

265

Beverley Hill

YORK WA 6302

Shire of York

Planning Department

Post Office Box 22

YORK WA 6302

24 May 2015

SHIRE OF YORK	
FILE	PS-GEN-PP0.3-1
OFFICER	INITIALS
K.A	KA
25 MAY 2015	
1147861	
REFERRED TO COUNCIL	
DATE	INITIALS

Attention Ms Kira Strange

Dear Kira

Re : Proposed Landfill at Allawuna Farm Lots 9926, 4869, 5931 & 26934 Great Southern Highway York

Please accept my submission to oppose the development of a Landfill Class 11 Facility on the above property and also to the Allawuna Farm Landfill Supplementary Report dated February 2015.

Once again the applicant has withheld the environmental/hydrogeological information and shown no respect to the Shire or the Town Planning Scheme 2, Part 8.1 (c, d) and Part 8.5 (i, l, m, w, z and zb.) which is a requirement for planning consent. There is scant attention paid to this most important aspect of the application.

Once again we have had to search through the application for Works Approval submitted to the Department of Environment for the "more detailed site investigations and particularly into groundwater and sub-soil conditions" as claimed by the applicant in their Supplementary Report. Please find attached a plan and cross section showing the Ground Water Flow, plotted from the Borehole information in the DER Works Approval showing that the GWF to the west into the catchment is now indisputably proven and so is more than ever grounds for refusal of this proposal.

Our expert advises "At a flow rate of 1.9 m/d leachate, if the landfill leaked, would reach the seepages west of the surface water drainage divide in just over six months. At an average flow of say 0.6 metres per day the time taken will be around 6 years to travel to the seepages. Considering the life of the landfill, its large size and the variable and permeable nature of valley fill sediments, there is a very real possibility the leachate will travel to the seepages in somewhere between the two travel times." THIS IS NOT ACCEPTABLE. The risk of contamination to the drinking water is too great.

Whilst attending the State Administrative Tribunal I heard Senior Member Peter McNab state "and of course the proposed use does not change" and "the conclusion is that the essence of the proposal remains unchanged:"

As nothing has substantially changed then all the submissions against the original application are still valid. The Shire of York Planning Officer's report is still valid and the JDAP's reasons for upholding the Shire's decision and refusing the application are still valid.

I therefore submit my amended submission and request the Shire of York refuse the application for Planning Consent put forward by SITA Australia under part 8.6(b) of the Shire of York Town Planning Scheme and prepare a case for 'the NO' to put before the JDAP.

Yours faithfully



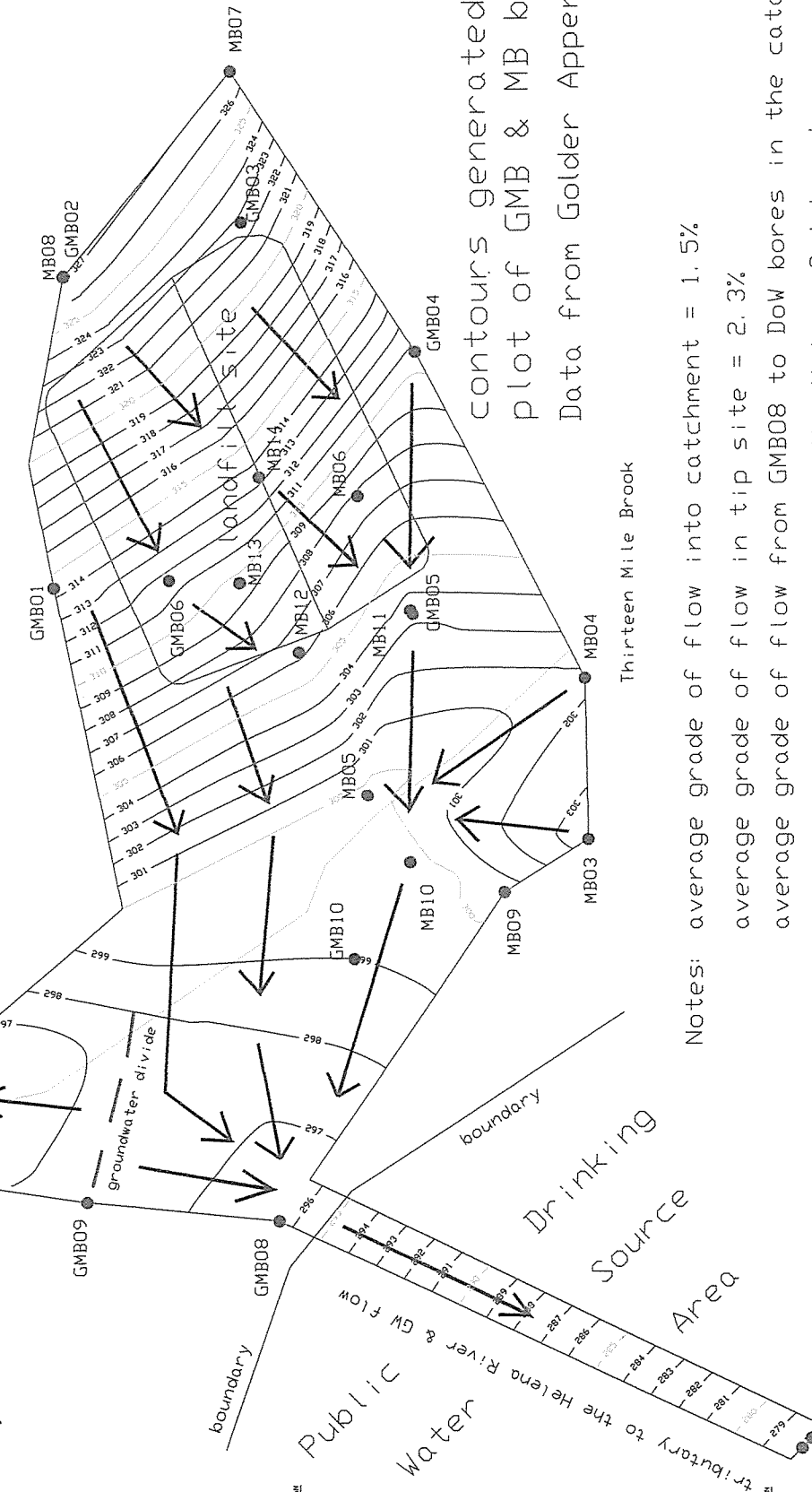
Beverley Hill

Enc: Ground water contour plan

Plan showing long sections of Ground water flow

[Signature]
22nd May 2015

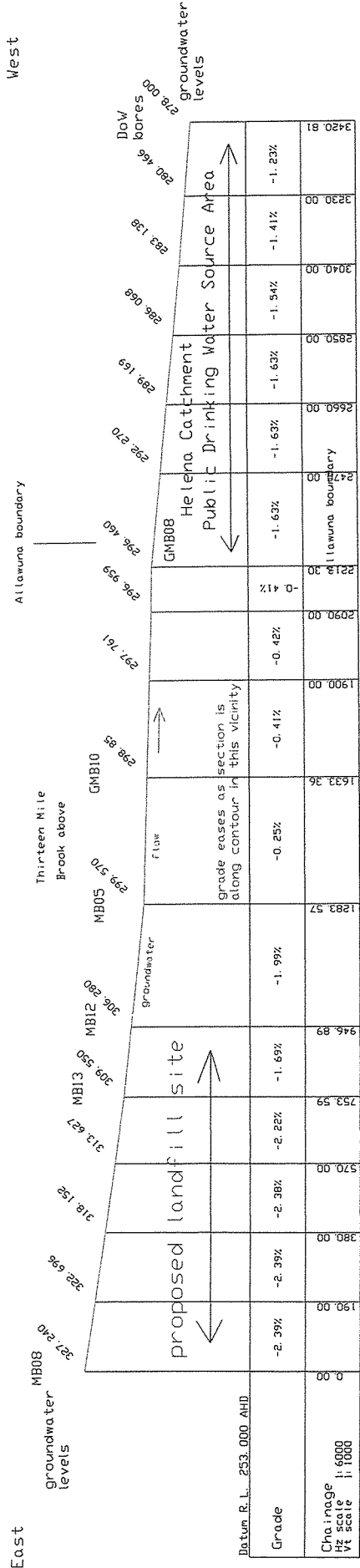
Ground water flow into the Helena catchment



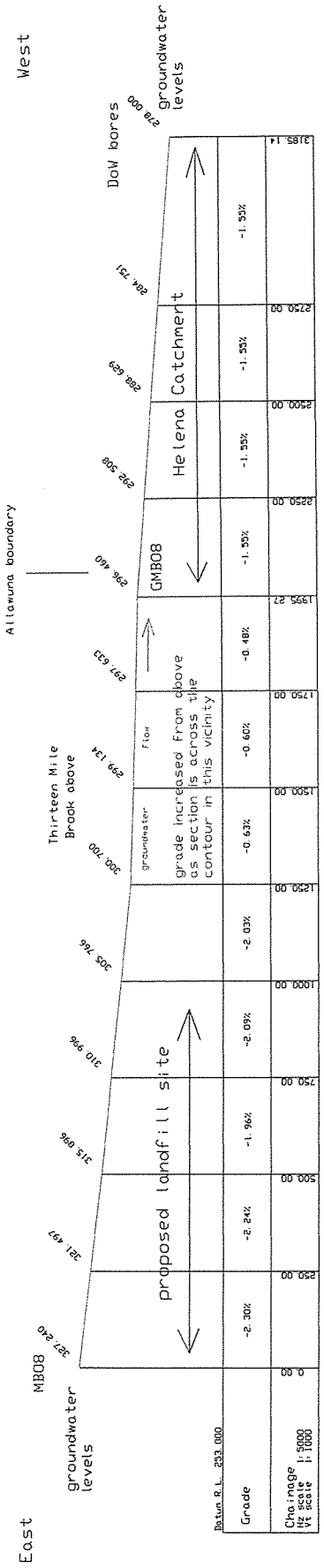
contours generated from the plot of GMB & MB bore GWL's
Data from Golder Appendix E1

- Notes:
- average grade of flow into catchment = 1.5%
 - average grade of flow in tip site = 2.3%
 - average grade of flow from GMB08 to Dow bores in the catchment = 1.6%
 - 100% of tip site drains into the Helena Catchment
 - GMB08 GWL is lower than all the other bore GWL's except GMB07
 - a groundwater divide exists as shown in the vicinity of GMB09
 - plotted GWL's are all late summer observations - Datum: AHD

Dow bores
61619242 & 61619243
RL278m approx
seepage evident in this area



Section of westerly GW flow from bore MB08 through MB13, MB12, MB05, GMB10, GMB08 to Dow bores



Section of westerly GW flow from MB08 to GMB08 and Dow bores

22nd May 2015

Beverley Hill

YORK WA 6302

Shire of York
Planning Department
22 Avon Terrace
YORK WA 6302

24 May 2015

Attention Kira Strange

Re : Proposed Landfill at Allawuna Farm Lots 9926, 4869, 5931 & 26934 Great Southern Highway York.

Dear Kira

Please accept my submission.

I oppose the development of a Landfill Class 11 Facility on the above mentioned property. My main objections are on the following planning grounds.

1. The proposed use is not consistent with the objectives of the General Agricultural zone.

Shire of York Town Planning Scheme 2 1996

Lots 4869, 5931, 9926, and 26934 Great Southern Highway Saint Ronans fall within the General Agriculture Zone of the Shire of York Town Planning Scheme 2.

4.15 General Agriculture Zone

4.15.1 The objectives are:

- (a) To ensure the continuation of broad-hectare agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities.
- (b) To consider non-rural uses where they can be shown to be of benefit to the district and not detrimental to the natural resources or the environment.
- (c) To allow for facilities for tourists and travellers, and for recreation uses.
- (d) To have regard to residential use of adjoining land at the interface of the General Agriculture zone with other zones to avoid adverse effects on local amenities.

I dispute that the proposed landfill meets with these objectives on the following grounds–

a) Landfill is not “broad-hectare agriculture” and the landfill will eventually result in the

cessation of such activities as the landfill inevitably expands.

b) The use is not of benefit to the district. The environment will be irrecoverably damaged by allowing a landfill in the position as shown on the applicant's drawings.

c) It will detract significantly from the ability to "allow for facilities for tourists and travellers, and for recreation uses" and you could argue that it will in fact reduce the ability of the surrounding area to achieve this objective (i.e. not just within the proposal area)

d) It WILL result in "adverse effects on local amenities"

2. The proposed use is consistent with "the type or class of activity of any other use" and therefore should require the rezoning of the land prior to the consideration of this proposal.

It is noted that the Application for Planning Consent is submitted under the provisions of Clause 3.2.4 as a 'Use Not Listed' within the General Agriculture Zone.

