED.msg

180901 FW Nesting at Isabella Ponds SEC UNCLASSIFIED.msg

31-Mar-18	Complaints by neighbour of dust affecting house inside and out		Sch 2 2.2(a)(ii)	ACT Gov't Internal email	Sch 2 2.2(a)(ii) sent draft response to Nick Taylor 12 April 18	ACT Gov't	Kim Harris and Sch 2 2.2(a)(ii) met with Sch 2 2.2(a)(ii) at 8:30 20 April 2018 to discuss the matter. Sch 2 2.2(a)(ii) were available. They are looking for cleaning of some curtains and blinds (including what are probably Luxaflex Luminette Privacy Sheers). Sch 2 2.2(a)(ii) will call Luxaflex for cleaning advice for these particular blinds. Quotes received from Sch 2 2.2(a)(ii) 16 May 2018. Kim Harris met a second time with Sch 2 2.2(a)(ii) Dickinson 24 May 18. Summary of discussion email attached at right.	180931 Dust Complaint by Fish Dickinson.pdf 180629 FWL Curtain cleaning enquiry _SEC_UNCLASSIFIED_msg
3-Sep-18	Three senior TCCS staff attended site: Jeremy Smith, Damien Hill and Duncan			Internal arrangement	To note.	Nil.	Site inspection carried out safely - no specific issues.	
21-Aug-18	Ducks trapped inside netting reportedly causing trauma to flock inside and out			Access Canberra	Sch 2 2.2(a)(ii) inspected, chased ducks out through opening. Left message on Sch 2 2.2(a)(ii) s phone. Reminded guideline of its role to inspect and remove wild animal on daily basis.	Sch 2 2.2(a)(ii)	22/08/2018	180822 FWL ducks under netting _SEC_UNCLASSIFIED_msg
14-Sep-18	Question to ACT Gov't Chief Minister on talk-back show about lowering of Upper Stranger Pond and impact on fish	Member of public	Chief Minister's talk-back radio	PAP Sch 2 2.2(a)(ii) made himself available to show Canberra Times photographer to Upper Stranger Pond later 14 Sept 18. Canberra Times did not arrive prior to 5 pm.	Sch 2 2.2(a)(ii), Stuart Oxborrow and others		Guideline opened Upper Stranger to Lower Stranger valve 8 turns 7 Sept 18 to allow southern wetland to be free of water input while waiting for CCTV of balancing pipes. Three hours later Sch 2 2.2(a)(ii) closed the valve. See embedded email for final press release to Canberra Times.	180919 FWL Upper Stranger Pond _SEC_UNCLASSIFIED_msg
04-Sep-18	"Canberra fishers are concerned native fingerlings ... Upper Stranger Pond"	Canberra Times newspaper	ACT Gov't "Media Watch"	Nil	N/A	24/09/2018	Embedded to right	180924 FWL ACT Government Daily Media Report 24 September 2018 _SEC_U
17-Oct-18	Complaint about 3 ducks drowned in northern wetland	RSPCA	Access Canberra System	Sch 2 2.2(a)(ii) investigated on-site, removed three dead ducks.	Sch 2 2.2(a)(ii) - reminding contractor to pin all nets securely and chase out ducks daily	19/10/2018	Ducks had become entangled in the net.	181019 RL ACT Government Feedback Reference 181017-001658 _SEC_UNCL

## NON COFORMANCE / CORRECTIVE ACTION (NCA) REPORT REGISTER

Project Name: Isabella Weir Upgrade

Project Number: GL616

NCA NO.	ACTION OFFICER	PROCEDURE NO.	SEVERITY	DESCRIPTION	DATE NCA ISSUED	DATE RESPONSE DUE	DATE REMINDER SENT	DATE NCA CLOSED	ACTUAL COST
1	Sch 2 2.2(a)(ii)	GLA-BP-1.3.1	2	Topsoil strip	15.5.17		N/A	31.5.17	Sch 2 2.2(a)(xi)
2		QP4.2.2	2	Instrument stolen	15.5.17		N/A	14.6.17	
3		CP 5.1.1	2	Reed watering	23.5.17		N/A	17.5.17	
4		SP 2.2.6	1	Evacuation Outcomes	14.6.17	14.7.17	N/A	12.7.17	
5		SP 2.3	2	Waterank SWMS	17.6.17	17.7.17	N/A	28.6.17	
6		SP 2.3	2	Plant without flashing light	17.6.17	17.7.17	N/A	12.07.17	
7		SP 2.3	2	Lifting gear out of date	17.6.17	17.7.17	N/A	19.07.17	
8		SP 2.3	2	Massbloc epoxy of Rebar not as per manufacture	14.6.17	17.7.17	N/A	16.8.17	
9		SP 2.3	2	Rebar hole size in mass bloc	14.6.17	17.7.17	N/A	1.11.17	
10		SP 2.3	2	Concrete pump plant induction not complete	31.7.17	31.8.17	N/A	16.8.17	
11		SP 2.3	2	IHT excavator plant induction not complete	31.7.17	31.8.17	N/A	16.5.17	
12		CP-5.3.1	1	EOT register	23.8.17	23.9.17	N/A		
13		CP 5.3.2	1	Subcontract control checklist	23.8.17	23.9.17	N/A	1.11.17	
14		CP 5.3.2	2	Cutoff wall footing height south	30.8.17	23.9.17	N/A	1.11.17	
15		SP 2.3	2	South abutment cutoff trench width	13.9.17	13.10.17	N/A	1.11.17	
16 a		SP 2.3	2	Sth upper slabhoneycomb & twisted waterstop at labyrinth	23.2.18	22.2.18	N/A	1.3.18	
17		SP 2.2.6	1	Evacuation drills outcome	7.11.17	24.11.17	N/A	10.1.18	
18		SP 2.3	2	Formwork holdpoint crossed	13.11.17	13.12.17	N/A	15.11.17	
19		SP 2.2.4	2	Worksafe proactive visit	24.11.17	29.11.17	N/A	10.1.18	
20		SP 2.3	2	Xmplar safety items from SWMS review	15.11.17	17.11.17	N/A	29.11.17	
21		SP 2.3	2	Failed crush test	28.11.17	27.12.17	N/A	21.02.18	

22	Sch 2 2.2(a)(ii)	SP 2.3	2	Nth cut off footing defects	5.12.17	27.12.17	N/A		Sch 2 2.2(a)(xi)
23		SP 2.3	2	Core concrete temperature greater than 30 degrees	11.12.17	24.1.18	N/A	21.2.18	
24		SP 2.2.1	1	People not inducted in SWMS	12.12.17	12.1.18	N/A	7.2.18	
25		SP 2.2.4	3	Xmplar accessing formwork unsafely	20.12.17	12.1.18	N/A	10.1.18	
26 a		SP 2.3	2	South abutment wall concrete defects	1.3.18	1.4.18	N/A		
27		SP 2.3	2	Concrete dry shrinkage	3.2.18	5.3.18	N/A		
28		CP 5.3.1	1	Variation not filed in paper copy	16.2.18	16.3.18	N/A		
29		QP 4.1.1	1	Lack of backup email correspondence	16.2.18	16.3.18	N/A		
30		SP 2.2.4	1	Induction #187 hasn't completed asbestos training	16.2.18	16.3.18	N/A		
31		SP 2.2.4	1	Caps to be provided to vertical bar	16.2.18	16.3.18	N/A		
32		CP 5.3.2	1	Checklist for Able Landscaping incomplete	16.2.18	16.3.18	N/A		
33			1	Verification checklist incomplete	16.2.18	16.3.18	N/A		
34			1	Incorrect bars in wing wall footings	20.2.18	19.3.18	N/A		
35			1	Pour 6 not immediately cured	20.2.18	19.3.18	N/A	21.2.18	
36		SP 2.3	2	Damage to V42	22.2.18	22.3.18	N/A		
37			2	Stoplogs in labyrinth wall missed in tender	22.02.18	21.03.18	N/A	14.03.18	
38			2	Pour 6 bony concrete	1.3.18	1.4.18	N/A		
39				Starter bars missing from pour 12 schedule	01.03.18	01.04.18	N/A	07.03.18	
40			2	Cut bars pour 11	6.3.18	15.3.18	N/A	6.3.18	
41			2	Pour 14, Cut off section of footing overfilled with blinding concrete	7.3.18	30.3.18	N/A	02.05.18	
42		QP - 4.2.2	2	Cut Starter Bar between pour 5 and pour 13B	19.03.18	20.03.18	N/A	02.05.18	
43			2	Honeycombing of concrete in pour 5 at intersection with pour 13B	20.03.18	21.03.18	N/A	02.05.18	
44			1	Excessive cover over top of pour 13B	04.04.18	05.04.18	N/A	02.05.18	

45	Sch 2 2.2(a)(ii)		1	Weak 'Z' Bar hole patching, can be tapped out	11.04.18	13.04.18	N/A	22.08.18	Sch 2 2.2(a)(xi)	
46			2	Sch 2 2.2(a)(ii) didn't attend Working at Heights Training	03.04.18	03.05.18	N/A	23.04.18		
47			2	Northern 'V' Noch weir homeycombing and lump in concrete	13.03.18	13.03.18	N/A	16.08.18		
48			3	Overhead Powerline Strike	12.04.18	17.05.18	N/A	27.08.18		
49			2	Pipe Left uncovered post CCTV	16.05.18	16.05.18	N/A	08.08.18		
50										
51				2	Cover to steel in part of Pour 6 not to specification	12.06.18	19.06.18	N/A		05.07.18
52				2	Not doing Evacuation Drill	14.06.18	14.07.18	N/A		22.08.18
53				2	Not doing SWMS at Induction	14.06.18	14.07.18	N/A		22.08.18
54				2	VC not being used for landscaping	14.06.18	14.07.18	N/A		22.08.18
55				2	Ancon Couplers	18.06.18	19.06.18	N/A		22.08.18
56				2	Water-stop in the wrong location and N32 to be installed correctly	19.06.18	19.07.18	N/A		22.08.18
57				2	Evacuation Drill Outcomes	22.06.18	25.06.18	N/A		22.08.18
58				2	Oversize Rock in Zone 1 Backfill Material	12.06.18	15.06.18	N/A		22.08.18
59			QP - 4.2.2	2	Break into Site sheds	29.06.18	29.07.18	N/A		08.08.18
60			QP - 4.2.2	2	Graffiti on Sth Abutment Weir Wall	29.06.18	29.07.18	N/A		
61			SP - 2.2.6	1	Sch 2 2.2(a)(ii) First Aid Certificate expired	02.07.18	31.07.18	N/A		08.08.18
62				2	Evacuation drill not recorded as per procedure	02.07.18	31.07.18	N/A		14.08.18
63			SP - 2.3	2	Xmplar telehandler not stood down when servicing was out of date	02.07.18	31.07.18	N/A		14.08.18
64			SP - 2.3	2	Xmplar Chains for Telehandler had no certification	02.07.18	31.07.18	N/A		14.08.18
65			SP - 2.3	2	Sch 2 2.2(a)(ii) operating Roller without completing daily pre-start	03.07.18	31.07.18	N/A		14.08.18
66			SP - 2.3	2	Xmplar Telehandler had no Pre-Start Completed (OFSC Audit)	03.07.18	31.07.18	N/A		14.08.18



