



Aberdeen Asset Management

PROJECT MOORE - VENDOR DUE DILIGENCE

Mundaring Water Treatment Plant - Technical Adviser's Report - DRAFT





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WSP


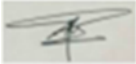

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EXECUTIVE SUMMARY

INTRODUCTION




WSP has been appointed by Aberdeen Standard Investment Ltd (ASI) to undertake Vendor technical due diligence on Mundaring Water Treatment Plant project (MWTP). Our technical due diligence has concentrated on the technical principles and risk transfer of the portfolio of assets, identifying the fundamental commercial, construction and operational issues that exist from a technical perspective.



THE PROJECT

MWTP is a is a PPP for the design, finance, build, operate and maintain and then hand back of water supply assets in western Australia. The assets include the Mundaring Water Treatment Plant, the Mundaring Water Pumping Station C (MWPSC) and new interconnecting pipelines to allow water to be abstracted from Mundaring Weir by MWPSC, transferred for treatment at MWTP and then delivered to existing trunk mains for use by Water Corporation of Western Australia.

Our report utilises a RAG risk reporting system. The Red, Amber and Green Flag definitions are as follows:

Table 1 - RAG Definitions

Definition	Risk Category
Red Flag: Material technical issue identified at the time of review, the Client should consider the implication of this risk in their price and its potential impact on equity. Strong asset management required to ensure the risk is managed and mitigated. This would be considered as a material risk until such time as it is mitigated or there is a robust management plan in place to mitigate it.	
Amber Flag: A technical issue has materialised at the time of the review, which has the potential to impact on project performance and equity if not managed appropriately. Will require the project parties to work together and implement a rectification plan, or a rectification plan is required to be produced. Potential for deterioration of key project relationships if not managed appropriately, however typical security provisions e.g. defects liability, PCG's are in place.	
Green Flag: No known material technical issues identified at the time of the review that could have a detrimental impact on project performance. Issues identified at the time of the review are considered to be manageable to an experienced investor. Typical security provisions e.g. defects liability, PCG's are in place.	

	Description / Key Points	Red / Amber / Green
Construction Matters	<p>The asset build phase was formally certified as Complete on 6th December 2013; Completion requires works to have no more than Minor Defects and as such the majority of construction related risks have passed. The design of the Project Infrastructure is suitable for the abstraction, transfer and treatment of raw water from surface sources and passed the commissioning and testing process prior to completion.</p> <p>Project Co is required to expand the capacity of the system in 3 stages over the project period and has included forecast expenditure for the works to be carried out by ATJV as described in the Project Scope and Requirements (PSR) schedule to the Project Agreement. Project Co has also to include for substantial forecast pipeline rehabilitation costs during 2038 and 2041 and has included forecast expenditure for these works to be carried out by ATJV in the Base Financial Model. The MSC will be reviewed and revised to account for efficiently made expenditure on these items, as certified by the Independent Certifier contracted at that time for that purpose, in accordance with the Change Compensation Principles in the Project Agreement.</p> <p>The works to expand the Project Infrastructure are known and are based on well understood technology and materials and are not expected to present any significant risk.</p>	
O&M Matters	<p>Revenue is generated through an availability-based payment mechanism. The payment mechanism and performance measurement system poses no undue risk beyond standard market principles and operational delivery risk has been passed down to the O&M Provider under the O&M Sub-Contract subject to liability caps that are considered to provide suitable protection to the Project Co in the event that there is a need to replace the Provider.</p> <p>The operational service delivery is reported as good, abatements to revenue are minimal with the asset comfortably operating well within the contractual trigger levels that may give rise to termination of the Contract.</p> <p>Monthly Service Charge paid to Project Co and O&M Monthly Fee paid to O&M Provider are suitably indexed and subject to Change Compensation for a suitable range of events.</p> <p>Project Co has passed their responsibilities and risks relating to the O&M Phase to ATJV. ATJV therefore provides the O&M services in the current O&M Phase of the project and as such is contracted to supply guaranteed quality and quantity of water in accordance with demand requests from Corporation, subject always to annual forecast limits. ATJV is also responsible for maintenance, repair and replacement of the project infrastructure such that it is fit for purpose and capable of meeting the contracted service over the 35 year project period and may be handed back to the Corporation in acceptable condition at the end of the project period.</p> <p>ATJV has forecast, in the Base Financial Model, expenditure to ensure that asset condition and performance are maintained at acceptable levels. The sums allowed for asset maintenance are within the</p>	

	benchmark range WSP would expect for this type of asset set. Asset inspections may be undertaken by a third party to assure Corporation and Project Co that asset management systems are robust and are implemented carefully and sufficient resource is available and used to this end; where any deficiency is identified Project Co will agree remedial action and will require ATJV to perform the works at ATJV cost. Latest review of Asset Management systems undertaken in November 2018 indicated that asset management is mature and effective, but there are a limited number of areas where improvements could be made, specifically around future asset disposals.	
Market Testing	<p>There are some services that may be market tested on an approximate 5 year cycle, primarily energy supply, laboratory services and chemical supplies. As substantial elements of the operation and maintenance costs this is a reasonable approach.</p> <p>Any revised costs from market testing which are accepted by Corporation will result in an appropriate variation to the Monthly Service Charge payable to Project Co based on the Change Compensation Principles in the Project Agreement.</p>	
Third Party Revenue	None noted	
Damage	Rectification of damage and destruction of any part or all of the Project Infrastructure will be the responsibility of Project Co, who will apply proceeds of insurances held by Project Co, and where relevant, Corporation to effect the repairs, replacement and renewals.	
Utilities	Procurement and payment for utilities to service the Project are the responsibility of the Project Co. As noted above energy costs are market tested on a 5 year cycle and agreed changes to the costs of energy, based on market testing will be reflected in the Monthly Service Charge payable to Project Co.	
Service Provider Replacement	In the event that the O&M Provider has to be replaced we consider that the Termination Cap represents a manageable position to allow for their replacement. This is based on current market conditions.	
Asset Management	The Project Co has passed the performance related risk plus the risk in relation to the overall financial adequacy of the asset management to assure Fitness for Purpose and availability of the Project Infrastructure to the O&M Provider. Asset Maintenance (Repair and Replacement line item in Financial Base Case) is AUD\$61.510m over the contract term equating to c25% of capital cost which is within the benchmark range for this type of asset.	
Commercial Matters	Project Co is managed via the Project Agreement to provide the design, build, finance, operation, maintenance and eventual hand back of the Mundaring Water Plant. Project Co has passed responsibility for the design, construction, operation, maintenance and hand back works to the O&M Provider under the Delivery Agreement. The O&M Provider is a capable service provider with experience in this type of asset and has successfully achieved construction completion and has operated and	



	maintained the asset effectively and generally within the Project Specific Requirements and Guaranteed Quality since December 2013. There are currently no open disputes reported on the project.	
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1 PROJECT DASHBOARD

KEY PARTIES		KEY DATA / RISK ALLOCATION	Value	Cost Risk Responsibility
Generic Term	Company	Construction Value	A\$254,674,133	Building Contractor
Authority	Water Corporation	Operational Service Costs	A\$ 3.325m/yr net of energy costs or 8.742m including energy (2020 price)	ATJV
Project Co	Helena Water Pty Ltd	Asset Maintenance and Repair Costs	A\$107,039,000	ATJV
Holding Company (HoldCo)	Helena Water Holdings Pty Ltd	PROJECT DATA		
Shareholders	Aberdeen Standard Investments – 50%, Acciona – 25% Trility – 25%	Contract Type	DBFOM	
Lenders	BBVA, MUFG	Financial Close	11 July 2011	
Contractor	ATJV sub-contracting to BMPX	Concession Period	35 years	
O&M Provider	ATJV	Construction Completion	October 2013	
Independent Certifier	Hyder Consulting Pty	Commencement of Full Operations	6 th December 2013	
Independent Expert (IE)	None currently employed	End of Operations	October 2048	
Lender's Technical Adviser (LTA)	Ranhill Advisory Pty. Ltd.	Next Market Testing Date	October 2023 and 5 Years thereafter	

2 INTRODUCTION

- 2.1.1. In September 2020, WSP was commissioned by Aberdeen Standard Investment Ltd (ASI) to undertake Vendor technical due diligence on Project Moore, which consists of four projects (one healthcare project, one water treatment plant project, one rolling stock project and one light rail project). This report is in relation to the Mundaring Water Treatment Plant project which is further described below.
- 2.1.2. Our technical due diligence has concentrated on the technical principles and risk transfer of the project, identifying the fundamental commercial and operational issues that exist from a technical perspective.
- 2.1.3. WSP does not make representation or warranty as to the factual accuracy of the information provided to us via the data room or by the Vendor on which this report is based.

