

Statement of Environmental Effects

Lock 9 Pump Station
Rufus

August 2020

planning & development specialists

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Introduction

Development approval is sought works associated with the refurbishment of an existing pump station located on the southern bank of the Murray River at Kulnine East, Victoria. The site is opposite the locality of Rufus in New South Wales. Infrastructure at the site is located on the border of New South Wales and Victoria.

The pump station is owned and operated by Lower Murray Urban and Rural Water Authority. It supplies water to the residents and businesses of the Millewa region of northern Victoria.

The New South Wales portion of the site is under a Crown Land Licence. All terrestrial access to the site is limited to the Victorian road network.

The pump station is located approximately 470m upstream of Lock 9. The closest population centre is the township of Lake Cullulleraine, approximately 10km south of the site.

The site is located opposite Lot 775 DP1184283 at Rufus, 2648.

Following consideration of the Wentworth LEP, Murray REP No. 2, various relevant SEPPs, and other relevant documents, the proposal to replace the pump station and associated works is worthy of support. The site has been used for water supply purposes for close to a century. The proposed works will not have any significant impacts upon the environment. The proposal is consistent with the Wentworth LEP and should be supported through the issue of landowner consent to allow an application for development approval.

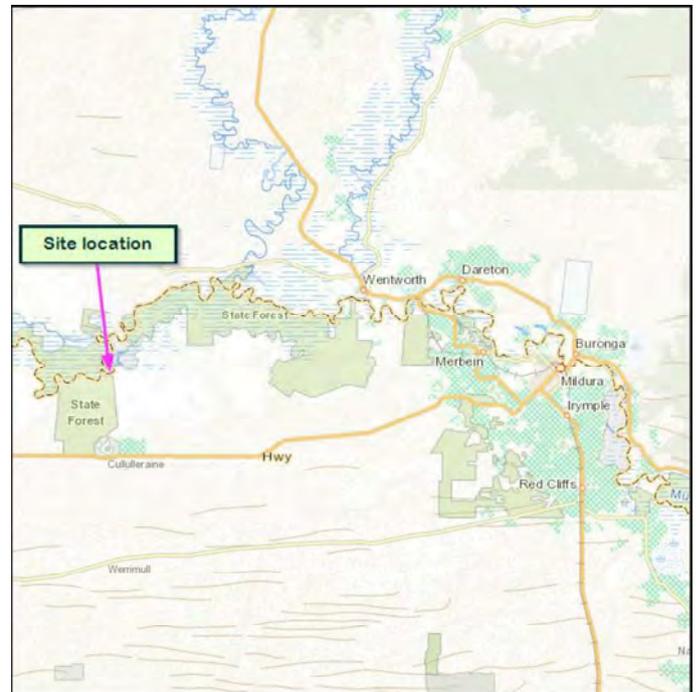


Figure 1 Location of the works area



Figure 2 Site detail

Proposal

The proposed works include the removal of the existing pump station and the construction of a modern, high capacity pump station.

Justification of proposed works

The proposed works to upgrade the existing pump station are necessary for the following reasons:

1. **Changes to river level management will render the current pump station inoperable.** Various projects connected to the Sustainable Diversion Limit Adjustment Mechanism will result in seasonal changes to water levels in this part of the Murray River. During periods of drawdown, the current pump station will not be capable of extracting water from the river.
2. **Current pump station infrastructure is approaching end-of-life.** Infrastructure at the pump station site is approaching the end of its useful life. The current design is now outdated in terms of efficiency and reliability.
3. **Current pump station not capable of meeting increased demand.** The pump station is operating at its full capacity in order to meet the existing needs of the residents and industry in the Millewa region. Planned increases in the agricultural industry in the Millewa area will result in increased demand for water. The current pump station is not capable at operating at greater capacity.

Description of works

The proposed project will result in the construction of a modern, efficient, high capacity pump station. Works connected to the proposal include the following:

Site preparation

Activities at the site will commence with works to prepare the site for the activities to follow. The focus of these works during this initial stage will be to protect the ecological, cultural and heritage values of the site and the surrounding areas. Works during this phase of the works will include:

- ♦ Establishing traffic access and parking areas. This will confine the impacts of vehicle movements to areas that are already subject to these impacts.
- ♦ Establishment of no-go areas. This will include areas of native vegetation and the general vicinity of the heritage listed old Millewa Pump Station.
- ♦ Removal of small area of native vegetation. A small patch of understorey vegetation will be cleared to allow construction activities to occur.
- ♦ Installation of silt control measures. A floating silt control curtain will be deployed to capture and control any debris or entrained sediments disturbed during construction activities.

Establishment of temporary water supply

Prior to the decommissioning of the existing pump station, a temporary pump system will be established at the site to ensure that the Millewa region has sufficient water during the construction period. The temporary pumping will utilise a small part of the eastern side of the site. No earthworks will be required. The pump and motor will be a mobile unit and the suction and delivery mains will be installed above ground.

