MINUTES OF THE MEETING of the District Council of Mount Barker held in the Council Chambers of the Local Government Centre, Mount Barker on Monday 14 July 2008 at 7pm

PRESENT The Mayor (A. Ferguson), Councillors Stokes, Gamble, Campbell, Brazher-Delaine, Bails, Hamilton, Irvine, Zanker and Wilksch.

IN ATTENDANCE: Chief Executive Officer (A. Stuart), General Manager Infrastructure and Projects (B. Clancey), General Manager Corporate and Community Services (N. Jeffery), A/g General Manager, Development Services (D. Starr.)

APOLOGIES
Cr Kuchel

REPORTS BY OFFICERS

5.0 CONFIDENTIAL REPORTS

5.1

REPORT TITLE:	**CONFIDENTIAL REPORT- POSSIBLE ACQUISITION OF LAND FOR TREATED WASTE WATER STORAGE**
DATE OF MEETING:	**14 JULY 2008**
AUTHOR:	**ATIS BERZINS** **MANAGER ENGINEERING AND TECHNICAL SERVICES AND** **DAVID NINIO** **SPECIAL PROJECTS OFFICER**
DEPARTMENT:	**INFRASTRUCTURE AND PROJECTS**
DEPARTMENT MANAGER:	**BRIAN CLANCEY**
REPRESENTORS:	**N/A**
FILE NUMBER:	**154948**

Moved Cr Stokes that Council:

1. orders pursuant to Section 90(2) and 90(3) of the Local Government Act 1999 that the public be excluded from attendance at the meeting to consider in confidence matters regarding:

(a) information the disclosure of which:

(i) could reasonably be expected to confer a commercial advantage on a person with whom the Council is conducting or proposing to conduct, business, or to prejudice the commercial position of the Council; and

(ii) would, on balance, be contrary to the public interest.

2. permits the Chief Executive Officer, General Manager Infrastructure & Projects, Acting General Manager Development Services, General Manager Corporate and Community Services, Special Projects Officer, Manager Engineering and Technical Services to remain in the room.

Seconded Cr Zanker and CARRIED.

Moved Cr Stokes that Council:

3. Note the Council's need to secure access to land in a strategic location for the purpose of establishing additional treated waste water storage facilities in order to secure its existing and future treated water storage capacity requirements.

4. Note the preliminary Waste Water Storage Assessment prepared for Council by Walbridge and Gilbert as shown on attachment 2.

5. Authorise the Chief Executive Officer to finalise negotiations with the vendors' agent and to enter into a contract for Sale and Purchase of the Brown land by 16 July 2008 contained in Certificate of Title Volume 6007 Folio 935 substantially in accordance to the following conditions:

(a) Purchase Price $985,000 plus GST if applicable

(b) Deposit $25,000 to be paid on 16 November 2008 subject to a separate formal Council resolution within four months of execution of contract.

(c) Council will pay a non refundable amount of $20,000 to the vendor (which will not be credited to the purchase price) in four instalments as follows:
$5000 on 16 July 2008
$5000 on 16 August 2008
$5000 on 16 September 2008
$5000 on 16 October 2008

(d) In consideration of the $20,000 payment by Council referred to in (c) above, the Council will not be liable to complete settlement under the contract unless Council has on or before 15 November 2008 passed a resolution approving the sale and purchase of the Brown land along with a resolution to execute under seal all of the necessary transfer documentation required to complete settlement.

(e) If Council decides not to pass a resolution to purchase the Brown land referred to in (d) above , then the contract shall lapse and neither party will have any liability to the other in relation to any matter arising out of the contract (except for the $20,000 payment by Council to the vendor referred to in (c) above).

(f) Settlement date 15 January 2009 (settlement will only occur if Council makes a resolution on or before 15 November 2008 to finalise the transaction).

(g) The vendor will grant uninterrupted access to Council from the date of execution of contract to settlement date.

6. Note that the proposed contract referred to in recommendation 5 above does not commit Council to proceed with the purchase of the Brown land unless Council makes a resolution to do so by 15 November 2008.

7. Note that unless Council determines by Council resolution on or before 15 November 2008 to finalise the contract, the Council's financial liability is limited to $20,000.

8. Note that following the further necessary investigations a further Council report will be submitted by no later than 15 November 2008.

9. Note that if following the further investigations the recommendation is to proceed with the purchase of the Brown land, the portion of the Brown land that is surplus to what is required for the storage of treated waste water would be intended to be disposed of by Council subject to a boundary realignment being approved.

10. Determine that the land contained in Certificate of Title Volume 6007 Folio 935 (the Brown Land) be excluded from Community Land Classification under the Local Government Act upon transfer of the Brown Land to Council (this will only occur if Council proceeds to settlement)

a) write to the Southern & Hills LGA and LGASA and Adelaide Hills Regional Development Board and

Murraylands Regional Development Board seeking that representations be made to the EPA requesting long term policy certainty for:

i) treated waste water continuing to be able to be discharged to watercourses; and

ii) the requirements for the management of treated waste water.

11. orders pursuant to Section 91(7), (8) and (9) of the Local Government Act 1999 that the discussion, reports, attachments and minutes relating to this item be kept confidential until 17 November 2008.

12. subject to Section 90 of the Local Government Act 1999 as amended, readmit the public to the meeting at the conclusion of this item.

Seconded Cr Wilksch and CARRIED.

MEETING DECLARED CLOSED AT 7.46 PM

_____ _____

MAYOR DATE

DISTRICT COUNCIL OF MOUNT BARKER

NOTICE OF SPECIAL MEETING

Notice is hereby given that the following meeting will be held in the Council Chambers, 6 Dutton Road, Mt Barker on Monday 14 July 2008.