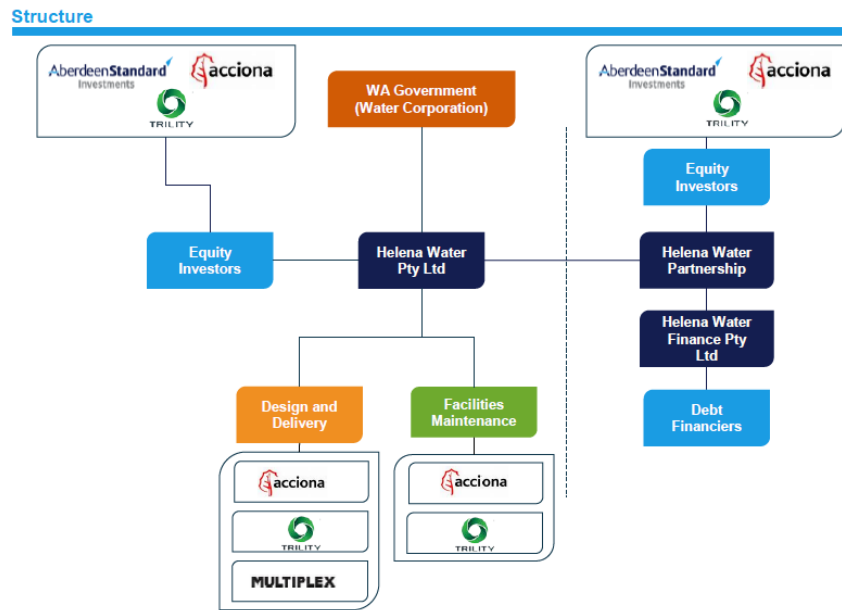
2.2 DISCLAIMER

- 2.2.1. WSP has provided this report solely for the use of the recipient and accepts no liability to any third parties or any other party using or reviewing the report or any part thereof. WSP makes no warranties or guarantees, actual or implied, in relation to this report, or the ultimate commercial, technical, economic, or financial effect on the project to which it relates, and bears no responsibility or liability related to its use other than as set out within the scope of the contract under which it was supplied.

2.3 PROJECT OVERVIEW

- 2.3.1. The Mundaring Water Treatment Project (MWTP) is a PPP for the design, finance, build, operate and maintain and then hand back water supply assets in western Australia. The assets include:
- A pumping station (MWPC) constructed on the northern bank of the Helena River;
 - A new treatment works (MWTW) constructed on some land made available about 1km north of the Helena River; and
 - Connecting pipelines to allow pumped raw water to be transferred to the MWTW, and from the MWTW to existing transmission pipelines which transfer treated water to the Sawyers Valley Tanks (SVT), from where Water Corporation distributes the water to their consumers.
- 2.3.2. The works were completed and put into service in December 2013, meaning that the construction period risks for the initial works are no longer an issue. There are some plant capacity extension works as listed in Schedule 18 of the Project Agreement between Helena Water Pty Ltd and Water Corporation, which will require some additional plant and construction work between 2038 and 2041 risks associated with which is reviewed in later sections of this report.
- 2.3.3. The project company (Project Co) established for the purpose of developing and operating the project is called Helena Water Pty Ltd. Project Co receives a monthly service charge (MSC) to cover costs, finance charges, taxes duties and other charges and profit based on availability of the system to supply water of contracted quality and quantity in accordance with demand patterns set by Water Corporation. Current water requests from Corporation are reportedly well below the plant design capacity and Project Infrastructure is managing well.

Figure 2-1 - Contract Structure

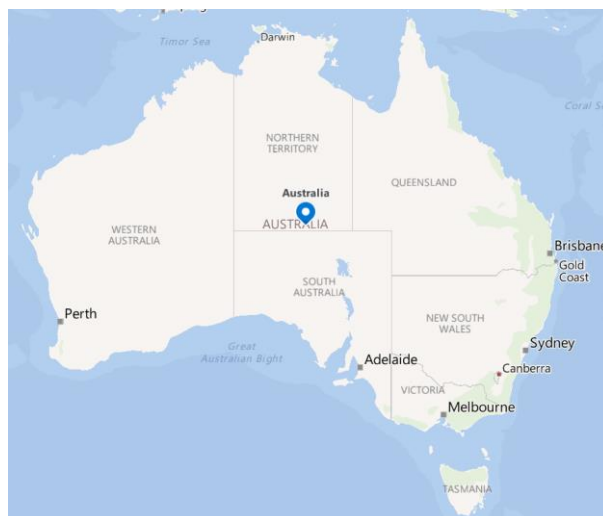


- 2.3.4. The Project Agreement between Water Corporation and Project Co is bespoke but is largely conventional in its scope and allocation of risks and liabilities for this type of project.
- 2.3.5. As such the MSC is capable of being abated for performance deficits as is conventional in this form of contract. Performance deficits include failure to provide sufficient water, or water of prescribed quality as well as failure to meet environmental, stakeholder, health and safety, pollution and other similar standards.

2.4 LOCATION

- 2.4.1. The site of the principal works is in close vicinity to the Mundaring Weir, itself located some 25 miles (40km) almost due east of downtown Perth. The location of the site is shown in Figure 2.1 below:

Figure 2-2 - Site Location



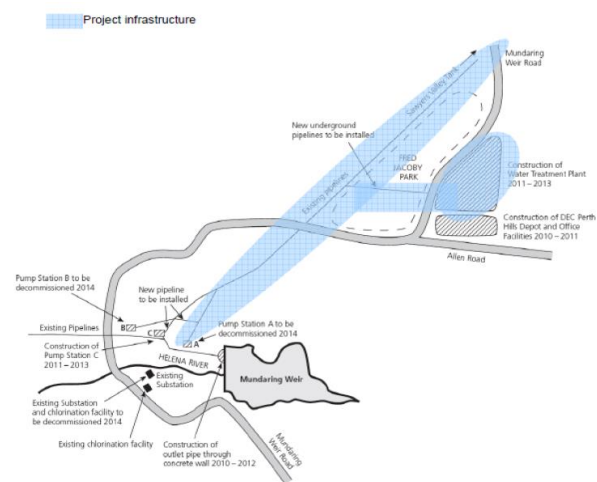
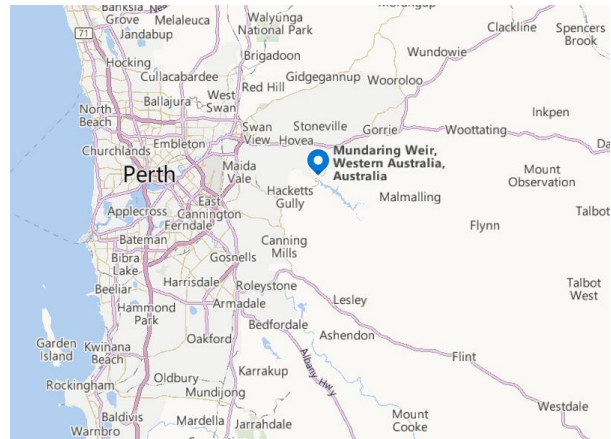


Figure 2-3 - Pictures of Site





Source. ASI IM and Google

3 RISK ALLOCATION

3.1.1. A summary of the risk allocation between the contracted parties is outlined in Table 3.1 below:

Table 3-1 – Risk Allocation Table

Risk	Liability	Commentary
Construction Completion / Longstop Date	Building Contractor	As the works have been completed, achieving the Longstop Date is not a risk.
Replacement of Building Contractor during the completion of construction works	Project Co	As the construction works are complete, risk relating to replacement of the Building Contractor has passed.
Latent Defects	ATJV	ATJV delivered the design and construction of the Project and is also delivering the O&M Phase with responsibility for maintaining, repairing and refurbishment of assets to maintain performance levels and thus retains any latent defect risk at this level.
Replacement of Service Provider	Project Co	If ATJV fails to perform or enters insolvency Project Co is liable to replace them. From our review the O&M Provider security package provided, should it be required, a replacement O&M Provider could be suitably procured within the replacement coverage provided, therefore we consider the replacement of the O&M Provider to be a manageable risk should the event arise.
Performance	ATJV	ATJV is liable for the performance of the Project Infrastructure and for repair, maintenance and refurbishment of assets to maintain performance levels and fitness for purpose. From Board Reports provided the project is performing well and abatement levels are minimal and well below termination levels.
Payment Mechanism sensitivities	ATJV	The ITE provided payment mechanism scenarios and opined that the payment mechanism and its abatements were suitably calibrated. WSP notes that there is a 50% cap on abatements which is considered beneficial. There have been minimal deductions to date.
Market Testing	Project Co	Project Co has to run market testing and benchmarking exercises on a routine (5 or 6 year cycle) to establish optimum costs for energy, laboratory services, chemicals supply and other specified significant operational and maintenance costs. First test is scheduled in 2023.
Third Party Revenue / Vending	Not applicable	

