



Reservoirs Act 1975 2019 Annual Supervising Engineer's Statement

Poynton Lake

4 October 2019

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Poynton Lake

4 October 2019

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1 General Details

1.1 Name of Reservoir

Name: Poynton Lake

Dam category: B

The reservoir has been given a high-risk designation under the Reservoirs Act 1975 (as amended by the Flood and Water Management Act 2010).

1.2 National Grid Reference

O.S. NGR: SJ 923845

1.3 Name and Address of Undertakers

Name: Cheshire East Council

Address: Asset Management Services
Municipal Buildings
Earle Street
Crewe
Cheshire
CW1 2BJ

Contact: [REDACTED]

Contact Address: As above

Office tel.: [REDACTED]

Mobile tel.: [REDACTED]

Email: [REDACTED]

1.4 Name and Address of Supervising Engineer

Name: [REDACTED]

Company: Mott MacDonald

Address: [REDACTED]
[REDACTED]
[REDACTED]

Office tel.: [REDACTED]

Mobile tel.: [REDACTED]

Email: [REDACTED]

1.5 Alternative Supervising Engineer contact details

Name: [REDACTED]
Company: Mott MacDonald Ltd
Office tel.: [REDACTED]
Mobile tel.: [REDACTED]
Email: [REDACTED]

If neither the Supervising Engineer nor Alternative Supervising Engineer is available in an emergency, contact [REDACTED] of Mott MacDonald as follows:

Office: [REDACTED]
Mobile: [REDACTED]
Email: [REDACTED]

1.6 Name of last Inspecting Engineer or Construction Engineer

Name: [REDACTED]
Company: Mott MacDonald
Address: [REDACTED]
[REDACTED]
[REDACTED]
Office tel.: [REDACTED]
Mobile tel.: [REDACTED]
Email: [REDACTED]

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2 Status and Findings

2.1 Construction Engineer's Requirements in relation to sections 6(2) to 6(4)

These sections do not apply as the reservoir has been in service for some years with the Construction Engineer's recommendations having been superseded by those in a subsequent inspection under Section 10 of the Reservoirs Act 1975.

2.2 Statement under section 12(2A) on the directions given for maintenance of the reservoir under Section 10(3)(b)

The Inspecting Engineer recommended the following Recommendations to be taken in Respect of Maintenance under Section 10(3)(b):

'I recommend that a new Prescribed Form of Record (PFR) shall be obtained and that all relevant details of the reservoir shall be entered into the Record including water level readings that shall be recorded each month and entered into Part 1 of the PFR. The completed PFR shall be kept in a safe place so that all future records can be maintained.'

The Supervising Engineer in September 2019 was instructed by the Undertaker to draft an Electronic Prescribed Form of Record and was duly prepared and submitted to the Undertaker on the 26th September 2019. It contains monthly water level records from January 2016 through to August 2019. The Undertaker has advised that the PFR will be held and maintained by the Council's Statutory Compliance team with the monthly monitoring to continue to be undertaken by the Park Rangers team. **The PFR may need updating once the Flood Study and Emergency Drawdown plan which are currently being undertaken is complete.**

The following recommendations (Table 2.1) were also identified by the Inspecting Engineer in respect of maintenance in the last Section 10 Inspection Report, but not under Section 10(3)(b):

The colour of the table cell indicates the following:

- Green – no further action currently required
- Yellow – action required within next 12 months
- Red – action urgently required

Table 2.1: Recommendations as to Measures to be taken in Respect of Maintenance

No.	Recommendation by last Inspecting Engineer	Status
1.	An assessment of the condition of the revetment boards along the upstream face should be carried out to identify those parts that are in need of repair or replacement. These localised repairs should then be implemented.	During this visit the upstream face was assessed. Where the boards end there is evidence of some erosion, but at this time there are no areas requiring attention. This will be reviewed at the next visit.
2.	Any fallen or leaning trees that are threatening the integrity of the upstream face should be removed. When the roots and stumps have been cleared away, the upstream face should be reinstated to the correct line and new revetment boards should be installed to provide erosion protection.	There are several leaning trees on the upstream face of the embankment. It would be advisable to have these removed and any damage repaired around the root bowl. There was some evidence of tree management, although it is advisable that attention is also given to the removal of tree saplings.