7.00 pm Special Council Meeting

A. Stuart
CHIEF EXECUTIVE OFFICER

10 July 2008

1. **APOLOGIES – CR BAILS AND STOKES**

2. **REPORTS BY OFFICERS**

2.1 **CONFIDENTIAL REPORTS**

REPORT TITLE: **CONFIDENTIAL REPORT- POSSIBLE ACQUISITION OF LAND FOR TREATED WASTE WATER STORAGE**

DATE OF MEETING: **14 JULY 2008**

AUTHOR: **ATIS BERZINS**
MANAGER ENGINEERING AND TECHNICAL SERVICES AND

DAVID NINIO
SPECIAL PROJECTS OFFICER

DEPARTMENT: **INFRASTRUCTURE AND PROJECTS**

DEPARTMENT MANAGER: **BRIAN CLANCEY**

REPRESENTORS: **N/A**

FILE NUMBER: **154948**

ATTACHMENTS:
1. **LOCATION PLAN**
2. **PRELIMINARY WALLBRIDGE AND GILBERT SITE ASSESSMENT**
3. **AERIAL PHOTOGRAPH**
4. **BROCHURE**
5. **TREATED WASTEWATER STORAGE REQUIREMENTS**

PURPOSE

1.To brief Council on the possibility of acquiring allotment 12 located on Balds Hill Road , Nairne as shown on attachment 1 (the Brown land) for the purpose of developing on portion of the Brown land treated waste water storage facilities.

2. To seek authority to enter into a conditional contract to purchase the Brown land subject to a further Council resolution.

RECOMMENDATION

That Council:

1. orders pursuant to Section 90(2) and 90(3) of the Local Government Act 1999 that the public be excluded from attendance at the meeting to consider in confidence matters regarding:

   (a) information the disclosure of which:

      (i) could reasonably be expected to confer a commercial advantage on a person with whom the Council is conducting or proposing to conduct, business, or to prejudice the commercial position of the Council; and

      (ii) would, on balance, be contrary to the public interest.

2. permits the Chief Executive Officer, General Manager Infrastructure & Projects, Acting General Manager Strategy and Policy, Acting General Manager Development Services, General Manager Corporate and Community Services, Special Projects Officer, Manager Engineering and Technical Services and the Minute Secretary to remain in the room;

3. Note the Council's need to secure access to land in a strategic location for the purpose of establishing additional treated waste water storage facilities in order to secure its existing and future treated water storage capacity requirements.

4. Note the preliminary Waste Water Storage Assessment prepared for Council by Walbridge and Gilbert as shown on attachment 2.

5 Authorise the Chief Executive Officer to finalise negotiations with the vendors' agent and to enter into a contract for Sale and Purchase of the Brown land by 16 July 2008 contained in Certificate of Title Volume 6007 Folio 935 substantially in accordance to the following conditions:

   (a) Purchase Price $985,000 plus GST if applicable

   (b) Deposit $25,000 to be paid on 16 November 2008 subject to a separate formal Council resolution within four months of execution of contract.

(c) Council will pay a non refundable amount of $20,000 to the vendor (which will not be credited to the purchase price) in four instalments as follows:
$5000 on 16 July 2008
$5000 on 16 August 2008
$5000 on 16 September 2008
$5000 on 16 October 2008

(d) In consideration of the $20,000 payment by Council referred to in (c) above, the Council will not be liable to complete settlement under the contract unless Council has on or before 15 November 2008 passed a resolution approving the sale and purchase of the Brown land along with a resolution to execute under seal all of the necessary transfer documentation required to complete settlement.

(e) If Council decides not to pass a resolution to purchase the Brown land referred to in (d) above , then the contract shall lapse and neither party will have any liability to the other in relation to any matter arising out of the contract (except for the $20,000 payment by Council to the vendor referred to in (c) above).

(f) Settlement date 15 January 2009 (settlement will only occur if Council makes a resolution on or before 15 November 2008 to finalise the transaction).

(g) The vendor will grant uninterrupted access to Council from the date of execution of contract to settlement date.

6. Note that the proposed contract referred to in recommendation 5 above does not commit Council to proceed with the purchase of the Brown land unless Council makes a resolution to do so by 15 November 2008.

7. Note that unless Council determines by Council resolution on or before 15 November 2008 to finalise the contract, the Council's financial liability is limited to $20,000.

8. Note that following the further necessary investigations a further Council report will be submitted by no later than 15 November 2008.

9. Note that if following the further investigations the recommendation is to proceed with the purchase of the Brown land, the portion of the Brown land that is surplus to what is required for the storage of treated waste water would be intended to be disposed of by Council subject to a boundary realignment being approved.

10. Determine that the land contained in Certificate of Title Volume 6007 Folio 935 (the Brown Land) be excluded from Community Land Classification under the Local Government Act upon transfer of the Brown Land to Council (this will only occur if Council proceeds to settlement)

11. orders pursuant to Section 91(7), (8) and (9) of the Local Government Act 1999 that the discussion, reports, attachments and minutes relating to this item be kept confidential until 17 November 2008.

12. subject to Section 90 of the Local Government Act 1999 as amended, readmit the public to the meeting at the conclusion of this item.

BACKGROUND

Septic Tank Effluent Disposal System (STEDS) Strategy

Council at its meeting of 18th August 2003 adopted the *Strategy for future collection, treatment and reuse for STEDS effluent – 2020* prepared for Council by Kellogg, Brown and Root (KBR).

The aim was to develop concepts and options for cost – effective effluent treatment and reuse, with an ultimate goal to eventually utilize all treated effluent from Council's existing and future STEDS with no discharge to Mount Barker Creek.

The strategy was based on the following:

- to enable the eventual total reuse of effluent;
- to provide a staged approach to changing from the current system to a system providing total reuse;
- to utilize existing assets where appropriate;
- to enable flexibility of operation to cope with system malfunctions, maintenance and changes in policy;
- to provide a cost effective approach.