Clause 3.2.4 says "if the use of land for a particular purpose is not specifically mentioned in the Zoning Table and cannot reasonably be determined as falling within the type or class of activity of any other use"

Information gained from the Acting Planning Manager, Wheatbelt Region, Department of Planning in November 2012 stated that 'Under the Shire of York's Town Planning Scheme No 2 a landfill/rubbish tip is regarded as "industry – noxious". This is consistent with the definition of the use which is "an industry which is subject to licensing as "Prescribed Premises" under the Environmental Protection Act, 1986 (as amended)." A landfill is a prescribed premises under the Environmental Protection Act.

Alternatively, it could be considered it is also appropriate for a landfill to require a "special use zone" where the land is privately owned (rather than a Public Purposes Reserve for public land which is also common practice in planning schemes). This is consistent with other planning schemes including:

- City of Albany have a "special use zone" for their biomass energy plant
- Shire of Busselton have a "Special Purpose zone" for "waste disposal"
- Shire of Mundaring have a "Special Purpose zone" for "waste transfer"

3. The proposed development will significantly impact on the visual amenity of the landscape and the rural character of the area.

4.15.2 Development

Having regard to the scenic values of the district and the views from roads the local government may refuse an application for planning consent if, in the opinion of the local government, the development if approved will have a detrimental effect on the rural character and amenities.

New information has come to hand that the finished height of the landfill will be seen from the Great Southern Highway, from neighbouring properties and Mount Observation. The finished level for the landfill is now 350.5m AHD. The level at Great Southern Highway where Mount Observation can be seen is 325m AHD and the level of Mount Observation is 359m AHD. As the above information describes this landfill will be an eyesore for tourists visiting as the landfill will be easily seen. The fact that the height of the finished landfill has been reduced 4.5m is negligible, this landfill will still be visible from both the road and Mt Observation.

4. The proposed development is likely to impact on the natural environment, particularly the groundwater, in close proximity to a public drinking water source area. Another firm of consultants has been appointed by SITA Australia and they have carried out considerable environmental testing.

Their results when plotted indicate the flow of ground water is West, directly into the Helena Catchment and on into the Mundaring Catchment.

8.5 Matters to be Considered by Local Government

(i) the compatibility of a use or development with its setting

From a planning perspective, as a rural zone and in the context of the prevailing use and development it would need to be demonstrated that such a use was incompatible with the prevailing use having regard to the specific amenity impacts that arise. Land fill sites are normally chosen where movements of the water table are well known. This presents a risk in this instance given that excavation will occur as part of the site works. It is also a risk on the basis that there will be movement of leachates through the soil and into the nearby aquifer, a public drinking water source area. On this basis alone it is considered that the land use may not be compatible.

(l) the likely effect of the proposal on the natural environmental environment and any means that are proposed to protect or to mitigate impacts on the natural environment

The in inaccuracy in hydrological calculations with regard to the permeation of leachate through the soil to an aquifer that is likely to exist beneath Thirteen Mile Brook which was found to be 13 years instead of 178 as outlined in the SITA report to the EPA is of great concern. This has not been addressed by SITA.

5. The proposed development is located in an area of known earthquake risk

8.5 Matters to be Considered by Local Government

(m) whether the land to which the application relates is unsuitable for the proposal by reason of it being, or being likely to be, subject to flooding, subsidence, landslip, bush fire or any other risk.

According to the University of Western Australia York is situated in the South West Seismic Zone of Western Australia. In the period November 1994 to January 1995, there were 27 earthquakes in the York area, with the largest having a magnitude of 2.6 on the Richter scale. In the triangular area between York, Wyalkatchem and Kellerberin in the period from November 1994 to June 1998, there were in excess of 400 earthquakes, with the largest being 4.6 (2010 Seismicity of University of Western Australia). On the 16th November 2012 Australian seismologists developed and released a new National Earthquake Hazard Map of Australia, which identified the areas of Moe in Victoria, York and Kirwan in Western Australia as well as Tenant Creek in the Northern Territory as the country's most susceptible location to the natural occurrence of earthquakes. This is of significant concern to us as any earthquake has the potential to affect the performance of the liner

To build a landfill in a valley with the Thirteen Mile Brook flowing through and having regard to the flawed Ground Water Report and high water table the risk of flooding, subsidence and landslip has increased exponentially.

6. The proposal has the potential to result in soil erosion and will degrade the land

8.5 Matters to be Considered by Local Government

(w) whether the proposal is likely to cause soil erosion or land degradation

A landfill will be definitely result in land degradation as waste is being added to the land. The degree of soil erosion that results would depend on site management practices, as well as accessway and hardstand design.

The addition of Borrow areas adds to the footprint of disturbed land, hills and sloping paddocks will be excavated which will alter the landform.

7. The proposal will impact on the surrounding land uses through emissions of light, dust and potential pollution of the groundwater (see also point 9)

8.5 Matters to be Considered by Local Government

(z) potential impacts of noise, dust, light, risk and other pollutants on surrounding land uses

The main concerns relate to groundwater contamination. There may also be potential for surface water contamination as a result of run-off during a storm event. Odour impacts would also be relevant in the context of the above.

**8. The proposal is inconsistent with State and Local policy and strategy
Shire of York Local Planning Strategy 2007**

The Allawuna Farm falls within the Western Slopes Precinct (Conservation) (2b) region.

2.4.4 The objectives are: Preserve and enhance the environment.
Support continued sustainable agricultural production.

This proposal is therefore inconsistent with the objectives of the Shire's Local Planning Strategy. Strategies 'e' & 'f' are also relevant to this proposal.

e. Any development to have regard for protection of views, particularly those from Great Southern Highway.

The finished height of the landfill will be seen from the Great Southern Highway, at least the closest neighbour and Mount Observation. The finished level for the landfill has been amended to 350.5m AHD. The level at Great Southern Highway where Mount Observation can be seen is 325m AHD and the level of Mount Observation is 359m AHD.

f. Ensure development had adequate setbacks and buffers from Avon River and any other designated waterways.

Although the site is not currently gazetted in this way, a detailed assessment of the topography of the area suggests that the proposed landfill will actually fall within the Helena River Catchment- a designated public drinking water surface area.

The applicant has put forward lots of arguments as to why a landfill should be treated no differently to a quarry, piggery or tannery. If these industries do not or can not conform to their undertakings or conditions, they can be closed down and remediated. If a landfill is in breach of its conditions, there is no fallback position to remediate and stop pollution of the aquifer if the site is closed down.

Shire of York Strategic Community Plan

One of the Community Priorities mentioned in the plan states
Preserving and Sustaining our Natural Environment -
Our Environment will be preserved for future generations, protecting viable rural land, whilst our town grows and develops.

There is no where in the plan for a landfill. SITA think so too, as it is not mentioned or addressed in their application.

The proposed landfill at Allawuna Farm has the potential to destroy the environment for future generations, ruin viable farming land and inhibit the growth of our heritage town.

State Planning Strategy (Draft) 2012

Please note that on 'Figure - 21 (of the Strategy) Planning for agriculture and food' the map shows that York lies within both the Intensive Agriculture areas.

As defined in the Strategy, Strategic Direction No 6 - Physical infrastructure

6.2 Water

Key facts

The fourth dot point states 'Western Australia has significant groundwater sources. Substantial investment continues to be made in groundwater investigations to identify new water resources to meet demand and ensure existing supplies are reliable and secure.'

The fifth dot point states 'Currently, the Department of Water manages water from over 770 different groundwater resources and nearly 180 different surface water resources and 134 public drinking water source areas across the State.'

A detailed hydrological assessment of the site and the proposal has revealed that the proposed landfill lies within the Helen River Catchment for public drinking water source. If it is built according to the engineering construction drawings, 60% of the landfill base either does not meet the separation distance criteria or is actually in the aquifer.

6.4 Waste

One of the State challenges –

'Sites will need to be suitable in terms of buffers, transport access, relationship to existing waste facilities and producers, and the degree of risk of air, soil, groundwater, and surface water pollution.'

The proposed landfill at Allawuna Farm does not meet any of these criteria.

To place a landfill facility in a valley with surface water and groundwater flowing in different directions is not a viable option.

Avon Arc Sub Regional Strategy 2001

2.2 Agriculture

Objective: Protect and manage agriculture land for its economic, landscape, environmental, tourism and social value.

Comment : Agriculture is a major economic activity in the Avon Arc. Planning strategies should recognise that agriculture and agriculture-related activities are the predominant use throughout the Avon Arc and ensure that incompatible uses do not place unnecessary restrictions on this economic activity.

Guidance for Implementation: Planning strategies to identify significant agricultural land and ensure that agriculture remains the predominant use in those areas.

A Landfill is not consistent with the statements made in the Avon Arc Regional Strategy and will result in the cessation of farming not only on this site but will also impact on the surrounding land.

The SITA proposal mentions the need for a 'Regional Waste Disposal Facility'. A regional waste disposal facility caters for regional waste and York being on the edge of the central wheatbelt region is not suitable as the cartage costs for shires near the other side of the region would be too great.

This proposal states the waste will come from the Perth metropolitan area and so the mention of it becoming a regional disposal facility is not applicable.

Omnibus Scheme Amendment 50

This amendment is currently with the Minister for Planning awaiting his consideration. As the application for Planning Consent was lodged with the Shire of York on the 17th December 2013 prior to a decision the Shire of York's own Planning Scheme No 2 remains unchanged, and Omnibus 50 has no place in the consideration of this application.

9. The documentation provided in support of this proposal has not sufficiently addressed a number of significant issues. It also contains serious errors of fact. A peer review should be undertaken of the documentation by qualified technical experts to assess the validity of the information provided PRIOR to any decision being made.

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Item 9

Environmental Impacts

The Shire of York's reporting officer said in her report dated 4th February 2014 - "Landfills do have environmental impacts and it is the operator's responsibility to minimise the impacts to acceptable levels and therefore the concepts of the precautionary principle and intergenerational equity will need to be considered in the full assessment of the proposal. As this is a preliminary report on land use permissibility, the environmental impacts have not been fully assessed or considered."

According to the information available on the Shire's website namely the Application for planning consent prepared by Larry Smith planning there is little information given to the environmental impact. The Shire of York would find it extremely difficult to carry out a full assessment as is required under the Town Planning Scheme No 2 Parts 8.1 and 8.5. The application devotes only 16 ½ pages to this most important subject and fails to address most of the crucial issues that will be created if a landfill facility is placed at this site.

The application has been amended significantly as a result of environmental investigations carried out during the appeal process to reduce the impacts of the environment and to meet the requirements of the DER for a Works Approval to be issued. The footprint of the landfill has been reduced and moved slightly to the south-west. Three borrow pits have been included in the design which will increase the area of land to be disturbed. The property will never be able to grow the magnificent crops again.

9.1 buffer requirements

On paper the site of the landfill meets the DER Guidelines for distances but on the ground the landfill could be readily seen from the nearest neighbours boundary and will tower 25m above it at this point. The position of the landfill is not acceptable.

9.2 flora and fauna

Flora

The site is at the foot of the Mt Observation Wandoo National Park, where there are significant stands of *Eucalyptus wandoo* and *Eucalyptus accendens* considered in excellent condition. The understorey vegetation comprises very high quality, intact shrub flora that is likely to contain a number of priority taxa including rare orchids based on similar vegetation associated with nearby Wambyn Nature Reserve.

Importantly, sand complexes associated with this eastern wandoo vegetation are hotspots for rare flora including remnant stands of the Declared Rare Flora, the scarlet lechenaultia, *Lechenaultia Laricina* that has a major population on nearby Berry Brow Road adjacent to the Mt Observation Wandoo National Park.

Adjacent to the proposed SITA development is a major privately owned wandoo remnant comprising over approximately 100ha of high quality wandoo upland over laterite interspersed with sand plain and sandy drainage channels and granite exposures. This privately owned area, though surveyed in summer 2012/13, was in excellent condition and there was evidence of good stands of orchids (remnant flower heads). *Therefore given the proximity to Wambyn Nature Reserve, the proposed landfill site needs surveying for rare and priority flora.*

Both Wambyn Nature Reserve and the private reserve adjacent to the proposal site are high quality biodiverse assets of regional significance where any impact on ground water (through excavation that will interrupt local water flow) may have a significant negative impact on the dominant wandoo species. It is well established through research undertaken at the University of Western Australia (Professor Hans Lambers) that wandoo is highly susceptible to changes in hydrology and thus any decline in wandoo and other groundwater dependant shrubs will have direct and potentially irreversible impacts on these important remnant woodlands.

Importantly, large amounts of putrescent materials will undoubtedly interrupt local fauna particularly pollinating insect communities that are important for maintaining the pollination of many species including all orchid species including those at Wambyn Nature Reserve.

This reserve has one of the richest assemblages of orchids in the eastern wandoo with over 50 species recorded for the reserve including a number of priority species. It is considered by botanists from the Royal Botanic Gardens in Kew, UK to be a major orchid habitat globally following several visits over the past decade to the reserve by Professor Mark Chase and Dr Michael Fay from Kew.

Please Note: The above information was provided by Professor Kingsley Dixon, Visiting Professor, The University of Western Australia, School of Plant Biology.

The proposed landfill facility will result in an unacceptable impact on the environment through direct loss of vegetation on site including likely species of protected flora and through indirect impacts resulting from the landfill including changes in hydrology, increases in weeds, pests and feral animals, and contamination of air, land and water resources.