Risk	Liability	Commentary
Vandalism / Damage	ATJV	Project Co must obtain and maintain insurance to cover loss, damage and vandalism. Project Co passes these risks down to ATJV under the Delivery Agreement
Utilities Consumption / Price Risk	ATJV	Project Co is responsible for volume and cost risk for utilities and services, subject to benchmarking exercises. Project Co passes these risks down to ATJV under the Delivery Agreement.
Sufficiency of Replacement and Refurbishment Fund	ATJV	ATJV takes responsibility for the adequacy of the Replacement and Refurbishment fund, which covers the resources necessary to maintain the operational performance and condition of the Project Infrastructure. In addition to this fund there are also line items for the major pipeline refurbishment; ATJV is responsible for these with the actual timing of the expenditure to be confirmed with Corporation.
Handback Position	Project Co	Project Co is liable to Corporation for the condition and performance of the Project Infrastructure. Project Co passes the risk of the cost of completing the works to ATJV and may withhold O&M Monthly Fees to the extent of the agreed costs (plus a contingency) as surety for ATJV completing the works. The Handback provisions are considered in line with what WSP would expect for a project of this type. There is provision for dedicated security in relation to sufficiency of funds to comply with the Handback requirements
Change of Law	Corporation	Project Co bears the risk under the Project Agreement but changes in Project Specific Law and General Law are subject to Compensable Relief from Corporation.

4 RESIDUAL CONSTRUCTION MATTERS

4.1 INTRODUCTION

- 4.1.1. A Delivery Agreement, incorporating a Design and Build Contract as well as the O&M activities, was entered into on 27 July 2011 between Project Co and Acciona Trility JV Pty Ltd (ATJV). ATJV entered into a Construction Agreement at the same time with Brookfield Multiplex Engineering and Infrastructure Pty Ltd (BMPX) to execute the construction works as described in detail in the Project Scope and Requirements (PSR) which is included as Schedule 19 to the Project Agreement and Schedule 19 to the Delivery Agreement.
- 4.1.2. The scope of works in summary was:
- Design, installation, construction, testing and commissioning of the Mundaring Weir Pump Station C (MWPS) to abstract raw water from the existing Helena Water Supply System (HWSS) and deliver it to the Mundaring Weir Treatment Plant (MWTP).
 - Design, installation, construction, testing and commissioning of the Mundaring Weir Treatment Plant (MWTP) and associated facilities including the overall system instrumentation and control/communications system.
 - Design, installation, construction, testing and commissioning of the New Pipelines, which enable to water to be abstracted and delivered to all the required locations to permit the scheme to function safely and effectively.
 - Design, construction and commissioning of the road access to MWPS.
- 4.1.3. The initial output capacity of the project under normal operating conditions (when raw water of suitable quality and quantity is available from Mundaring Weir) is 165MI/d.
- 4.1.4. If raw water quality and/or quantity from Mundaring Weir is compromised then the project must be capable of operating under Contingency Operating Mode where water is taken from the Corporation's Integrated Water Supply System (IWSS) and treated prior to delivery to the trunk mains. The initial output capacity under contingency conditions is 120MI/d.
- 4.1.5. In the Delivery Agreement (cl 7.1 (d)) it was noted that Hyder Consulting Pty Ltd. would be appointed as the Independent Certifier (IC), the party responsible for certifying that the Works have been completed in accordance with the contractual requirements. The works were certified by the IC as complete on 6th December 2013.
- 4.1.6. The Project Agreement requires that Project Co undertakes planned expansion and major rehabilitation works in future; the expansion works are provided in great detail in Schedule 18 of the Delivery Agreement and are as summarised below:

Table 4-1: Initial Production Capacity and Expanded Production Capacities

Stage	Commissioning Year	MWPS Capacity (MI/d)	WTP Capacity (MI/d)	Contingency Capacity (MI/d)
Stage 1 Initial Production Capacity	2013	173	165 (CWPS only) 167 (WTP)	120
Stage 2 Intermediate Production Capacity	2038	173	200 (CWPS only) 167 (WTP)	122
Stage 2 Project Capacity (WTP)	2041	210	200	125
Stage 3 Ultimate Project Capacity	TBD	255	240	148

- 4.1.7. Where MWPSC is Pumping Station C (abstraction pumping station), CWPS is the clear water pumping station which delivers treated water into the trunk mains and contingency capacity is defined in PSR cl 10.1 (v) (B). The major pipeline rehabilitation works are nominated as Pipeline Refurbishment Stage 1 and Stage 2. These have cost estimates and commencement times associated with them in the Base Financial Model providing forecast modifications to the MSC, but the actual modification to MSC will depend on the actual commencement times as determined by the Corporation and actual efficiently made costs for the works as certified by the Independent Certifier.

4.2 DEFECTS LIABILITY PERIODS

- 4.2.1. Under the Construction Agreement, ATJV and the Construction Contractor were liable to make good and rectify all defects identified during the works in the 6 month period between Date of Completion and Date of Close-Out. Date of Completion was achieved when only minor defects not capable of preventing effective operation were in existence. Date of Close-Out was achieved when the defects identified had been rectified. Following completion, the liability for maintenance and repair of all the assets lies with the O&M provider which in this case remains ATJV.
- 4.2.2. O&M provider (ATJV) has warranted under cl 19 and cl 20 that the Project Infrastructure is, and will remain Fit for Purpose, and will remain fully available for the production of sufficient quality and quantity of water in accordance with the Project Agreement. This warranty lays the responsibility for all defect rectification and latent defects at the door of ATJV following Date of Close-Out. Under cl 22 ATJV is also required to both maintain and repair at its cost all of the Project Infrastructure and to ensure that the design lives specified in PSR cl 10.2 are maintained. For ease of reference the design lives specified are shown in the Table below extracted from cl 10.2 of PSR. These design lives are suitably selected for these types of assets under management through a DBFOM.
- 4.2.3. Further, under cl 22.3 ATJV is required to annually update the Asset Management Plan and 5 Year Work Plan, submit these plans for review and acceptance and/or revision by Project Co and must implement these plans as approved. Water Corporation is entitled to inspect the assets at any time, subject to approval of the timing of inspection by Project Co, to satisfy itself that the Project Infrastructure is indeed being maintained and repaired in accordance with approved plans. ATJV is then required to rectify or remediate any deficiency identified to and agreed with Project Co. It is reported that the requirement for 5 yearly Asset Inspections has been superseded by a 3 yearly third party "Asset Management System Effectiveness Review". The latest version of this report is dated November 2018 and is generally positive about the effectiveness of ATJV's asset management, with a few areas identified which could be further strengthened as part of a continuous improvement process. The report is further considered in following sections.

Figure 4-1 - Design Lives

Asset Item	Design Life
Earthworks	100 years
Foundations	100 years
All structures, whether buried submerged or exposed to air)	100 years
Buildings	100 years
Tanks for water storage	100 years
Hard standing areas	100 years, with not less than 20 years for top course
Pipelines	100 years
Interconnecting fittings, pipes and valves	80 years
Mechanical assets	25 years (including chemical tanks)
Electrical assets (including communications)	25 years
Instrumentation and control assets (including electronic security assets)	15 years
All structural steel (including roof purlins and fasteners)	100 years, with major recoating or maintenance, or both at 25 year intervals
All metallic roof sheets (including	25 years

4.3 SECURITY PACKAGE

4.3.1. The overall approach to the cap on liability (D&C) for DBO JV is as follows:

- D&C General Liability Cap – the D&C aggregate limit of liability is 50% of the contract price. This is estimated at around \$140 million based on a total contract price of \$280 million.
- D&C Performance Bond – the limit of liability includes a 7.5% performance bond against the overall contract price (Clause 9.6a) until DBO JV completion. This is estimated at \$21 million;
- Parent Company Guarantee (PCG) – this supports the obligations of DBO JV to Helena Water and is provided by PCGs from the two parent companies of the JV members (Acciona Agua SAU and Mitsubishi on a joint and several basis.
- The Building Contractor, its Sub-Contractors and professional team are required to maintain Professional Indemnity Insurance (PII) from Financial Close and for a period of 12 years from Practical Completion. WSP also notes that the purchaser will also benefit from recourse to the key-subcontractors appointed under the building contract.