The Strategy recognized that to fully utilize treated effluent produced over the winter months, significant storage of treated effluent would be needed as irrigation only occurs over the summer months.

The shortfall between existing winter storage capacity and wastewater produced requires Council to give serious consideration to securing access to an additional site in the near future.

Business Approach to the Sale of Treated Waste Water

As well as the environmental objective there is also an economic objective. On 17 March 2008 Council resolved to authorize for community consultation:

- Treated Waste Water Pricing Policy Framework; and
- Treated Waste Water – Customer Charter

A report is currently being prepared for a future Council meeting following the closure of the community consultation process.

In addition, at the Council meeting on 7 July 2008 the Annual Business Plan 2008/09 was adopted and includes provision for the preparation of a Community Wastewater Management System (CWMS) Strategic Plan and Business Plan.

A Project Brief is yet to be drafted and once finalized a process will need to be undertaken to engage a suitable consultant. This work is not expected to be completed until Autumn 2009.

Financial provision to provide additional storage for treated wastewater and also to secure markets for the treated wastewater are immediate considerations.

Additional Storage Capacity for Treated Waste Water

Current storage capacity is around 130 megalitres (ML), based on 50 ML at Laratinga and 80 ML at Samwells

Council Risk Exposure

Existing Storage and Irrigation Demands
Council currently discharges treated waste water into the Samwell's storage facility (approximately 80 ML). This is not directly under Council control and is not the subject of any formal agreement between Council and Samwells. This highlights a significant risk for Council should the private operator no longer wish to be supplied with treated wastewater. As a risk management initiative it important that Council investigates alternative options if circumstances change in the availability to Council of this storage capacity.

The risk to Council as shown in table 1 (attachment 5) for current demand is that approximately 125 ML of additional storage would be required by Council to achieve 100% reuse should the private operator no longer wish to be supplied with treated wastewater whilst the Hillgrove mine is operating. Table 2 (attachment 5) indicates that overall an additional 125 ML (i.e. a total of 250 ML of storage by not later than 2020) will be required should the private operator (Samwells) no longer wish to be supplied with treated wastewater but the Hillgrove mine is still in operation as far out as 2020 which is considered unlikely based on current indications.

The demand modeling shown in the tables has been based on the STED strategy which was prepared by KBR in 2003. Since that time, residential growth has been grater than predicted and the 2020 year predicted flows could be achieved much earlier.

Hillgrove Mine Operation
Tables 1 and 2 (attachment 5) highlight the storage requirements should the Hillgrove mine no longer require treated wastewater for its operation.

The benefit of the mine operation is that the demand is relatively constant throughout the year as compared to low demands for water for irrigation during winter months. The life of the mine is likely to be relatively short and depends on factors such as global markets and prices.

Regulatory Framework
Currently Council discharges treated waste water to the Mount Barker Creek under the current EPA regulatory framework. This could change where no discharge would be allowed to waterways. A change was experienced by Council with the introduction of an Environment Protection Policy (statutory basis) controlling the discharges of wastewater to water courses. The future regulatory framework is at this time uncertain and may or may not change.

Previous Council Resolution

At the Council Meeting held on 16 June 2008 it was resolved to discuss an item in confidence. Council resolved to note that:

> *"investigations are occurring in relation to the possible acquisition by Council of another parcel of land currently on the market as to its suitability for treated waste water storage "*

DISCUSSION

Preliminary Site Assessment – Brown Land

A preliminary site assessment of the Brown land carried out by Wallbridge and Gilbert on behalf of Council (attachment 2) indicates that:

- the Brown land is strategically located to take advantage of Council's existing infrastructure.
- Its central location could be used as staging storage for a number of reuse sites within the region.
- The location of storage facilities in the outskirts of town would mean that buffer requirements will have minimal impact on future and current development.
- The site has the potential to provide one third of Council's future storage requirements and all of Council's current storage requirements.

- Serious consideration should be given to the acquisition of the Brown land subject to cost.
- The methodology steps outlined in the assessment should be followed to determine the feasibility of developing treated waste water storage facilities on the site.

The Brown Land

The subject land currently for sale is located on allotment 12, with frontages to Bald Hills Road and Little Dublin Road, Nairne (refer to attachment 1). It contains 17.6 hectares; a ranch style well maintained 4 bedrooms home, a bore, a dam and a plantation of 2800 olive trees (refer to attachment 3 and 4). The adjacent land, lot 11 shown on attachment 1 has been purchased by Council as part of the proposed freeway interchange.

Negotiations with Vendors

The vendors have verbally agreed to sell their property to Council in accordance to the essential conditions contained in recommendation 5 of this report; provided that a contract is finalised before 16 July 2008. The Special meeting of Council has been called in order to determine before the 16 July 2008 if a contract is to be executed between Council and the vendors. It is important to note that the verbal undertaking from the vendors cannot be legally enforced and that any possible agreement will need to be in writing and executed by both parties.

The possible agreement can be summarised as follows:

- Purchase price $985,000. The land agent indicated that a cash offer of $950,000 was rejected by the vendors and that their bottom price is $985,000. Obviously a formal valuation will need to be undertaken and its findings reported to Council.
- Notwithstanding that the contract would be executed by the Chief Executive Officer, the contract would lapse unless Council makes a resolution by 15 November 2008 to proceed with the contract. It provides Council with a 4 month period to determine the viability of developing treated water storage facilities on the subject land and report back to Council.
- Settlement date 15 January 2009.
- A non refundable payment to the vendors of $20,000 (which is not credited to the purchase price). This amount is to cover the uncertainty that Council will proceed with the purchase and the interest component to the settlement date of 15 January 2009.

Potential Added Value to the Land

Depending on set back provisions that may be required by the Environment Protection Authority between the proposed treated waste water storage facilities and the existing house located on the Brown Land, there is the intention for Council to partially offset the cost of the possible land acquisition by undertaking a boundary realignment between the existing allotment 11 owned by Council and allotment 12 (see attachment 1). This process would not create any new allotments but enable the sale of the house on one allotment leaving the second allotment for the development of the treated waste water storage facilities.