Once again, having regard for the new information 60% of the landfill will not meet the separation criteria and although the applicant informed the EPA there would be 'no dewatering necessary', this is no longer correct, any dewatering will have a significant negative affect t on local flora

Fauna

Establishment of the site will require the clearing of native vegetation that is considered to provide habitat for protected fauna, namely Carnaby's Cockatoo. A bird list for the area surrounding the landfill site is extensive and includes other rare species: Red-tailed Cockatoo, Baudin's Balck Cockatoo, Western Yellow Robin, Black Shouldered Kite and Wedge-tailed Eagle.

The wedge tailed eagle (Aquila Audax) is found in the Wandoo National Park which borders the property selected by SITA and has been observed on Allawuna farm. It has a generalised diet and preys on animals according to their relative abundance and also eats carrion. This means that rats from the landfill and rotting meat in the waste could potentially be eaten and this would affect the local population and introduce disease and poisons into the wild animals that inhabit the park. As a native species the wedge-tailed eagle is protected under the provisions of the Wildlife Conservation Act 1950. A large flock of the rare Carnaby's Cocktoo uses this farm and adjacent areas. The cockatoos require a close association between breeding and feeding sites. They have been observed on many of the farms in the area, feeding on marri seeds and crops. Residents, who have gone to the fences of Allawuna farm boundaries from October onwards, have observed a flock of between 40 and 50 birds in the trees and on the grounds of the farm.

Nearby residents do not agree with the proponent that the landfill will have minimal impact on the flora and fauna within the region.

9.3 dust and particulates

It is important to note the incidence of hot dry winds in the summer months. These winds will spread odour and pollution all over the surrounding farms. They have the potential to spread contaminants onto the roofs of farms for miles around and will pollute the drinking water for our animals. Residents to the west of York, all collect the drinking water from exposed roof areas. With prevailing winds from the west and the unpredictable nature of willy-willies, the chances of surfaces being polluted by air borne dust, are very real. We woke one morning a couple of months ago to be covered in smoke from Denmark!!!

Residents have a common law right to fresh air, free from any added pollution.

9.4 odour

The proposal will result in the emission of obnoxious odours from this site. On a westerly breeze, the effects of this odour will be smelt in York Townsite as well as nearby landholders

9.5 noise

The noise of large vehicles entering and leaving the site at least every 10 minutes, six days per week for 12-13 hours each day will be unbearable and thoroughly destroy the amenity of the surrounding residents and people living on the farms, all the way up the Great Southern Highway from The Lakes to Allawuna farm, let alone the residents on Great Eastern Highway from the Welshpool and Landsdale SITA transfer stations to The Lakes turnoff. It will be impossible for the proponent to limit this noise effect.

9.6 landfill gas emissions

The safe collection of the landfill gasses emanating from such a huge landfill is most worrying. There is no room for human error. It is stated that the gas will be flared to convert it to the less than harmful carbon dioxide and when sufficient quantity and quality of landfill gas is being produced the gas may be used as fuel for electricity generation. There is no power grid to the west of York suitable to carry out this operation. The proposed landfill is situated very near to the Wandoo National Park and given the extremely hot summers with strong winds and thunder storms experienced in this area the idea of gas being flared or escaping is of great concern.

There have been too many 'accidents' in the landfill industry to warrant placing a landfill in such a vulnerable area.

9.7 litter

Again given the extreme winds in the district the containment of litter on a landfill site is extremely worrying.

9.8 groundwater & surface water quality

There has been little environmental information included in this application for planning consent. The applicant has not included any groundwater information. The groundwater component is integral to a landfill application as the pollution of the aquifer is certain to occur in varying degrees.

Information regarding the water issues has been gained from the EPA Referral Documents and the DER application for works approval. The fact is that none of this information is readily available to the public on the Shire of York website contrary to the TPS 2 parts 8.1 and 8.5. The Shire of York does not have the information required to assess this proposal.

The proposed landfill site contains Thirteen Mile Brook. This waterway drains into the Helena and Swan-Avon rivers, eventually running into the Mundaring Weir, which is used for human consumption. The western boundary of the property is the eastern boundary of the Mundaring Catchment area and the site is located above a significant groundwater resource that is of drinking-water quality. The

potential to contaminate the ground and surface water poses an unacceptable risk to the environment. The Helena River Catchment is located in the woodland adjacent to Allawuna Farm (given new information the catchment should cover much of Allawuna Farm).

One of the biggest potential polluting agents is the toxic leachate emitted from the landfill. The reasons why leachates are toxic is because there are no limitations on what can be buried. Organic matter, electronic waste and items like fluorescent light globes/tubes should not be put in landfill sites. These items are responsible for the great majority of toxicity in the leachate. It goes without saying that all glass, plastic, drink containers, metals, etc should be taken out of the waste stream before taken to landfill. All organic matter should be reprocessed and used as fertiliser/soil improver. While the SITA documents talk about recycling, there is no documentation or undertakings to show that any of the waste taken to Allawuna Farm will be subject to any form of recycling.

All landfill operations produce large quantities of toxic leachate. In the case of the Allawuna proposal, the leachate ponds are located uphill from the landfill site. This means all leachate needs to be pumped uphill to the ponds. In severe rain fall events, storm water and leachate will mix in the collecting area downhill from the landfill. Severe rain fall events like the one we witnessed on January 6th, 2013 when 40mm of rain fell in the area in a 30 minute period, will result in spillages. With the landfill in full operational mode of 500,000 sq metres, the area will produce 20,000 cubic metres (20 million litres) of water. If only a quarter of this accumulates at the bottom of the landfill (5 million litres), there is no known way in science or technology that any type of pump could handle these quantities. Spillages will happen.

Another area of leachate spillage is likely to come from liner failure. This can happen spontaneously but is more likely to happen as the result of operational mishaps or from earthquakes. There are many examples of this happening overseas. Earthquakes can rip the liners and even make the landfill cells slip down the hill. Rectifying these sorts of mishaps is difficult to achieve and will result in ground and surface water contamination.

What happens to these spillages? They will spread across the country side as the soil is a porous, gravelly type and it will absorb the contaminated water rapidly. The contaminated water that reaches the water table will, in all likelihood, find its way into the paleochannel system. The location of this system is largely unknown as SITA has not done any work to locate these channels. These paleochannels, both open and closed, are known to join the Helena River system which in turn runs into Manyeuring Spring and then on into the Mundaring water catchment area. Open channels show up in the landscape as soaks. There are several in the nearby area. To pollute these channels would be extremely unwise. The water that reaches the 13 Mile Creek finds its way downstream and eventually joins the Avon River. There is substantial documented evidence regarding the poor performance of landfill facilities with regards to leaking of contaminated leachate. Although current DER guidelines proposed a number of solutions to control leachate leakage, once these sites start to leak there is no way to rectify the situation. Leachate leaking into the groundwater could not be recovered and could lead to possible pollution of the Palaeolithic channels and the groundwater. The fact that landfill sites are no longer permitted on the Swan Coastal Plan demonstrates the considerable risk posed to surface and groundwaters, as well as soil, from contamination from landfills.

There is an acceptable amount of leachate leakage within the DER guidelines, with a landfill of this size it will equate to 2x44 gallon drums tipped into the 13 Mile Creek daily. This amount of leachate leakage is totally unacceptable. The York Water Supply from Scheme water will be contaminated.

Once again we have had to search through the application for Works Approval submitted to the Department of Environment for the "more detailed site investigations and particularly into groundwater and sub-soil conditions" as claimed by the applicant in their Supplementary Report. Please find attached a plan and cross section showing the Ground Water Flow, plotted from the Borehole information in the DER Works Approval showing that the GWF to the west into the catchment is now indisputably proven and so is more than ever grounds for refusal of this proposal.

Our expert advises "At a flow rate of 1.9 m/d leachate, if the landfill leaked, would reach the seepages west of the surface water drainage divide in just over six months. At an average flow of say 0.6 metres per day the time taken will be around 6 years to travel to the seepages. Considering the life of the landfill, its large size and the variable and permeable nature of valley fill sediments, there is a very real possibility the leachate will travel to the seepages in somewhere between the two travel times." **THIS IS NOT ACCEPTABLE.** The risk of contamination to the drinking water is too great.

The Precautionary Principle

It is an internationally recognised principle with a working definition of:

"When human activities may lead to morally unacceptable harm that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm."

Morally unacceptable harm refers to harm to humans or the environment that is –

- Threatening to human life or health, or*
- Seriously and effectively irreversible, or*
- Inequitable to present and/or future generations, or*
- Imposed without adequate consideration of the human rights of those affected.*

Common Law

Based on the principles of 'common law' the residents of west York have -

"The right to the enjoyment of their properties and their amenities."

These amenities include any changes in the air and water quality, noise, pollution and the altered value of the land.

All of these are in jeopardy because of this proposed landfill.

It should be noted that the Minister for Environment wrote in his Appeals Convenor's Report –

"The EPA noted advice from the DER that the Allawuna facility could be seen as a replacement for the proponent's South Cardup landfill, which is expected to be full by 2015/16. The DER also advised the EPA that there are other landfills, existing and proposed, that could meet the needs of the metropolitan area for the next 10 to 15 years and the proposal could constitute an oversupply of landfill space. In relation to planning processes, the EPA advised that these are matters for the relevant planning authorities. The EPA noted that the proposed facility is a 'SA' land use in the Shire of York's planning scheme, which means that the use is not permitted unless the local government has exercised its discretion and has granted planning consent after giving special notice."

It would appear that our beautiful 'First Inland Historical Town' could be ruined to assist a multi national company and their shareholders, for no purpose other than private commercial interest.

I request the Shire of York refuse the application for Planning Consent put forward by SITA Australia under part 8.6 (b) of the Shire of York Town Planning Scheme and prepare a case for 'the NO' to put before the DAP.

Yours faithfully



Beverley Hill

266



The Shire of York
PO Box 22
York WA 6302

Monday 25th May 2015

Attention: Shire Planner Kira Strange

SHIRE OF YORK	
FILE	P5.GEN.PP0.3.1
OFFICER	INITIALS
KIRA	[Signature]
25 MAY 2015 1147862	
REFERRED TO COUNCIL	
DATE	INITIALS

Dear Kira,

Re: Allawuna Landfill Amended Application by SITA Australia.

Please accept our submission on the above proposal. We will present information on this proposal under the following headings:

- History of the Proposal
- Environmental Information - Groundwater
- Town Planning Scheme No 2
- Policy Implication

Pre-amble:

As the State Administrative Tribunal stated in the summary of reasons for the decision on the 10th April to approve the amendment, "And, of course the proposed use does not change." and also: "the conclusion is that the essence of the proposal remains unchanged."

For these reasons I consider that nothing has changed that would require us to substantially amend our original submission against the proposal. The main focus will still be on the planning and environmental issues, but with more attention on the groundwater component, upon which this proposal should be assessed and planning consent refused accordingly.

The initial presentation of incorrect and misleading data by the proponent and its on going perpetuation over a prolonged period without correction appears to have been addressed by this amended application with the exception of the groundwater detail that is critical to this application.

The groundwater situation is now clear despite the way, and I quote from Attachment A, "some critical data has been omitted, obscured and concluded". Right from the very beginning this whole application, and most importantly the presentation of the geological and hydrogeological information could at best be described as inept, and at worst, deceptive.

History of the Proposal to the Present Time

Early in 2013 the applicant referred the proposal to the EPA. The base mapping upon which the project had been engineered was in gross error. Every report that relied on this ground information was similarly in error. This included the Appendix 6 Baseline Groundwater Monitoring Report and construction plans in the Allawuna Landfill Proposal Drawings file.

The EPA, Appeal Convenor and the Minister for the Environment have made decisions based on false technical data that is critical to this application adjacent to a public drinking water source area.

A development application was lodged with the Shire of York (SoY) in late December 2013 and subsequently a works approval application (WAA) was lodged with the DER in February 2014 inviting the DER to make a decision based on the same deficient data.

The SoY refused the proposal in March 2014. The JDAP similarly refused the application in April 2014 and SITA lodged an appeal with the SAT in that same month, April 2014.

SITA withdrew their original WAA from the DER in December 2014 as it was still deeply flawed in various aspects of the base mapping, site construction detail, materials and hydrology reporting. It would not have been approved by the DER.

SITA then lodged an amended application to the SAT in March 2015 and subsequently to the SoY in April 2015, resulting in this second submission on the proposal. A second WAA was lodged with the DER in April 2015.

Environmental Information - Groundwater

The groundwater component is integral to a landfill application as the pollution of the aquifer is certain to occur to varying degrees. This is borne out by the experience on the Swan Coastal Plain and is the reason for not allowing any more such applications there.

Incorrect and misleading groundwater information had previously been lodged with the EPA and the DER as described above. SITA's second WAA lodged with the DER in April 2015 is similarly flawed in aspects of the hydrology presentation. As it is quite clear that no groundwater information was included with the SoY development application then none was made available for public scrutiny during the advertising period closing on the 25th May 2015.