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Approved by: Managing Director	Date: June 2015	





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## FORECAST COST TO COMPLETE SUMMARY

### ISABELLA WEIR AND WETLANDS

Based on Progress Claim:

31/10/2018

#### Estimated Cost to Complete

	<b>Estimated Final Cost</b>
Schedule Items	\$13,084,680.90
Variations	\$ 1,264,453.67
Anticipated Variations	<u>\$ 20,000.00</u>

<b>Total</b>	<b>\$14,369,134.57</b>
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Pay Item	Description of Work	SCHEDULED (with GST removed)				Cumulative Total - Current Claim		FORECAST FINAL COST		NOTES
		Quantity	Unit	Rate	Amount	PROGRESS	FINAL	Quantity	Amount	
						Quantity	Amount	Quantity	Amount	
205P2.1	General Earthworks (PQ) - Refer to Earthworks Schedule (Table 2.0.1 and 2.0.2, Clause 2.05.1)	Sch 2 2.2(a)(xi)								See also VO51
205P2.2	Extra/Over for Stockpiling, Blending, Hauling and Reincorporation of Material into the Works									Amended forecast in Sept 18
205P2.2.1	Extra/Over 205P2.1 - Zone 1 Material (PQ)									Amended forecast in Sept 18
205P2.2.2	Extra/Over 205P2.1 - Zone 2 Material and General Fill from Weir Excavations (PQ)									Item deleted; Nil Zone 3 and 4 available. See also Extra/Over VO 47
205P2.2.3	Extra/Over 205P2.1 - Zone 3 & Zone 4 Material (PQ)									Additional qty not expected
205P2.2.4	Extra/Over 205P2.1 - Sediment From Isabella Pond (PQ)									Additional qty not expected
205P2.2.5	Extra/Over 212P9 - Additional Excavated Material (PQ)									
205P4	Unsuitable Material (PQ)									
206P2	Replacement of Unsuitable with General Fill (PQ)									
207P2	Preparation of Cut or Fill Subgrade (PQ) (access road and 5A material under embankment pavement zone)									
208P1	Pre-Landscape Survey for Gradient Verification									
209P1	Mass Concrete Backfill (PQ) (25MPa)									Covered by other items
212P1	Embankment Foundation Preparation									
212P1.1	Foundation Preparation Including Dental Cleaning (PQ)									
212P2.1	Supply & Installation of Dental Concrete (PQ)									See also Extra/Over VO30, VO62, VO88, VO73
212P2.2	Supply & Installation of Filling Concrete (PQ)									
212P3	Drilling of Grout Holes (PQ)									Not used, Deducted in VO31
212P15	Hook-up to Grout Holes (PQ)									Not used, Deducted in VO31
212P7	Grout Foundations (PQ)									Not used, Deducted in VO31
212P8	Grout Cap (PQ)									Not used, Deducted in VO31
212P9	Excavation Below Foundation Level (PQ)									See also Extra/Over VO61
213P1	Embankment Construction									
213P2.3	Supply and Place Imported Zone 5A Fine Filter Material (PQ)									
213P2.4	Supply and Place Imported Zone 5B Coarse Filter Material (PQ)									Tender estimate over-estimated needed qty Schedule quantity assumed, assumed no extra costs for "select rip rap" where 5C exists (small cost in any case).
213P2.5	Supply and Place Imported Zone 5C Rock Fill Material (PQ)									
215P1	Demolition									
215P1.1	Slab Demolition									
215P1.2	Walls									
215P1.3	Labyrinth									
215P1.4	Existing Reinforced Concrete Channel (PQ)	See also VO29								
	<b>Sub Total - EARTHWORKS</b>									
<b>PART1-03</b>	<b>UNDERGROUND SERVICES</b>									
303P1	Backfilling under Roads Paths and Driveways (PQ)	Not expected to utilise other than a nominal amount.								
303P5	Backfill of Redundant Service Trenches Under Structures with Mass Concrete									
303P6	Removal of abandoned services									
306P1	Subsoil Drainage									
306P1.3	150mm Pipe, Including No-Fines Concrete Backfill (PQ)	Not required								
306P3	High End Risers in Locations as Directed by Geotechnical Engineer (PQ)	Not required								
306P4.3	V Notch Headwall in Locations as Directed by Geotechnical Engineer	Not required								
	<b>Sub Total - UNDERGROUND SERVICES</b>									
<b>PART1-04</b>	<b>FLEXIBLE PAVEMENT CONSTRUCTION</b>									
403P1	Base Material									
403P1.1	Traffic Category 1 Base Material (permanent access road, embankment pavement zone, mowing strip)	One of last activities. Expected 3rd week Oct 18.								
	<b>Sub Total - FLEXIBLE PAVEMENT CONSTRUCTION</b>									
<b>PART1-06</b>	<b>CONCRETE KERBS, FOOTPATHS AND MINOR WORKS</b>									
603P1.8	Mowing Strips (300x75mm)									
	<b>Sub Total - CONCRETE KERBS, FOOTPATHS AND MINOR WORKS</b>									
<b>PART1-08</b>	<b>INCIDENTAL WORKS</b>									
816P1	Rip Rap									
	<b>Sub Total - INCIDENTAL WORKS</b>									
<b>PART1-09</b>	<b>WEIR LANDSCAPING</b>									
905P1	Topsoiling - 100mm thick (PQ)									
905P1.1	Non-irrigated Dryland Grassing (PQ)									
908P1	Bitumen and Straw Mulching (PQ)									

Pay Item	Description of Work	SCHEDULED (with GST removed)				Cumulative Total - Current Claim		FORECAST FINAL COST	
		Quantity	Unit	Rate	Amount	PROGRESS	FINAL	Quantity	Amount
						Quantity	Amount	Quantity	Amount
913P1	Jute Matting (PQ)								
911P1	Consolidation								
	<b>Sub Total - WEIR LANDSCAPING</b>								
	<b>Total Schedule of Rates (exc GST)</b>								
	<b>Total Provisional Sums (exc GST)</b>								
	<b>TOTAL PART1 SCHEDULE OF RATES &amp; PROVISIONAL SUMS (exc GST)</b>								
<b>PART2-02</b>	<b>EARTHWORKS</b>								
207P2	Subgrade Preparation								
207P2.1	Preparation of Wetlands Wall Foundation (including blinding concrete)								
207P2.2	Preparation of Wetlands Fill Area Subgrade								
207P2.3	Preparation of maintenance access track subgrade								
	<b>Sub Total - EARTHWORKS</b>								
<b>PART2-03</b>	<b>UNDERGROUND SERVICES</b>								
305P1	Stormwater Drainage								
305P1.3.2.225	Supply and Install 225mm uPVC Balancing Pipes Within Wetlands								
305P1.1.2.300	Supply and Install 300mm dia RCP Baffle Pit Outlet Pipes within Wetlands								
305P8	Special Chambered Manholes								
305P8.1	Supply and Construct Custom Baffle Pit/Wetland Water Level Control Pit No. NWL1 (North wetland) including gates and lids								
305P8.2	Supply and Construct Custom Baffle Pit/Wetland Water Level Control Pit No. SWL1 (South wetland) including gates and lids								
305P8.3	Supply and Construct Custom Submerged Offtake Pit								
305P10	Grated Inlet Sumps								
305P10.900.900	Supply and Install 900 by 900 Maintenance Grated Junction Pits Within North and South Wetlands								
305P13	Headwalls								
305P13.P.300	Supply and Install Standard Headwall to Suit 300 dia RCP pipe								
	<b>Sub Total - UNDERGROUND SERVICES</b>								
<b>PART2-04</b>	<b>FLEXIBLE PAVEMENT CONSTRUCTION</b>								
403P1	Maintenance Access Track								
403P1.1	DGB20 (Traffic Category 1)								
403P1.1	DGB40 (Traffic Category 1)								
	<b>Sub Total - FLEXIBLE PAVEMENT CONSTRUCTION</b>								
<b>PART2-08</b>	<b>INCIDENTAL WORKS</b>								
804P1	Fencing								
804P1.1	Supply and Install Fencing to Ends of Retaining Walls - Type PD								
805P2	Removable Bollards								
805P2.1	Supply and Install Removable Bollards to Sediment Pond Maintenance Access Ramp (North Wetland)								
808P2	Edging								
808P2	Spade Edging								
809P1	Decomposed Granite Gravel Paving								
809P1	Gravel Paving to Rock Viewing Platform - "Cream"								
813P1	Temporary Bird Proof Protective Netting "Type BP"								
816P1	Erosion Control Matting								
816P1	Supply and Install Coir-9 Jute Matting								
816P2	Drainage Rockwork - Dn=450mm, 900mm Thick								
816P2.1	Supply and Install Rockwork to Downstream of all Existing Stormwater Pipe Outlets (6 Outlets)								
816P2.2	Supply and install Rockwork at Diversion Connections and Transition to South Wetland Inlet Pool								
817P1	Granite Feature Rocks at Rock Viewing Platform, Rock Seats and Potential Rock Clusters								
817P1	Rock Viewing Platform including Batter Slope Rockwork and Rock Seats								
818P1	Roost Tree Logs and Habitat Logs								
818P1.1	Utilisation of Existing Tree Roosts								
818P1.2	Tree Roost Sourced From Off-Site								
818P1.3	Habitat Tree Logs								
819P1	Water Level Indicator								
819P1	Supply and Install Water Level Indicators								
820P1	Seat Furniture								

Sch 2 2.2(a)(xi)