It is likely that this approach would add value to the Brown land and that this would be reflected at the time of the intended sale by Council of the house on the Brown land.

The land to be retained by Council for waste water storage would be held on a separate title by Council and would not be classified as community land (see recommendation 10).

Technical Assessment

The Wallbridge and Gilbert report provided preliminary information only in order for Council to assess the feasibility of the construction of treated waste water storage. A more detailed survey and assessment of the Brown land needs to be conducted to determine, capacity, surface water diversion, seepage control and lagoon operational requirements etc.

Should Council resolve to proceed with the possible purchase of the said land, then it has a four month period (under the proposed purchase agreement contract) to assess the viability and cost of constructing waste water storage facilities on the site.

To facilitate the investigation it is proposed to engage:

- Mr Richard Crabb (has previously worked for Council on the Meadows waste water and stormwater proposals) to prepare the consultant's brief and manage the investigation.
- Wallbridge & Gilbert (Council's Wastewater Consultants) to undertake the further investigation.

The Technical assessment will include the following matters:

Engineering assessment

The determination of site conditions including contours (by existing mapping and field checks where necessary) and geotechnical

investigation to determine ground water level and the presence of rock.

Preparation of a concept design for a 120 ML storage lagoon having consideration for balancing cut/fill, access, visual amenity and connection into the existing wastewater network.

Preparation of cost estimates including initial capital cost, annual maintenance costs and replacement costs.

Site optimisation

To determine the best economic use of the balance of the said land in conjunction with Lot 11 already owned by the Council. The proposed storage facilities to be located in order to provide a saleable allotment around the existing dwelling on the said land but also having regard for additional storage requirements above 120 ML if it is deemed to be worthy of consideration or any other use that Council may have.

Regulatory assessment

It will be important for Council to be satisfied that all Regulatory requirements can be satisfied prior to purchase of the said land.

This assessment will include discussions with the Environmental Protection Authority, the Department of Health, the Department of Water, Land & Biodiversity Conservation and an assessment of Council's Development Plan.

Councils will be required to provide a compliant wastewater treatment system (which includes treatment, storage and disposal / reuse) to ensure that the treated effluent is 'fit for purpose' in accordance with the reclaimed water guidelines.

Other Sites

A preliminary assessment of other possible sites, including the possibility of a large scale customer with their own "on site" storage will be undertaken to provide a comparative cost.

As advised previously this will need to have regard to the Environment Protection Authority and in particular considerations like setback distances from residences and impacts on watercourses. Where these circumstances exist, a risk assessment will need to be carried out to demonstrate that the risk of contamination to the watercourse and any odours potentially impacting on neighbouring residences is able to be satisfactorily managed.

Update on status of negotiations with Hillgrove

As an update to the previous Council reports, it is expected that draft term sheets between Hillgrove and Council will be able to be finalized in the not too distant future. The term sheets provide for a minimum uptake of treated waste water of 400 megalitres and a maximum of 546 megalitres (annually).

A condition of the term sheet is that Hillgrove at the termination of its mining operation will provide at no cost to Council a storage facility of 50 megalitres. It is understood that the economic life of the mine is to last approximately 8 years.

POLICY IMPLICATIONS

1. **Financial/budget**
   If Council enters into a contract to purchase the Brown land the financial exposure is limited to $20,000. The proposed contract will clearly state that a separate Council resolution is required by 15 November 2008 in order to proceed to settlement.

   There is no budget allocation in the 2008-2009 financial year for the purchase of the Brown Land. If Council determines to purchase the Brown Land in this financial year, the 2008-2009 funding deficit would increase from $3.6 million to $4.6 million. This means that the cash reserve would be diminished by an additional $1 million and impact accordingly on the draft 10 year financial plan.

   As per recommendation 9, if the Brown land is purchased it would be intended to subsequently recoup some of the purchase price through the sale of portion of the land that is surplus to Council's needs for storage of treated waste water.

   As at 30 June 2007 the CWMS capital reserve was $1.2 million. The balance as at 30 June 2008 is expected to be determined towards the end of September 2008. The 2008/09 Annual Business Plan includes some significant CWMS capital investment, in excess of projected income.

   The CWMS capital reserve is generated through developer contributions by payment of $2,962.00 (2008/2009 fee) for each additional allotment created.

   As a guide there are in the order of an additional 1,750 allotments that could be generated within the areas that have been rezoned for residential development and this can reasonably be expected to generate around an additional $5 million in the capital reserve over the next several years which is very relevant to long term financial planning.

Hence there is a substantial income stream for CWMS capital investment purposes, including land acquisitions.

2. Legal

Planning

The Brown Land is located in a rural zone. The construction of treated waste water storage would constitute development and require approval from the Development Assessment Commission.

In order to meet the objectives of this zone, the Development Application would need to satisfy that the proposed treated water storage facility the outcome of which do not adversely impact on existing water courses and compliment rural activities within this zone.

Regulatory Approvals

In addition to the planning consideration the proposed treated water storage facility would need to satisfy the regulatory bodies mentioned in this report.

3. Staffing/Work Plans

In addition to internal staff resources, the further investigations required to assess the viability of establishing on the Brown land treated water treated water storage would require expert external advice. It is proposed that the services of Richard Crabb and Wallbridge and Gilbert be retained.

4. Environmental

Securing suitable land for the storage of treated waste water and stormwater harvesting will have environmental benefits.

5. Social

The conservation and reuse of water has significant social benefits.

6. Strategic Plans

Strategy for future collection, treatment and reuse for STEDS effluent - 2020 KBR August 2003

Mount Barker District's Community Strategic Plan 2004 - 2007
3. Environment
Goal " Promote value conserve and manage the natural and built environment for the benefit of current and future generations and at every opportunity observe the principles of ecological sustainability ".