As this is a requirement for planning consent under the Town Planning Scheme, it appears the Shire of York does not have the information required to assess this proposal under the Town Planning Scheme 2 Part 8.1 and Part 8.5.

To prove the veracity of this amended application AVRA has continued to engage experts in geology and hydrogeology, given the misrepresentation previously encountered with the application. This has confirmed our earlier reports and conclusions as to why this site is not suitable for a landfill.

Golder has drilled 10 more bores to supplement the original 14 by ENV. Interestingly they do not directly report the GWL for bores GMB08, 09 & 10 in their table included in Attachment B. Fortunately, scrutiny of the bore logs for these holes confirm the GWL's as used in the plotting and contouring of the water table. These GWL's are also shown in Attachment B.

The drilling of bores GMB08, 09 & 10 has provided confirmation and now makes it clear and unequivocal that the groundwater under the landfill site drains directly to the Helena Catchment. The most westerly bore GMB08 has a groundwater level (GWL) that is lower than all of the other twenty one bores to the east. The average GWL under the landfill ranges from 10m to 30m above the GWL at GMB08 on the catchment boundary. The groundwater grades consistently downward from the eastern end of the landfill to the surface seepage at the DoW bores in the Helena catchment.

See Attachment B for the plan and section view of the groundwater flow generated from the plotting of the GWL's of all twenty four bores reported by Sita's consultant Golder. This bore information is in the current WAA (Appendix E1) being advertised by the DER and is the basis for the geological and hydrogeological reports as attached.

Attachment A is a report by Landform Research in support of this submission.

Attachments A & B are to form part of this submission.

Town Planning Scheme No 2

- **Omnibus 50**
This is not relevant or applicable, as it was not approved at the time of the development application.
- **Clause 3.1.2 & 3.2.4**
That the SoY chooses to interpret the proposal as a "use not listed" does not make it the correct interpretation. The use is clearly noxious industry despite the semantics being played with the vague TPS. We have written advice from the WAPC to this effect. The SoY is the only local authority in WA to view it differently. All the agencies responsible for a landfill's licensing and regulation classify it as a noxious industry. The applicant itself regards the proposal as noxious industry, their alternate of a "use not listed" is a sham to cast it in a more favourable light. Allawuna should be re-zoned to Special Purpose to qualify for consideration, just as the SoY's waste station had been re-zoned to Special Purpose.

- **Clause 4.15.1 & 4.15.2**

- (a) This will not ensure the continuation of agricultural use on the land. Further applications for expansion in size and for higher waste classifications to handle more toxic material will follow within the first few years of operation.
- (b) This proposal is of no benefit to the district. It is a result of expedience by the applicant bought on by Perth's failure to plan for the future. It is detrimental to the environment by its very location.
- (c) The applicant fully realises the potential impacts on tourism by trying to assuage the damage in using unmarked trucks and unmarked site entry. The trucking can only increase in volume as Perth grows.
- (d) This proposal will have a far reaching effect on the local amenity and "brand" of the district. Tourism, small business, heritage values, lifestyle and agriculture are all at risk by locating this landfill at the gateway to York. Perceived or not, evidence the total opposition to the proposal from all strata's of the community.

- **Clause 8.1 & 8.5**

The proponent provided no environmental information to the SoY, particularly the groundwater component that is critical to a project of this type and size adjacent to a public drinking water source area. The community has had no opportunity to comment on this fundamental part of the application. *The SoY has not been given the information required to assess this proposal as required under the TPS2 and for this reason alone should refuse planning consent under Clause 8.6 of the TPS.*

- **Clause 8.5**

Traffic generation – If there were prospects of the York to Lakes Road being upgraded to a Roe Highway standard this may not be an issue. It is certain that this will not happen in the short term. The applicant still does not include the empty returning trucks in their statistics. The applicant points out the expanding population figures for Perth but not the subsequent increase in waste and trucking. The applicant uses light vehicle numbers to dilute the figures.

Reducing the scale of the tip and its life to 20 years is disingenuous, as SITA decline to rule out lodging further applications, which will follow in due course. SITA's 30% market share of the waste industry will top one million tonnes per annum within 10 years, and destined for trucking to Allawuna. The true increase in *road train traffic* is in the order of 400% over this time.

- **Clause 8.11**

Planning consent should not be granted pending approval of further detail or information. The applicant has previously provided grossly incorrect and misleading technical information to the EPA and the DER. In this amended application the applicant has again withheld the critical groundwater information from the SoY.

Considering the selective amendment of certain aspects of the applicants documentation it beggars belief that these actions are not concerted and calculated to mislead. I again invite the SoY to examine the lodged documents on the DER website to ascertain the veracity of the information provided by SITA and reported on by AVRA and their consultants.

Policy Implications

State Planning Strategy 1997

- Makes no reference to noxious industry (landfill) on agricultural land.

Draft State Planning Strategy 2012

- Belatedly acknowledges the need for future planning of waste disposal, but does not promote an ad hoc approach by private developers on unsuitable land and based on expedience.
- Acknowledges that existing buffers are inadequate.
- *It is currently a draft document and not applicable to this application.*

Avon Arc Sub-Regional Strategy 2001

- This strategy promotes everything except metropolitan waste.
- The applicant endeavors to link regional waste with metropolitan waste. It is an absurdity to locate a waste facility at the extreme western edge of the area that it is to service. The viable distance for travel for the light regional waste trucks in use is around 40km. Would Cunderdin be happy to travel 120km while York travels 20km ?
- The regional waste issue should play no part in the assessment of this application.
- The Avon Arc Strategy is similar in every aspect to the York Community Strategic Plan. The York Community Strategic Plan is not challenged by the applicant.

SoY Local Planning Strategy 2007

- This strategy makes no reference to metropolitan waste.
- The applicant makes the comparison of a metropolitan waste disposal site with an extractive industry. The difference is that mine sites and quarries have to lodge rehabilitation bonds and remediate the site upon completion. Waste dumps create pollution and in the event of large scale contamination there is no going back, the district has to live with it. Similar noxious industries such as a piggery or chicken farm can be closed down and the land re-mediated in the event of disaster, not so a waste disposal of this magnitude.

- The fragile attempt to comply with this strategy is compounded by the complete lack of any effort to comply with the York Community Strategic Plan.

York Community Strategic Plan

- From above it is heartening to see the applicant admit by omission that this proposal does not comply with the SoY vision for the future.

SoY Town Planning Scheme No 2

- Discussed above – this proposal does not qualify for approval under the existing zoning or any other clause of the scheme.

Statement of Planning Policy No 2

- Section 5.4 of SPP 2 Environment and Natural Resources states:

(iii) Ensure that land uses that may result in land contamination such as storage of chemicals, waste, other toxic materials or liquid fuel are not permitted unless it can be demonstrated that the proposed activities will not result in contamination of land or adverse effects on future land use.

- We consider that the landfill operation will not meet this provision We consider that the environmental impacts of this landfill will give rise to undue and adverse amenity impacts. This will result in the contamination of the underlying aquifer that drains to the Helena Catchment, a public drinking water source area.

Economic

- There is no economic benefit to York from this landfill. It is a private operation run for the benefit of its shareholders. The only benefits from landfills for the surrounding communities are those operated by the local authorities themselves.
- The 8-10 site employees (as recorded in early discussions with the SoY confirm) will be existing SITA employees. The truck fleet and drivers will be sub-contract and based in Perth. SITA's employment figures have always included off site personnel.
- Infrastructure will be tendered out and the same few experienced and capable contractors based in Perth will vie to win the work.
- This amended application should stand alone to be assessed without considering a regional waste solution as discussed in the Avon Arc Sub-Regional Strategy above. Why would the SoY support this location for a regional tip that funnels every rubbish truck in the wheatbelt through the York townsite ?
- The economic effect will be a net negative for the SoY considering it's historic and agricultural standing.

Social

- A large scale metropolitan waste dump with a guaranteed expansion both in size and class of waste accepted ie toxicity.
- A proposal with inherent environmental, traffic and amenity issues.
- A community known for it's heritage, history, tourism, small business, lifestyle and a vibrant agricultural future. A getaway for tree changers, day trippers and visitors.
- There is no comparison between these two regimes.

Environmental

- Comment on potential pollution from noise and deterioration of air quality we will leave to other submissions to address.
- Comment on the pollution of the above ground water we will similarly leave to other submissions to address.
- The applicant points to the qualities of the clay to prevent the filtration of the leachate to the underlying aquifer. They provided only one clay sample for testing, did not state where it was taken from, and declared it would take 178 years to penetrate. In our previous submission, Rockwaters Pty Ltd calculated, using the applicants own information, that the correct figure is 13 years for the leachate to reach the aquifer.
- This is also borne out by the applicant's own figures on the existing contamination of the aquifer by fertiliser chemical traces. This land has only been cleared since the 1960's and intensive chemical application has only been applied since some 20 to 30 years ago. It is quite apparent that the filtration rates are a lot faster than the applicant has the ability to correctly calculate.
- See also Attachment A page 15 – it will take between six months and six years for the landfill pollution to reach the surface seepage's in the Helena Catchment based on the applicant's own data.
- If pollution is now apparently unacceptable to Perth, why would you place a landfill in a location that drains into the Helena and Mundaring Catchment ?
- If pollution is now apparently unacceptable to Perth, it should not be deemed acceptable for the SoY.

Liner Leakage Rates

- No manufacturer of landfill liners will guarantee that they will not leak. The accepted maximum rate is about 10 litres/day/ha.
- This is due to poor weld seams, installation defects, pin holes, slices and punctures and generally tears caused by machinery and cutting materials dumped in the landfill.
- On a site this size that equates to 180,000 litres a year. If this is the accepted rate it is not a stretch to believe the actual rate will be higher, based on experience on the Swan Coastal Plain.
- The rainfall being less here than on the coastal plain equates to less dilution of the leachate and greater pollution rates.

Rural Dependence on Water

York town site water is supplied from the Mundaring – Helena catchment, now under threat by this application. The rural properties have no water on tap, rainwater and underground water are the only option. Any contamination of the underground water will have an irreversible effect on the viability of living on the land, both for humans, stock and agriculture for food production.

Summary

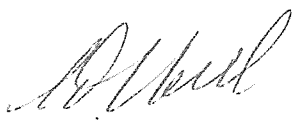
I believe the proposal to locate a landfill of this scale in a valley with a high water table and a direct flow of underground water into the Helena River catchment, a public drinking water source area, is unacceptable.

To consider a proposal that:

- Is located on an aquifer that flows directly into a Public Drinking Water Source Area is unacceptable.
- Does not comply with any of the Policy Implications is unacceptable.
- Fails to provide the information required under the TPS2 is unacceptable.
- Is advertised to the community deficient in critical information is unacceptable.

For all of these reasons we respectfully invite you to recommend that this application be refused planning consent and this decision be carried forward to the JDAP.

Yours faithfully,



Denis Hill
for the Avon Valley Residents Association

Attachments:

- A: Report by Landform Research
B: Plan & Sections of Groundwater Flow to the Helena Catchment

Cc: It is intended to widely circulate the information related to the groundwater to the Premier's Office, the Minister for Water, the Minister for the Environment and acknowledged experts in this field in the DoW and DER. However we will delay this until the close of DER submissions on the 1st June 2015. AVRA will copy the SoY on our DER submission and its circulation.



REVIEW OF THE DATA PRESENTED BY SITA IN SUPPORT OF A PROPOSED LANDFILL – ALLAWUNA FARM, YORK

20 May 2015

Background and Conclusions

SITA have undertaken site studies from 2012 on the Allawuna property at York, with a view to potentially locating a landfill on site. This has culminated in the production of a report prepared for a Works Approval Application dated March 2015.

Whether the proposed Allawuna Landfill is located within the Helena Public Drinking Water Catchment is potentially critical to the future water supply of the Goldfields and agricultural region.

From a scientific perspective, I have major concerns with the way some critical data has been omitted, obscured and concluded.

I TOTALLY disagree with the conclusions reached by SITA and their consultants with respect to the groundwater flows in relation to the Helena Catchment.

All evidence that I have reviewed supports the contention that the landfill lies within the groundwater catchment of the Helena Catchment and flows are relatively fast to the west, directly towards the catchment.

I could not find any evidence to support the conclusions in the documentation, prepared by SITA or their consultants, that there is no groundwater connection.

Companies have an inherent responsibility to consider and report on environmental risk, and consultants have professional duties to provide all relevant material, considerations and advice whether commissioned to or not.

From the evidence available I believe that there are situations relating to the proposed Allawuna Landfill reporting where some of these principles and responsibilities may have been compromised.

Drilling and mapping from 22 August 2012 prepared by ENV Australia (Figure 2 in their report) excluded Borehole MB02 (removed) and yet still showed the groundwater contours draining west to the Helena Catchment.

Since that time, the documentation and work completed and provided by SITA and their consultants has apparently been designed to hide or exclude scrutiny of the presence of valley fill palaeochannels with direct connection to, and inclusion within, the Helena Public Drinking Water Catchment, the presence of which is proven by publically available information and the studies completed by SITA consultants.