Removal of existing pump station

The structures associated with the existing pump station will be decommissioned, demolished and removed from the site. Some excavation will be required to expose the subterranean components of the infrastructure. However, none of these works will occur in New South Wales.

Construction of replacement pump station

This part of the planned works constitutes the major component of the overall project. Works connected to this phase of the works consist of the following works:

- ♦ **Earthworks.** Excavations will be required to re-route the existing electrical supply cabling from its current location to the east of the site to its new location on the west side of the site. Other earthworks will be required to construct the concrete footings for the new pump station support gantry, and associated pump house. Further excavation will be required to locate and connect to the delivery rising main.
- ♦ **Construction works.** Once the earthworks are complete construction and fabrication works will commence. This will include the erection of the pump station support gantry and the pump control room. An

electrical kiosk will be erected on the western side of the site. Electrical works will also take place during this phase of the project. The support gantry will extend down the riverbank and into the river itself and include the driving of piles into the bed/embankment of the river.

- ◆ **Installation of site components.** Once the construction of the support structures is completed, the installation of site componentry will commence. This includes the installation of the pumps and the suction intakes. The infrastructure will be connected to the electrical supply and to the telemetry system for control and monitoring. The pump suctions and delivery main will be connected to the pumps. The delivery main will be connected into the existing system
- ◆ **Commissioning and site restoration.** Construction activities will conclude with the commissioning of the new pump station. Once the new pump station is operational, the temporary pumping system will be dismantled and removed from the site. All temporary measures installed at the site will be removed and the site and the surrounding area will be returned to its pre-construction state.



Figure 3 Plan view of the proposed site layout.



Figure 4 Location of pump looking downstream

Works in New South Wales

The infrastructure that is located within New South Wales consists of the suction intake located inside a wet well. The pipe and intake will be capped and backfilled. The existing head wall and guard rail will be left in place.

The replacement pump station will be supplied by three separate intakes connected directly to the pumps. These suctions will be secured to a steel gantry supported by pylons driven into the riverbed.

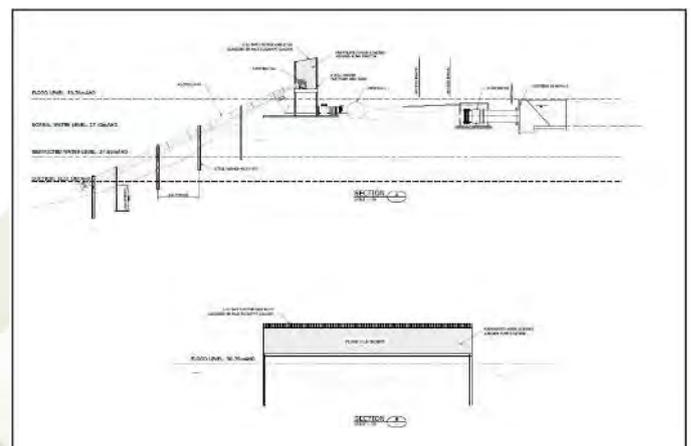


Figure 5 Section view of the works

Planning controls

| Type | Planning Control |
|--------------------------------|-------------------------|
| Local Environment Plan | Wentworth LEP 2011 |
| Land Zoning | W1 Natural Waterways |
| Minimum lot size | n/a |
| Riparian Land and Watercourses | Riparian Land |
| Terrestrial Biodiversity | High conservation value |
| Wetlands | Wetlands |

Table 1 A summary of the planning controls for the site and the adjoining lot

Definition

The works are defined as a Water Supply System for which the LEP provides the definition as:

any of the following:

- (a) a water reticulation system,
- (b) a water storage facility,
- (c) a water treatment facility,
- (d) a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).

Zoning

In accordance with the Wentworth LEP zoning maps the land is contained within zone W1 Zone – Waterways.

The objectives of zone W1 is:

- ♦ To protect the ecological and scenic values of natural waterways.
- ♦ To prevent development that would have an adverse effect on the natural values of waterways in this zone.
- ♦ To provide for sustainable fishing industries and recreational fishing.

Development consent is required under zone W1 for the Water Supply System.

Other relevant local provisions contained in LEP are as follows:

- ♦ 7.1 Earthworks
- ♦ 7.3 Flood planning
- ♦ 7.6 Development on river front areas
- ♦ 7.7 Riparian land and Murray River and other watercourses – general principles
- ♦ 7.8 Additional provisions – development on riverbed and banks of the Murray River



Figure 6 Zone map

Additional Mapping Controls

The land is affected by the following mapping in addition to the zoning of the land:

- ♦ Riparian lands and watercourse
- ♦ Terrestrial biodiversity
- ♦ Wetlands

Murray Regional Environmental Plan No.2 – Riverine land

This plan applies to the area covered by the Wentworth Shire Council and is applicable in the assessment of this proposal. The objectives of this plan are:

- (a) to ensure that appropriate consideration is given to development with the potential to adversely affect the riverine environment of the River Murray, and

- (b) *to establish a consistent and co-ordinated approach to environmental planning and assessment along the River Murray, and*
- (c) *to conserve and promote the better management of the natural and cultural heritage values of the riverine environment of the River Murray.*

The plan outlines specific principles and planning controls that apply to this proposal and consultation which is required under the plan. Clause 12 does not specifically identify consultation for a water supply system.