No.	Recommendation by last Inspecting Engineer	Status
3.	The trees on all parts of the embankment should be managed and checked on a regular basis. Any trees that become unhealthy and which may be in danger of toppling should be removed. If the tree canopy becomes too dense then I recommend that careful pollarding of the trees should be carried out to reduce the height of the trees and to let more light through to the ground beneath.	During the Supervision visit there were no trees on the embankment looking like they were about to fall. However, it is advisable to use the services of arboriculturalist to assess the trees on a regular basis.
4.	On the downstream face of the embankment regular ground clearance activities shall be carried out to minimise the spread of the undergrowth and to expose the dam surface in the areas between the large trees.	There appeared to be some areas where ground clearance has taken place. However, it is not generally currently being undertaken and ivy is covering some of the masonry wall – it is suggested that this is cleared.
5.	A detailed inspection of the masonry wall that retains the embankment toe shall be carried out to identify those parts of the wall that are showing signs of distress with missing stones, open joints and bulging of the surface. Localised repair work shall then be carried out to those parts that have suffered damage to fill the gaps and to reinstate the wall to the correct profile.	The entire length of the masonry retaining wall was inspected and found generally to be in fair condition. The southern half requires some repointing (refer Photo 8) and there are two specific areas in the northern half requiring reconstruction (refer Photo 11). The Undertaker is instructing their Highways Team to undertake the repair works.
6.	The disused Council Yard area at the downstream side of the dam shall be tidied up to facilitate access to this part of the dam and in order that any repairs to the wall within the yard can be carried out.	The depot area which had been sold to a developer is back up for sale. It is unclear where the land ownership boundary is up to, but this will be kept under observation. The area was inspected and is noted as still being heavily overgrown preventing inspection of the masonry wall where the embankment is at its narrowest.
7.	The undertakers should enter into dialogue with the farmer that owns the field at the downstream side of the A523 to agree appropriate access arrangements for Council personnel so that regular surveillance and inspection of the downstream toe and the route of the overflow pipe can be carried out.	The council has been in contact with the land owner regarding some drainage issues. At the time of the visit, the overflow pipework was being cleared and one of the pipes through the field was found to have a couple of defects. These are likely to required repair.

2.3 Matters to be watched by the Supervising Engineer under Section 7(5) or 10(4)

The following specific matters (Table 2.2) were identified by the Inspecting Engineer for the guidance of the Supervising Engineer in the last Section 10 Inspection Report:

The colour of the table cell indicates the following:

- Green – no further action currently required
- Yellow – action required within next 12 months
- Red – action urgently required

Table 2.2: Matters to be watched by the Supervising Engineer

No.	Recommendation by last Inspecting Engineer	Status
1.	The Supervising Engineer shall visit the reservoir at least once per year. This should be altered to coincide with different seasons to assess the performance of the embankment.	Visits to the site have been undertaken on the 4 October 2019, previous visit being the 6 October 2018.
2.	The Supervising Engineer should assess the conditions on the downstream side of the embankment and should check the conditions for any signs of movement, leakage or untoward behaviour	The downstream side of the embankment was inspected and no signs of leakage, however, as it was raining on the day, this made it more difficult. No new movement appeared evident.

No.	Recommendation by last Inspecting Engineer	Status
3.	The inspection shall include a full walk over survey across the downstream toe of the embankment and along the masonry retaining wall to check for signs of deformation or water egress.	The downstream masonry wall was visually inspected, and no signs of further movement or water egress were noted. The displacement of the masonry wall stone shown in Photo 11 is the result of a vehicle impact and is still to be repaired.
4.	Provided that suitable access can be arranged he should also check conditions along the downstream toe of the embankment at its highest section.	No formal access was granted – but, from the roadside, nothing detrimental was evident. However, it would be preferable to access the area.
5.	Observe the condition of the upstream face to check for signs of erosion damage or movement arising from the instability of the trees and assess the on-going erosion protection that is afforded by the timber revetment boards.	The upstream face appeared in reasonable condition – although at the ends of the timber revetment boards there was some evidence of erosion although no worse than previous visits – this shall continue to be checked. The trees along the upstream face are providing good protection – although their health is to be kept monitored.
6.	If there is an extreme flood event such that the overflow pipe is required to operate with an unusually high discharge, then it is recommended that the Supervising Engineer should inspect the works after the flood to evaluate the condition and performance of the overflow	No extreme event has occurred since the appointment of the Supervising Engineer. The overflow was clear at the time of the visit. The pipe has been recently surveyed and found to be clear