4.3.2. Following the DBO JV Completion Date, an O&M Performance Bond will be provided that will also cover any outstanding items from the D&C phase. Completion is achieved for the D&C phase when all works are complete other than minor defects, as certified by an Independent Certifier. There is no specified defects liability period as DBO JV will be in place for the entire concession period and will be responsible for correction of the defects to ensure that the O&M is not impacted.

4.3.3. This provision is considered unusual in that market norms would normally require a Defect Liability period built into the DBO contract. We do however note that the O&M liability cap provisions appear robust with the exception of the termination cap liability.

- 4.3.4. WSP consider that the security package provided by ATJV in relation to the Design and Build element of the project affords the Project Co adequate protection in line with market expectations for similar schemes in the event of any significant latent defects or claims arising in respect of residual construction issues at this stage of the project and in respect of long term asset condition and performance.

4.4 RESIDUAL CONSTRUCTION ISSUES

- 4.4.1. The Date for Completion of the works has been certified and the project was passed into the O&M Phase on 6th December 2013 with the certifier noting only minor construction defects remaining to be rectified by ATJV and its construction contractor BMPX. As noted above, responsibility for making good any latent defects is passed under the Delivery Agreement to the operating team of ATJV to manage at their own cost over the project period.
- 4.4.2. There are future potential construction risks associated with the future expansion of the works and with the rehabilitation expenditure for the pipelines nominated as Pipeline Refurbishment Stage 1 and Stage 2. These are considered to be well described in terms of scope, and Project Co will be responsible for design, finance, installation, construction and commissioning, in return for a modified MSC. Project Co will enter into a Construction Contract or similar agreement with ATJV to undertake the works, as this will keep the responsibility for design competence, construction or material defects, latent defects and operational problems within the same entity and will ensure that co-ordination of the works and integration of new systems will be within the control of the same entity.
- 4.4.3. Quality control and approval by a third party Independent Certifier as per the initial works will protect Project Co and Corporation from defects and ATJV will assume responsibility for asset management, repair and maintenance in accordance with the requirements of the Project Agreement as carried directly into the current Delivery Agreement.
- 4.4.4. The works required are conventional, the sites/routes and relevant ground conditions are well known, operational interfaces are well understood, and materials required are conventional and well understood. As such WSP consider intrinsic risks to programme, costs and quality may be expected to be low; given the further quality control and approval by an independent third party certifier, residual risks passed to ATJV operations and later passed to Corporation on hand back are likewise very low.

4.5 INTERFACE AGREEMENT

- 4.5.1. The contract structure is for a project agreement between Corporation and Project Co passing a defined range of responsibilities to Project Co and for a Delivery Agreement between Project Co and ATJV to fulfil the design, construction, commissioning and operation and handback of the project.
- 4.5.2. There is no interface agreement for this Project.

5 PERFORMANCE & REVENUE ANALYSIS

5.1 INTRODUCTION

- 5.1.1. This section of the report considers performance of the Project against the project requirements. This includes a review of the Performance Reports made available and how the Payment Mechanism has been applied to affect the revenue.
- 5.1.2. In the event that the Services are not delivered to the standards required, the O&M Provider and ultimately the Project Co can be terminated from the contract; the provisions for this are considered from a technical perspective against market expectations. The risks of Termination are then considered against the current delivery of the Services.
- 5.1.3. Finally, further consideration is given to the costs provided for the delivery of the O&M Service, also considering these costs in light of their robustness and the ability to replace the current O&M Provider within the Termination Limits of Liability.
- 5.1.4. The Services have been in operation since December 2013 which was when Practical Completion occurred. Since service commencement the level of service and performance appears to have been good.

5.2 O&M PROVIDER CAPABILITY

- 5.2.1. The O&M provider is ATJV, which as noted above is composed of Acciona Agua Australia Pty Limited and Trility Pty Limited.
- 5.2.2. ATJV is considered a competent O&M Provider and was adjudicated as such as part of the tender and contract execution process.
- 5.2.3. Example projects where Trility are delivering similar services are:
- Riverland Water Project, S Australia: DBFOM for 25 years for 10 water treatment plants with capacity 272Mld; and
 - Wentworth to Broken Hill (W2BH) Pipeline: O&M contract for 10+5+5 years for 250km pipeline and pumping stations.
- 5.2.4. Example projects where Acciona are delivering or have delivered similar projects are:
- Putatan WTP: D&C and O&M for 1 year for 100Mld plant extendable to 150Mld; and
 - Simbirizzi WTP and Desalination plant: 190Mld of D&C and 188Mld of operation and maintenance.
- 5.2.5. WSP concurs that ATJV is a suitable and competent supplier.

5.3 CONTRACTUAL O&M REQUIREMENTS

- 5.3.1. Under the Project Agreement, Project Co is required to deliver operation, asset maintenance and expansion services. Project Co has contracted these services to ATJV under the Delivery Agreement.
- 5.3.2. The O&M Provider is delivering the following services under Cl 19.2 of the Delivery Agreement:
- Manage, operate, maintain and repair the Project Infrastructure so that it remains fit for purpose;
 - Ensure the Project Infrastructure meets the contractual requirements and is operated, maintained and repaired in accordance with O&M Best Practice;
 - Deliver water of Guaranteed Quality to the specified locations in the Project Agreement and in quantities to meet the Corporation specified Requested Production Rates;
 - Comply with all relevant approvals and laws in performing the services; and

- Procure and supply all services and utilities necessary including fuels and maintenance for any standby energy service, and management of all health and safety, social and environmental impacts and wastes, hazardous materials and all other materials in accordance with approvals and laws.
- 5.3.3. The O&M Provider will also be required to support the hand back of the Project Infrastructure to the Corporation at the end of the Contract Term in the agreed condition.
- 5.3.4. The Project Agreement sets out the performance standards which, to avoid any revenue abatement, the O&M Provider must meet:
 - The Production Capacity must be available 24 hour per day, 365 (or 366) days per year. Production Capacity in Normal Mode is shown in Table 4-1 above as initially 165Mld but increasing in stages to an ultimate capacity of 255Mld. Normal Mode is when the raw water of suitable specification and volume is available at the Mundaring Weir. Production Capacity in Contingency Mode is shown in Table 4-1 above as initially 120Mld but increasing in stages to an ultimate capacity of 148Mld.
 - Guaranteed Quality of the required quantity of Product Water must be available 24 hours per day 365 (or 366) days per year subject to the Raw Water being within specification.
 - Pumping stations and connecting pipe systems must be available 24 hours per day, 365 (or 366) days per year to permit the required quantities of water (raw water and product water) to ensure that the required Production Capacity is available as above.
 - Project Infrastructure must be capable, at a maximum of 4 hours' notice from Project Co, of changing effectively between Normal Mode and Contingency Mode.
 - Delivery of the product water must be as required by Annual Production and Weekly Production Plans and the daily Requested Production Rate, initially published to Project Co by the Corporation, but as modified by the Corporation from time to time.
 - Monitoring of Raw Water must be performed by O&M Provider who shall notify Project Co if the Raw Water does not meet specification. Corporation may issue a notice for O&M Provider to cease abstraction but in the absence of such instruction O&M Provider must continue to abstract if the water can be treated to the Guaranteed Quality without any safety risks, or should cease abstraction and treatment if he considers that to continue would constitute a safety risk or would cause material damage to the system.
 - The O&M Provider is required to operate the whole system such that the actual storage in the system does not exceed Maximum Notional Storage and is not less than the Minimum Notional Storage in the system.
- 5.3.5. The O&M Provider has to monitor and report on its performance in strict accordance with the requirements of section 10.1 (d) of the PSR, which itself refers to the monitoring of Critical Control Points and product water quality in accordance with the Australian Drinking Water Guidelines (ADWG). ADWG is a document which lays out in some detail the approaches to be adopted to secure reliable, high quality water. Project Co and Corporation have jointly developed a Water Safety Plan that addresses all of the ADWG requirements and defines monitoring points, monitoring variables, critical limits, Critical Control Points, data storage and management and actions to ensure pro-active management and secure delivery of safe drinking water. O&M Provider reports monthly against these requirements.
- 5.3.6. In the event that the O&M Provider detects, through the monitoring system, that Product Water may not be of the Guaranteed Quality then, in accordance with cl 20.12 of the Delivery Agreement, he must not deliver the water until the issue is resolved. If Product Water, which is not Guaranteed Quality, is delivered then the Incident procedure must be followed, Project Co must inform Corporation who may issue a Shutdown Notice or Direction Notice and invoke an Incident Management Plan to ensure that the issue is resolved. Project Co passes these risks to the O&M Provider as is conventional for PPP projects.
- 5.3.7. These Requirements are considered typical for PPP water projects and should present a manageable risk.