Aboriginal cultural heritage

All Aboriginal cultural heritage is protected by the NSW National Parks and Wildlife Act 1974. Responsibility rests with the proponent of a development to demonstrate that due care and diligence have been taken to identify and avoid impacts on archaeological sites through construction works.

Water Management Act

A controlled activity approval authorises its holder to carry out a specified controlled activity at a specified location in, on or under waterfront land. Under the Water Management Act 2000 (WM Act), a controlled activity means:

- ♦ the erection of a building or the carrying out of a work (within the meaning of the Environmental Planning and Assessment Act 1979), or
- ♦ the removal of material (whether or not extractive material) or vegetation from land, whether by way of excavation or otherwise, or
- ♦ the deposition of material (whether or not extractive material) on land, whether by way of landfill operations or otherwise, or
- ♦ the carrying out of any other activity that affects the quantity or flow of water in a water source.

Site and surrounding area

Subject site

The site is located on the Victorian bank of the Murray River at Kulnine East. Access is via Lock 9 Road which connects to the Sturt Highway 10 km to the south. The site is opposite Lot 775 DP1184283 which is located across the Murray River on the opposite bank. No private property directly abuts the works site.

The site has a long history of use by state owned authorities for the supply of water. The historic Millewa Pump Station is located immediately to the east of the site. The site is located approximately 470m upstream of Lock 9.

The land south of the site has been developed for agriculture and is principally used for grazing and cropping.



Figure 8 Existing site delivery infrastructure



Figure 9 View upstream



Figure 10 View downstream



Figure 7 The historic Millewa Pump Station



Figure 11 *Headwall and guard rail*



Figure 12 *Existing pump and control kiosk*



Locality

The new pump station will allow Lower Murray Water to continue provide the residents of the Millewa region with water. The pump station pumps water from the river and lifts it into the Cullulleraine channel which supplies water to Lake Cullulleraine. Lake Cullulleraine is a vital resource for the surrounding region. It is the principle water storage for the entire Millewa region. It is highly valued for its aesthetic qualities, attracting visitors and tourism to the area. The lake is an important recreational and cultural resource and it has important environmental and ecological values.

There are no New South Wales residents close to the pump station. The locality is considered remote and has very low population density.

The closest residences are located in Victoria approximately 200 metres to the west of the site.



Figure 14 *Adjoining pump east of the site*



Figure 13 *Lake Cullulleraine*

Planning assessment

Policy context

The works subject to this application are for the construction of a pump station constituting a water supply system under the Wentworth LEP (2011). The pump station will supply water to the residents, farms, and businesses of the Millewa district.

The current pump station is an obsolete design and is reaching the end of its original design life. In addition to this, changes in the way the Murray River is to be regulated will render the current pump station inoperable during periods of pool drawdown.

Aboriginal Cultural Heritage

The full activity area, including the portions either side of the state border has been subject to an Aboriginal cultural heritage survey.

A search of the Aboriginal Heritage Management System (AHIMS) database was conducted. The results indicated that there are no Aboriginal cultural heritage objects of places within the activity area for these works.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| | |
|---|---|
| 0 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location. * |

Figure 15 AHIMS search for the land

Biodiversity

In support of the proposal, the proponent engaged the services of Pinion Advisory, a specialist environmental consultancy to provide a comprehensive analysis of the biodiversity values of the site.

The overall environmental impact of the works was found to be minor. This is largely due to the modest nature of the construction activities that will occur within New South Wales, and the fact that the site has been highly modified over the long period it has been utilised for water supply purposes.

The survey found that “the impacts on the native flora at the site will be restricted to a small amount of juvenile understorey plants within the footprint of the pump s site and the trimming of the tree limbs to enable...access during construction.” (Pinion Advisory, 2020; p21). The report states that a small patch of juvenile understorey will be removed to allow for the installation of the pump columns.

The survey found that “there will be little to no impact on terrestrial fauna” during the proposed works (Pinion Advisory, 2020; p22).

The works will have limited impact on the riverbed, being restricted to driving in the piles for the support gantry framework. There will be no removal of snags or logs from the river.

Murray REP No. 2

The Murray REP No2 sets out specific principles that need to be considered when undertaking any development on land that the plan applies to. A response to the principles is offered below.