2.4 Records, monitoring and supervision by the Undertaker under Section 11

The keeping of records under Section 11 of the Reservoirs Act 1975, as directed by the last Inspecting Engineer in his Section 10 Inspection Report, and their status are as given below (Table 2.3):

The colour of the table cell indicates the following:

- Green – no further action currently required
- Yellow – action required within next 12 months
- Red – action urgently required

Table 2.3: Records Prescribed by the last Inspecting Engineer

No.	Direction by last Inspecting Engineer	Status
1	A prescribed form of record to be commenced within 3 months of the Inspection Report (previous PFR has been lost)	The PFR has been created in an electronic format following the revised prescribed format.
2	The reservoir water levels to be recorded monthly	The PFR was updated by the SE on the 26 th September 2019. It now contains monthly water records from January 2016 to August 2019. The Undertaker's Statutory Compliance team is to hold and maintain the PFR

2.5 Inspection under Section 10(2)

2.5.1 Date of last Section 10 Report and Section 10(5) Certificate

The last inspection under Section 10 of the Reservoirs Act was carried out by [REDACTED] on 11 July 2016. The final report and certificate was issued on 23 August 2016.

2.5.2 Description and status of any measures to be taken in the Interests of Safety under Section 10(6)

The inspecting engineer in 2016 made two recommendations in the interests of safety (MloS) which are repeated below (Table 2.4):

The colour of the table cell indicates the following:

- Green – no further action currently required
- Yellow – action required within next 12 months
- Red – action urgently required

Table 2.4: Matters in the Interests of Safety Recommended by the last Inspecting Engineer

No.	Direction by last Inspecting Engineer	Status
1	An Emergency Drawdown Plan shall be prepared for the reservoir to describe the methods to be used and the procedures to be followed to facilitate a lowering of the water in the reservoir by up to 300mm in the first 24 hours of an emergency. Further details of this requirement are given in Section 10.4.	The Undertaker has now appointed Jacobs to undertake this work. It is expected to be complete by the end of the year. [REDACTED] has been appointed by the Undertaker as the QCE to supervise the provision of the report. The Undertaker has been contacted by the Enforcement Authority.
2	A Flood Study Assessment shall be prepared for the reservoir. This shall include an estimation of the inflow hydrographs for the Design Flood and the Safety Check Flood, the hydraulic characteristics of the inlet works to the reservoir (direct and indirect catchments), discharge characteristics of the overflow weir and outlet pipe, and flood routing to determine flood surcharge levels. The study should also incorporate an estimate of wave heights and the potential for wave over-topping that could occur during the passing of these floods, as well as a topographic survey of the embankment crest.	The Undertaker has now appointed Jacobs to undertake this work. It is expected to be complete by the end of the year. [REDACTED] has been appointed by the Undertaker as the QCE to supervise the provision of the report. The Undertaker has been contacted by the Enforcement Authority.

It was recommended in the last Section 10 Inspection that these works are to be completed within 1 year of the date of the last report under Section 10, i.e. by 23 August 2017. As noted above, the Undertaker has yet to complete the works but has appointed Jacobs and [REDACTED] as the QCE to complete these outstanding recommendations and is expected to be complete by the end of 2019.

2.5.3 Date of next scheduled inspection under section 10(2) of the Act

An Inspection under Section 10 was completed on 11 July 2016. The report of that inspection states that the next inspection must be carried out by 11 July 2026.