5.4 REVENUE ANALYSIS

Comparison of Payment Mechanism with market norms / standard form

- 5.4.1. The project during the O&M Phase is a self-monitoring, performance based contract, administered through Schedule 9 to the Delivery Agreement, entitled O&M Payment Mechanism. Audit and checking of Project Co performance reporting is available to Corporation at any time in accordance with cl 21.6 of the Project Agreement.
- 5.4.2. As noted above if Performance fails to meet any of the Performance Standards or Availability Criteria, then the Corporation will be entitled to make Abatements from the Project Co's Monthly Service Charge (MSC). Abatements are passed through to O&M Provider. Abatements are made against availability (Fixed Abatement), water quality (Quality Abatement), reporting failures (Reporting Abatement) and excessive losses/leakage from the system (Leakage Abatement).
- 5.4.3. Abatements are potentially susceptible to a ratcheting effect if a performance deficit persists from month to month as laid out in Schedule 9 of the Project Agreement and Delivery Agreement. Corporation may apply the ratchet to increase the incentive to Project Co to respond positively to such a failure. Such a ratcheting effect provides a suitable incentive for corrective action.
- 5.4.4. The Payment Mechanism typically follows PPP market norms as follows:

Monthly Service Charge

This is paid to Project Co and reflects the fixed costs, variable costs, alterations to energy charges from third parties, abatements, adjustments to capital cost base due to expansion, major pipeline refurbishment costs and other adjustments. It includes a reasonable range of indexation allowances for a specified range of price elements relating to labour, chemicals, power and similar.

- Fixed payments – based on the annual fixed payment, including debt and equity service, fixed operating and maintenance costs, refurbishment and restoration;
 - Variable payments - covering operating, chemical and power costs;
 - Abatements – including a fixed failure, quality failure, reporting failure and other failures; and
 - Remedial payments – relating to the previous contract payments such as recoupment of costs when allowed
- 5.4.5. The abatement regime covers a range of areas of the Project including the quantity of water delivered, the quality of the water, reporting and “other”, which incorporates environmental management, safety and community requirements.
- 5.4.6. A fixed abatement covers the loss of production of water (i.e. shortfall), including for instances such as plant shutdown.
- 5.4.7. A quality abatement refers to water quality parameters found in Annex F of Schedule 9 that define the Guaranteed Quality: The criteria are categorised as Critical Control Points (CCP), Process Control Points Tier 1 or Process Control Points Tier 2; Parameters have defined Normal Operating Condition (NOC) and Abnormal Operating Condition (AOC); a ratchet mechanism also applies for multiple abatements.
- 5.4.8. A reporting abatement applies when fixed or quality abatements are not monitored or reported through the monthly reporting mechanism in the Project.
- 5.4.9. Other abatements include environmental management, leakage from the system, general operation including safety, social and community requirements.
- 5.4.10. An escalation regime of Warning Notices, Increased Monitoring and Remedial Plan are also defined as actions to respond to ongoing abatements. A Step in Adjustment is also calculated if Water Corp is required to apply/use step in rights.

- 5.4.11. As such the payment mechanism is reasonably balanced with the influence of external risks such as third party costs largely mitigated through indexation and reconciliation, while performance deficits are penalised; this is typical of other large scale water treatment Plant PPPs.

Relief

- 5.4.12. Abatements are not applicable to the extent there is a change in Law that affects the quality parameters to be met, where the Corporation has caused damage to which Project Co has to respond, where Corporation has instructed modifications to the Agreement whereupon abatements do not apply to the effect of such modifications and where there are Compensable Relief events.
- 5.4.13. Relief Events are dealt with in cl 27 of the Project Agreement and are reflected appropriately into cl 27 of the Delivery Agreement. Project Co must apply to the Corporation for any Change Notice if circumstances arise which prevent Project Co from meeting the requirements of the Project Agreement. Relief events either permit Project Co relief from relevant abatements or allow for additional revenues if they are deemed Compensable and dealt with under the Change Procedure.
- 5.4.14. Schedule 10 of the Delivery Agreement and of the Project Agreement list the Compensable Events for the O&M Phase as follows:

Table 5-1 List of Compensable Events for O&M Phase

Event	Delivery Agreement Clause	Entitlement	Schedule 10 Section
Incident after Completion	Clause 20.13(c)(ii)	Net Incremental Costs minus Savings	Section 6.3
Modification Proposed by Corporation or Project Co – After the Date for Completion	Clause 28.3 and Clause 28A.1	Net Incremental Costs minus Savings	Section 6.3
Modification requested by ATJV	Clause 28.4	50% of the Net Savings	Section 9 and Section 6.3
Streamlined Modification	Clause 28.6	Net Incremental Costs minus Savings	Section 6.3
General Change in Law and Project Specific Change in Law occurring after the Date of Completion	Clause 29.2	Net Incremental Costs minus Savings	Section 6.3
Change in Drinking Water Standards where Corporation does not direct a Modification under the Project Agreement but does direct Project Co to take such other action as the Corporation considers necessary.	Clause 29.3(f)	Net Incremental Costs minus Savings	Section 6.3
The Corporation exercises its Step-in Rights in accordance with clause 42.1 of the Project Agreement after Completion	Clause 42.4(c)(ii)	Net Incremental Costs minus Savings	Section 6.3

- 5.4.15. These provide appropriate protection to Project Co from external and third party events.

5.5 TERMINATION

5.5.1. Termination is exercisable by the Corporation for the following in accordance with Cl 41 of the Project Agreement:

- Termination for Convenience (cl 41.1);
- Termination for Force Majeure (cl 41.3);
- Termination for Uninsurable Risk (cl 41.3); and
- Termination for Default (cl 41.9).

Termination for Convenience

5.5.2. Corporation may terminate for convenience with 90 days written notice to Project Co. In this event the Termination for Convenience Payment is made by Corporation to Project Co in accordance with Section 5 of Schedule 11 to the Project Agreement.

5.5.3. The Termination for Convenience Payment compensates Project Co by:

- Repaying debt plus relevant interest as accrued prior to payment;
- Paying net present value of forecast equity cashflows at a discount rate to be agreed;
- Paying costs associated with termination including staff severance payments, contract break clauses;
- Recovering any outstanding monies due to Corporation, any insurances payable and any bank accounts in credit; and
- Recovering any securitisation financing termination payment.

5.5.4. Project Co is effectively held harmless and in no materially worse condition than had the project persisted to contract term.

Termination for Force Majeure or Uninsurable Risk

5.5.5. Either party to the Project Agreement is entitled to terminate for Force Majeure during the O&M Phase subject to prior proper claim of any relevant insurance. Corporation is entitled to terminate if it declares a risk to be uninsurable (cl 31.13.(c) (ii) B).

5.5.6. In either event General Termination Payments are payable in accordance with Section 5 Schedule 11 unless there is a Default Termination Event also occurring.

5.5.7. General Termination Payments provide:

- Repaying debt plus relevant interest as accrued prior to payment;
- Paying or recovering any losses or gains from terminating the debt finance, including any sums payable to Project Co from early debt repayment;
- Recovering any outstanding monies due to Corporation, any insurances payable and any bank accounts in credit; and
- Recovering any securitisation financing termination payment.

5.5.8. In this event Project Co is held harmless from the termination but does not benefit from the equity cashflows.

Termination for Default

5.5.9. Corporation may notify Project Co of an Event of Default and the Project Agreement allows for Project Co to remedy the default or respond with a Cure Plan within 10 working days. If the Cure Plan is approved Project Co must implement it, with a maximum elapsed time of 40 working days.

5.5.10. If Project Co fails to resolve the default and Corporation deems the default incapable of being resolved a Default Termination Event results and the Corporation may step-in to continue the safe, efficient and environmentally acceptable operation of the Project.

5.5.11. Clause 41.9 of the Project Agreement provides for Default Termination Events and these have been defined as follows;

- Project Co (SPV) abandons the project;
- An Insolvency Event occurs;
- Completion is not achieved by the Completion Sunset Date; and
- Project Co has been abated 40% of the Monthly Service Charges over 12 months or 30% of the Monthly Service Charges over 24 months.