Access

- ◆ The proposed works will not adversely impact the public’s ability to access the river or foreshore areas. Access will remain as it was prior to the activities and works subject to this application.
- ◆ The suction intakes will extend into the Murray River. However, navigation of the river will not be adversely impacted.

- ◆ Markers will be installed on the support gantry structure as required by NSW Maritime.

Bank disturbance

- ◆ Disturbance of the riverbank will be confined to the construction phase of the project. This will include the driving of piles and other related activities.
- ◆ The existing concrete headwall and guard rail will be left in place to provide additional support for the gantry. Leaving this in place eliminates the adverse impacts that the demolition the structure would cause.
- ◆ Once construction activity is complete, no further disturbance of the river bank will occur.

Flooding

- ◆ The site is subject to inundation by floodwaters during moderate flood events. However, the works will not be adversely impacted by floods of any magnitude. The principal structures of the site are designed to withstand the impact of flood waters.
- ◆ The proposed development of the site will not deprive the surrounding ecosystems of the benefits of periodic flooding. The scale and design of the structure is such that it is not large and generally open in nature enabling the flow of water through generally unimpeded
- ◆ There will no increased hazards or risks from flooding as a result of this proposed development. The proposed development will not have any material impact on risk from flooding due to its design, scale and siting
- ◆ There will be no redistributive effect on flooding as a result of the proposed works. The actual impact of this development on the flow of floodwaters will be minor and not measurable.
- ◆ All of the site's flood sensitive infrastructure will be located above the 1:100-year flood level.
- ◆ The proposed works will not impact any other land in the vicinity. All adjoining land consists of the riverbank and by definition is subject to inundation.
- ◆ There will be no impact on the ability of emergency services to have flood-free access through the proposal based upon its design and siting

- ◆ There will be no increased risk of pollution during flooding as a result of this proposal. No contaminants will be stored in/on the structure and the facility will pump water to horticultural plantings only
- ◆ The design of this infrastructure ensures that it will not be at risk even in a 1:100 year flood event.

Land degradation

- ◆ The land subject to the proposed works are relatively modest and will have limited contact with the riverbank.
- ◆ The site is an existing pump station and will not be significantly altered from its current appearance.
- ◆ There will be no large-scale excavation at the site as part of the proposed works. This will eliminate the likelihood of impact with groundwater and soil acidity.

Landscape

- ◆ The vegetation at the site is limited to mainly overstorey species, which will not be significantly impacted as a result of the planned works.
- ◆ A small patch (0.004 ha) of juvenile understorey plants will be removed to allow the installation of the pump components.
- ◆ Once construction is complete, the understorey species will be left undisturbed and will be encouraged to re-establish underneath the pump suction.



Figure 16 Small vegetation to be removed

River related uses

- ◆ The proposed works have an essential relationship with the Murray River. The pump station must be located at the proposed site. The river is the only source of water in the region and the development cannot occur elsewhere or be set back from the river.

Settlement

- ◆ The proposal represents a continuance of use of the site for water supply purposes. It does not constitute a new development.,
- ◆ The pump station is intrinsically linked to the Murray River. It cannot be located anywhere else. It cannot be located on flood-free land.
- ◆ The pump station is publicly owned and operated and is located close to other public infrastructure (Lock 9).
- ◆ This proposal will not have any adverse impact on the availability of cropping, pastoral or food and fibre producing land.

Water quality

- ◆ There will be no effect on water quality as a result of the proposed works. There is the potential for minor impacts on water quality through the construction phase. However, this will be minor and temporary and will not endure beyond the construction period.
- ◆ The proponent will ensure all possible measures to prevent any negative impact on water quality during construction. This will include measures such as:
 - ◆ Construction activity will be confined to periods of suitable weather
 - ◆ A suitable silt barrier will be erected to prevent and silt and soil entering the river.
 - ◆ No snags or logs will be removed from the river.

Wetlands

- ◆ The works are not located on wetlands and will not impact upon any wetlands

Wentworth LEP

The site is located in Zone W1 Natural Waterways. The proposed works are consistent with the relevant objectives of this zone, including:

- ◆ *To protect the ecological and scenic values of natural waterways*

The site is adjacent to an existing pump station (upstream side). The proposed development will have minimal additional impact on the ecological values of the immediate region. The works will be located on a small area that has no significant ecological value as habitat. The aquatic habitat will not be interfered with as there is no contact with the bed of the river. No snags will be removed from the river.

- ◆ *To prevent development that would have an adverse effect on the natural values of waterways in this zone*

As stated earlier the proposed works represent a continuance of use of the site for water supply purposes. There will be minimal or effectively no additional impact on the natural values of the waterway.

- ♦ To provide for sustainable fishing industries and recreational fishing

There will be no adverse impacts on the fishing as a result of the proposed development.