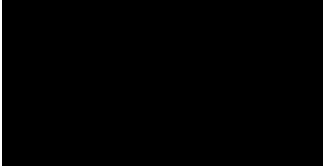
2.5.4 Recommendation under Section 12(3) for an inspection under section 10(2)

No recommendation is made for an inspection at this time.

2.6 Directions by the supervising engineer as to the visual inspection by the undertaker under section 12(6)

No directions are given.

2.7 Signature of Supervising Engineer and Expiry Date of Five-Year Panel Appointment



Signature of Supervising Engineer:



Date of expiry of current panel appointment: 30 April 2020

3 Site Visit Report – Poynton Lake

3.1 Visit Date and Details

- Friday 10th November 2019.
- Accompanied by: Unaccompanied due to error in SE's diary. Visit was followed up with a phone call with the Undertaker. All areas were accessible.
- Reservoir Level: 185 mm over the weir.
- Weather: 8°C and rainy.

3.2 Water Level, Site Conditions and Scope of Inspection

The reservoir was full at the time of the inspection, with about 185mm depth overflowing the overflow. The area around the gauge board was clear and an accurate level could now be taken. As there is no abstraction from the lake, the natural condition is for the outflow via the overflow to balance the run-off from the catchment.

The inlet from the indirect catchment at the southern end, behind Parklands Way, was visited and found to be relatively clear except for recent leaf fall (Photo 17).

The site was found to be in reasonable condition – see Sections 3.5 to 3.9. However, the masonry retaining wall of the embankment is noted as requiring some attention in some specific areas, it would be preferred if the ivy, sapling and low-lying brush could be removed.

The inspection comprised of a walkover of the crest where accessible and the downstream toe of the embankment.

A number of photographs were taken during the inspection to illustrate key points and these are included as Appendix A of this report.

At the time of the visit, the overflow pipe was being cctv'd so the opportunity was taken to view the chamber downstream of the overflow (Photo 18).

3.3 Significant events since previous inspection

No significant events have occurred since the Supervising Engineer was appointed.

3.4 Access

There is good vehicular access to the reservoir site. There is a car park at the northern end of the embankment and from this point there is direct pedestrian access on to the path that runs along the crest. The footpath alongside the A523 extends along the full length of the dam and gives access to the retaining wall and to the downstream face. At several points along its length there are gaps through the wall and steps which connect the footpath with the crest.

In addition, there is vehicle and pedestrian access around the southern end of the lake (South Park Drive and Woodside Lane) via which the inlet works and bifurcation arrangement on the Poynton Brook can be reached. The field to the west of the A523 which includes a part of the downstream face is not owned by the Council. At the present time there is only restricted access to this field. This is not an ideal situation and representations should be made [REDACTED]

Arrangements should be made to gain regular access to the downstream field to allow inspection of the lower part of the embankment.

3.5 Embankments

3.5.1 Upstream Face

The reservoir was full and, consequently, only a small part of the face that stands above the water surface was exposed. As can be seen in Photo 5 to Photo 7, there are considerable amounts of vegetation along the upstream edge that obscured the view. In general, the upstream face of the embankment appeared to be reasonably intact.

Where erosion has taken place, timber revetment boards have been installed to provide protection and reinstate the path width. Where these are present there is evidence of some erosion at either end, but in general these all appeared to be in reasonable condition. The latest visit was undertaken after significant leaf fall and some recent vegetation clearance and it was found that the erosion at the ends of the revetment boards is not significant and similar to previous visits.

It was noted that tree management has been ongoing with a number of trees cut down and sections of the upstream face cleared of saplings. However, there has recently been a tree fall over which has taken with it a portion of the embankment (Photo 5). Fortunately the tree was located mostly off the crest so there has been very little taken out of the embankment. **It is recommended that any fallen or leaning trees that are threatening the integrity of the face should be removed along with any tree saplings before they become established.** When the roots and stumps have been cleared away, the upstream face should be reinstated to the correct line and new revetment boards should be installed to provide erosion protection.