Object 4 states "Provide a leadership role in a range of environmental issues including water management.

Strategy 3.10 states "Develop a water resource management strategy that encompasses all areas on water quality and flooding involving all key stakeholders. Take advantage of potential opportunities through use of reclaimed effluent stormwater.

COMMUNITY CONSULTATION

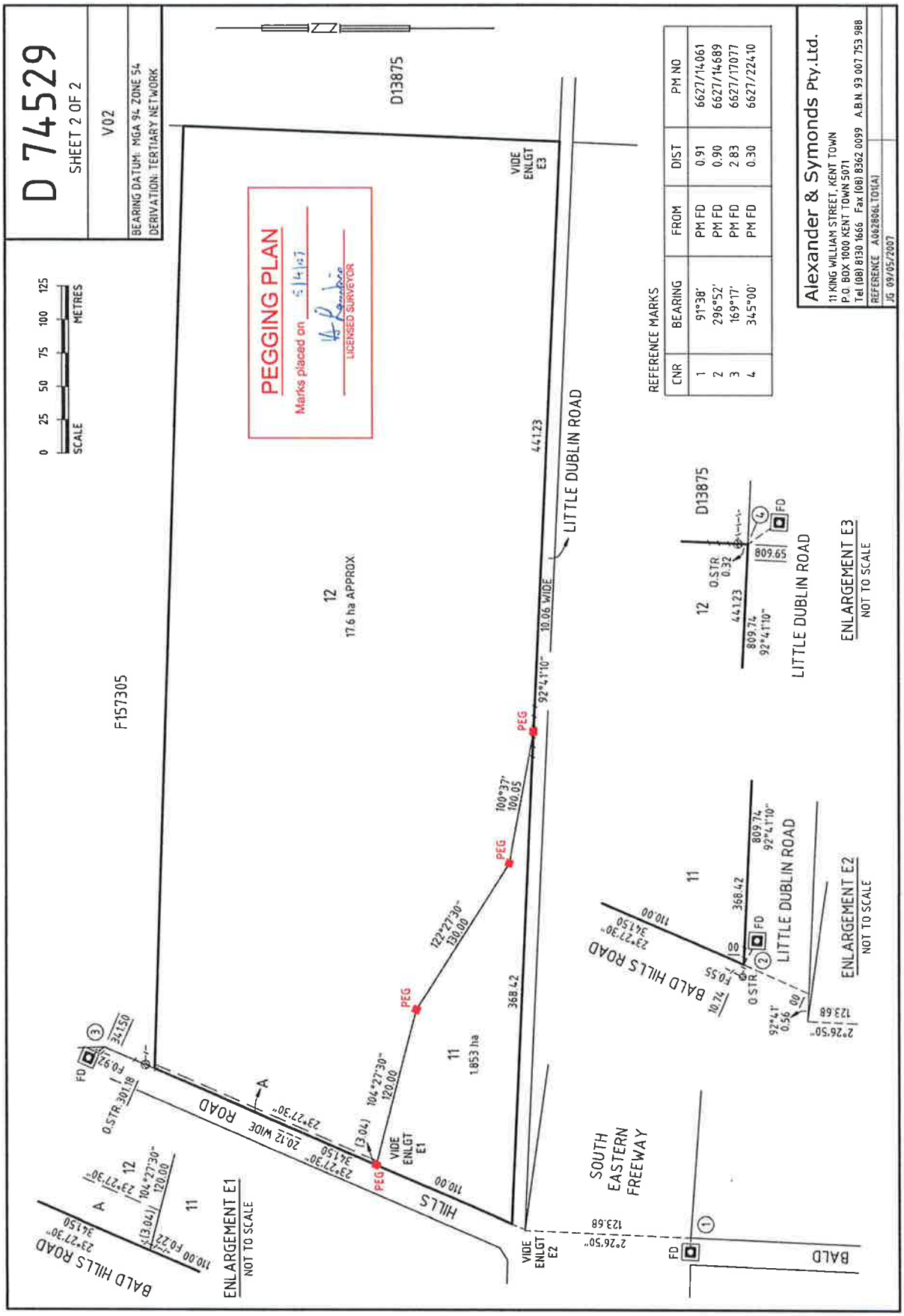
1. Customer Needs Analysis

Not applicable.

2. Promotion/Communications

Not applicable at this time.

ATTACHMENT 1 OF ITEM 2.1



ATTACHMENT 2 OF ITEM 2.1

MOUNT BARKER STEDS (CWMS)

STORAGE ASSESSMENT

Prepared for
DISTRICT COUNCIL OF MT BARKER

by

WALLBRIDGE & GILBERT
Consulting Engineers

JUNE 2008
REV A

JOB NO: C070829 – R2

CONTENTS

ISSUE REGISTER				
Rev	Date	Issue	Originator	Approved
A	10 Jun 08	For Client comment	NJS	NJS

1. INTRODUCTION

The District Council of Mount Barker requested Wallbridge & Gilbert (W&G) to investigate the potential of establishing a storage facility for treated waste water on a parcel of land on the north eastern corner of the intersection of Baldhills Road, Little Dublin Road and the South Eastern Freeway.

The site in question is currently for sale and Council wish to consider its suitability for use as a storage facility.

As part of Council's 2020 STEDS Strategy it was identified that additional storage is required in order to reduce treated effluent flow to Mount Barker Creek and to provide sufficient winter storage to enable the total reuse of effluent produced within the Mount Barker STEDS catchment.

W&G completed a preliminary investigation for Council in November 2007, which identified that Council required an additional 44 ML of storage under current flows if Hillgrove is being supplied and up to 190 ML once the scheme flows reach 3.7ML/a. Should the Hillgrove supply not go ahead then the required storage would increase to over 300ML once flows reach 3.7ML/a.