Site Constraints

The principal site constraint is that the entire site is located on the southern bank of the Murray River. This means that it is located on the state border between New South Wales and Victoria. All terrestrial access to the site is from the Victorian road network.

A small number of native trees are located within the works footprint and will need to be removed.

Potential Impacts

Below is a list of the potential impacts that have been identified during the planning phase for this project. The list also includes the steps that have been taken to minimise these impacts.

Tree removal or damage

Impacts to vegetation will be minimal and will be restricted to the removal of a small patch of juvenile understorey vegetation. Some larger trees will be trimmed, but these are located on the Victorian part of the site and permission to carry out these works is being sought from the relevant authorities.

Visual and aesthetic impact

The new pump station will be replacing the existing pump station. It will be larger than the existing pump station, but the essential elements will be of similar design. An appropriate colour palette will be used for all site infrastructure to ensure that it blends into the setting as much as possible.

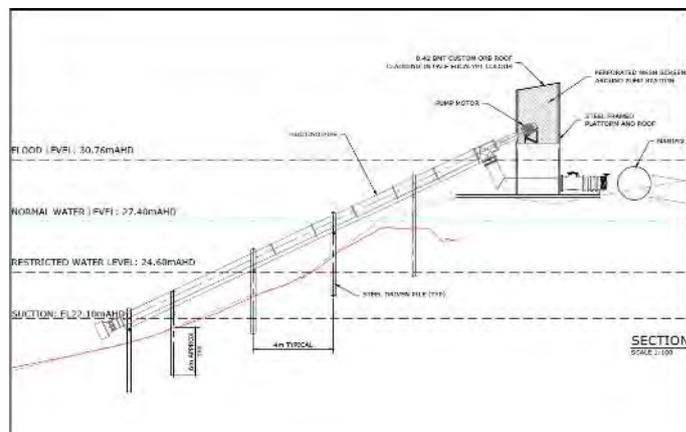


Figure 17 Pump station section

Traffic impacts

There will be no additional traffic generated or any additional traffic impacts for any roads in New South Wales.

Impact on flow paths

There will be no impacts on river flow as a result of this proposal.

Waste management

The production of waste will be limited to the construction phase of the project. During construction, the management of waste will be a priority. All workers at the site will be required to place all waste material into a site bin that will be emptied at the conclusion of every working day.

The operational pump station will produce no onsite waste.

Siting impacts

The pump station will not interrupt views of, or disrupt access to, the river and its environs.

Visual appearance

The visual impact of the infrastructure at the site will reflect its function. Its appearance will be attenuated as far as possible through the careful choice of materials and colours where scope to do so exists.

Design impacts

The pump station is located on a site that has been used for water supply for many decades. The current site is located next to the historic Millewa Pump Station. The design of the proposed new pump station reflects the site's history of use.

Noise, vibration and dust

The pump station will be located in a relatively remote area of New South Wales. There are no residences that are close enough to detect noise from the operating pump station. There will be no detectable vibration or dust or any other type of emissions from the operating pump station.

Other considerations

The pump station is a publicly owned and operated asset that supplies water to the greater Millewa region. The new larger pump station is required to ensure that the people of the Millewa can continue to be receive water once the changes to the flow regime of the Murray River are commenced.

Impact Identification

Potential impacts on the site as result of this proposal have been identified through a process involving consultation with expert consultants, visits to the site, and negotiation with various consent authorities and service providers on both sides of the state border.

Impact Minimisation

The impact minimisations efforts are outlined in the list above.

Construction Impact

The proponent will implement a number of control measures to ensure that the potential impacts to the site as result of construction activity will be controlled and minimised. These include the following:

Silt fencing

Silt fencing will be erected at the site. This will prevent any loose soil or any other debris from entering the river. Any material trapped by the fence will be picked up by and removed from the site.

A floating silt curtain will be placed in the river and this will prevent any floating debris leaving the site in the unlikely event that this type of material enters the river.

Vegetation impact

The project has been designed to have the smallest possible impact on vegetation at the site. A single patch of juvenile understorey vegetation will be removed. No other vegetation in the New South Wales part of the site will be adversely impacted.

Fauna impact

There will be no impact on terrestrial fauna. The works are being planned for the first half of 2021 and are not scheduled to occur during nesting time.

No habitat structure will be removed for the river. The interaction with the riverbed will be limited to the driving of piles.

The pump intakes will be fitted with coarse mesh screens designed to exclude fish and continue to allow optimum operation of the infrastructure.

Rubbish and waste

A temporary bin will be placed at the site during construction. The works contractor will be required to ensure that the bin is emptied at the conclusion of works each day. All wastes and rubbish will be removed from site for appropriate disposal. No waste or rubbish of any type will be buried or burned at the site.

Noise

Noise generated during construction will be general construction noise. There will be no blasting at any time during construction. Construction hours will be confined to the EPA recommended times.