3.5.2 Embankment Crest

The crest of the dam comprises two parts; the gravel path that runs along the upstream edge and the broad expanse of grassy/woody area, sometimes at a higher level than the path, which generally runs along the upstream edge. The path itself was found to be in a good state of repair. It has a good regular surface of gravel-type material and appeared to be well maintained. There were a few minor humps and bumps in the path but nothing more than might be expected from localised settlement. There were no signs of excessive disturbance, settlement or cracking that might arise from movement of the embankment (Photo 6 and Photo 7).

The downstream part of the crest has minimal grass cover and instead is predominantly ivy, low shrub and numerous mature trees. Between the trees the grass and other soft vegetation should be cut back from time to time as part of normal ground maintenance. One section was noted which appears to have had some of the low-lying vegetation removed which has encouraged some grass cover (Photo 6). It is encouraged that this is repeated along the entire length, especially the narrower sections of embankment. Walking through these areas the ground is uneven but there were no signs of unexpected movement.

With regard to the trees, it is recommended that they should be managed and checked on a regular basis by an arboriculturalist. Any trees that become unhealthy and which may be in danger of toppling should be removed. If the tree canopy becomes too dense then I suggest that careful pollarding of the trees should be carried out to reduce the height of the trees and to let more light through to the ground beneath to encourage healthy grass growth.

3.5.3 Downstream Face and Retaining Wall

The downstream face varies; in some places there is a masonry wall at the toe whilst in other parts the face slopes down directly to the path alongside the road. Various views of the face are shown in Photo 8 to Photo 13. In many places a detailed assessment of the condition was hampered by the vegetation which obscures the ground surface but, in general, the slope of the face was fairly regular with no indication of movement or instability. As far as could be determined and, taking due account of the curvature of the dam, it appeared that the alignment of the face (both the wall section and the sloping face) was regular and on a whole, has not suffered any serious displacement. As with the grassy parts of the crest, **it is recommended that regular ground clearance activities are carried out to minimise the spread of the undergrowth and in order to expose the dam profile in the areas between the large trees.**

The masonry retaining wall is shown in Photo 8 to Photo 11. The overall alignment was reasonable as it follows the line of the footpath. The wall appears to be stable and there were no indications of imminent collapse, this is despite having mature trees growing directly behind the wall. However, several areas are noted (see Photo 8 and Photo 11) where individual stones have eroded away and where localised bulging is occurring. It is recommended that the parts of the wall that have experienced this type of damage and movement should be repaired. It is understood that the Council's Highways team have been instructed by the Undertaker to carry out repair works to the masonry wall where there is severe deformation, including the replacement of eroded stone work, although this has yet to take place.

Towards the southern end of the dam there is an old and now disused Council Yard that occupies the land between the road and the dam. The yard has now been sold to a private developer with unknown intentions for the land. The area continues to be in a state of disrepair (Photo 9) and neglect and this includes the perimeter wall at the east side of the yard that forms a boundary with the face of the embankment. **It is recommended that communication is given to the new owners on the importance of the masonry wall. It is also recommended that the old Council Yard is tidied up in order to facilitate access to this part of the dam and in order that any repairs to the wall within the yard can be carried out.**

The highest section of the dam is towards the northern end and at this point the downstream face continues on the downstream (western) side of the road. This section of the face is shown in Photo 13. This part of the face is within a field that is owned by a local farmer. It was fenced off such that there was no access during the visit. Whilst the overall alignment appeared to be satisfactory, it is important that all parts of the embankment structure are accessible. **I recommend that the Council should enter into dialogue with the farmer in order to agree appropriate access arrangements into the field and onto the downstream face.**

There has been some recent dialogue with the landowner regarding water ponding in the field which is thought to be related to the overflow pipes which run through the field.

3.6 Overflow / Spillway

The inlet overflow was inspected, the screen was clear of debris and there was a small but steady flow passing through the screens and over the weir. This flow was discharging into the chamber and into the downstream pipe without hindrance. The majority of the overflow works are buried and cannot be readily inspected; however, as far as could be seen, the overflow was operating satisfactorily, and the modest spill flow was passing through the pipe system to reach the course of the Poynton Brook at the downstream side.