The lack of openness has resulted in exclusion of all borehole data from west of Thirteen

Mile Brook from mapping and sections, timing the drilling - fieldwork and reporting to justify the lack of information or conclusions, apparently restricting scope of works and by providing reduced or minimal conclusions relating to regional groundwater flow.

The lack of openness culminated in the failure to provide any data based groundwater flownets west of Thirteen Mile Brook and no geological or hydrogeological sections, and the provision in at least two parts of the documentation of a "Conceptual Hydrogeological Section" that is false and misleading in the way it portrays the land surface west and groundwater west of Thirteen Mile Brook.

I note that the geotechnical work completed by Golder on the actual landfill site east of Thirteen Mile Brook is very thorough and extremely diligent and provides comprehensive data for the design of the landfill.

I also note that, however comprehensive the data east of Thirteen Mile Brook, the decision making processes will need to be determined on the environmental risk to the Helena Public Drinking Water Catchment, bearing in mind the landfill is located wholly within the groundwater catchment of the Helena River and the leachate pond and landfill are only 150 metres and 300 metres respectively from the edge of the main risk zones.

Whilst it is difficult to quantify the environmental risk of locating the landfill within the Public Drinking Water Catchment, Government policies are not to locate such developments in drinking water catchments. My view is that risk minimisation and precaution should prevail.

Lindsay Stephens

Lindsay Stephens BSc Geology), MSc (Plant Ecology)

Mem Aus Geomechanics Soc – MEIANZ – FIQA

REVIEW OF GEOLOGICAL AND HYDROGEOLOGICAL DOCUMENTATION PROVIDED IN SUPPORT OF THE PROPOSED ALLAWUNA LANDFILL

1.0 Methodology

This review is based on SITA documentation supplied to me by community members by way of a CD in March 2015. Other information is taken from documentation that became publically available during the earlier application processes. All material reviewed was prepared by SITA or their consultants.

Published information was also reviewed and a site inspection made from outside Allawuna on the west in State Forest, and on the east with permission of that landowner.

Local knowledge, aerial photographic interpretation, map examination and a review of the published geology was used. No access to the landfill site has been conducted.

Whilst I have been requested by some members of the York community to provide my thoughts and comments, I have not sought, nor been provided with, any payment for past or current information or attendance at meetings.

The comments are not to be taken as support or opposition to the proposal, but rather as an interpretation of the data to ensure that all facts are considered through due scientific process. This is critical to the State, because of the proximity of the Public Drinking Water Catchment.

All I have done is provide the missing published and field information, and used SITA and Golder data to draw the Groundwater Contours and sections that should have been completed as part of any normal hydrogeological study.

2.0 Critical Factor

The critical factors are the ancient drainage system, *Palaeo Drainage*, that could be as old as the Permian with later drainage systems such as during the Eocene and current times imprinted on that drainage.

The Australian landscape, in particular the Yilgarn Craton on which the Plateau is developed, is a very geologically old landmass that has been subjected to drainage, valley fill, peneplanation and erosion that have been repeated a number of times through geological history.

The geomorphological and geological formation is nothing unusual and occurs all across Western Australia, other parts of Australia and the globe.

The potential presence of palaeochannels should have been alerted to prior to, or during the SITA studies. For example see Published information in Figures 2 or 8 – 11.

No mention of the potential for Palaeodrainage was made in the initial SITA documentation.

Mention has now been made in the latest documentation, but from this review it appears that any data relating to the palaeodrainage is either ignored or obscured and certainly not considered in any scientifically rigorous manner.

The critical factor therefore becomes;

Does palaeodrainage locally exist, and, if present, what impact does that drainage have on ground or surface water flows?

The potential for palaeochannels was first raised in notes prepared by Landform Research and dated March 2014.

In those notes all the evidence available (including SITA data) available at that time supported the conclusion that the landfill was located in the palaeovalley catchment of the Helena (Mundaring) Public Drinking Water Source Area.

It was verbally acknowledged by SITA that they had a copy of the notes.

Since March 2014 a significant amount of additional work has been completed by SITA and their consultants, which supports the Landform Research Notes of March 2014 and yet the data is either not used, or obscured to convey the impression that the palaeo valleys do not occur and that the groundwater flow is ***erroneously*** to the north west and not towards the Helena Catchment.

Instead of a full scientific consideration of valley fill deposits and the groundwater flows, it might even be suggested that there has been a deliberate policy to distort or hide the scientific data and conclusions. It is not clear who may have taken that action or for what purpose.

3.0 The Site

The proposed landfill is located on the western edge of the York Shire on the most western agricultural land that adjoins State Forest 13 and the Helena Catchment that feeds to Mundaring Weir Water Supply.

The site lies at the top of the adjoining surface water catchment that drains to the Avon Swan River System, just east of the drainage divide.

4.0 Geology

From published information, DOW Report WRT 34 and local knowledge, the Allawuna area is a mixture of granite basement, palaeochannel valley fill and laterite peneplain remnants. Figures 8 – 11.

The granitic basement on which the landfill is to be constructed is typically highly undulating with outcrop at or close to the surface, with other locations having deep regolith as indicated in the bore hole data.

The valley of Thirteen Mile Brook lies on an ancient valley filled with sediments that drains west to the Helena River.

The evidence presented and published geological mapping suggests that generally west of Thirteen Mile Brook is sedimentary valley fill and east of the Brook is regolith on granite basement. These geological materials have different geotechnical and hydrogeological

attributes. Figures 1, 2 and 8 – 11.

The regional structural geology has been interpreted from aerial photography. These are shown on Figure 1, and provide the lines of weakness along which the palaeo-streams were able to erode. The structural control of the watercourses and valleys is obvious on DOW mapping (Figure 1), shown by the straight lines of the valleys.

5.0 Palaeochannels – Valley Fill

Palaeochannels are simply ancient valleys that have been filled by sediments. The sediments are typically sands and clays.

The valleys were formed millions of years ago and were then filled by stream and lake deposits, which can then be further eroded and filled and the sequence repeated several times.

Palaeochannels are very common across the Yilgarn Craton and are well known for water resource, clay and sand resources, gold and uranium resources. There is nothing unusual in them and they have been widely studied and reported on. Figures 8 – 11.

With the movement of Antactica away from the south coast, as the last phase of the breakup of the greater Australian continent, the Yilgarn Craton was tilted and uplifted allowing for additional erosion of the valley fill deposits.

With uplift of the land the valley fill sediments were frequently elevated, the water flows reduced or reversed. This left the valley fill sediments as preserved features that were then partially eroded in more recent times. The valley fill palaeochannels are common through the western Wheatbelt including west of York and Talbot River, locally Dale, Gingin, Bolgart, Jelcobine and through to Katanning. Figures 8 – 11.

They are valley fill or palaeochannels represented by sediments that have not been eroded.

I have included figures from the Department of Water Helena River Salinity Situation Statement WRT 34 as Figures 8 – 11 to provide context to the location and background and to show that the Department of Water recognises the presence of palaeochannel and valley fill deposits as does the Western Australian Geological Survey (see later and Figure 2).

The sediments take the form of infilled river valleys, alluvial sandy clays, deep sands and lake beds. They frequently have later infilled river channels cut into them and are often now only represented on a hill in an elevated position where erosion has been reduced and not lead to their removal.

They are readily recognised in the field by surface sands in areas dominated by granitic loams (York Loams) and being soft and not lithified by gently sloping landscapes and soils that are quite different to the steeper York Soils. They are also readily recognisable from the typical deep laterite profile developed on granite. Figure 1.

Where the valley fill sediments have been removed, the valley can be cut back to the original valley form prior to infill such as granite basement, as through the York Area . In other situations the valley fill deposits remain as hills or ridges and drainage divides such as at Bolgart and Kokeby.

For example extensive kaolin clay beds lie in the Bolgart, Maitland and Kokeby areas and river sediments at Action Sands and Great Sands Supplies on Goods Road not far west of this site. See also Figures 8 – 11.

The sediments filling ancient valleys are typically variable and often contain a large component of alluvial sediments that can be horizontally bedded or lensing and are typically very good aquifers.

There are many lines of evidence that can be used to determine the presence of palaeo channels and valley fill deposits.

6.0 Evidence for the presence of Palaeo Valleys

All these lines of evidence are independent of each other. In scientific investigation, when independent lines of evidence line up and support each other without contradiction there is an increasing degree of certainty that the findings and interpretations are correct.

All evidence supports the presence of valley fill palaeochannels and the conclusion that the proposed landfill lies within the groundwater catchment of the Public Drinking Water Catchment.

No evidence contradicts the presence of valley fills west of Thirteen Mile Brook and a palaeovalley connection with the Helena Catchment.

The investigations completed on the site add additional evidence and confirm the palaeovalleys and the flow of groundwater to the Helena Catchment.

6.1 Local knowledge

Valley fill palaeochannels are well known to occur in the local area, to the north and south. They are locally typified by the use of wells as a source of water rather than dams because the valley fill sediments do not hold water to support dams.

It is understood that there are wells on Allawuna near Thirteen Mile Brook. From aerial photography there appears to be only one dam west of Thirteen Mile Brook on Allawuna. Figures 1 and 8 – 11.

6.2 Geological Structures - Springs

Geological structures have been plotted from aerial photography. These are faults and other lineations that often result in rocks more easily eroded and lead to valleys, and may give clues to palaeo valleys. The structures are drawn on Figure 1. It can be seen that the structures run across the landfill site and Allawuna Farm.

Manyuering Spring and the soaks to the west of Allawuna Farm occur on the junctions of the linearments and probably result from seepages from valley fill deposits where they hit the granitic basement.

The location of the springs have been plotted Figures 1 and 2.

The geological structures are also reflected in Golder Mapping, for example TP94 where a depth of 20 metres of sand was recorded by Golder. (E1, Golder page 11, paragraph 1 and 9.0 Remote Sensing, paragraph 1)

6.3 Western Australian Geological Survey Mapping

Valley fill deposits are mapped and occur widely across the local area by the Western Australian Geological Survey as “QRC – Colluvium including valley fill deposits, variably laterised and podsolised”, “CZS Sand overlying laterite – yellow white or grey and often associated with drainage courses” and “CZL – Laterite – chiefly massive but includes overlying pisolitic gravel and laterised sand”.

The laterised sand is often developed on sandy palaeochannel or valley fill sediments, whereas the more massive laterite is more frequently developed on deeply weathered granitic basements.

It can be seen that west of Thirteen Mile Brook all geological mapping is shown as valley fill materials with the exception of the scattered granite. Some valley fills are also shown under the landfill and to the north of the landfill.

See E1 Golder Figure 4 (Attached as Figure 2) and Figure 10.

This is supported by Golder in E1 who make the point that Hole TP94 extended to 20 metres deep through sands. (E1, Golder page 11, paragraph 1 and 9.0 Remote Sensing, paragraph 1)

6.4 Low Gentle Landforms

Landforms developed on the soft and unlithified valley fill sediments are gently sloping landscapes and soils that are quite different to the steeper York Soils. For example note the steep gradient soils developed on granite shown by the contours in Figure 2 taken from Appendix E1 Golder where the contours on the red illustrate granite rocks on part of the landfill and to the east and west at Mount Observation.

These form steep tributary and first order valleys. Compare that to the more gentle contours of the valley fill deposits shown by all the land west of Thirteen Mile Brook and note that the more gentle slopes continue west as the catchment divide of the Helena Catchment. Figure 2.

6.5 Low Surface Divide

The surface water drainage divide between the Helena Catchment and Thirteen Mile Brook is very low and gentle and would raise the impression that the divide was not in granite basement.

6.6 Surface Sands

Valley fill deposits are typically deep sandy kaolin clay. On exposure to the more recent erosion the clays washed from between the sand grains leaving sand on the surface which is often washed to form new valley fill deposits. The white sandy areas are shown on Figure 1. Note how the sandy soils of the palaeochannels correspond to the regional geological mapping, interpreted geological structures in Figure 1 and the more gently undulating landform in Figure 2.

6.7 Wells – The Lack of Dams and increased soil permeability

Palaeochannel sediments typically do not support dams, and were often in the past accessed by wells. That seems to fit locally. Where are the dams west of the Brook? Except in the south outside the palaeochannel. (Figure 3).

6.8 Flows in Thirteen Mile Brook

It is understood from local persons that Thirteen Mile Brook only flows following significant storm events and does not flow all winter. If this is the case then it indicates that the bed and regolith over which it flows are permeable with downwards leakage. This is typical of valley fill deposits and explains the lack of dams in that regolith and west of Thirteen Mile Brook.

6.9 Soil Types

Soils developed on granite basement have very typical profiles. The soils belong to the York Series of soils that have been mapped by the Department of Agriculture and Food.

Typically they show loam or gravelly loam surface horizons, yellow to brown sandy clay subsoils overlying mottled red and white basal subsoil horizons above the granite basement. Often there is a sandy layer immediately on top of the granite basement that forms an aquifer and is developed as a result of the removal of clay, leaving sand.