Dust and vibration

The driving of piles will cause significant noise and vibration. However, there are no nearby residents in New South Wales. Works will be confined to the standard EPA mandated construction times.

The potential for adverse impacts will be confined to the construction phase of the project. The operational pump station will not cause adverse noise or vibration and will produce no dust or any other type of emissions.

Conclusion

In conclusion, it is considered for the reasons outlined above the development responds well to the opportunities and constraints of the site and is considered to be consistent with the relevant provisions.

The proposal is considered appropriate for the site for the following reasons:

- ♦ The proposal is consistent with Wentworth LEP.
- ♦ The proposal is consistent with the Murray Regional Environmental Plan No 2 – Riverine land.
- ♦ The proposal is vital to the residents and businesses of the Millewa region
- ♦ There will be minimal loss of vegetation and no other substantial impact on ecological or biodiversity values of the locality.
- ♦ The proposal responds well to the site's characteristics and opportunities and has considered the potential impacts upon the locality and particularly of this section of the Murray River.



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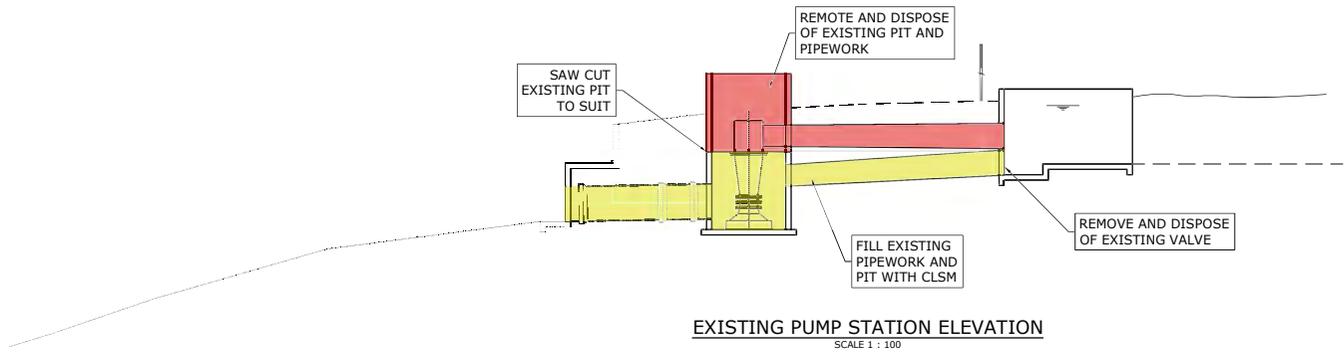
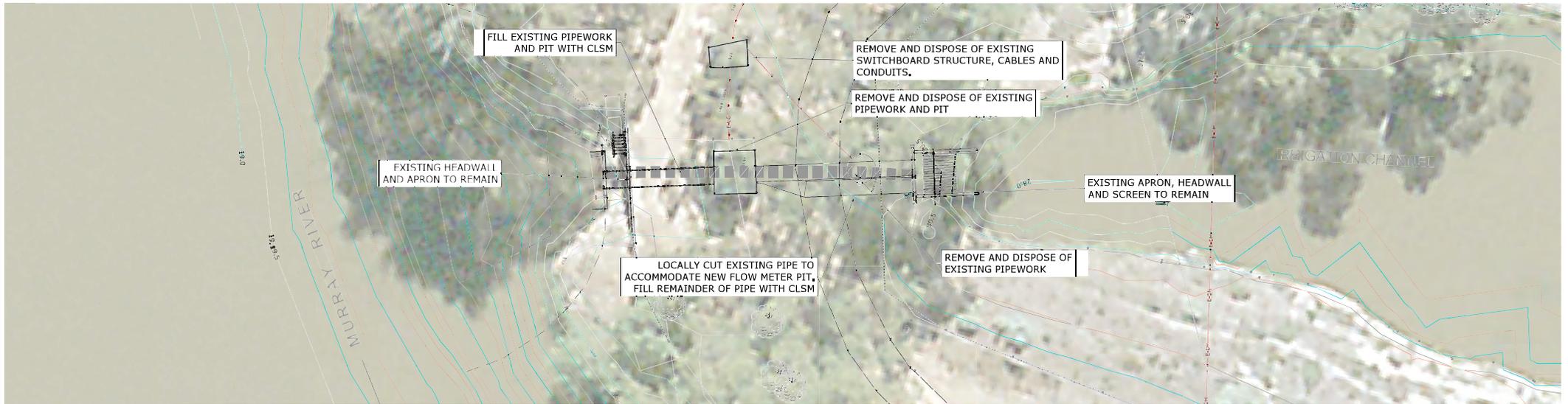
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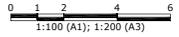
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LEGEND
 MAJOR CONTOUR
 MINOR CONTOUR
 CONTOURS AT 0.5m INTERVALS