At the time of the annual visit, the pipe was being cctv'd and the opportunity was taken to discuss the condition of the overflow pipe. The 450mm pipe running beneath the road was found to have

root ingress and partial blockage, but otherwise is operating satisfactorily. Two pipes then run through the field, and the smaller, 300mm pipe is broken in two places with a void formed up to surface. The parallel 450mm pipe was found to be satisfactory. It is likely that this is causing flooding of the field and will require repair. The opportunity was also taken to view the chamber downstream of the overflow (Photo 18) and was found to be clear. It contains two large diameter inlets from the overflow chamber, a low level and a high level.

The downstream valley that connects with the Poynton Brook and which represents the route of the overflow outlet pipe is shown in Photo 4. Unfortunately, because of access restrictions it is not possible to walk along this route or to inspect the outfall at the end of the pipe where the water discharges to the brook. This is an unsatisfactory situation which needs to be resolved in order that regular surveillance, inspection and maintenance of the overflow works can be carried out.

3.7 Outlet Works

As reported above there is no outlet works at this reservoir and no permanent means by which water can be abstracted from the reservoir. For a small reservoir this is not so unusual and need not be an immediate problem. However, in the case of an emergency there might be a need to lower the water level in the reservoir in order to reduce the hydrostatic load on the embankment.

It is recommendation of the last Inspecting Engineer to develop an Emergency Drawdown Plan by August 2017. The Undertaker has appointed Jacobs and [REDACTED] as the QCE to undertake this outstanding recommendation and is expected to be complete by the end of the year.

3.8 Seepage/drainage flows

There is no formalised drainage to review. There is no history of seepage and therefore no monitoring is set up. During the visit there were no signs of seepage through any part of the embankment structures.

3.9 Settlement and movement

There are no signs of instability within the embankments, such as slips. There are also no signs of differential settlement around the inlet/outlet structure and low-level control structure.

Due to the size of the embankment, the last Inspecting Engineer did not believe it warranted further instrumentation or settlement monitoring.

3.10 Instrumentation

The reservoir water level can be read from a graduated gauge board that is fixed to the upstream side of inlet structure to the overflow (Photo 3). The area around the gauge board was clear and could be easily read.

It is recognised that the reservoir remains full or near to full most of the time. Taking this into account the Inspecting Engineer recommended that water levels should be taken and recorded at least once per month. In addition, exceptionally high levels during flood conditions or low levels that might occur during a drought should also be recorded. In accordance with Section 11(1) of the Reservoirs Act, the undertakers have a legal obligation to monitor the reservoir including the taking and recording of water levels in the Prescribed Form of Record and this contains monthly water level records from January 2016.

3.11 Area Downstream of the dam

The Supervising Engineer is not aware of any changes to the downstream conditions.

3.12 Flood Plan

The Floods and Water Management Act 2010 requires Flood Plans to be produced for specified reservoirs. However, as yet, no guidance has been issued by the Environment Agency. As a precursor to the preparation of flood plans, flood inundation maps that indicate the extent of flooding should there be a breach of a dam and an uncontrolled escape of water were produced by the Environment Agency in 2009. These inundation maps are primarily for Emergency Planning purposes, but for information the basic maps showing the extent of the flood outline are in the public domain and have been issued to all reservoir Undertakers.

For a high-risk reservoir, such as Poynton Lake, it is likely that some form of on-site flood plan will be required, although the exact requirement (if any) would need to be determined when further guidance is provided by the Environment Agency and a Direction made by the Secretary of State. A key component of the On-Site Plan would however be the Drawdown Plan for the reservoir.