The previous report investigated the potential of sites immediately downstream of the Laratinga wetlands which are currently privately owned.

This report provides preliminary information only in order for Council to assess the feasibility of the construction of a treated effluent storage. A more detailed survey and assessment of the proposed site needs to be conducted prior to construction to determine, capacity, surface water diversion, seepage control and lagoon operational requirements etc.

It is clear Council requires additional storage to not only cater for future growth but to bring its current system up to current EPA standards, resulting in no direct discharge to watercourses.

An integrated strategic plan should be developed in order to provide suitable winter storage and distribution systems to cater for current and future loads. Failure to address this issue will have a significant impact on the potential sustainable development of the region.

2. DESCRIPTION OF CURRENT STORAGE SYSTEM

In the late 1990's the District Council of Mt Barker upgraded the Mt Barker STEDS WWTP to improve treated effluent quality, reduce discharge to the Mount Barker Creek by 75% and provide for reuse of reclaimed water for various customers. This included an upgrade to the existing treatment ponds, establishment of additional treatment processes (dissolved air flotation and continuous micro filtration) and construction of the Laratinga wetlands. A further upgrade of the plant is still being implemented to increase the hydraulic capacity of the plant without increasing the footprint. This has been

achieved by converting the existing aerated facultative lagoons to a suspended growth aerated lagoon system.

Apart from acting as an additional treatment process, the Laratinga Wetlands provide for the storage of approximately 50 ML of treated effluent. Reclaimed water is pumped from the wetland to various irrigators. A 60 ML storage dam is also available at Samwell's which acts as balancing storage for that user.

Emergency storage of approximately 50 ML of untreated effluent is available at the WWTP site. The WWTP has the capacity to treat this additional amount of effluent during the summer months to meet irrigation demand if necessary.

Council believe that approximately 100 ML of treated effluent is lost to evaporation due to the large area and shallow nature of the wetlands. W&G's preliminary calculations indicate that it should be in the order of 60 ML/a.

Treated effluent from the WWTP is transferred via gravity to the Laratinga Wetland, which is situated approximately 600 m east of the WWTP along the Mount Barker Creek. A pump station situated on Bald Hills Road, pumps reuse water from the wetland or directly from the WWTP outlet to customers.

Council are currently considering storages at the following sites:

- The existing Nairne lagoons
- The area adjacent the MT Barker WWTP nominally earmarked for the "Big Green"
- A site adjacent the Nairne Lagoons closer to the Freeway
- Down stream of the Laratinga Wetlands.

3. REQUIRED STORAGE CAPACITY FOR CURRENT AND FUTURE REUSE

Council's 2020 STEDS strategy predicted a flow of 4.9ML/d by 2020 with current flows in the order of 2.5 ML/d to 3ML/d. Water balance and storage requirements that have been previously identified are summarised below:

Table 3.1 provides a summary of the estimated total winter storage and additional irrigation requirements required to achieve 100% reuse, based on water balance scenarios outlined below.

Table 3.2 provides the same information based on projected flows for 2020.

Table 3.1: Required Additional Winter Storage at Current flows

Scenario	Additional Irrigation Required *(to achieve 100% reuse)*	Total Storage Required *(to facilitate 100% reuse and based on summer irrigation)*	Shortfall in current storage facilities
1: Irrigation demand from Hillgrove Resources and Samwell's	64 ML	154 ML	44 ML
2: Irrigation demand only from Samwell's	584 ML	327 ML	217 ML

**Current storage capacity is 110 ML, based on 50 ML at Laratinga and 60 Ml at Samwells. Of the available storage over half of it is not directly under Council Control. This highlights a potential risk for Council in maintaining a water balance should the private operator no longer wish to be supplied with reuse water.*

Table 3.2: Predicted Required Additional Winter Storage based on projected flows 3.7ML/d

Scenario	Additional Irrigation Required *(to achieve 100% reuse)*	Total Storage Required *(to facilitate 100% reuse and based on summer irrigation)*	Shortfall in current storage facilities
1: Irrigation demand from Hillgrove Resources and Samwell's	502 ML	300 ML	190 ML
2: Irrigation demand only from Samwell's	1022 ML	475 ML	365 ML

The scenarios outlined in Table 3.2 assume the same irrigation demands as those in Table 3.1. The only difference is that the predicted daily inflow has increased from 2.5 ML/d to 3.7 ML/d.

Table 3.3: Predicted Required Additional Winter Storage based on projected flows for 2020 (4.9ML/d)

Scenario	Additional Irrigation Required *(to achieve 100% reuse)*	Total Storage Required *(to facilitate 100% reuse and based on summer irrigation)*	Shortfall in current storage facilities
1: Irrigation demand from Hillgrove Resources and Samwell's	976 ML	460 ML	350 ML
2: Irrigation demand only from Samwell's	1496 ML	630 ML	520 ML

4. DESCRIPTION OF THE SITE

The site slopes from north east to south west and has a defined water course through the site. Diversion of these defined water courses will be required as part of the construction of the lagoons as in the current location they will have a significant impact on the storage capability of the site.

It has predominantly been cleared of native vegetation so significant trees and native vegetation issues are not likely to be significant.

There are a number of dwellings on the western side of Baldhills Road. A buffer distance of 200m should be maintained to these dwellings. The size of the proposed site should enable buffers to be maintained.

A more detailed assessment of the site is required. However, a storage capacity in the order of 120 ML should be able to be achieved. This would effectively double the size of Council's existing storage facilities.

There is an existing 150mm unused pipeline that runs to the site. This pipe could be used to transfer treated water from the WWTP or Laratinga wetland. A 120 ML lagoon would not require an upgrade of Council's pipeline and pumping infrastructure to fully utilise the storage.