NOTES

Extra/Over VO 28  
Extra/Over VO 48

Not required

See VO54 for Extra/Over quantity  
See VO54 for Extra/Over quantity

See VO56 for additional scope

See Extra/Over Variation VO55

Pay Item	Description of Work	SCHEDULED (with GST removed)				Cumulative Total - Current Claim		FORECAST FINAL COST	
		Quantity	Unit	Rate	Amount	PROGRESS Quantity	Amount	FINAL Quantity	Amount
820P1	Supply and Install Metal Park Seats (Emerdyn Seat EM010)								
	<b>Sub Total - INCIDENTAL WORKS</b>								
<b>PART2-09</b>	<b>WETLAND LANDSCAPE</b>								
9.05P1	<u>Topsoiling</u>								
905P.1.1	Topsoiling to Terrestrial / Ephemeral / Macrophyte Planting Zones Planter Beds - 150mm Depth								
905P1.2	Topsoiling to Rock Viewing Platform Base of Rockwork Planting Surround - 150mm Depth								
905P1.3	Incorporation of Topsoil Amendments - Gypsum and Blood & Bone to Planter Beds as Specified								
905P2	<u>Planter Beds</u>								
905P2	Planter Beds Terrestrial / Ephemeral / Macrophyte Planting Zones including All Associated Preparation								
906P1	<u>Grassing</u>								
906P2	Restorative Topsoiling and Grassing to Disturbed Areas								
909P1	<u>Planting</u>								
909P1.1	Low shrub species at rock viewing platform surround mulched bed (virotubes)								
909P1.2	Rock viewing platform rocky better select pocket planting (virotubes)								
909P1.3	Terrestrial / ephemeral / shallow marsh / deep marsh macrophytes (virotubes)								
909P1.4	Submerged marsh macrophytes (Flawra-Ej)								
910P1	<u>Mulching</u>								
910P1	Supply and place Wood Chip mulch to a final consolidated depth of 125mm to planting beds around Rock Viewing Platform and any associated pocket plantings								
911P1	<u>Consolidation</u>								
911P1.1	a) Restorative grassing areas								
911P1.2	b) Planting - Terrestrial / ephemeral / macrophyte planter beds and spot plants								
911P2	<u>Handover including Work as Executed Drawings</u>								
911P2	Work as Executed Drawings								
914P1	<u>Weed Management</u>								
914P1	Site Weed Management								
	<b>Sub Total - WETLAND LANDSCAPE</b>								
<b>PART2-15</b>	<b>MAJOR CONCRETE</b>								
1505P2	<u>Concrete Works</u>								
1505P2.1	15MPa Concrete for Retaining Wall backfill (North and South)								
1505P2.3a	32MPa Concrete for Slotted Weir (North Wetland)								
1505P2.3b	32MPa Concrete for Base of Sediment Pond and Maintenance Access Road (North Wetland)								
1507P1	<u>Reinforcement</u>								
1507P1.1	Steel Reinforcement - SL82 Mesh for Slotted Weir to Transition Flows from Sediment Pond to Wetland (North wetland)								
1507P1.2	Steel Reinforcement - SL82 Mesh for Sediment Pond Base and Maintenance Access to Sediment Pond (North Wetland Only)								
1507P2.1	Anchorage Bar (1N16) for Retaining Wall (north and south)								
1510P1	<u>Precast Units</u>								
1511P1	Supply and Placement of Precast Roca Mass Block Retaining Wall North and South								
	<b>Sub Total - MAJOR CONCRETE</b>								
	<b>TOTAL PART 2 SCHEDULE OF RATES (incl GST)</b>								
	<b>LUMP SUM Schedule of Prices</b>								
<b>PART3-15</b>	<b>MAJOR CONCRETE STRUCTURES</b>								
	<u>Labyrinth Weir Spillway</u>								
1505P2	<u>Concrete Works</u>								
1505P2.1	Supply and Place 50mm Thick, 15MPa Blinding Concrete								
1505P2.4.1	32MPa Concrete for Abutment & Wing Wall Shear Keys and Base Slabs								
1505P2.4.2	32MPa Concrete for Wing Walls								
1505P2.4.3	32MPa Concrete for Cut-off Walls								
1505P2.4.4	32MPa Concrete for Abutment walls								
1505P2.4.5	32MPa Concrete for Weir Main Slab								
1505P2.4.6	32MPa Concrete for Labyrinth Walls (including Return Walls)								
1505P2.4.7	32MPa Concrete for Abutment Return & end walls								
1505P2.4.8	32MPa Concrete for Infill walls								
1507P1	<u>Reinforcement</u>								

Sch 2 2.2(a)(xi)

NOTES
Extra/Over VO 24
Extra/Over VO 33
Actual qty of blocks when finished 1889

Pay Item	Description of Work	SCHEDULED (with GST removed)				Cumulative Total - Current Claim		FORECAST FINAL COST	
		Quantity	Unit	Rate	Amount	PROGRESS Quantity	Amount	FINAL Quantity	Amount
1507P1.1	Steel Reinforcement in Infill Walls (PQ)								
1507P1.2	Steel Reinforcement in Abutment & Wing Wall Shear Keys and Base Slabs (PQ)								
1507P1.3	Steel Reinforcement in Wing Walls (PQ)								
1507P1.4	Steel Reinforcement in Cut-off Walls (PQ)								
1507P1.5	Steel Reinforcement in Abutment Walls (PQ)								
1507P1.6	Steel Reinforcement in Weir Main Slab (PQ)								
1507P1.7	Steel Reinforcement in Labyrinth Walls (incl return walls) (PQ)								
1507P1.8	Steel Reinforcement in Abutment Return & End Walls (PQ)								
15.17	Additional Weir Works								
1517P1.1	Supply and Installation of Galvanised Steel Dowel Bars								
1517P1.2	80mm dia uPVC Class 18 Socked and Slotted Pipe Subsoil Drainage, Including No-Fines Concrete Backfill								
1517P1.3	Supply and Place Aggregate and Epoxy Bed for Aeration Nib at Top of New Labyrinth Walls								
1517P1.4	Supply and Installation of Galvanised Steel Handrails/Balustrades								
1517P1.5	Low-Sheen Anti-Graffiti Coating (PQ)								
1517P1.6	Joint Protection								
	Sub Total - MAJOR CONCRETE STRUCTURES								
<b>PART3-16</b>	<b>OUTLET WORKS</b>								
1601P1.1	Supply and Installation of 450mm dia outlet Pipe								
1601P1.2	Supply and installation of all Valves and Fittings for the Outlet Works								
1601P1.3	Supply and installation of Trashracks								
1601P1.4	Construction of Access Platform and Fencing								
1601P1.5	Testing and Commissioning and Handover to TCCS								
1601P1.6	Operations and Maintenance Manuals								
	Sub Total - OUTLET WORKS								
<b>PART3-17</b>	<b>EMBANKMENT INSTRUMENTATION</b>								
1701P1.1	Supply and Installation of Survey Settlement Monuments on Embankments								
1701P1.2	Supply and Installation of Deep Survey Reference Mark								
1701P1.3	Monitoring Borehole Including Standpipe (PQ)								
	Sub Total - EMBANKMENT INSTRUMENTATION								
	<b>TOTAL LUMP SUM SCHEDULE OF PRICES (incl GST)</b>				\$3,219,626.97		\$3,857,587.52		\$3,857,599.91

Sch 2 2.2(a)(xi)

**NOTES**

Allocation of tonnes of steel accurately to individual weir components has not been carried out. Generally the schedule qty under-estimates required steel (based on delivered tonnes) by approximately 66%. Original qty 399 t  
**FORECAST COMBINED INTO THIS ITEM FOR REO**

Design amended - fewer dowels required

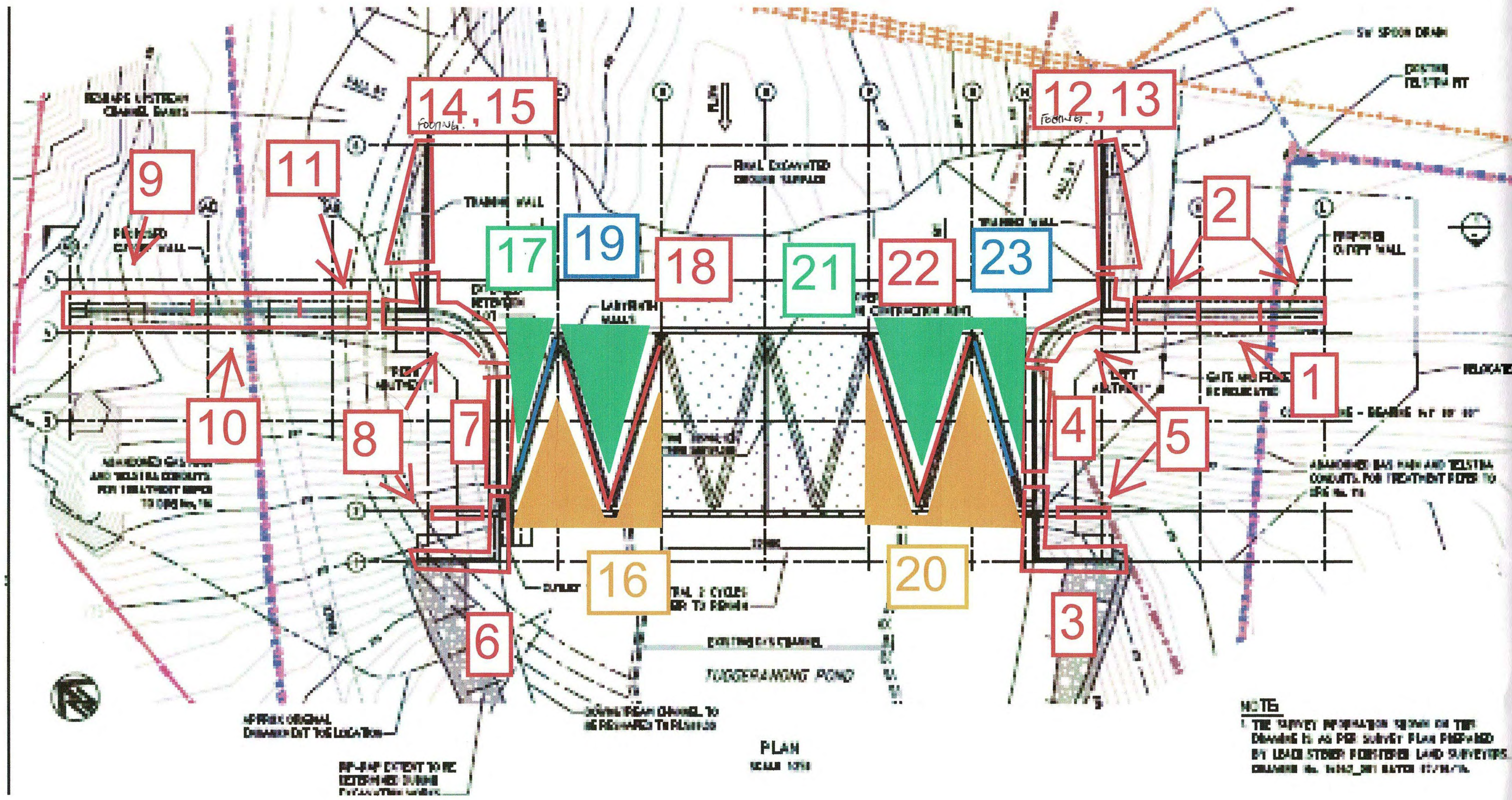
See variation VOB2 for additional 2 joint protections

Item deleted, see instead V077

	Contract	Total to date	Total to date
<b>TOTAL AMOUNT (Including SOP, Provisional Sums and Excl GST)</b>	\$13,155,544.49	\$13,022,397.23	\$13,084,680.90
<i>PROVISIONAL SUMS</i>	\$718,181.83	\$717,727.28	\$717,727.28
<i>Lump Sum SOP</i>	\$3,219,626.97	\$3,857,587.52	\$3,857,599.91
<b>TOTAL AMOUNT (Exc SOP, Provisional Sums and GST) ie SOP Items only</b>	\$9,217,735.70	\$12,304,669.95	\$12,366,953.62
		\$1,302,239.72	
		\$14,324,636.95	







14, 15  
FOOTING

12, 13  
FOOTING

PLAN  
SCALE 1:250

NOTE  
1. THE SURVEY INFORMATION SHOWN ON THIS DRAWING IS AS PER SURVEY PLAN PREPARED BY LEACH STORER PORTER LAND SURVEYERS. DRAWING NO. WND\_001 BATCH 17/18/76.