Appendices

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A. Photographs

Photo 1 – General View of the Lake at the Northern End



Photo 2 – Inlet Structure with Screen at the Upstream end of the Overflow Pipe



Photo 3 – Gauge Board by overflow – 2016 visit



Photo 4 – Route of Overflow Pipe in Downstream Valley



Photo 5 – Fallen Tree along Upstream Face



Photo 6 – Broad Crest Dam south of the Overflow



Photo 7 – Upstream Face of Crest with Protection Boards



Photo 8 – Masonry Retaining Wall Alongside the A523 (southern end)



Photo 9 – Masonry Retaining Wall within the Old Council Depot



Photo 10 – Central Section of Masonry Wall



Photo 11 – Bulging and Displaced Stonework within the Wall (central section)



Photo 12 – Downstream face at the Northern End (no wall)



Photo 13 – Downstream face at the highest section



Photo 14 – Inlet Pipe at Southern End - 2017



Photo 15 – Inlet Pipe at Northern End – 2017



Photo 16 – Inlet Pipe at Eastern End - 2017



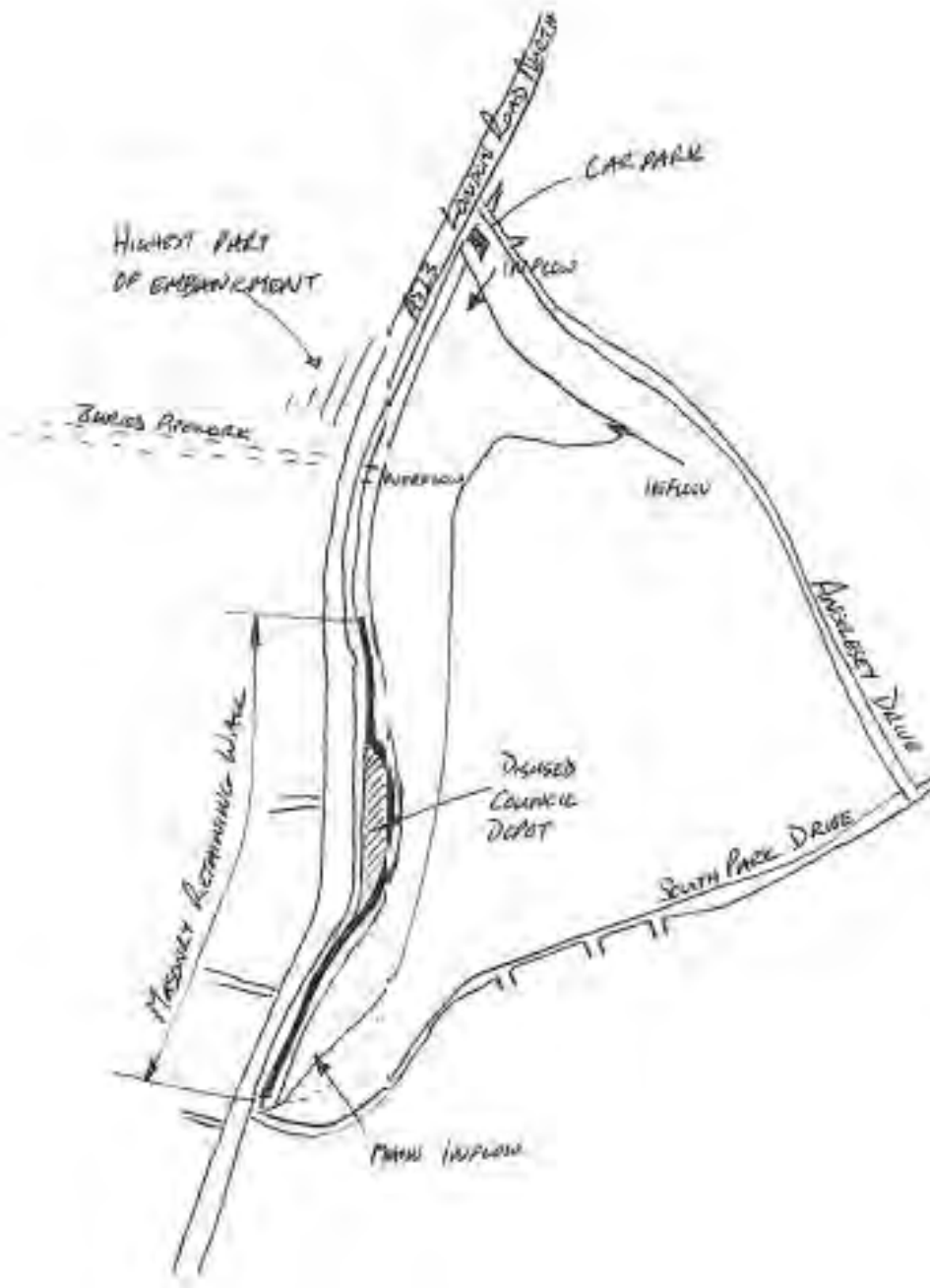
Photo 17 – Inlet Arrangement – behind Parklands Drive