The red and white mottled basal clay originates from the regular wetting and drying of the subsoil and results from the presence of the species of iron oxide and its reduction to form the white clay.

On dolerite the soils are much more red brown in the upper horizons and have less quartz, due to the increased proportion of mafic (iron rich minerals) in dolerite compared to granite.

The typical granite based soils are shown in Appendix D of the SITA documentation prepared by Golder. Holes such as TP11, TP 17, TP18, TP19, TP21, TP22, TP25, TP29, TP88 for example.

A number of soils are quite different. For example TP84, TP94, BA35, BA37. Notice how the soils are yellow to depth and have no mottled red white zone. This indicates that the soils are deep and much more freely draining with no wetting and drying soil horizon in the depths excavated.

Hole TP94 was, for example, determined by Golder to have 20 metres of sandy soil eg Appendix D Golder page 14, paragraph 3 or. (E1, Golder page 11, paragraph 1 and 9.0 Remote Sensing, paragraph 1). Notice that Golder even suggest that Hole TP94 is a valley fill deposit.

What the soil testing indicates is that valley fill deposits do occur on site, probably in a very minor way under the landfill but my interpretation of Borrow Pit 1 is that it is probably mostly on a valley fill based on the Golder soil samples (Appendix D), and that agrees with the published geological map. See E1 Golder Figure 4 (Attached as Figure 2).

It is noted that Golder used cone penetrometer testing of the landfill site. Whilst that method is good and appropriate for engineering design it is of low usefulness in relation to determining the geology. For example it has difficulty distinguishing between hard clay beds in summer and rock areas when refusal is met.

6.10 Drill Hole Data

Holes were drilled and reported on in the ENV Report of 19 October 2012 that is included in Appendix E1 of the SITA documentation. The problem with the ENV Report was that the land surface contours were clearly incorrect and did not correspond to AHD or published mapping, making independent interpretation difficult.

In that drilling program Hole MB02 was drilled and was dry. Being dry was a highly significant finding as it determined that the water table was lower than the base of the bore and enabled the groundwater contours to be determined. For some reason the bore was removed from the ground and all data excluded.

The bore log remains in the Appendix A of the Bowman and Associates Baseline Groundwater Monitoring Report included in E1 of the SITA documentation.

Even though the groundwater contours excluded Bore MB02 in the ENV Report, the contours in that document are shown in ENV Figure 2 (prepared on 20 September 2012) which clearly show the westward flow of the groundwater through the divide as part of the Helena catchment.

That data was taken and put into a document that included a groundwater flow net and section lines prepared by myself, titled and dated 4 March 2015, "Comments on the General Geology of Proposed Landfill Site".

Additional holes were drilled in December 2014 with a further four drilled in March 2015. It is not clear why 6 of the ten holes were drilled in December and all those west of Thirteen Mile Brook, that would provide data on the regional groundwater, were not drilled until March 2015 about the same time that the SITA Report was being prepared.

Even though The Scope of Work listed by Golder in 4.0 Scope of Work in E1 page 2 listed drilling 10 additional groundwater monitoring wells it appears that only 6 of the 10 were drilled in December 2014 with the remaining four holes, all those west of Thirteen Mile Brook being drilled in March 2015. The location of the drill holes is shown on Figure 2 of the Golder Report in Appendix E1 and included here as Figure 3.

The drill hole data for the holes west of Thirteen Mile Brook confirm that the groundwater flows west directly to the Helena Catchment and that there is a

groundwater divide between holes GMB08 and GMB09 with groundwater flowing to the north from GMB09 and south west from all other holes and the site.

See Figure 3 for the location of the unreported holes.

6.11 Department of Water Helena Catchment Study

The Department of Water Salinity Situation Statement, May 2007 Report WRT 34, highlights the palaeochannels and valley fill deposits to the east of the catchment and makes the point that the groundwater catchment needs defining in the Talbot Brook area which is just south of Allawuna. Figures 8 – 11.

7.0 Inconsistencies

There are a number of inconsistencies within the reporting.

In isolation these may be considered to be errors, or inadvertent omissions, however taken collectively they all show the same thing.

The data for the bores and any suggestion that the groundwater flow is to the west is difficult to find, provided in such a way as to make the information obscure, ignored or simply provided with obviously incorrect interpretations.

The following points are made.

1. All Appendices have text names on the digital data. The reports dealing with the geology and hydrogeology have only file numbers making it less obvious to a reviewer and more difficult to find the data. That may have been inadvertent but it raises a question.
2. Drill Hole MB02 was drilled in 2012? Its data showing no water to 288 metres AHD was ignored in the ENV Report of 19 October 2012 and in Figure 2 of that report. See Appendix E1 of the SITA documentation.

Bore Hole MB02 was located adjacent to the Allawuna property boundary and was removed from site and, apart from the bore log, has been ignored in all the tables, subsequent data and reporting.

The water table in MB02 was not intersected down to 30 metres. The description of the bore log would suggest palaeochannel sedimentary sediments. The water table must be below the 30 metres of bore hole (ie <288 m AHD), proving the divide of the Helena catchment at that point are remnant palaeochannel sediments.

Ignoring a result that does not comply with a particular point of view is unscientific and the exclusion of the data from Figure 2 of the ENV Report goes against hydrogeological and geological principles. The inclusion of MB02 into Figure 2 of the ENV Report in Appendix E1, would clearly have shown groundwater flow through the divide in the Helena Catchment.

3. Golder states that hole GMB08 is a redrill of MB02 for control (Appendix E1 page

6). Even though it was provided as a redrill of the important Bore MB02, which was removed, GMB08 is totally ignored in terms of its groundwater elevation in the Golder reporting. It is not included in any section or on any map.

4. The redrill is even discussed in the Golder report at 11.1.1 on page 13 of Appendix E1. Golder states that the key point of the redrill was to determine the groundwater elevation so why was that not mentioned?

Notice that Golder state that “GMB08 showed groundwater at about 18 metres below land surface”. They then state that “more time series groundwater level data is required before conclusions are made.” The data was not provided on any groundwater contour flownet or any hydrogeological section provided.

Well, its now the end of May 2015. There has been several months since March 2015 so where is the data which now should be supplied for GMB08 and for all holes GMB07 to GMB10?

Moreover, this and holes GMB07 – GMB10 are the critical holes. The groundwater in GMB08 is shown as about 17.8 metres below ground surface on 16 March 2015.

That places the groundwater level as $231.46 - 17.8 = 296.6$ AHD. The groundwater was measured three days after the first logging (drill log sheet) and even if drilled just prior to the first logging would have had three days to settle and was therefore valid.

The elevation of the groundwater level is near the lowest recorded on site and the lowest south of the drainage divide and therefore of great importance, but ignored. See Figures 4 and 5.

5. Bore holes GMB07 – GMB10 were not drilled nor logged until March 2015 even though Bores GMB01 – GMB06 were drilled and logged in December 2014.

Golder state that their scope was to drill ten holes, presumably Holes GMB01 to GMB10. Why were the holes west of Thirteen Mile Brook not drilled until just before the report writing; So the data could not be reported on?

It would be unusual to set out to drill ten holes, drill six holes, remove the drill from site and then return three months later to drill the other holes which all happen to be west of Thirteen Mile Brook. Inconsistencies raise questions.

The only mention of the critical Holes GMG07 to GMB10 is in the logs attached in Golders report in E1 and the location shown on Figure 2 of Golder Report in E2 and attached here as Figure 2.

The water tables were measured and are attached in the bore logs and can be used. The groundwater levels GWL clearly show groundwater flow directly to the seepages in the Helena Catchment. Figures 4 and 5.

The bores were installed as monitoring bores and since March 2015 (or December 2014) there is adequate time for the monitoring data to be measured, and reported on.

The use of the data for GMB10 is valid because the summer to winter difference in

all other bore holes is around 0.3 metres.

6. No groundwater contours west of Thirteen Mile Brook, just 300 metres from the edge of the landfill and 150 metres from the edge of the leachate pond is provided, and no data or field based geological or hydrogeological sections are provided.
7. The drill hole log of GMB08 is shown as saprolite. Golder did offer for me to review the samples but that was not taken up immediately. In mid May I took up the offer but have not heard if the offer remains open.

Weathered granites and depositional materials can be difficult to tell apart.

The bore logs note “chips of 2 mm. The granite in this area is a fine grained adamellite rock (Geological Survey mapping attached as Figure 2), but also includes microcline (a feldspar), megacrysts; much larger crystals. No larger crystals are reported which raises the question on whether the 2 mm grainsize is the normal quartz grains that would be expected from weathering of the rock with all the feldspars having weathered to clay as seems likely and at 33 metres of depth may suggest sedimentary redeposition.

If this is a normal deep laterite weathering profile on granite basement, the description would not appear to match. A feature of deep weathering during laterisation is the dissolution of quartz in the upper profile and changes to the composition of the feldspar to, for example, gibbsite. None of this is described or appears present. The description does not change with depth even through 33 metres of material.

On the basis of the description a likely explanation is a valley fill deposit of feldspar and quartz grains shed from the nearby fine grained granite which would explain the depth with no in situ secondary changes to the weathered materials. Without examination of the material in the field, the bore log of GMB08 should be viewed as potentially “inconclusive”.

Even so, the description in the bore hole log does not change the water table elevations which are conclusive in showing the westwards flow of groundwater.

8. The Groundwater monitoring and flownet as shown by Golder Figure 6 in Appendix E1 is dated August 2014.

The flow net is seven months out of date in relation to the report and does not include any bore holes drilled by Golder (Holes GMB01 – GMB10) even though the bore logs are provided in the Golder Report in Appendix E1 of the SITA documentation.

There are no groundwater contours west of Thirteen Mile Brook.

I have updated Figure 6 as my Figure 4. It can clearly be seen that there is a groundwater divide to the north west between GMB08 – MB02 and GMB07 – MB01. Where the groundwater flows northwest and to the south the groundwater flows west as part of the Helena Groundwater Catchment.

This is also shown in Figure 5 for a more regional view and confirmed by independent plotting by Denis Hill from a survey level perspective.

9. The summary sheet at the end of the Golder report in E1 does not contain any logo so it is unclear who provided the report on the water monitoring. That may have been inadvertent.
10. Perhaps the most erroneous document is the “Conceptual Hydrogeological Section” which is attached as Figure 7 in the Golder Report in Appendix E1 and is repeated as Figure 3 in the Works Approval Supporting Information.

It is not known who or why the section was drawn but it does not match either the land surface data or the drill hole data particularly west of Thirteen Mile Brook.

Golder Figure 7 is also incorrect and dated 2015-04-01, presumably drawn on 1 April 2015. That is after all the drill hole and groundwater data for all holes was available (including GMB01 – GMB10). The section does not even reflect the groundwater monitoring shown in Golder’s Figure 8. I have overlaid the groundwater elevations and flow net on the published contours as Figure 7.

I have included Golder Figure 7 as my Figure 7 and a corrected version of Golder Figure 7 also in Figure 7. I have also provided a hydrogeological section based on the land surface and groundwater elevations as Figure 6.

The differences are obvious and are in fact not a conceptual Hydrogeological Section because the concept is clearly wrong.

I can form no conclusion other than the section is an attempt to mislead. It is the only section submitted. There is no real geological or hydrogeological section presented even though there is detailed geology and drilling. I prepared sections in March 2014 and these have been confirmed by the drilling conducted by Golder. My updated section is attached as Figure 6.

11. The groundwater flow is west as shown by my Figures 4 and 5 and confirmed independently by Denis Hill (Surveyor) who has plotted the groundwater elevations and flows. His plotting of SITA/Golder data clearly shows westwards flow of the groundwater at a consistent 1% – 2% gradient.
12. Golder state in 11.2.1 in Appendix E1, in reference to groundwater flow “... while on the western side of Thirteen Mile Brook Groundwater gradients are likely to be easterly towards the Brook during the wet season”. That statement does not match the data provided by Golder in relation to MB02, GMB08, GMB10 and distorts the actual flows. See Figures 4 and 5.
13. Golder also state in 12.0 Summary “There is no evidence of a link between the waters that may leak from the landfill facility, and drinking water resources in the region”. That is erroneous. The links are clear and have been since the 2012 drilling. Standard hydrogeological sections drawn and provided in Figures 4, 5 and 6 show the direct flow to the Helena Catchment. That is also confirmed by the

groundwater elevations drawn by Denis Hill (Surveyor). I can see no other conclusion.

14. In Appendix E2, Golder provided the “Drainage Direction” in Figure C3. That showed only the surface water catchments and not the groundwater.

Near the end of Appendix E1 is Appendix I Numerical Groundwater Modelling. The curious thing is that the catchment (presumably groundwater catchment) is defined by the surface water catchment. The catchment and groundwater flows are not accurate because the data from west of Thirteen Mile Brook is not included. The groundwater contours shown in Golder Figures 6 and 7 of the model are incorrect if I am reading the model correctly.

The seepage from flooded cells does not consider the proven potential for leakage to groundwater and flow to the west to the Helena Catchment.