**From:** "Taylor, Nick"  
**Sent:** 08/11/2018 5:30 AM  
**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Cc:** "McGrath, Michael" <Michael.McGrath@act.gov.au>  
**Subject:** after rain event Isabella Weir /Wetlands [SEC=UNCLASSIFIED]  
**Attachments:** IMG\_0976.jpg, IMG\_0977.jpg, IMG\_0978.jpg, IMG\_0979.jpg, IMG\_0980.jpg

Stuart

IMG 0976: Most Northern Section IWC-06 COLLAPSED NETTING

IMG 0977: NORTHERN END OF POND: NOTE THE SMALL BROWN OBJECT IN POND PROBABLY OVERFILL WHEN SPREADING SURPLUS MATERIAL

IMG 0978: NORTHERN END OF POND: THIS WAS THE ACCESS AND EGRESS TRACK TO THE STORED WEIR BACK FILL MATERIAL WILL REQUIRE REGRASSING DOWN TO WATERLINE

IMG 0979: NORTHERN END OF POND ADJACENT TO GTP GABION BASKETS LOOKS LIKE THESE ARE PERFORMING WELL

IMG 0980: NORTHERN END OF POND SHOWING GTP

IMG 0981/0982: SOUTHERN SIDE OF POND SHOWING GABION BASKETS

IMG 0983 GTP DEBRI BUILD UP

Nick Taylor | Senior Project Officer | Civil Infrastructure

**Phone 02 6207 0118** | Mobile 0451 449 331 [Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)

Infrastructure Finance Capital Works Chief Minister, Treasury and Economic Development Directorate ACT Government

Level 2 Nature Conservation House, 186 Emu Bank Belconnen 2617 | ACT Procurement, GPO Box 158 CANBERRA ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

















**From:**"Taylor, Nick"

**Sent:**09/11/2018 1:07 AM

**To:**"Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>

**Subject:**fill in pond [SEC=UNCLASSIFIED]

**Attachments:**blocks deliverd to site.JPG, condition of concrete channel.jpg, de watered pond.jpg, DJI\_0088 (3) email.jpg, Event 26-11-17 Isabella weir.JPG, general Channel.JPG, IMG\_0064.JPG, IMG\_0066.JPG, IMG\_0068.JPG, IMG\_1049.JPG, IMG\_1050.JPG, IMG\_1053.JPG, IMG\_1054.JPG, IMG\_1055.JPG

Hope this helps

Nick Taylor | Senior Project Officer | Civil Infrastructure

**Phone 02 6207 0118** | | Mobile 0451 449 331 [Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)

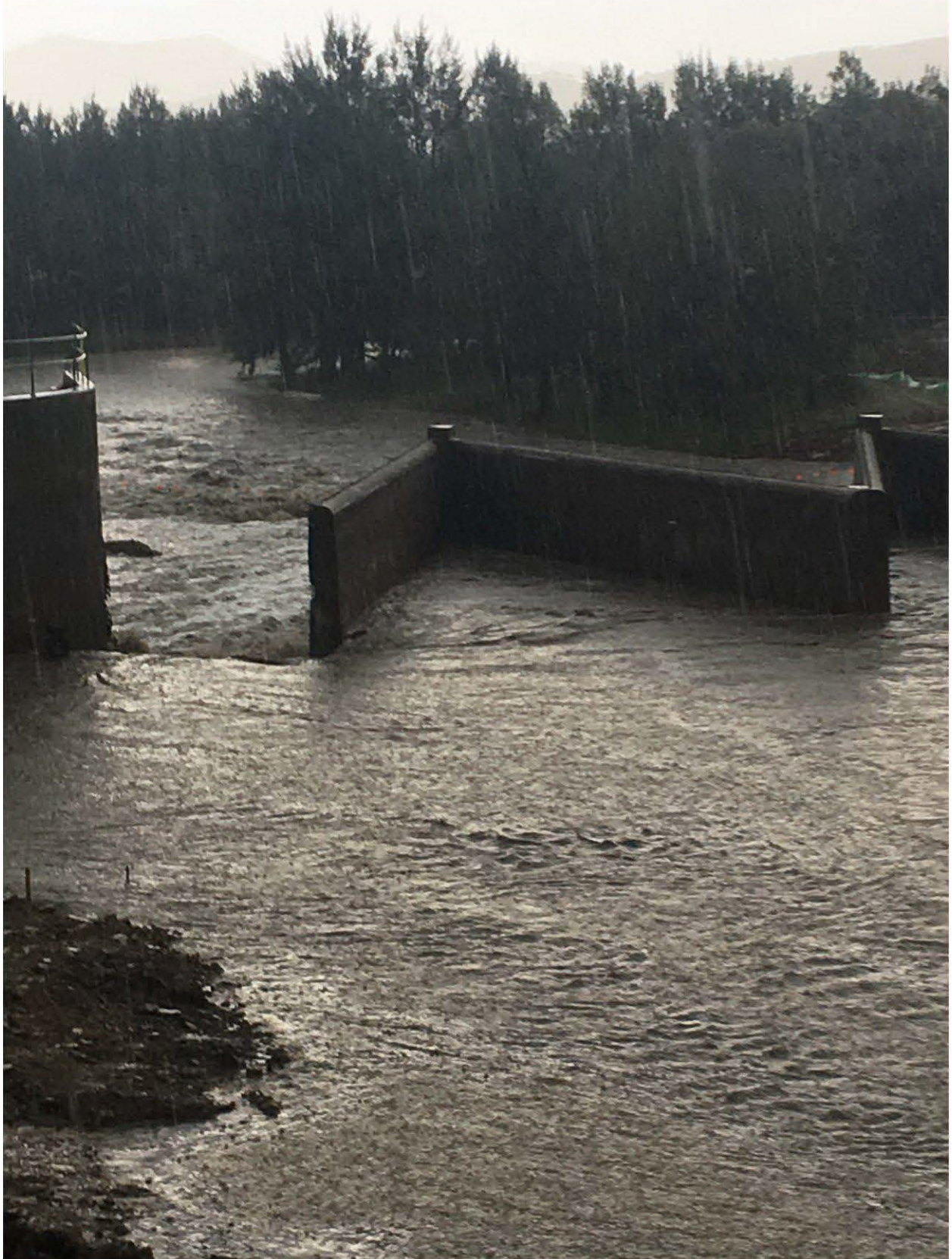
Infrastructure Finance Capital Works Chief Minister, Treasury and Economic Development Directorate ACT Government

Level 2 Nature Conservation House, 186 Emu Bank Belconnen 2617 | ACT Procurement, GPO Box 158 CANBERRA ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

















































**From:** "Taylor, Nick"

**Sent:** 09/11/2018 1:12 AM

**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>

**Subject:** fill TO POND [SEC=UNCLASSIFIED]

**Attachments:** Isabella Weir 170717B rectangular email.jpg, Leigh walking the channel.JPG, Northern Channel top of pond.JPG, rsz\_\_dsc7734 (1).jpg

Hope this helps I`m still looking for more

Nick Taylor | Senior Project Officer | Civil Infrastructure

**Phone 02 6207 0118** | Mobile 0451 449 331 [Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)

Infrastructure Finance Capital Works Chief Minister, Treasury and Economic Development Directorate ACT Government

Level 2 Nature Conservation House, 186 Emu Bank Belconnen 2617 | ACT Procurement, GPO Box 158 CANBERRA ACT 2601 | [www.act.gov.au](http://www.act.gov.au)













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**From:** "Taylor, Nick"  
**Sent:** 08/11/2018 10:57 PM  
**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Subject:** RE: After rain event Isabella Weir /Wetlands [SEC=UNCLASSIFIED]

I'll attempt to have another look today sir it's on my list lol

---

**From:** Oxborrow, Stuart  
**Sent:** Friday, 9 November 2018 8:25 AM  
**To:** Taylor, Nick <Nick.Taylor@act.gov.au>  
**Subject:** RE: After rain event Isabella Weir /Wetlands [SEC=UNCLASSIFIED]

Thanks Nick,

Did you have any luck finding any photos of the upstream end of the northern wall under construction (from the front) showing the amount of earth which was removed from the pond to build it.

Thanks

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502** | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)  
 Capital Works, Transport Canberra and City Services Directorate | ACT Government  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

---

**From:** Taylor, Nick  
**Sent:** Thursday, 8 November 2018 5:01 PM  
**To:** Oxborrow, Stuart <[Stuart.Oxborrow@act.gov.au](mailto:Stuart.Oxborrow@act.gov.au)>  
**Cc:** McGrath, Michael <[Michael.McGrath@act.gov.au](mailto:Michael.McGrath@act.gov.au)>  
**Subject:** After rain event Isabella Weir /Wetlands [SEC=UNCLASSIFIED]

Stuart More to follow tomorrow I'm going home I'm hungry

IMG 1001: SHOWING WATER EDGE OF SOUTHERN WETLAND  
 IMG 1002: SHOWING PART OF SOUTHERN WETLAND OUTLETPool IWC-01  
 IMG 1003: SHOWING WATER LEVEL LOW IN UPPERSTRANGER POND  
 IMG 1004: SHOWING DETENTION PLATE APPROX 200MM ACROSS CULVERT IN UPPERSTRANGER CULVERT AND SURROUNDING AREAS DRY WATER LEVEL IN POND APPROX 800MM LOWER THAN INVERT LEVEL OF PLATE  
 IMG 1005: AREA ADJACENT TO CULVERT VERY DRY AND APPROX 700MM TO 800MM LOWER THAN CULVERT INVERT LEVEL  
 IMG 1006: EDGE OF POND LOOKING BACK AT CULVERT  
 IMG 1007: ISABELLA WEIR WITH STOP LOGS OUT  
 IMG 1008: DITTO  
 IMG 1009: DOWN STREAM ISABELLA WEIR NO SCOURING OF RIP RAP OBSERVED  
 IMG 1010: DOWN STREAM ISABELLA WEIR

Nick Taylor | Senior Project Officer | Civil Infrastructure  
**Phone 02 6207 0118** | Mobile 0451 449 331 [Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)  
 Infrastructure Finance Capital Works Chief Minister, Treasury and Economic Development Directorate ACT Government  
 Level 2 Nature Conservation House, 186 Emu Bank Belconnen 2617 | ACT Procurement, GPO Box 158 CANBERRA ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

**From:** "Taylor, Nick"  
**Sent:** 08/11/2018 11:00 PM  
**To:** "Crocker, Leigh" <Leigh.Crocker@act.gov.au>; Sch 2 2.2(a)(ii) @smec.com>  
**Cc:** Sch 2 2.2(a)(ii) @smec.com>  
**Subject:** RE: Isabella Weir: Advice of probable first fill 7, 8 November 2018 [SEC=UNCLASSIFIED]

Please include me in the invite

Regards Nick

---

**From:** Crocker, Leigh  
**Sent:** Thursday, 8 November 2018 2:03 PM  
**To:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>; Taylor, Nick <Nick.Taylor@act.gov.au>  
**Subject:** FW: Isabella Weir: Advice of probable first fill 7, 8 November 2018 [SEC=UNCLASSIFIED]

See below, you should come along as well.