The proposed Hillgrove main will also run past this site so it could be used to fill the storage lagoon. Or the lagoon could be used as a supply site to service the Hillgrove line. The supply pump station for the Hillgrove main could be moved to the storage site, which would provide additional capacity at the existing station servicing the Martindale/Dalmeny estate and storage tank. It would also decrease the length of pipe required to be constructed for the Hillgrove line. Physically separating the existing booster pump station from the Hillgrove main would reduce surge pressure on the pump station. It would also remove any requirement to construct additional pipeline crossings under the South Eastern Freeway.

5 RECOMENDATIONS

The site in question is strategically located to take advantage of Council's existing infrastructure. It is also centrally located so could be used as staging storage for a number of reuse sites within the region. The site is located on

the outskirts of town which will mean that buffer requirements will have a minimal impact on future and current development

The site has the potential to provide one third of Council's future storage requirements and all of Council's current storage requirements. As such the site should be given serious consideration subject to the cost of acquisition.

W&G recommend the following methodology for to determine the feasibility of the site:

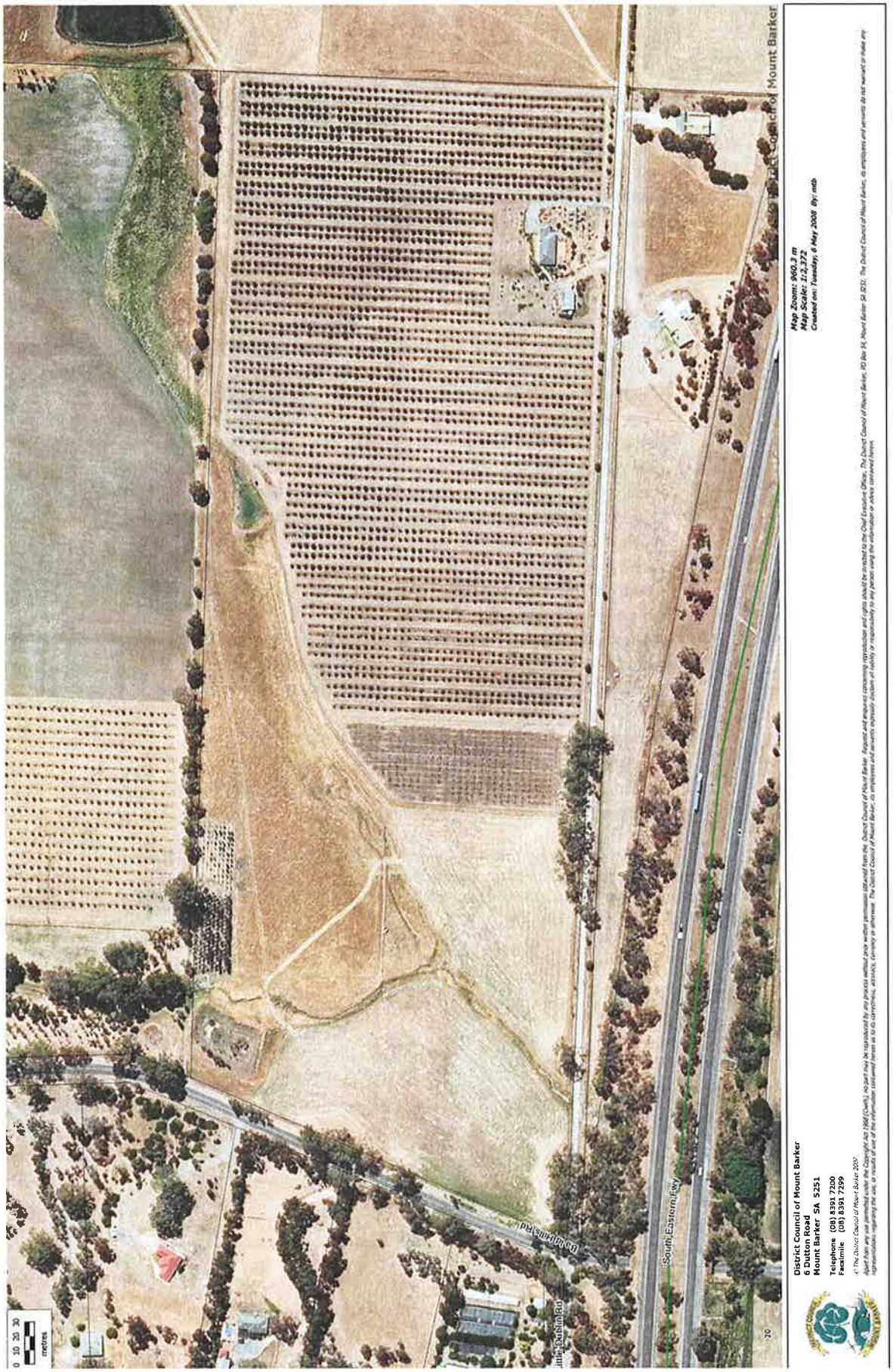
- Discuss the potential with the current land owner to determine likelihood of land sale/transfer and the resultant costs.
- Undertake a strategic assessment of storage and demand for reuse water within the region. This will identify the amount of storage required and sites that could facilitate this storage. This assessment should also determine the impact of a 1:10 wet year as this will increase the storage requirement but will not change the general water balance.
- Determine what irrigation demands Council have that could be met by reuse water.
- Determine distribution routes
- Liaise with the EPA and DWLBC regarding the non compliance of the sites and any other issues of concern.
- A reticulation network could also be determined. The specifics of which would impact on the storage requirements.
- Undertake detailed survey of the sites to enable more accurate concept plans to be developed.
- Undertake a geotechnical investigation of the sites.
- Prepare a cost estimate for the works.
- Undertake a final feasibility of providing storage at these locations
- Commence negotiations for a land transfer.

This study highlights the importance of Council developing a strategic plan for the distribution of its treated effluent in order to determine its future storage requirements. This needs to be addressed urgently while there is still land available to construct large storage bodies.