15. Bowman and Associates Groundwater Monitoring Report included in Appendix E1 and dated February 2015 states in the last sentence on page 13 “Groundwater flow under 13 Mile Brook remains to the north west away from the Mundaring Weir Catchment”.

This is clearly incorrect based on the groundwater elevations of Bores GMB06 – GMB10. The groundwater flow is directly to the Mundaring Weir (Helena) Catchment. The reason that it is not reflected in the Bowman Report is that the data has been left out. Bores GMB06 – GMB10 and Hole MB02 were simply ignored.

8.0 How, and how fast will the Groundwater Flow?

Groundwater Flow

All landfills leak as evidenced by Department of Environment Regulation Design Guidelines for lined and unlined landfills. The key is how to manage the leakages and minimise the environmental risks.

In order to determine the rate of flow and risk to the catchment a consideration of the geology is required.

The whole facility is located within the groundwater catchment of the Helena River that feeds the Public Drinking Water Supply of Mundaring Weir, probably the most important drinking water catchment on the Darling Scarp.

The landfill only partially lies outside the surface water catchment, because even though land surface divide is to the west, the evidence suggests downwards leakage of surface water and water within Thirteen Mile Brook through to the deeper valley fill deposits.

The land east of Thirteen Mile Brook is predominantly soils developed on granite basement. There are however some deeper sandy soils as illustrated by TP 94 and GMB06.

The land west of Thirteen Mile Brook by all evidence, is palaeochannel valley fill. That

type of material typically is comprised of sandy clays with sand and clay lenses and beds. The evidence also suggests downwards leakage of precipitation through the palaeochannel valley fill deposits. Figures 5 and 6.

East of Thirteen Mile Brook the groundwater flows west along the base of the soil profile, within the sandy aquifer that sits on irregular top of the granite basement east of the Brook.

When the groundwater hits the likely faulted eastern edge of the valley fill sediments at the Brook, groundwater will flow through sandy and other aquifers of the fill directly west to the seepages within the Helena Catchment.

From those seepages flows are surface water flows within the tributaries of the Helena River and the river itself. Figures 5 and 6.

The edge of the landfill is only 300 metres from Thirteen Mile Brook and the leachate pond is only 150 metres from the Brook.

The distance from Thirteen Mile Brook to the edge of the drainage divide is 600 metres and a further 600 metres to the seepages in the Helena Catchment.

Rate of Groundwater Flow

There are sandy aquifers within the valley fill deposits.

Vertical recharge to the valley fill occurs west of the Brook and most likely also occurs in limited deep sandy materials east of Thirteen Mile Brook (eg TP94 and GMB06 for example).

Action Sands and Great Sand Supplies downstream at Good Road excavate deep highly permeable sands. Sand was also found to depth for example in TP94, under the land fill, and sandy sediments were found in other holes such as GMB06 to depths of 14 metres near TP94. Sand lenses do occur.

Groundwater intersecting any sandy materials or valley fill deposits east of Thirteen Mile Brook will travel faster.

The gradients were found by Denis Hill from SITA data to be between 1% – 2% gradient with 2.5% east of Thirteen Mile Brook.

At a general slope of 1.0 to 1.5%, lateral flow rates in sand can be several metres per day or even greater.

Golder carried out slug testing of the bores that is shown in 6.4 Hydraulic Testing on page 9 of their report included as Appendix E1. Slug testing includes baling water from the bores and measuring the replacement inflow. From that a permeability and flow rate in metres per day is determined.

The flow rates were determined as varying between 0.02 m/d in MB06 to 1.9 m/d in GMB05. The flow rate is variable, even within each hole and shows the lensing nature of the regolith materials.

The distance being 1200 metres from the landfill to the seepages.

At a flow rate of 1.9 m/d, leachate, if the landfill leaked, groundwater carrying leachate would reach the seepages west of the surface water drainage divide in just over 6 months.

At an average flow of say 0.6 metres per day the time taken will be 5.5 years to travel from the landfill to the seepages.

Considering the life of the landfill, its large size and the variable and permeable nature of valley fill sediments, there is a very real possibility the leachate will travel to the seepages in somewhere between the two travel times.

At the seepages, any water carrying leachate will flow by surface watercourse to Mundaring Weir within 2 – 3 days.

The critical areas are the edge of the valley fill deposits at Thirteen Mile Brook and any sandy permeable areas under the landfill as both have high connectivity to the seepages.

On the calculations above, any leachate that leaks from the landfill or ponds will likely reach Mundaring Weir within around 1 – 5.5 years and most likely less than 3 years.

That is a very short time in relation to the size and life of the landfill.

Once groundwater becomes contaminated by leachate it will be unstoppable unless all the landfill is removed.

How much risk is involved is difficult to determine because the actual aquifers are very variable and will be difficult to map without extensive deep drilling. There are also dilution factors.

Government Policy is that land uses such as landfills should not be located within Public Drinking Water Catchments.

Lindsay Stephens
20 May 2015.

Attached

- Figure 1 Regional geological structures
- Figure 2 Local and regional geology
- Figure 3 Drill hole locations
- Figure 4 Local groundwater flownet
- Figure 5 Regional groundwater flows
- Figure 6 Section of the hydrogeology
- Figure 7 Annotated Golder Concept Section
- Figures 8 - 11 DOW Figures From Helena Catchment WRT 34

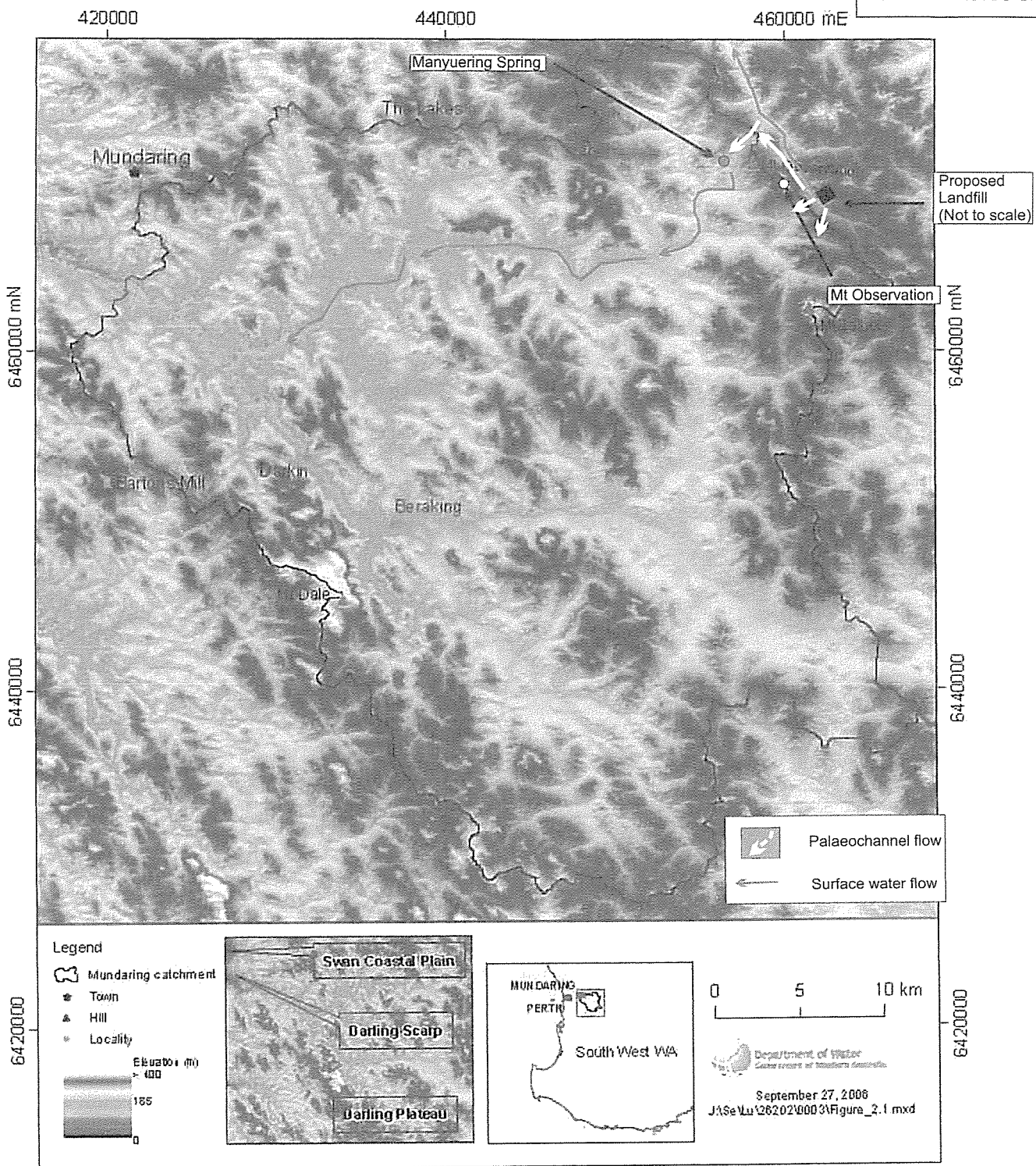


Figure 2.1 Topography and physiographic divisions

Mapping does not show the palaeochannel flows under the surface water drainage divide

Surface water flows outside the Helena Catchment.

Palaeochannel flow most likely flows into the Helena Catchment

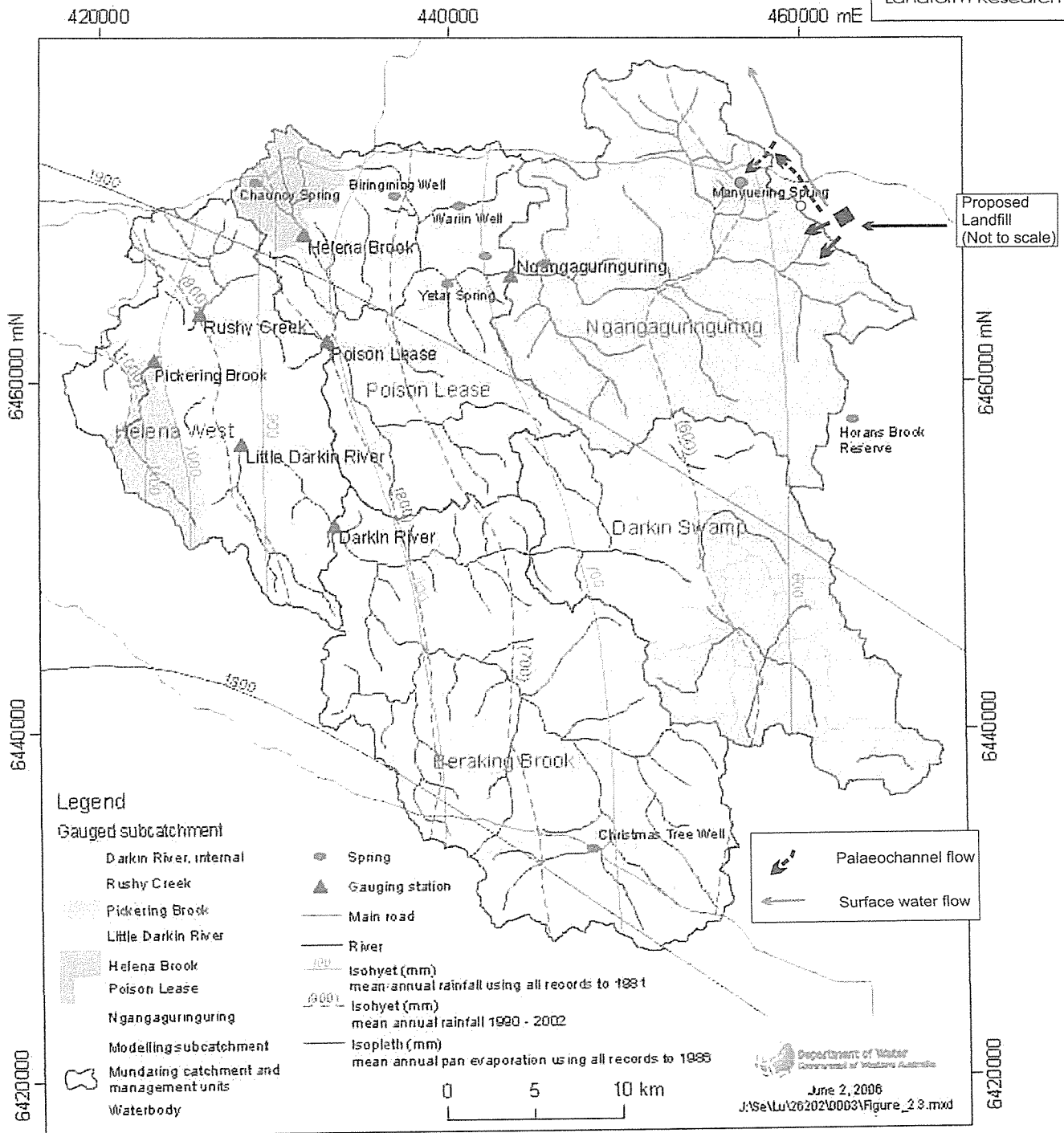


Figure 2.2 Hydrology, subcatchments, gauging stations, rainfall and potential evaporation

Mapping does not show the palaeochannel flows under the surface water drainage divide

Surface water flows outside the Helena Catchment.