---

**From:** Sch 2 2.2(a)(ii) @smec.com]  
**Sent:** Thursday, 8 November 2018 2:01 PM  
**To:** Crocker, Leigh <Leigh.Crocker@act.gov.au>  
**Subject:** RE: Isabella Weir: Advice of probable first fill 7, 8 November 2018 [SEC=UNCLASSIFIED]

Leigh,

Date is looking like 19<sup>th</sup> November. I will ask Thusitha to liaise with you on timing.

Regards,

Sch 2 2.2(a)(ii)  
 Senior Structural Engineer  
 SMEC (Member of the Surbana Jurong Group)  
 T Sch 2 2.2(a)(ii)

---

**From:** Crocker, Leigh [mailto:Leigh.Crocker@act.gov.au]  
**Sent:** Thursday, 8 November 2018 1:52 PM  
**To:** Oxborrow, Stuart <stuart.oxborrow@act.gov.au>; Sch 2 2.2(a)(ii) @smec.com>  
**Cc:** Sch 2 2.2(a)(ii) @smec.com>; Taylor, Nick <Nick.Taylor@act.gov.au>; Sch 2 2.2(a)(ii) @pes.net.au; McGrath, Michael <Michael.McGrath@act.gov.au>; Sch 2 2.2(a)(ii) @pes.net.au>  
**Subject:** RE: Isabella Weir: Advice of probable first fill 7, 8 November 2018 [SEC=UNCLASSIFIED]

Hi Steve,

If its not until next week I wouldn't mind tagging along, if I can fit it in.

Regards

---

**From:** Oxborrow, Stuart  
**Sent:** Thursday, 8 November 2018 1:33 PM  
**To:** Sch 2 2.2(a)(ii) @smec.com>  
**Cc:** Sch 2 2.2(a)(ii) @smec.com>; Taylor, Nick <Nick.Taylor@act.gov.au>; Sch 2 2.2(a)(ii) @pes.net.au; McGrath, Michael <Michael.McGrath@act.gov.au>; Crocker, Leigh <Leigh.Crocker@act.gov.au>; Sch 2 2.2(a)(ii) @pes.net.au>  
**Subject:** RE: Isabella Weir: Advice of probable first fill 7, 8 November 2018 [SEC=UNCLASSIFIED]

Sch 2 2.2(a)(i)

I have been advised that the pond is now full and flowing over the stop logs as forecast below. Has the first fill inspection been undertaken ?

Regards,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**

**Phone 02 6207 4502 | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)**

Capital Works, Transport Canberra and City Services Directorate | ACT Government

GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

---

**From:** Sch 2 2.2(a)(ii) [@pes.net.au](mailto:Sch 2 2.2(a)(ii)@pes.net.au) Sch 2 2.2(a)(ii) [@pes.net.au](mailto:Sch 2 2.2(a)(ii)@pes.net.au)

**Sent:** Tuesday, 6 November 2018 7:53 AM

**To:** Sch 2 2.2(a)(ii) [@smec.com](mailto:Sch 2 2.2(a)(ii)@smec.com)

**Cc:** Sch 2 2.2(a)(ii) [@smec.com](mailto:Sch 2 2.2(a)(ii)@smec.com); Oxborrow, Stuart

[<Stuart.Oxborrow@act.gov.au>](mailto:Stuart.Oxborrow@act.gov.au); Sch 2 2.2(a)(ii) [@act.gov.au](mailto:Sch 2 2.2(a)(ii)@act.gov.au)

**Subject:** Isabella Weir: Advice of probable first fill 7, 8 November 2018

Sch 2 2.2(a)(i)

Guideline's advice to me this morning, the weather forecast and the now finished/valve-closed state of the weir, I expect "first fill" will occur either tonight or Wednesday.

For your information and possible initiation of the dam safety processes.

[Stuart, Sch 2 2.2(a)(i) received the upper pond invert survey late yesterday, he will review it early today. As discussed, this may or may not result in a direction to Guideline to open the weir valve.]

Regards

Sch 2 2.2(a)(ii)

Professional Engineering Service Pty Limited ACN 057 633 897

Acting in the capacity of the Territory's Principal's Authorised Person (PAP) Isabella Weir and Wetlands Project

Mobile Sch 2 2.2(a)(ii)

-----  
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 -----

**From:** "Taylor, Nick"  
**Sent:** 08/11/2018 10:59 PM  
**To:** "Sch 2 2.2(a)(ii)"  
**Subject:** RE: Isabella weir [SEC=UNCLASSIFIED]

Thanks Sch 2 2.2(a)(ii)

Thanks for meeting up yesterday, I've sent all the photos to Stuart with our comment attached thanks again for your help

Regards Nick

---

**From:** Sch 2 2.2(a)(ii)  
**Sent:** Thursday, 8 November 2018 2:19 PM  
**To:** Taylor, Nick <Nick.Taylor@act.gov.au>  
**Cc:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Subject:** Isabella weir

Nick,

As discussed today

Signs missing.

Project signs needs to be removed.

Cleaning of the house of the resident.

Ducks trapped in netting.

Removing of nets upstream on the NE corner.

Southern wetlands not being filled by upper stranger pond (possible healthy waterways project may have some impact on this).

Two small noticeable islands poking through the current water level.

Small areas of landscaping not completed.

Regards

Sch 2 2.2(a)(ii)

Sent from my iPhone

**From:** "Taylor, Nick"  
**Sent:** 08/11/2018 11:02 PM  
**To:** 'Sch 2 2.2(a)(ii)'@smec.com>  
**Subject:** RE: Isabella weir Upgrade First Fill Inspection and report [SEC=UNCLASSIFIED]

Yep I believe it is now with Mynal

---

**From:** 'Sch 2 2.2(a)(ii)'@smec.com]  
**Sent:** Wednesday, 7 November 2018 10:27 AM  
**To:** Taylor, Nick <Nick.Taylor@act.gov.au>  
**Cc:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>; 'Sch 2 2.2(a)(ii)'@pes.net.au; 'Sch 2 2.2(a)(ii)'@smec.com>  
**Subject:** Isabella weir Upgrade First Fill Inspection and report

Nick,

We expect Isabella Pond to reach FSL today given its current water level and weather forecast. Consequently we will arrange for the first fill inspection next week.

Is the weir now in possession of TCCS? If so we will contact Mynul to arrange someone to operate the valve for us during the inspection.

Regards,

'Sch 2 2.2(a)(ii)'

Senior Structural Engineer

T +'Sch 2 2.2(a)(ii)'

E 'Sch 2 2.2(a)(ii)'@smec.com

**Local People, Global Experience**

SMEC (Member of the Surbana Jurong Group)

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**From:** "Taylor, Nick"  
**Sent:** 08/11/2018 10:55 PM  
**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Cc:** "McGrath, Michael" <Michael.McGrath@act.gov.au>  
**Subject:** AFTER RAIN EVENT [SEC=UNCLASSIFIED]  
**Attachments:** IMG\_0992.jpg, IMG\_0993.jpg, IMG\_0994.jpg, IMG\_0995.jpg, IMG\_0996.jpg, IMG\_0997.jpg, IMG\_0998.jpg

Morning Stuart

Apologies for not getting these to you yesterday, also below are some observations/comments from Michael Sergi

IMG 0992: IWC-02 SHOWING GENERAL AREA AROUND INLET POOL 1  
IMG 0993: IWC-02 SHOWING INTERMEDIATE POOL S2  
IMG 0994: IWC-01 SHOWING INTERMEDIATE POOL S4 NB PITS SUB MERGED  
IMG 0995: IWC-01 SHOWING INTERMEDIATE POOL S5 NB NOTE PITS SUB MERGED  
IMG 0996: IWC-01 SHOWING SWL PIT  
IMG 0997: IWC-01 SHOWING OUTLET POOL  
IMG 0998: IWC-01 SHOWING SWALE AREA IN SOUTHERN WETLAND  
IMG 0999: IWC-02 SHOWING INTERMEDIATE POOL 3

Nick,

As discussed today

Signs missing.

Project signs needs to be removed.

Cleaning of the house of the resident.

Ducks trapped in netting.

Removing of nets upstream on the NE corner.

Southern wetlands not being filled by upper stranger pond (possible healthy waterways project may have some impact on this).

Two small noticeable islands poking through the current water level.

Small areas of landscaping not completed.