5.5.12. These Default Termination Events have been passed down to the Delivery Agreement with appropriate step downs for Abatement thresholds (32% & 24% respectively) thus enabling Project Co to have sufficient time to replace the OM Provider.

5.5.13. Project Co has similar rights to terminate O&M Provider but given that the Delivery Agreement covers both the construction and operational phases and both phases are contracted to the same party, WSP considers the risk of any termination under the Delivery Agreement to be very low.

5.6 CURRENT PERFORMANCE VS. TERMINATION THRESHOLDS

5.6.1. Board Packs for 2019 and 2020 (up till Aug 2020) and Performance Reports from Sep 2019 to July 2020 have been provided and reviewed. WSP notes that overall the performance against contractual requirements has been good, health and safety performance has been excellent, and abatement of revenue has been very limited. This indicates a strong operational competence. There are several notifications of repairs and replacements of equipment from time to time, but this is to be expected in complex plant running 24 hours a day.

Some summary tables and charts to confirm performance are extracted from the Performance Reports are reproduced below:

Table 5-2 Summary of Reported O&M Phase Performance

	Water Quality Compliance (Internal/External)	Plant Availability	H&S Lost Time Incidents	Environmental Incidents	Unplanned Maintenance Orders	Planned Maintenance Orders	Production Rate Actual (Mld)	Energy Consumption Ratio (kWh - Limit = 1.0)	Revenue Abatement
Jan-19									
Feb-19	99.92%								\$3,674.63
Mar-19									
Apr-19	99.98%								\$744.18
May-19	99.98%								\$622.54
Jun-19									
Jul-19			0	0	28	123	47.72	In range	
Aug-19	100%/93%	100%	0	0	28	135	50.65	In range	
Sep-19	95.23%/95.0%	99.09%	0	0	20	131	57.06	In range	\$17,631
Oct-19	100%/100%	99.09%	0	0	21	128	71.87	In range	
Nov-19	100%/98%	100%	0	0	30	115	80.07	In range	
Dec-19	100%/90%	100%	0	0	25	98	93.65	In range	\$1,525
Jan-20	100%/92%	100%	0	0	27	117	92.76	In range	\$261
Feb-20			0	0	28	114	82.62	In range	
Mar-20	100%/97%	100%	0	1	25	128	72.43	In range	
Apr-20	100%/98%	100%	1 near miss	0	21	127	66.87	In range	
May-20	100%/100%	100%	0	0	14	124	60.8	In range	
Jun-20	100%/100%	100%	0	0	14	133	51.91	In range	
Jul-20	100%/98%	100%	0	0	26	120	50.49	In range	\$9.11

Note: Monthly reports provided only from Aug 19 to July 20 (missing Feb 20). Quarterly Board Reports used to provide earlier information on table)

5.6.2. The above table, whilst it only includes complete information for the past year, shows a solid operational performance with few deficiencies.

A review of the reasons for revenue abatement since the O&M Phase started shows the following causes of abatement:

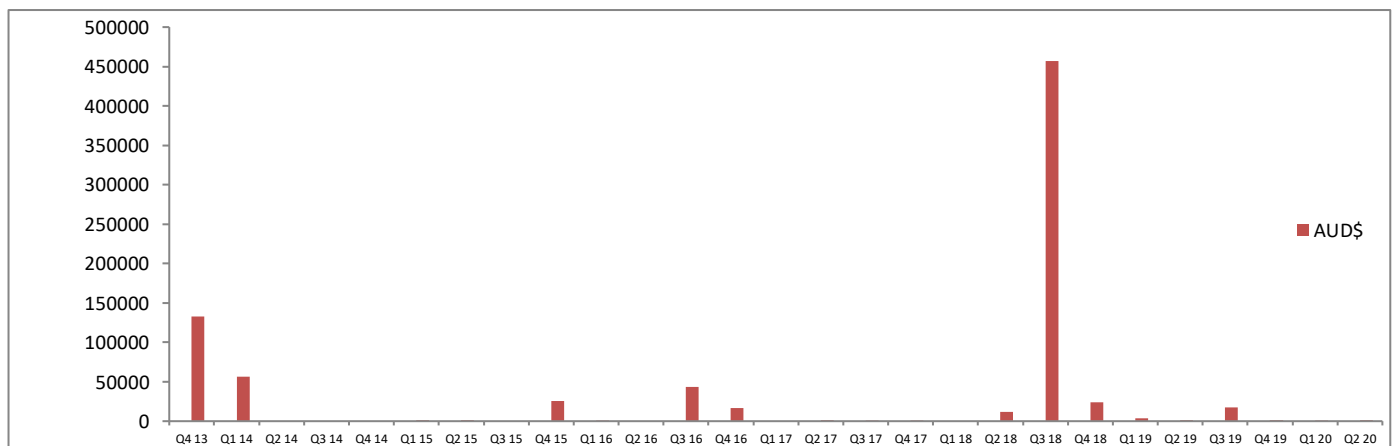
Table 5-3 Reported O&M Phase Causes of Abatement

Year	Abatement Cause Reported (count per year)					
	Total CI Limits	High Turbidity	Flouride Limits	UV System Failure	pH Limits	SCADA/ Operational Fault
2013/14	2					2
2014/15	2	1				
2015/16			1			1
2016/17	5	1		1		
2017/18		2				2
2018/19	1	7			1	
2019/20 (part)	2	2			1	

- 5.6.3. This shows that the principal issues arise, as is expected for a surface water treatment plant, from the turbidity and pH compliance. Turbidity in surface water is variable and can change quite rapidly following rainfall and the plant may take a short time to react. An Incident was declared in August 2018 following reports by O&M Provider of higher treated water turbidity than contractual limits. The O&M Provider responded properly to the turbidity issues and agreed with Corporation a Dissolved Air Flotation/Filtration (DAFF) Action plan as reported in Board Meeting minutes October 2019,. Work under the Action Plan was still progressing as reported in Board Meeting minutes January 2020 and was reported in the Feb 2020 Project Group Meeting Minutes that the required works had been successfully completed. Monitoring of performance of the modified DAFF plant is on-going. WSP concurs with the ITE Due Diligence report of 2010 that DAFF plant is generally conservative and a suitable process for dealing with turbid surface waters and it is expected that the Action Plan will eventually result in improved performance.

Total abatements since the plant was put into operation are as follows:

Table 5-4 Reported O&M Phase Abatements



- 5.6.4. The initial 2 quarters of abatement were reported to be general start-up issues, which were satisfactorily resolved by third quarter of operation.
- 5.6.5. The largest sum, at c AUD\$450k, was in August 2018 and resulted from the significant raw water turbidity excess. This was reported as an Incident in accordance with cl 20.13 of the Delivery Agreement. The DAFF Action Plan resulted from this incident.

- 5.6.6. There have been no abatements due to leakage from the system. Most recent condition assessment of the pipelines by Detection Services in 2019 indicated that they were in generally good condition.
- 5.6.7. Our review of the Board Reports shows a low risk of termination for default at this stage.

5.7 CURRENT OPERATIONAL MATTERS

- 5.7.1. Current environment includes constraints imposed as a result of COVID-19. To date, according to Monthly and Board Reports ATJV has adapted rapidly to the new situation and is managing it well.
- 5.7.2. Operationally the system is performing well. The single Incident giving rise to an Action Plan relates to the high turbidity event in 2018. The Action Plan was due to complete the related works in July 2020 in time for the expected high turbidity winter period. On-going monitoring will reveal the success of the plan over the next few months, but the resolution proposed – increasing the number and efficacy of the DAFF diffuser system – has a high probability of success.
- 5.7.3. The O&M Provider has to establish and deliver against an effective and efficient asset management plan to ensure on-going performance and condition of the Project. A recent external audit of the asset system was undertaken by a third party (Odysseus-imc Pty Ltd) and reported on in November 2018. The findings were generally positive:
- *“AM capability introduced to date with the information systems used has placed TRILITY in a good position to deliver AM enhancements in the future as support to ATJV. It has also provided the foundation needed for the ATJV to mature in the future”.*
- 5.7.4. Some recommendations for improvement and enhancement were made around improving documentation to support implementation, consideration of future asset disposals and improvements to staff training in asset management techniques.