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 CO-ORDINATE: VIDE PM. CO-ORDINATES: MGA, ZONE 53



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| DRAWN BY | B. KOLSTER |
| DATE | 4.09.20 |
| CHECKED BY | J. TYLER |
| APPROVED BY | A. SEATON-STEWART |
| SCALE | 1:100 |

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| TITLE | MILLEWA PUMPSTATION UPGRADE CULLULLERAINE, VIC DEMOLITION PLAN |
| DRAWING | 70-2001-001-M-005 |
| REV | A |



PROPOSED
LOCATION FOR SITE
OFFICE, LAY DOWN
AND AMENITIES

PUMP MOTOR HOUSE REFER SHEET
70-2001-001-M-018 FOR DETAILS

EXTENTS OF
SUSPENDED SLAB

SCOUR PROTECTION
TO BE INSTALLED
AROUND HEADWALL

ACCESS TRACK TO BE
RE-ALIGNED TO AVOID
ELEVATED PLATFORMS
AND FLOW METER PIT

SWITCH ROOM
FOR DETAILS REFER
SHEET 70-2001-001-M-017

KIOSK
FOR DETAILS REFER
SHEET 70-2001-001-M-017

PROPOSED UNDERGROUND
ELECTRICAL

EXISTING POWER POLE

- LEGEND**
- MAJOR CONTOUR
 - MINOR CONTOUR
 - CONTOURS AT 0.5m INTERVALS
 - BOLLARD
 - PROPOSED UNDERGROUND ELECTRICAL



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| REV | No | Date | Description | App'd |
|-----------|----|----------|---------------------------|--------|
| REVISIONS | C | 04/09/20 | ISSUED FOR CLIENT REVIEW | A.S.B. |
| | B | 12/08/20 | LMW COMMENTS INCORPORATED | A.S.B. |
| | A | 04/08/20 | ISSUED FOR 80% PERMIT | A.S.B. |
| | No | | | |

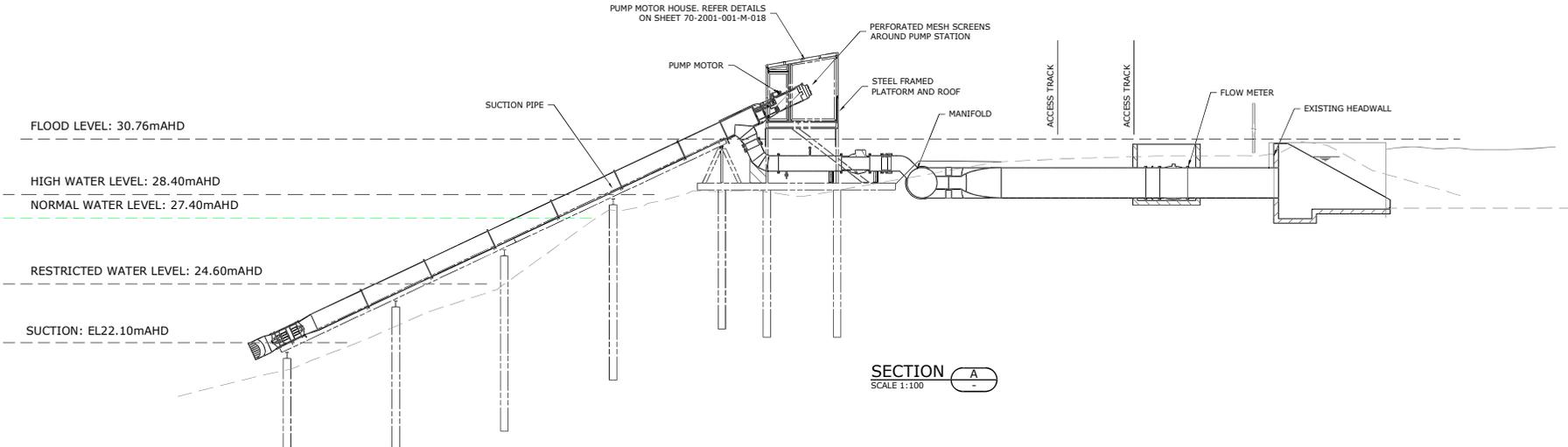
SURVEY INFORMATION: LMW SURVEY (02/07/2019)
LEVEL DATUM: VIDE PM. ALL LEVELS ARE TO A.M.D.
COORDINATE: VIDE PM. COORDINATES: MGA_ZONES_53