Regards

Sch 2.2.2(a)(ii)

Nick Taylor | Senior Project Officer | Civil Infrastructure

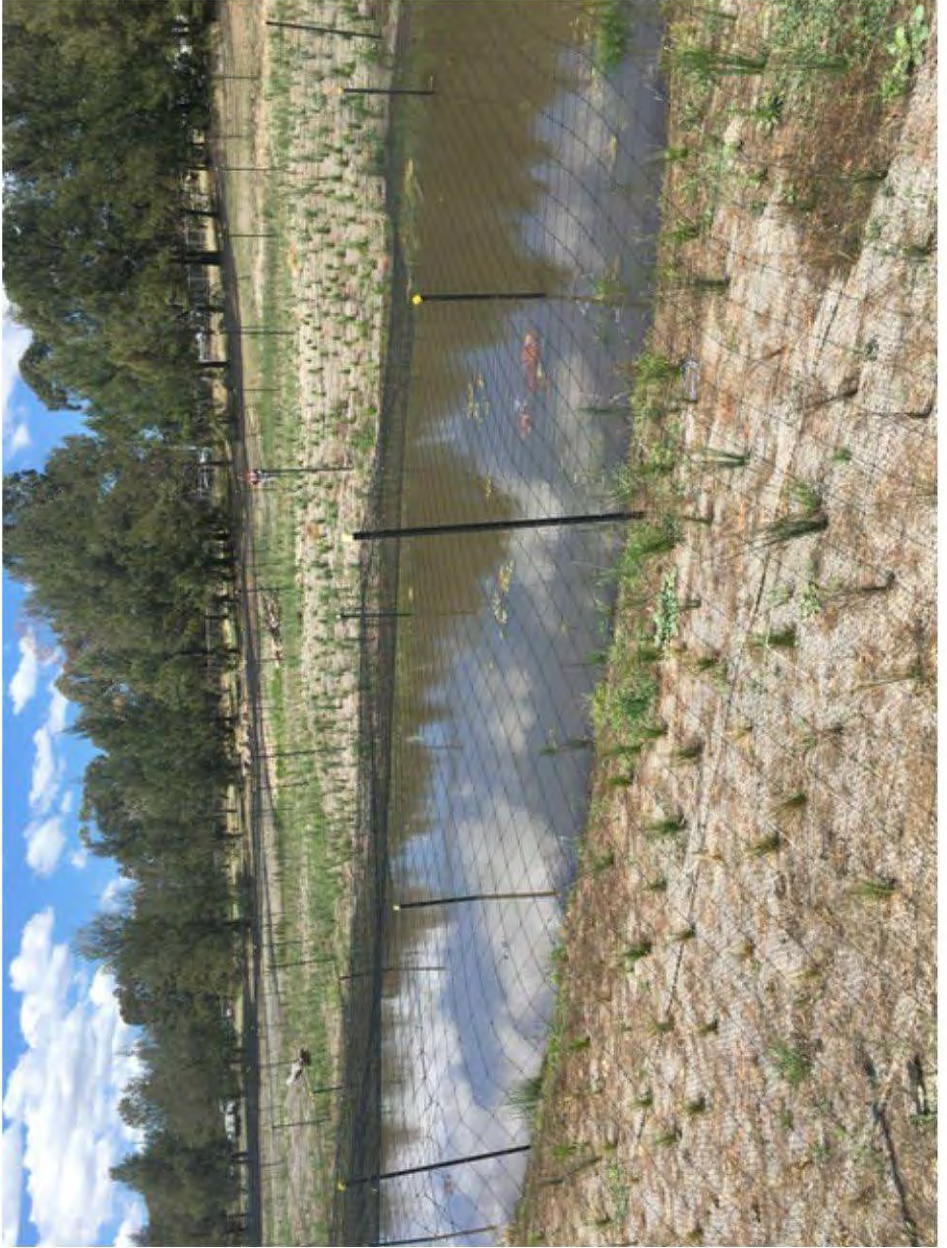
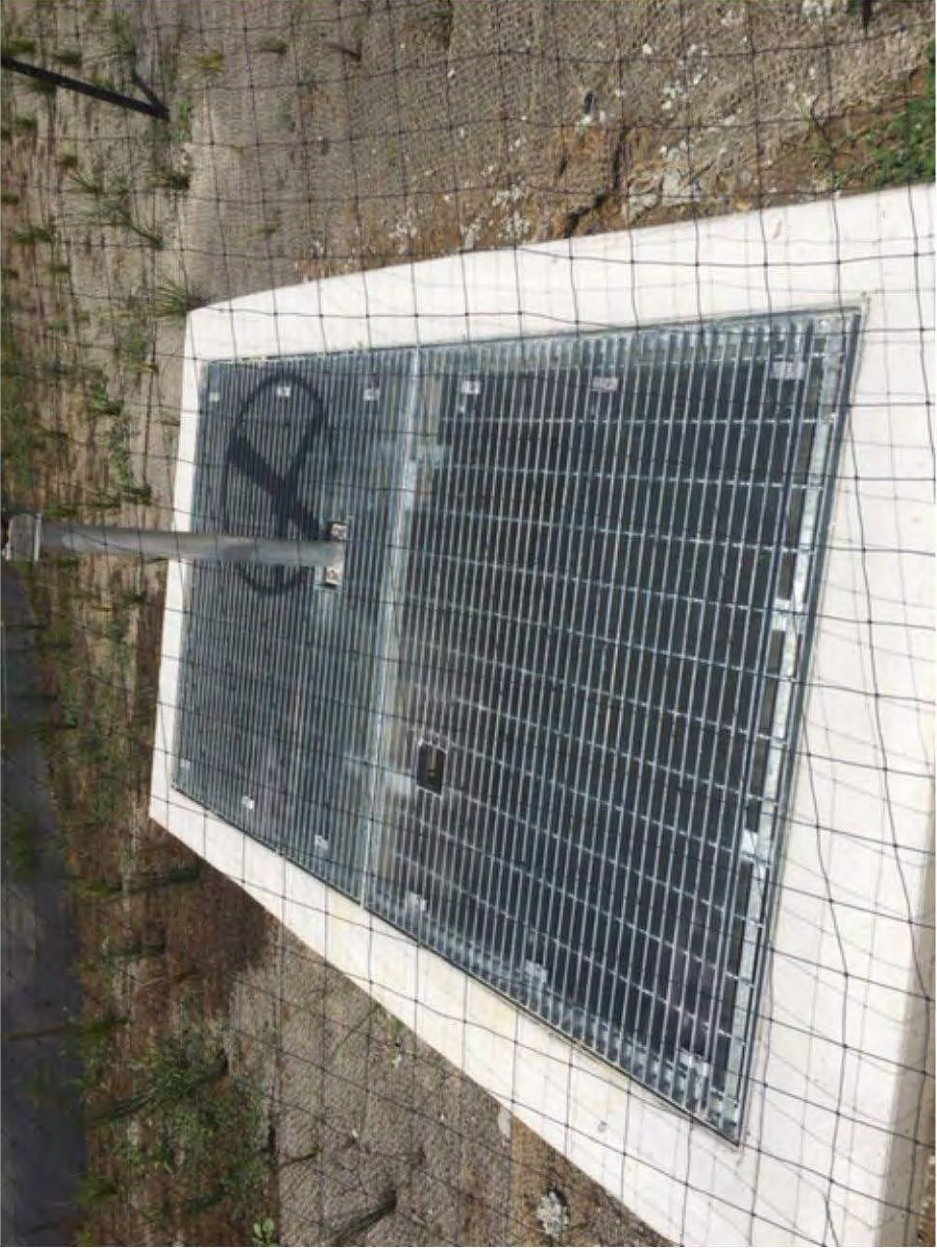
Phone 02 6207 0118 | Mobile 0451 449 331 [Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)

Infrastructure Finance Capital Works Chief Minister, Treasury and Economic Development Directorate ACT Government

Level 2 Nature Conservation House, 186 Emu Bank Belconnen 2617 | ACT Procurement, GPO Box 158 CANBERRA ACT 2601 | [www.act.gov.au](http://www.act.gov.au)























**From:** [Sch 2 2.2(a)(ii)]@pes.net.au>  
**Sent:** 12/11/2018 1:19 PM  
**To:** "[Sch 2 2.2(a)(ii)]@guidelineact.com.au"  
**Cc:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>; "Taylor, Nick" <Nick.Taylor@act.gov.au>; "McGrath, Michael" <Michael.McGrath@act.gov.au>; "[Sch 2 2.2(a)(ii)]@pes.net.au"  
**Subject:** RE: Further Levels of Silt in Wetlands  
**Attachments:** EASTERN DEPTHS IWU.pdf

[Sch 2 2.2(a)(ii)]

Thanks for the attached contour.

Further to today's inspection, it was agreed with yourself that the Guideline to open the weir valve and lower the pond to the level of the underside of the lowest stop log. That will place water level approximately 400mm below the current level. It will provide a clearer understanding of the level of the fill in upstream areas of the pond and whether the small area seen this morning was indeed an 'island' or not.

As discussed this morning it was also noted that the water is possibly leaking through the gap between the lowest stop log and the weir wall. By lowering the water level, we would then be able to check that seal as well. Please advise me when you open the valve so we can inspect the seal while the water level is dropping.

Please contact me if you have any queries.

Regards,

[Sch 2 2.2(a)(ii)]

Principal's Authorised Delegate (PAPD)  
 Professional Engineering Service Pty Limited ACN 057 633 897  
 Mobile - [Sch 2 2.2(a)(ii)]




---

**From:** [Sch 2 2.2(a)(ii)]@guidelineact.com.au>  
**Sent:** Friday, 9 November 2018 5:23 PM  
**To:** [Sch 2 2.2(a)(ii)]@pes.net.au>  
**Subject:** Further Levels of Silt in Wetlands

Hi [Sch 2 2.2(a)(ii)]

Please see attached an expanded plot for the silt depth in the wetlands.

Kind regards, [Sch 2 2.2(a)(ii)]

---

**From:** [Sch 2 2.2(a)(ii)]@kerrysurveys.com.au]  
**Sent:** Friday, 9 November 2018 1:00 PM  
**To:** [Sch 2 2.2(a)(ii)]  
**Subject:** iwu

plot

Sch 2 2.2(a)(ii)