5.8 O&M COSTS REVIEW

- 5.8.1. WSP has been provided with the Base Financial Management Case Model.
- 5.8.2. From the Base Case Financial Model (BCFM) the average (real) O&M cost is cAUD3.325m/yr net of energy costs which are effectively a pass through and net of depreciation charges, interest and land acquisition cost. The model indicates an annual forecast for produced water of 32,181MI for the period 1 April 2020 to 31 March 2021 which is in line with requested quantities from Corporation as confirmed in bi-monthly Project Group Meeting minutes. This means a cost of c10c/m³ of produced water, which is reasonable net of energy charges. The model assumptions for produced water quantities is broadly in line with the operating history thus far, with between 24,000 – 25,500MI of water being produced a year. Whilst, this is much lower than the plant capacity that is able to be produced, it is in line with the contractual requirements of water quantity required by the Corporation.
- 5.8.3. Energy charges include:
- Monthly Fixed Power Payment; from BCFM taking 12 months from 1/4 to 31/3 in year =AUD2.379m
 - Monthly Variable Power Cost from BCFM taking 12 months from 1/4 to 31/3 in year = AUD0.453m
 - Monthly REC charges: from BCFM taking 12 months from 1/4 to 31/3 in year =AUD2.585m
- 5.8.4. Adding these to the annual O&M Fee means an average (real) O&M cost of AUD (3.325m + 2.379m+0.453m + 2.585m) or AUD 8.742m or c27/m³ which is considered reasonable and within the expected range.
- 5.8.5. The refurbishment and replacement fund is c 25% of the initial capital cost, which is within the expected range. In addition to this there are also the two line items for the major pipeline refurbishment task nominally to take place in 2038 and 2041. The actual date for these activities is to be confirmed and the investment sum will also require review and agreement prior to the financial model and resulting fee being modified.

- 5.8.6. The Project Co is required to market test some of the most significant O&M costs so that the fee can be modified to take advantage of the best deals for these supplies. The market testing takes place on a 5 or 6 year cycle as specified in Cl 26 of the Project Agreement. Project Co has passed the risk of price volatility down to O&M Provider to manage between review dates.

5.9 MARKET TESTING PROVISIONS

- 5.9.1. Project Co is required to market test the following costs from time to time:
- Energy costs;
 - Insurances;
 - IT services;
 - Laboratory;
 - Chemicals provision; and
 - Sludge management and disposal.
- 5.9.2. These are significant O&M cost headings and it is good practice to seek to control costs in these areas.
- 5.9.3. Times for seeking market prices are specified in cl 26.2 of the Project Agreement, at 5 year intervals with the next review in 2023.
- 5.9.4. Agreed outcomes from the market testing will allow new contracts for suppliers to be established and the MSC modified to reflect the changed costs, up or down, in accordance with cl 26.11 of the Project Agreement

5.10 UTILITIES

- 5.10.1. Project Co is responsible for procurement and payment for all relevant utilities for operation of the Project and passes the risk of utilities costs to O&M Provider. As noted in 5.9 above there is protection under the Project Agreement to the extent that the larger cost items for the O&M services specifically included in the MSC are to be market tested on a 5 or 6 year cycle as specified and the cost impacts where approved are dealt with under the Change Compensation Principles.

5.11 SECURITY PACKAGE

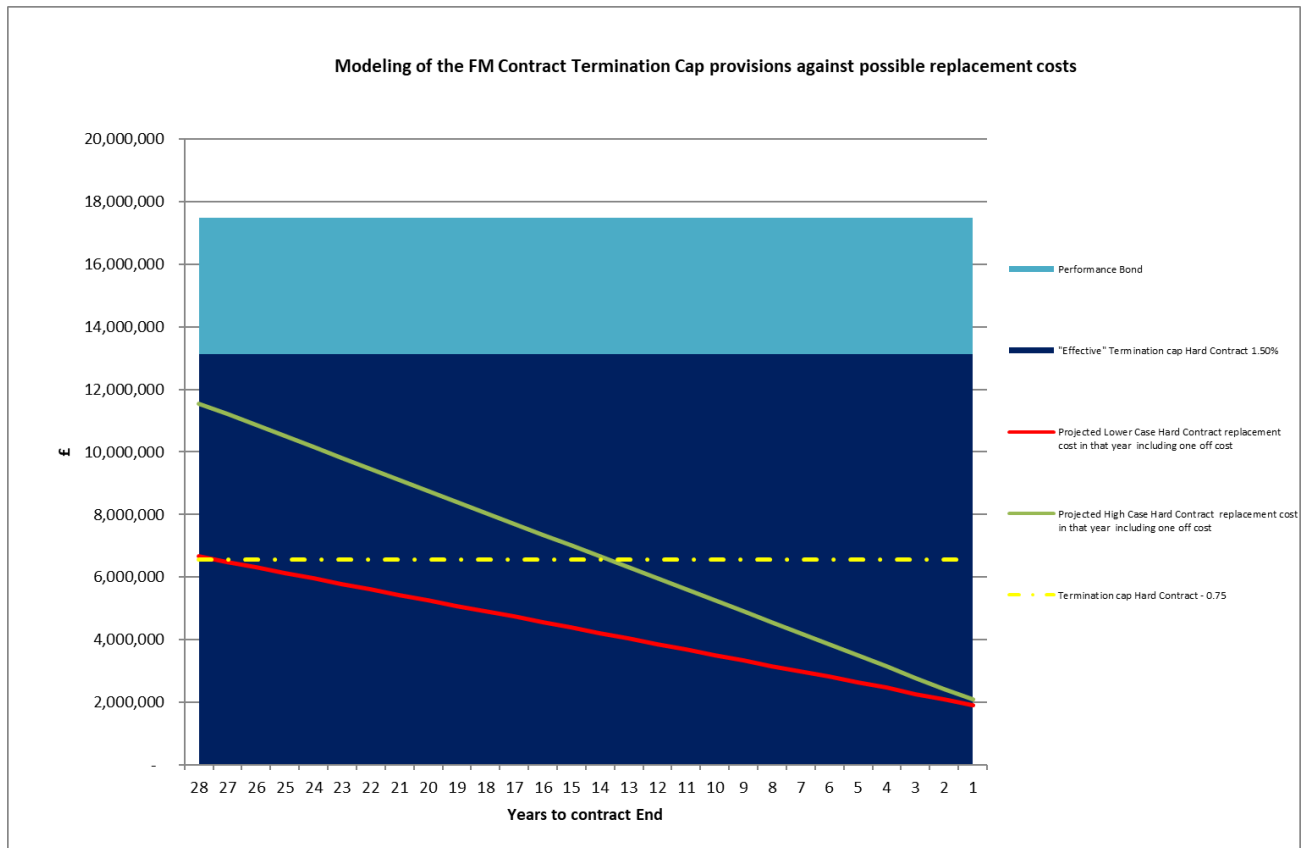
- 5.11.1. In the Delivery Agreement, the O&M Provider's Liability Caps and security package have been identified as follows:
- O&M General Liability Cap – the O&M aggregate limit of liability is 75% of the year one Reference O&M fee (Clause 12.4c).
 - Abatement Cap - deductions is limited to an aggregate amount equal to 50% of the Reference O&M Fee, which is refreshed annually.
 - Parent Company Guarantee (PCG) – this supports the obligations of DBO JV to Helena Water and is provided by PCGs from the two parent companies of the JV members (Acciona Agua SAU and Mitsubishi on a joint and several basis).
 - O&M Default Termination Liability Cap – the O&M default termination limit of liability is 75% of the Reference O&M fee (Clause 12.4e).
 - O&M Performance Bond – the limit of liability includes a 50% performance bond against the Reference O&M Fee (Clause 9.7b) until date of contract completion, reset every 5 years.
 - Handover Bond – the handover bond is equal to the estimate total cost of works to meet the handover conditions in the PA, which will be determined at the end of the contract term.
 - Shortfall Bond – the shortfall bond is required when the forecast required expenditure is in excess of 115% of the scheduled lifecycle payments. The bond is equal to the difference between these two sums, with a tenure of 18 months.
- 5.11.2. The O&M General Liability Cap and Abatement Cap are increased by an amount equal to the amount paid under any insurance policies cap is increased by any amount payable under available insurances.

- 5.11.3. WSP considers the security package to generally be in line with market provisions, although the liability termination cap would appear low, this also includes the amount remaining of the O&M General Liability Cap at the Termination Date, therefore giving an effective total cap of 150%, which is in line with market provisions albeit toward the lower end.