Photo 18 – Chamber Downstream of Overflow Chamber



B. Site Layout Plan



C. Summary of advisory maintenance actions suggested by the Supervising Engineer

The colour of the cell in Table C.1 indicates the following:

- Green – previously noted, action completed
- Yellow – early action recommended but not immediately required (however issue could deteriorate if left unchecked)
- Red – action urgently required

Table C.1: Advisory maintenance actions suggested by the Supervising Engineer

Ref	Description	Planned Action	Closure
1	2.4 Records, monitoring and supervision PFoR to be completed with monthly water levels and issued to the SE.	Undertaker to send the SE the PFoR for review.	Complete by SE 26 Sept 19
2	2.4 Records, monitoring and supervision PFoR to be kept up to date with monthly water level records	Ongoing	
3	2.4 Records, monitoring and supervision The PFoR may need updating once the Flood Study and Emergency Drawdown plan which are currently being undertaken is complete.	To be updated once reports are prepared.	
4	2.5.2 Matters in the Interests of Safety The Inspecting Engineer has recommended for a Drawdown Plan to be produced by August 2017.	The Undertaker has now appointed Jacobs to undertake this work. It is expected to be complete by the end of the year. [REDACTED] has been appointed by the Undertaker as the QCE to supervise the provision of the report.	
5	2.5.2 Matters in the Interests of Safety The Inspecting Engineer has recommended for a Flood Study to be produced by August 2017.	The Undertaker has now appointed Jacobs to undertake this work. It is expected to be complete by the end of the year. [REDACTED] has been appointed by the Undertaker as the QCE to supervise the provision of the report.	
4	3.4 Access Make arrangements with [REDACTED] embankment and to follow the route of the overflow pipe.	There is currently an issue with drainage on the field – it is thought that a section of the overflow pipe through the field is damaged. CCTV of the pipe was ongoing on the day of the visit and proven to be so. [REDACTED] [REDACTED]	
5	3.5.1 Upstream Face The fallen down trees to be removed and the root bowls repaired in the upstream face of the embankment.	Tree management and some clearance has been ongoing – this is to continue.	Nov 18
6	3.5.2 Embankment Crest	Tree management and some clearance has been ongoing – this is to continue.	Nov 18

Ref	Description	Planned Action	Closure
	Trees to be inspected regularly by an arboriculturalist and any dead trees to be removed.		
7	3.5.2 Embankment Crest Low level vegetation and tree saplings are to be regularly cut, and the tree canopy thinned to encourage grass growth.	Whilst there has been some clearance, there are many saplings which could be removed.	
8	3.5.3 Downstream Face and Retaining Wall Vegetation obscuring the masonry wall to be removed. Damaged stonework to be re-bedded or replaced where eroded. Low level vegetation on non-masonry section to be kept short to encourage grass growth. Old Council Yard to be tidied to facilitate access to this part of the dam and in order that any repairs to the wall within the yard can be carried out.		
9	3.5.3 Downstream Face and Retaining Wall The new owners of the council yard should be made aware of the importance of the masonry retaining wall. There is the potential that they can be considered joint undertakers if their ownership includes the masonry wall and will therefore have obligations to maintain the structure.	The Undertaker is to enquire regarding the landownership boundary as sold by the council and whether the wall is included or not.	
10	3.10 Instrumentation Gauge board to be repaired or replaced to allow accurate monthly reservoir level measurement – for recording on the Prescribed Form of Record.	The gauge board was clearly observable at the time of the visit. The Park Ranger is to be advised how to read the board (recording 1.5 instead of 150)	