Surveyor/Project Manager



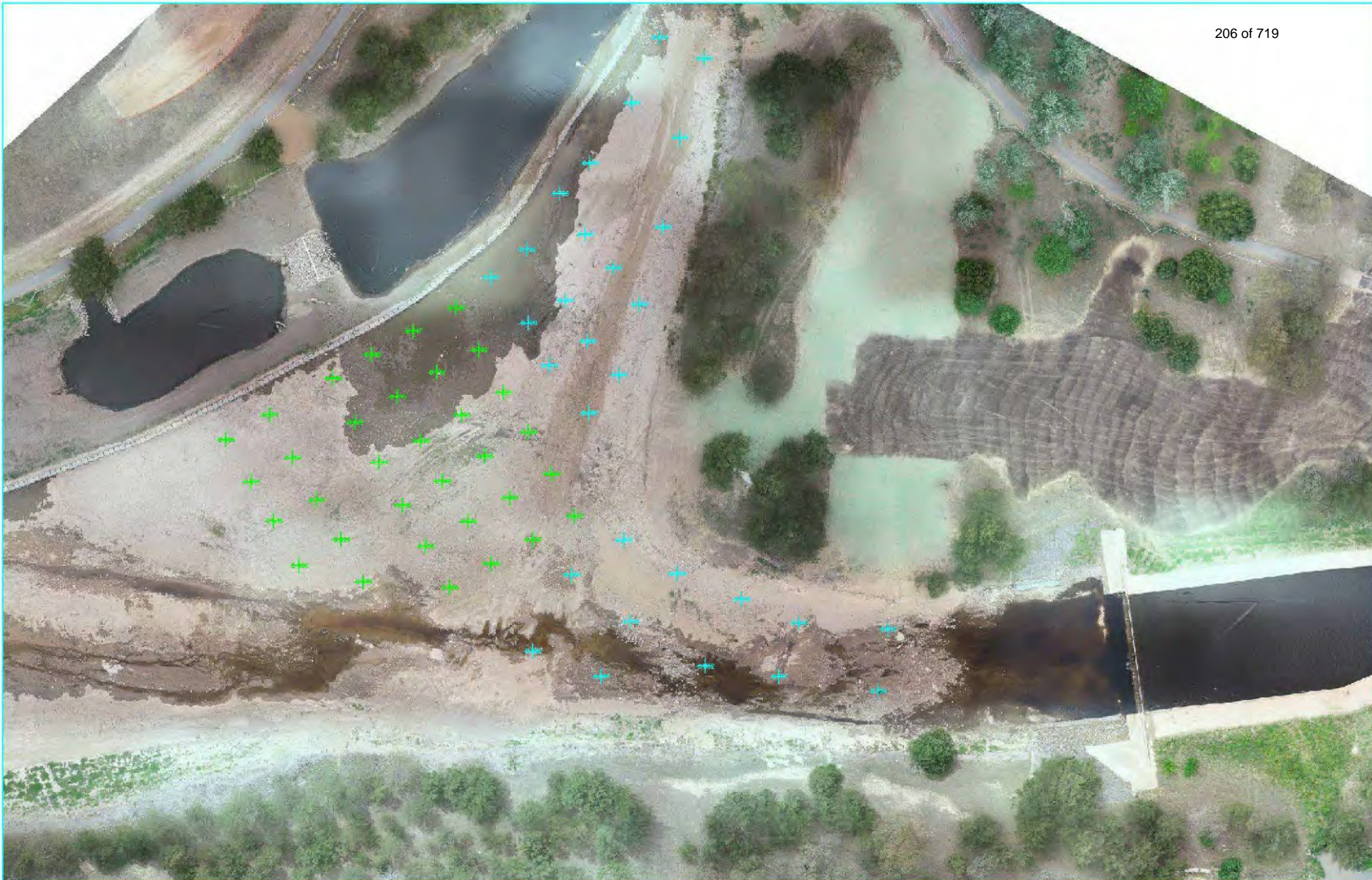
ABN 74 131 478 914

T (02) 6287 3300 M Sch 2 2.2(a)(ii)

Office: Unit 1, 20-24 Trenerry Street, Weston ACT 2611

Postal: PO Box 21, Waramanga ACT 2611

[www.kerrysurveys.com.au](http://www.kerrysurveys.com.au)



Weir water depths at 574.600m  
water depths on silt survey

12d Model  
Scale 1:1000  
Fri Nov 09 12:58:28 2018

**From:** [Sch 2 2.2(a)(ii)]@pes.net.au>  
**Sent:** 12/11/2018 5:11 PM  
**To:** "[Sch 2 2.2(a)(ii)]@guidelineact.com.au">  
**Cc:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>; "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Subject:** RE: Shade Cloth Removal from Temp. Fencing.

Hi [Sch 2 2.2(a)(ii)]

As discussed with Stuart this morning, the Principal's intention to maintain some of the shade clothes in place on fences those can be visible from the road side and to the Public. We will discuss the location of the shade clothes in a site meeting tomorrow. I am not sure whether the Principal would like to retain some of the wasted shade clothes. But I will confirm this with Stuart in the morning.

Thanks

[Sch 2 2.2(a)(ii)]

Principal's Authorised Person (PAP)

Professional Engineering Service Pty Limited ACN 057 633 897

Mobile - [Sch 2 2.2(a)(ii)]




---

**From:** [Sch 2 2.2(a)(ii)]@guidelineact.com.au>  
**Sent:** Monday, 12 November 2018 4:50 PM  
**To:** [Sch 2 2.2(a)(ii)]@pes.net.au>  
**Cc:** 'Oxborrow, Stuart' <Stuart.Oxborrow@act.gov.au>  
**Subject:** Shade Cloth Removal from Temp. Fencing.

Hi [Sch 2 2.2(a)(ii)],

The advertising shade cloth located on the temporary fencing have been an ongoing variation to date, please see variations V027,34,41,42 and 43 for details.

For the remaining shade cloth, all costs will be tracked for the removal/disposal and covered under variation V090 for your review.

As discussed with Stuart today onsite, some sections nearest to "high traffic area's" will be relocated to the new fence under the same variation.

Should you wish to retain any of the old shade cloth, please let me know by COB 13/11/2018.

Kind regards,

[Sch 2 2.2(a)(ii)]

[Sch 2 2.2(a)(ii)] | Project Manager | Isabella Weir Upgrade

16B Bass Street, Queanbeyan NSW 2620

PO Box 537, Queanbeyan NSW 2620

E [Sch 2 2.2(a)(ii)]@guidelineact.com.au

M: [Sch 2 2.2(a)(ii)]



**From:** 'Sch 2 2.2(a)(ii)' <[REDACTED]@pes.net.au>  
**Sent:** 12/11/2018 3:07 PM  
**To:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Cc:** 'Sch 2 2.2(a)(ii)' <[REDACTED]@pes.net.au>  
**Subject:** FW: Further Levels of Silt in Wetlands

Hi Nick,

I thought you would like to know below email. I will call you in next half an hour.

Thanks

Sch 2 2.2(a)(ii)  
 Principal's Authorised Person (PAP)  
 Professional Engineering Service Pty Limited ACN 057 633 897  
 Mobile - Sch 2 2.2(a)(ii)




---

**From:** Sch 2 2.2(a)(ii) <[REDACTED]@guidelineact.com.au>  
**Sent:** Monday, 12 November 2018 2:47 PM  
**To:** Sch 2 2.2(a)(ii) <[REDACTED]@pes.net.au>  
**Cc:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Subject:** RE: Further Levels of Silt in Wetlands

Hi [REDACTED]

Can you please confirm that the you wish Guideline to drop the water level to RL 574.2?  
 Can you please also indicate when you would like this work to be completed?

Please note, access to the downstream of the weir may be inundated after the water level of the weir dropped to RL 574.2.

These works and all associated costs with lowering the water level as an additional check, I feel are a variation. Costs will be kept and we can discuss this at the next progress meeting.

The stop logs in my opinion do not appear to be leaking. When we lower the water level, we can complete a joint inspection and rectify as required.

Kind regards,

[REDACTED]

**Sch 2 2.2(a)(ii) | Project Manager | Isabella Weir Upgrade**

16B Bass Street, Queanbeyan NSW 2620

PO Box 537, Queanbeyan NSW 2620

E: Sch 2 2.2(a)(ii) <[REDACTED]@guidelineact.com.au>

M: Sch 2 2.2(a)(ii) <[REDACTED]>



---

**From:** [Sch 2 2.2(a)(ii)]@pes.net.au]  
**Sent:** Monday, 12 November 2018 1:20 PM  
**To:** [Sch 2 2.2(a)(ii)]  
**Cc:** [Stuart.Oxborrow@act.gov.au](mailto:Stuart.Oxborrow@act.gov.au); [Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au); [Michael.McGrath@act.gov.au](mailto:Michael.McGrath@act.gov.au); [Sch 2 2.2(a)(ii)]  
**Subject:** RE: Further Levels of Silt in Wetlands

[Sch 2 2.2(a)(ii)]

Thanks for the attached contour.

Further to today's inspection, it was agreed with yourself that the Guideline to open the weir valve and lower the pond to the level of the underside of the lowest stop log. That will place water level approximately 400mm below the current level. It will provide a clearer understanding of the level of the fill in upstream areas of the pond and whether the small area seen this morning was indeed an 'island' or not.

As discussed this morning it was also noted that the water is possibly leaking through the gap between the lowest stop log and the weir wall. By lowering the water level, we would then be able to check that seal as well. Please advise me when you open the valve so we can inspect the seal while the water level is dropping.

Please contact me if you have any queries.

Regards,

[Sch 2 2.2(a)(ii)]  
 Principal's Authorised Delegate (PAPD)  
 Professional Engineering Service Pty Limited ACN 057 633 897  
 Mobile - [Sch 2 2.2(a)(ii)]




---

**From:** [Sch 2 2.2(a)(ii)]@guidelineact.com.au>  
**Sent:** Friday, 9 November 2018 5:23 PM  
**To:** [Sch 2 2.2(a)(ii)]@pes.net.au>  
**Subject:** Further Levels of Silt in Wetlands

Hi [Sch 2 2.2(a)(ii)]

Please see attached an expanded plot for the silt depth in the wetlands.

Kind regards, [Sch 2 2.2(a)(ii)]

---

**From:** [Sch 2 2.2(a)(ii)]@kerrysurveys.com.au]  
**Sent:** Friday, 9 November 2018 1:00 PM  
**To:** [Sch 2 2.2(a)(ii)]  
**Subject:** iwu

plot

[Sch 2 2.2(a)(ii)]

Surveyor/Project Manager



ABN 74 131 478 914

T (02) 6287 3300 M **Sch 2 2 2(a)(ii)**

Office: Unit 1, 20-24 Trenerry Street, Weston ACT 2611

Postal: PO Box 21, Waramanga ACT 2611

[www.kerrysurveys.com.au](http://www.kerrysurveys.com.au)

**From:** [Sch 2 2.2(a)(ii)]@pes.net.au>  
**Sent:** 13/11/2018 3:01 PM  
**To:** [Sch 2 2.2(a)(ii)]@guidelineact.com.au>  
**Cc:** "Taylor, Nick" <Nick.Taylor@act.gov.au>  
**Subject:** FW: Shade Cloth Removal from Temp. Fencing. [SEC=UNCLASSIFIED]

Hi [Sch 2 2.2(a)(ii)]

As discussed this morning, we agreed to place the shade cloths at three locations along the northern wetland and two locations along the southern wetland. Please position the shade clothes at the top side of the temp fence.

As advised by Nick Taylor, the Principal will organise someone to pick up the surplus shade clothes. Meanwhile, would you please store it temporary? However, it would be good idea to keep the piece of small length (may be 15m) of the shade cloth onsite if in case the Client would like to place at different location addition to agreed location.