ATTACHMENT 3 OF ITEM 2.1

District Council of Mount Barker

Brown's Land



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ATTACHMENT 4 OF ITEM 2.1

.ot 69 Bald Hills Road, Blakiston (Via Littlehampton)

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he information within has been furnished to us by the Vendor. We have not verified whether or not that information is accurate and do not have any belief ne way or the other in its accuracy. We do not accept any responsibility to any person for its accuracy and do no more than pass it on. All interested parties hould make and rely upon their own enquiries in order to determine whether or not this information is in fact accurate.

Land
Approx 44 acres of rich alluvial land, with an electic fence boundry. Supporting a 2800 olive tree plantation which has been meticulously laid out and is now 7/8 years old and coming into full production. Featuring 7 varieties consisting of 1,900 oil trees and 900 table olive trees. There are a small number of Polonia trees which have been planted as a hobby. The unplanted portion of the land would be suitable for cattle production.

Olive Trees
These trees have been carefully managed, and trim pruned for mechanical harvester operation.

Water
Property is watered from a well equipped bore, with a 'Calpeda' 6SD 15/13 15 KW pump and control panel. This services the 10 ha sprinkler system which flows through the olive plantation, domestic garden and lawns. There is also a small dam for stock water.

Shedding
6m x 12 m Colour Bond shed with concrete floor and electricity.

Home
'Oakford' Circa 2002 Ranch style 4 bedroom home, main with ensuite and walk in dressing room, country kitchen with open plan meals, family and dining area. The home has excellent rural views of the olives and the hills valley over 'Blakiston', s/c heater & gas outlet. Double carport under main roof, front verandah, with front and rear lawns, rose garden beds and landscaped garden. Large variety of fruit trees, all with dripper watering system. 10,000 litres of rainwater for domestic use. Solar panel heating for the HWS supply. Domestic septic 'Environ Cycle' unit with use of the 'grey water' for the gardens.

Agents Note
This is a very productive hills small acre property especially with the olives now coming into full mature tree production and having a very good market for the product. Some items of plant may be negotiated with the sale. These include; Inter diesel tractor with PTO, 5ft Berends E/P 150 Slasher, ripper, spray tank and carry all, quad 4 WD bike, ride on grass mower.

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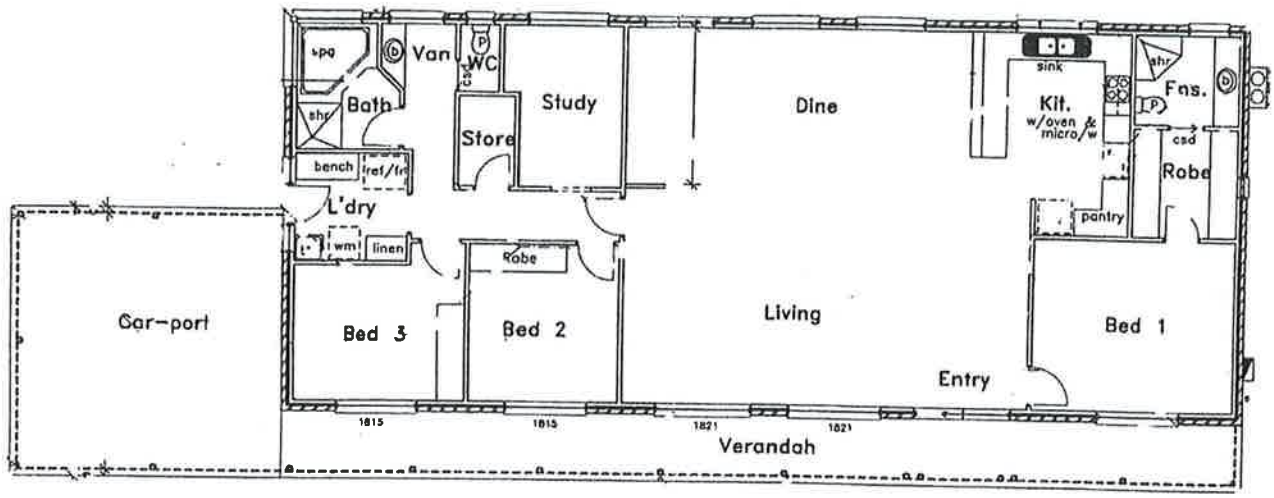
is plan provided as a guide only. While we trust it to be correct, we cannot guarantee its accuracy. Sizes and areas indicated are approximate. Not to scale.



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ATTACHMENT 5 OF ITEM 2.1

Table 1: Required Additional Treated Waste Water Storage at Current flows i.e. 2.5ML/day.

Scenario	Additional Irrigation Required *(to achieve 100% reuse)*	Total Storage Required *(to facilitate 100% reuse and based on summer irrigation)*	Shortfall in current storage facilities
1: Irrigation demand from Hillgrove Resources and Samwell's	64 ML	154 ML	44 ML
2: Irrigation demand only from Samwell's	584 ML	327 ML	217 ML
3. Irrigation demand only from Hillgrove	264 ML	224 ML	124 ML

Table 2: Predicted Required Additional Treated Waste Water Storage based on projected flows (by 2020 daily flows of 3.7ML)

Scenario	Additional Irrigation Required *(to achieve 100% reuse)*	Total Storage Required *(to facilitate 100% reuse and based on summer irrigation)*	Shortfall in current storage facilities
1: Irrigation demand from Hillgrove Resources and Samwell's	502 ML	180 ML	170 ML
2: Irrigation demand only from Samwell's	1022 ML	455 ML	385 ML
3. Irrigation demand only from Hillgrove	702 ML	265 ML	250 ML

The scenarios outlined in Table 2 assume the same irrigation demands as those in Table 1. The only difference is that the predicted daily inflow has increased from 2.5 ML/d to 3.7 ML/d.