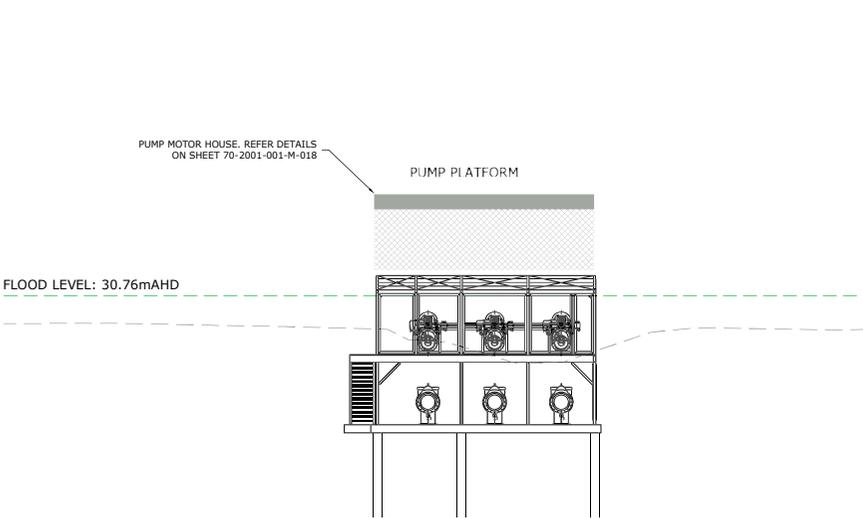
| | | | |
|-------------|-------------------|---------|-----------------------------|
| DESIGNED BY | P. SWINCER | TITLE | MILLEWA PUMPSTATION UPGRADE |
| DRAWN BY | B. KOLSTER | | CULLULLERAINE, VIC |
| DATE | 4.09.20 | | GENERAL CONSTRUCTION PLAN |
| CHECKED BY | J. TYLER | | |
| APPROVED BY | A. SEATON-STEWART | | |
| SCALE | 1:100 | DRAWING | 70-2001-001-M-006 |
| | | REV | C |

1 2 3 4 5 6 7 8 9 10 11 12

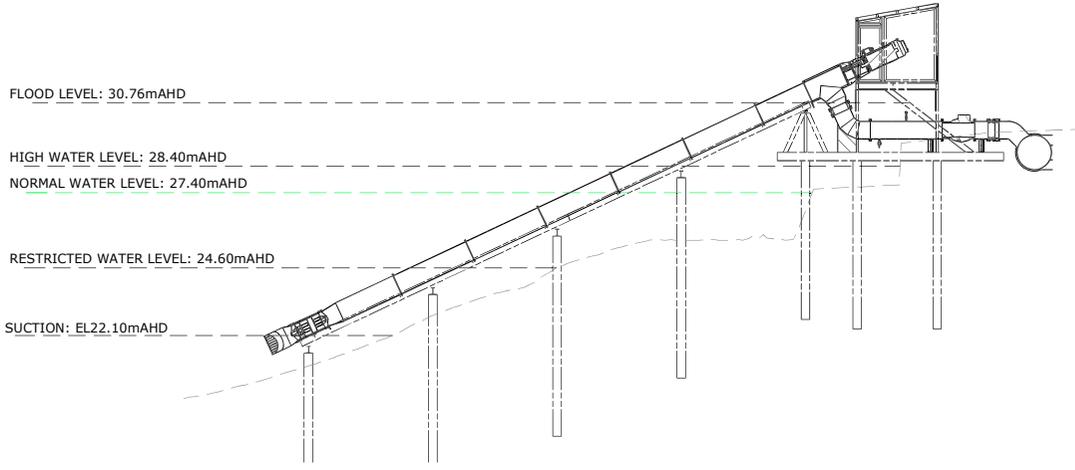
A B C D E F G H I J



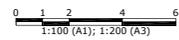
SECTION A
SCALE 1:100



SECTION B
SCALE 1:100



SECTION C
SCALE 1:100



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| REV | No | Date | Description | App'd |
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| REVISIONS | C | 04.09.20 | ISSUED FOR CLIENT REVIEW | A.S.B. |
| | B | 12.08.20 | LMW COMMENTS INCORPORATED | A.S.B. |
| | A | 04.08.2019 | ISSUED FOR 80% REVIEW | A.S.B. |
| | | | | |

SURVEY INFORMATION: LMW SURVEY (02/07/2019)
LEVEL DATUM: VIDE PM; ALL LEVELS ARE TO A.M.D.
CO-ORDINATE: VIDE PM; CO-ORDINATES: MGA, ZONE 53



| | |
|-------------|-------------------|
| DESIGNED BY | P. SWINCER |
| DRAWN BY | B. KOLSTER |
| DATE | 4.09.20 |
| CHECKED BY | J. TYLER |
| APPROVED BY | A. SEATON-STEWART |
| SCALE | 1:100 |

| | |
|---------|--|
| TITLE | MILLEWA PUMPSTATION UPGRADE CULLULLERAINE, VIC LONGITUDINAL SECTIONS |
| DRAWING | 70-2001-001-M-007 |
| REV | C |

1 2 3 4 5 6 7 8 9 10 11 12

Attachment A – Location Map