Regards

[Sch 2 2.2(a)(ii)]  
 Principal's Authorised Person (PAP)  
 Professional Engineering Service Pty Limited ACN 057 633 897  
 Mobile - [Sch 2 2.2(a)(ii)]




---

**From:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Sent:** Tuesday, 13 November 2018 9:57 AM  
**To:** [Sch 2 2.2(a)(ii)]@pes.net.au>  
**Cc:** McGrath, Michael <Michael.McGrath@act.gov.au>; Taylor, Nick <Nick.Taylor@act.gov.au>  
**Subject:** FW: Shade Cloth Removal from Temp. Fencing. [SEC=UNCLASSIFIED]

[Sch 2 2.2(a)(ii)]

Please ask [Sch 2 2.2(a)(ii)] to place three small lengths (say 10 -15m m each) of shade cloth on each side of the relocated wetland fence, in visible areas.

Thanks,

Stuart

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502 | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)**  
 Capital Works, Transport Canberra and City Services Directorate | ACT Government  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

---

**From:** [Sch 2 2.2(a)(ii)]@guidelineact.com.au]  
**Sent:** Monday, 12 November 2018 4:50 PM  
**To:** [Sch 2 2.2(a)(ii)]@pes.net.au>  
**Cc:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Subject:** Shade Cloth Removal from Temp. Fencing.

Hi [redacted]

The advertising shade cloth located on the temporary fencing have been an ongoing variation to date, please see variations V027,34,41,42 and 43 for details.

For the remaining shade cloth, all costs will be tracked for the removal/disposal and covered under variation V090 for your review.

As discussed with Stuart today onsite, some sections nearest to "high traffic area's" will be relocated to the new fence under the same variation.

Should you wish to retain any of the old shade cloth, please let me know by COB 13/11/2018.

Kind regards,

[redacted]

**Sch 2 2.2(a)(ii) | Project Manager | Isabella Weir Upgrade**

16B Bass Street, Queanbeyan NSW 2620

PO Box 537, Queanbeyan NSW 2620

E: [\[redacted\]@guidelineact.com.au](mailto:[redacted]@guidelineact.com.au)

M: [redacted]



-----  
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-----

**From:** "Taylor, Nick"  
**Sent:** 12/11/2018 9:14 PM  
**To:** "Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>  
**Subject:** RE: Isabella Wetlands Draft O&M Plan [SEC=UNCLASSIFIED]

Morning Stuart

Please be advise that we currently have enough monies in the original Alluvium PO for this work \$21,740.00, please also be aware that we currently have \$87,761.19 in the PES PO , and \$21,740.00 in the SMEC PO, we will need to discuss in terms of forecast for future works.

Regards Nick

---

**From:** Oxborrow, Stuart  
**Sent:** Monday, 12 November 2018 11:29 AM  
**To:** Sch 2 2.2(a)(ii)@alluvium.com.au  
**Cc:** Sch 2 2.2(a)(ii)@alluvium.com.au; Taylor, Nick <Nick.Taylor@act.gov.au>; McGrath, Michael <Michael.McGrath@act.gov.au>  
**Subject:** RE: Isabella Wetlands Draft O&M Plan [SEC=UNCLASSIFIED]

Thanks Sch 2 2.2(a)(ii)

The fee proposal outlined below (ie \$7,760 ex GST) is acceptable. If you can target the draft manual by COB this Friday (16/11) as proposed below, that would be appreciated.

Regards,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502 | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)**  
 Capital Works, Transport Canberra and City Services Directorate | ACT Government  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

---

**From:** Sch 2 2.2(a)(ii)@alluvium.com.au  
**Sent:** Friday, 9 November 2018 11:55 AM  
**To:** Oxborrow, Stuart <Stuart.Oxborrow@act.gov.au>  
**Cc:** Sch 2 2.2(a)(ii)@alluvium.com.au; Taylor, Nick <Nick.Taylor@act.gov.au>; McGrath, Michael <Michael.McGrath@act.gov.au>  
**Subject:** RE: Isabella Wetlands Draft O&M Plan [SEC=UNCLASSIFIED]

Hi Stuart, I apologise for the delay.

I have read over the attached Letter of Design Review and the requirements listed in there to complete the O&M.

The fee to write the manual including an allowance for revision/comments from yourself is \$7,760 ex GST. This includes time from myself, Sch 2 2.2(a)(ii), drafting for plans/maps to display operation requirements, sourcing any additional information needed from Guideline on materials, internal review and allowance for addressing of comments.

In terms of timing we have moved a few things around next week to clear some space and get a draft back to you by end of the week.

Can you let me know if your happy to proceed?

Regards

M Sch 2 2.2(a)(ii)  
 E [redacted]@alluvium.com.au

**From:** Oxborrow, Stuart <[Stuart.Oxborrow@act.gov.au](mailto:Stuart.Oxborrow@act.gov.au)>  
**Sent:** Friday, 9 November 2018 9:44 AM  
**To:** Sch 2 2.2(a)(ii) [redacted]@alluvium.com.au>  
**Cc:** Sch 2 2.2(a)(ii) [redacted]@alluvium.com.au>; Taylor, Nick <[Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)>; McGrath, Michael <[Michael.McGrath@act.gov.au](mailto:Michael.McGrath@act.gov.au)>  
**Subject:** RE: Isabella Wetlands Draft O&M Plan [SEC=UNCLASSIFIED]

Sch 2 2.2(a)(ii)

Have you had a chance to prepare the fee proposal for the O&M manual? During the Close Out workshop on 30/10 I believe you advised that you would submit it by the end of last week. This is now becoming urgent. Can you please submit it by COB today.

Thanks,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502** | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)  
 Capital Works, Transport Canberra and City Services Directorate | ACT Government  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

**From:** Oxborrow, Stuart  
**Sent:** Friday, 19 October 2018 9:37 AM  
**To:** Sch 2 2.2(a)(ii) [redacted]@alluvium.com.au>  
**Cc:** Sch 2 2.2(a)(ii) [redacted]@alluvium.com.au>; Taylor, Nick <[Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)>; McGrath, Michael <[Michael.McGrath@act.gov.au](mailto:Michael.McGrath@act.gov.au)>; Sch 2 2.2(a)(ii) [redacted]@pes.net.au>  
**Subject:** FW: Isabella Wetlands Draft O&M Plan [SEC=UNCLASSIFIED]

Thanks Sch 2 2.2(a)(ii)

I think your document is a good start.

We actually need an O&M manual which is structured so that the topics in Section 8 of the attached Letter of Design Review are individually addressed. Some of the topics may not be relevant to Isabella Wetland, in which case 'not applicable' should be quoted in the manual .

Attached are some data sheets received from the contractor to date.

Can you please provide a short reverse brief and a fee proposal to prepare the O&M manual in accordance with Section 8 of the Letter of Design Review and get it approved by TCCS asset acceptance.

Thanks,

Stuart

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**  
**Phone 02 6207 4502** | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)  
 Capital Works, Transport Canberra and City Services Directorate | ACT Government  
 GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

**From:** Sch 2 2.2(a)(ii) [redacted]@alluvium.com.au]  
**Sent:** Friday, 12 October 2018 11:48 AM  
**To:** Oxborrow, Stuart <[Stuart.Oxborrow@act.gov.au](mailto:Stuart.Oxborrow@act.gov.au)>  
**Cc:** Sch 2 2.2(a)(ii) [redacted]@alluvium.com.au>  
**Subject:** Isabella Wetlands Draft O&M Plan

Hi Stuart,

As discussed please find the attached draft Operation and Maintenance Plan we started work on for the Isabella Wetland project. In the end it was never finished as scope and time was required to focus on other parts of design. Thus please consider it as preliminary and still needing work to refine and finish off.

Once you have had a chance to go through it let me know which guidelines/standards or other info you want included and I'll prepare the fee to complete it.

Any questions, please feel free to call me.

Regards

Sch 2.2.2(a)(i) | [Alluvium Com](#)  
Sch 2.2.2(a)(ii) | [@alluvium.com.au](#)

[www.alluvium.com.au](http://www.alluvium.com.au) | Level 1, 105-115 Dover Street Cremorne, VIC 3121 | [LinkedIn](#) | [Blog](#)

-----  
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-----

**Sent:**15/05/2019 2:09 PM

**To:**"Oxborrow, Stuart" <Stuart.Oxborrow@act.gov.au>

**Subject:**RE: Isabella Wetlands Draft O&M Plan

---

**From:** Oxborrow, Stuart

**Sent:** Tuesday, 13 November 2018 10:22 AM

**To:** Taylor, Nick <Nick.Taylor@act.gov.au>

**Cc:** McGrath, Michael <Michael.McGrath@act.gov.au>

**Subject:** RE: Isabella Wetlands Draft O&M Plan [SEC=UNCLASSIFIED]

Ok thanks Nick.

I presume the PES and Smec PO's will both need increasing shortly. Hopefully it will become clearer over the next few weeks (as the project is finalised) how much we need to increase the PO's by.

Regards,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**

**Phone 02 6207 4502 | Mobile 0401 333 179 | Email: [stuart.oxborrow@act.gov.au](mailto:stuart.oxborrow@act.gov.au)**

Capital Works, Transport Canberra and City Services Directorate | **ACT Government**

GPO Box 158, Canberra ACT 2601 | [www.act.gov.au](http://www.act.gov.au)

---

**From:** Taylor, Nick

**Sent:** Tuesday, 13 November 2018 8:14 AM

**To:** Oxborrow, Stuart <[Stuart.Oxborrow@act.gov.au](mailto:Stuart.Oxborrow@act.gov.au)>

**Subject:** RE: Isabella Wetlands Draft O&M Plan [SEC=UNCLASSIFIED]

Morning Stuart

Please be advise that we currently have enough monies in the original Alluvium PO for this work \$21,740.00, please also be aware that we currently have\$ 87,761.19 in the PES PO , and \$21,740.00 in the SMEC PO, we will need to discuss in terms of forecast for future works.

Regards Nick

---

**From:** Oxborrow, Stuart

**Sent:** Monday, 12 November 2018 11:29 AM

**To:**[Sch 2 2.2\(a\)\(ii\)@alluvium.com.au](mailto:Sch 2 2.2(a)(ii)@alluvium.com.au)

**Cc:**[Sch 2 2.2\(a\)\(ii\)@alluvium.com.au](mailto:Sch 2 2.2(a)(ii)@alluvium.com.au); Taylor, Nick <[Nick.Taylor@act.gov.au](mailto:Nick.Taylor@act.gov.au)>; McGrath, Michael <[Michael.McGrath@act.gov.au](mailto:Michael.McGrath@act.gov.au)>

**Subject:** RE: Isabella Wetlands Draft O&M Plan [SEC=UNCLASSIFIED]

Thanks [Sch 2 2.2\(a\)\(ii\)](mailto:Sch 2 2.2(a)(ii)@alluvium.com.au)

The fee proposal outlined below (ie \$7,760 ex GST) is acceptable. If you can target the draft manual by COB this Friday (16/11) as proposed below, that would be appreciated.

Regards,

**Stuart Oxborrow | Senior Engineer – Land Release Infrastructure**

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