5.12 OPERATOR REPLACEMENT ANALYSIS

- 5.12.1. In the event of termination, WSP would expect to see a cap of a minimum of 150%- 200% of the annual service fee provided. On this project the termination provisions are 75% of the Reference O&M fee, albeit the amount remaining of the O&M General Liability Cap at the Termination Date can also be utilised, therefore giving an effective total cap of 150%. We also note that the O&M Provider is also required to provide a Performance Bond, which provides additional security over and above the cap.
- 5.12.2. WSP's view is that a competent O&M Provider should not allow a level of poor Service performance to frequently re-occur over a sustained period without a rectification plan being implemented and the Project Co's continuous monitoring should intervene before termination is required. It is therefore considered that the risk of O&M Provider Default under the Delivery Agreement should be properly mitigated and be a manageable risk.
- 5.12.3. Furthermore, the ability to replace the Service Provider on an operational PPP scheme is a factor of both the robustness of the FM costs and the contractual conditions that provide protection and security. The key considerations can be summarised as follows:
- Contractual Conditions including liability caps;
 - Scale and range of FM Services;
 - Timescales;
 - Risk Profile of the project;
 - Robustness of FM costing;
 - Capacity of the market at that time;
 - Project Location; and
 - Mobilisation timescales.
- 5.12.4. It is our opinion that if the contractual conditions are on market and the Services are attractive and supported by robust FM costs, then the contract will be viewed as an attractive commodity and will generate interest in the marketplace. The Scope for Services are typical for this type of contract and the location would also help to generate interest in this contract should it come on the market.
- 5.12.5. It is however our experience that the FM cost will likely attract a price premium on the contract price to cover any perceived risk that a new O&M Provider would need to take into account on a contract, particularly in the event that the incumbent provider was failing. In addition, a change of O&M Provider would generate one-off costs in respect of procurement, mobilisation, management and professional fees.
- 5.12.6. From our experience and the current market conditions, as the FM costs for this project sit within the lower quartile of the expected benchmark range for this type of project we estimate that the premium applied to the FM costs per annum, could be between 2% (projected lower case) and 4% (projected higher case). Based on our modelling, the additional annual total increase in costs could therefore range from c\$175k to c\$350k for the Hard FM services, together with a one off cost of c\$1.7m for the mobilisation, professional and legal fees.
- 5.12.7. From our review the O&M Provider support package provided, should it be required, a replacement O&M Provider could be suitably procured within the replacement coverage provided, therefore we consider the replacement of the O&M Provider to be a manageable risk should the event arise. This is outlined graphically below:

Figure 5-1 - Service Provider Termination Modelling



6 ASSET MANAGEMENT

6.1 FINANCIAL

- 6.1.1. WSP was provided with the Financial Close Financial Model, which contains the Asset Management budget cost. These are shown as line item Refurbishment and Replacement at base date and nominal (indexed through the concession).
- 6.1.2. The Financial Model identifies the Asset Management budget as AUD61.51m over the contract term. This sum is approximately 25% of the original capital cost. WSP expects this to be c20-30%% so considers this a reasonable sum to be applied to maintenance of this type of asset.
- 6.1.3. This sum is further assessed by considering the MEICA and civil works separately. For civil works maintenance costs are generally in the order of 0.1% to 0.2% of capital cost per annum and for MEICA works maintenance costs are generally in the order of 0.75-1.5% per annum. The capital cost is likely to be approximately 50:50 as between civils and MEICA meaning that the annual Refurbishment and Replacement cost would be in the range (AUD1.0-2m). The Financial Close Financial Model shows cAUD 1.3m which is towards the lower end of the benchmark but satisfactory. Project Co has passed the cost risk to O&M Provider as the expert for the provision of these services, and O&M Provider is in the best position to make decisions about the balance of investments in repair, maintenance and replacement,
- 6.1.4. Based on the information received and the results from our benchmarking analysis, WSP considers the available Refurbishment and Replacement costs to be sufficient to enable a competent Service Provider to discharge its maintenance obligations, subject to robust management and execution of the works. The recent review of the Asset Management system by Odysseus-imc supports the view that ATJV has robust systems in place.

6.2 CONTRACTUAL CONSIDERATIONS

Asset Maintenance and Repair

- 6.2.1. Project Co has passed the performance related risk plus the risk in relation to the overall financial adequacy of the O&M budget fund to O&M provider (ATJV).
- 6.2.2. O&M Provider is required to maintain, rehabilitate, repair and replace assets in order to ensure performance of the Project Infrastructure 24 hours per day, 365 days per year (or 366 days as appropriate) for the contract term in accordance with cl 22.1 of the Delivery Agreement.
- 6.2.3. During the contract term Project Co is responsible for any damage, destruction or loss of any part of the Project Infrastructure. In turn, O&M Provider is responsible for any damage, destruction or loss of any part of the Project Infrastructure resulting from O&M Provider's actions, inactions, design and construction quality in accordance with cl 30.1 (d) of the Delivery Agreement.
- 6.2.4. Project Co may require O&M Provider to rectify any damage or loss, or has the option to engage a third party to do so; if a third party is engaged to do such works, O&M Provider does not bear any liability or suffer abatements for any failure of the works so provided and the O&M Monthly Fee may be modified to account for facilities or equipment undertaken by the third party. Project Co will use proceeds of insurances available to it and/or Corporation to fund the rectification works in accordance with cl 30.2 (c) (ii) of the Delivery Agreement.

Handover Reserve

- 6.2.5. The Project Infrastructure will be inspected 3 years prior to handover and every 6 months thereafter, to establish the scope and scale of the work needed to ensure acceptable condition. Project Co will either hold back fees from O&M Provider until there are sufficient funds (including a contingency not less than 10%) to complete the works, and will lodge those fees in an Escrow Account in favour of the Corporation, or O&M provider will be required to issue a Handover Bond to that value in favour of the Corporation.

6.3 OPERATIONS

- 6.3.1. ATJV is responsible for Operations and Maintenance. The Monthly Operational & Maintenance reports that we have reviewed show that the service provider is generally meeting its obligations.
- 6.3.2. As noted above the COVID restrictions currently in place appear to have been well handled to date with no apparent decline in performance with respect to environmental, health and safety and maintenance activities.
- 6.3.3. One of the areas where fee may be abated is with reference to leakage performance. There appears to be no separate reporting of leakage performance in the Monthly O&M Reports. The leakage abatement is calculated annually but to date no abatement related to leakage is recorded in the information provided and the recent (December 2019) condition survey of the pipelines, which present the greatest opportunity for leakage, indicated good condition.

7 VARIATIONS AND MODIFICATION

7.1 PROCESS

- 7.1.1. Under cl 28 of the Project Agreement and cl 28 of the Delivery Agreement Corporation and Project Co are entitled to propose Modifications.
- 7.1.2. Project Co is required to price, agree scope and price with Corporation and undertake the required modification to Corporation's satisfaction and will be recompensed in accordance with the Project Agreement; any of a lump sum payment, change to MSC or combination of lump sum and change to MSC may be used.
- 7.1.3. Project Co may propose a Modification which may or may not be accepted and approved by Corporation. If accepted any changes to the revenue will be managed through the Change Compensation Principles, Schedule 10 of the Agreement.
- 7.1.4. Variations to O&M Monthly Fee are managed under the Change Compensation Principles and an O&M Variation Payment may be made in respect of Modifications, the Expansion works or Change Compensation Events which include changes to Law, outcomes from benchmarking/market testing of energy and other operational costs.

7.2 SUMMARY OF VARIATIONS TO DATE

- 7.2.1. None recorded.

7.3 CHANGE IN LAW

- 7.3.1. Where a General Change in Law or a Project Specific Change in Law occurs, which impacts the cost of performing the O&M services and Project Co is not entitled to relief the Corporation will compensate Project Co for its Net Incremental Costs arising directly from the Compensable Relief Event less any relevant Savings, calculated in accordance with the Change Compensation Principles. This is passed down in the Delivery Agreement.

8 PROJECT CO MATTERS

8.1 KEY COMMERCIAL ISSUES

- 8.1.1. Review of the Board reports provided (2019 and Jan to August 2020) suggests that there are no significant outstanding commercial issues. The O&M Provider is effectively carrying out its responsibilities and the commercial position is tracking as expected since the requested volumes of water have been very closely delivered and water quality has remained in specification with in-year abatements amounting to cAUD\$2000 from January to end July whilst revenue runs at around AUD1.7m/month. The refinancing was completed, and a small refinance gain was shared with Corporation in accordance with the Project Agreement.

8.2 DELIVERY AGREEMENT

- 8.2.1. There have been no reported commercial issues arising from administration of the Delivery Agreement.

8.3 DISPUTES/CLAIMS/CURRENT PROJECT ISSUES

- 8.3.1. From review of Monthly Operation and Maintenance Reports and Board Pack, WSP is not aware of any disputes that pose a material risk to Project Co.



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