Palaeochannel flow most likely flows into the Helena Catchment

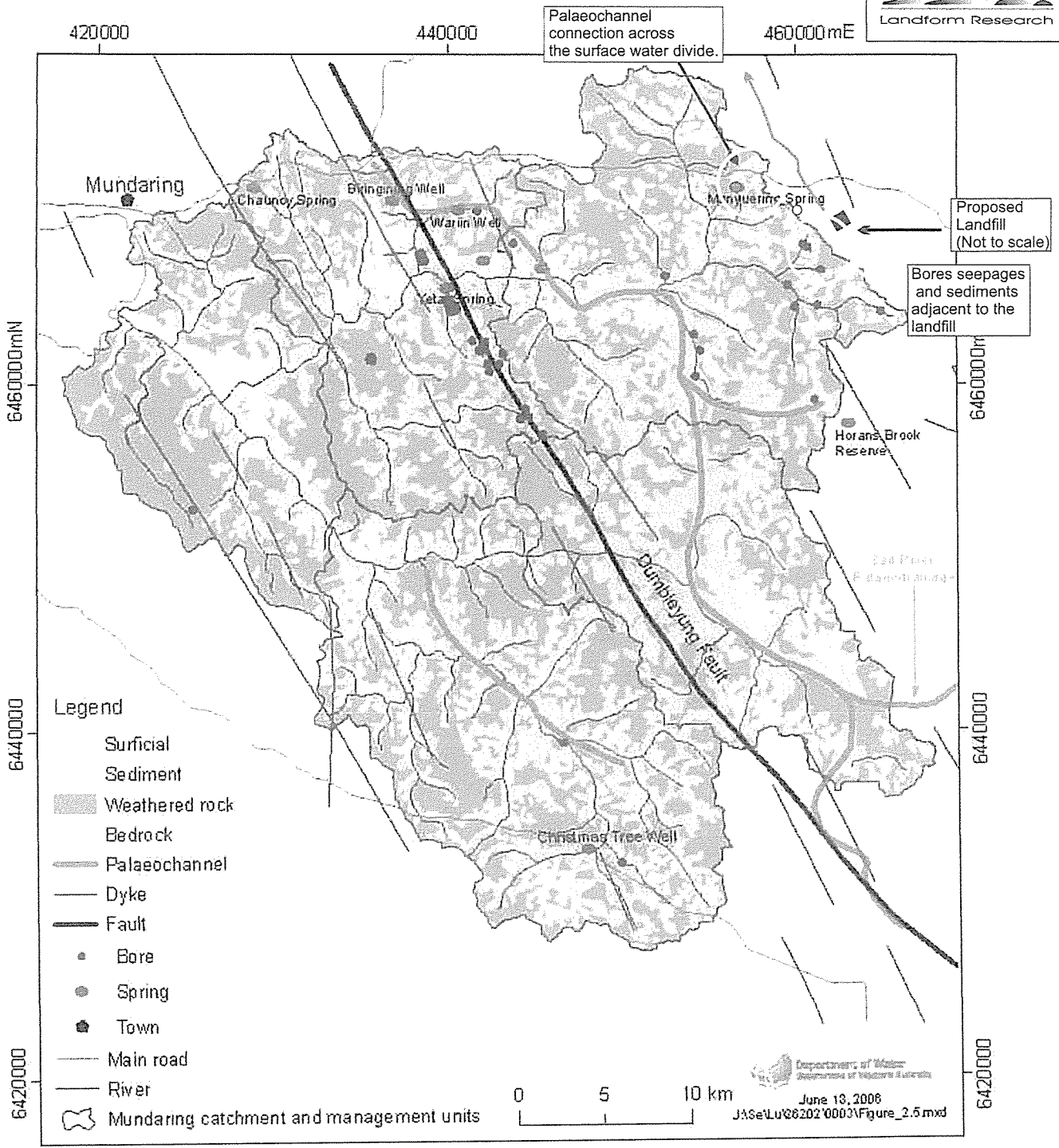


Figure 2.5 Hydrogeology

Notice the palaeochannel connection from the valley outside the Helena Catchment to Manyuering Spring, shown in green as sediment. Notice the spings and bores associated with sediments that receive water within the Helena Catchment.

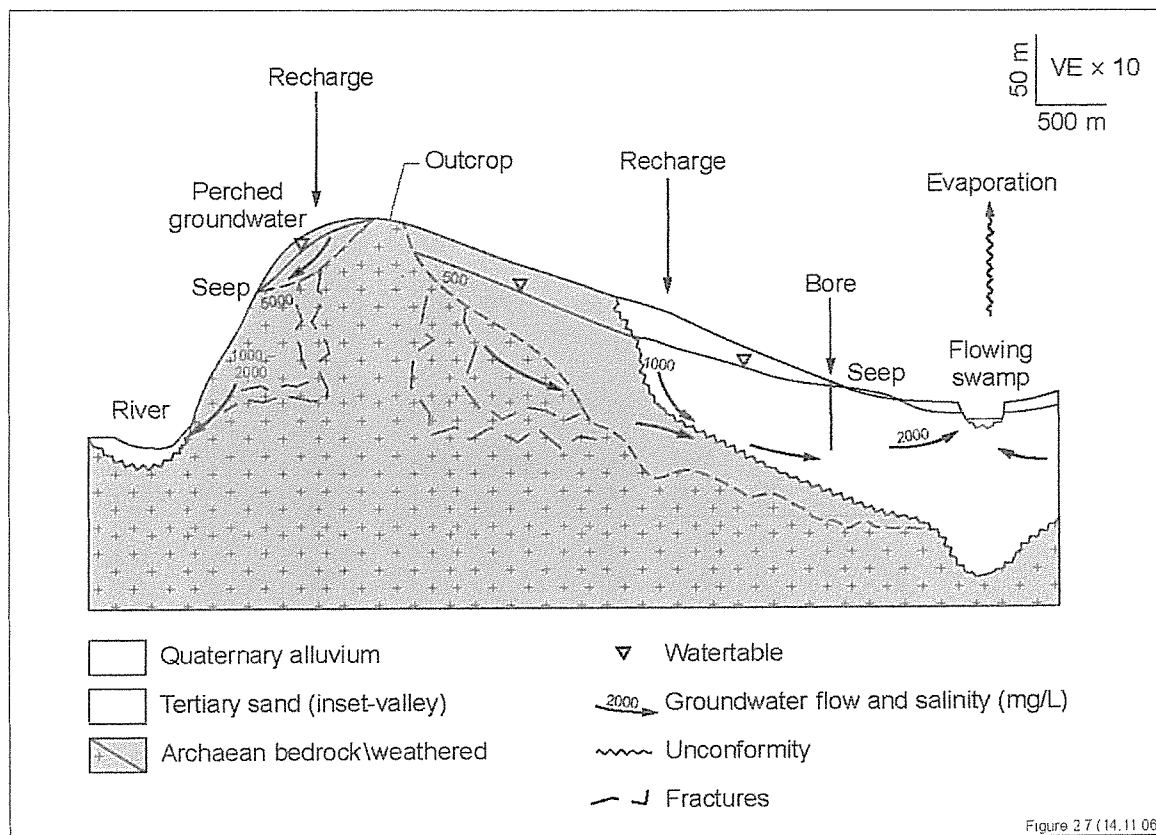


Figure 2.7 Diagrammatic section of hillside seeps and valley floor springs near the Ngangaguringuring gauging station

colluvial (Qrc & Qrcs) deposits, and are widespread but not extensive within valleys, broad flats, wetlands, some lower slopes, high in the landscape (Qa), and associated with stream channels (Qas & Qs). These aquifers are recharged by direct infiltration of excess rainfall or runoff. They also transmit upward discharge from the weathered and/or fractured rock aquifers and sedimentary aquifers. Groundwater loss is mainly through evapotranspiration. These aquifers form a minor water source only in the higher rainfall areas towards the south-west of the catchment. The salinity of the groundwater varies significantly depending on the long-term rainfall.

2.6.2 Sedimentary aquifers

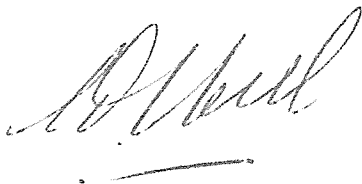
The unconfined to semi-confined sedimentary aquifers (Ts mapped mostly as Qra, Qas & Czs) are now recognised as significant sources of saline water in the Helena subcatchment (Fig. 2.5). The largest of these minor local aquifers extends north-north-west through Goonaping, Darkin and Little Darkin swamps (Appendix A2.1, Photo 35). The sediments comprise mostly sand and gravel deposited in palaeovalleys and topographic depressions eroded into weathered bedrock and are suspected to be Late Eocene in age (Table 2.2). The discrete occurrences appear to have been connected with ancestral drainages east of the catchment (Commander et al. 2001; Salama 1997). These sediments extend north-west for about 50 km across the east of the Mundaring catchment (about half in the each of the Darkin and Helena subcatchments). In

Attachment B

Allawuna Landfill – Amended Application

Review of the survey data relating to groundwater levels (GWL):

- Page 1. Plan view of contours generated from the GWL's.
- Page 2. Sections of GW flow generated from the above contours.
- Page 3. Compilation of co-ordinates and levels used from SITA Works Approval Application (WAA) currently being advertised by the DER and as listed below.
- Page 4. Golder bore location plan from WAA Appendix E1.
- Page 5. Golder bore list from WAA Appendix E1.
- Page 6. Golder GW list from WAA Appendix E1.
- Pages 7-9 Golder bore logs from WAA Appendix E1 – groundwater level verification in holes GMB08, 09 & 10



Denis Hill
Surveyor
25th May 2015

ob ID : 001
 ob name : Allawuna Landfill
 Description : GW contours & sections (AHD)
 Reference : SITA-May 2015
 Field surveyor : by others
 Drafting : Denis Hill
 Date printed : 23/05/15

Point	Code	Easting	Northing	Height
2893	MB01	461249.600	6469808.30	296.440
2894	MB03	461968.700	6468385.70	303.590
2895	MB04	462311.600	6468391.90	301.760
2896	MB05	462062.600	6468857.20	299.570
2897	MB06	462700.900	6468874.60	307.760
2898	MB07	463608.300	6469136.20	326.900
2899	MB08	463173.100	6469492.80	327.240
2900	MB09	461856.100	6468566.00	300.420
2901	MB10	461920.000	6468767.40	299.560
2902	MB11	462456.700	6468764.60	303.500 mean of GMB05 & MB11
2903	MB12	462367.500	6469000.00	306.280
2904	MB13	462516.200	6469123.50	309.550 see below
2905	MB14	462742.000	6469081.70	313.340
2906	GMB01	462508.000	6469516.00	refusal - no water recorded
2907	GMB02	463175.000	6469492.00	327.220
2908	GMB03	463287.000	6469115.00	322.750
2909	GMB04	463008.000	6468751.00	310.600
2910	GMB05	462449.000	6468760.00	303.240 mean of GMB05 & MB11
2911	GMB06	462522.000	6469274.00	317.770 see below
2912	GMB07	461435.000	6469819.00	295.560
2913	GMB08	461156.000	6469044.00	296.460 confirmed by bore logs
2914	GMB09	461195.000	6469450.00	297.600 confirmed by bore logs
2915	GMB10	461714.000	6468886.00	299.000 confirmed by bore logs
2928	bore 61619243	460699.000	6467914.00	278.000 approx measure from contour
2929	bore 61619242	460677.787	6467935.21	278.000 approx measure from contour

Note:

1. there is an anomaly between GMB06 and MB13, a difference of 8m in GWL over 150m horizontal distance ? adopting either or both bore levels makes no difference to the GW flow direction.
2. there is a 1m difference in the GWL of GMB05 and MB11, no matter which level for GMB 05 or MB11 is adopted, the GW flow direction is unaffected.

Table 2: Summary of Monitor Well Completion Details

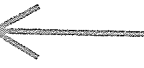
Monitor Well	Easting*	Northing*	Ground Elevation*	Top of Casing Elevation*	Casing Stickup (m AGL)	Borehole Depth (m BGL)	Cased Depth (m BGL)	Screened Interval (m BGL)
MB01	461249.6	6469808.3	297.57	298.268	0.70	11.9	11	5.0-11.0
MB03	461968.7	6468385.7	309.26	309.874	0.61	13.42	13	7.0-13.0
MB04	462311.6	6468391.9	302.23	302.726	0.50	10.91	12?	6.0-12.0?
MB05	462062.6	6468857.2	300.70	301.432	0.74	9.7	10?	4.0-10.0?
MB06	462700.9	6468874.6	306.81	307.395	0.58	10.64	18?	4.5-10.5?
MB07	463608.3	6469136.2	330.90	331.502	0.61	10.55	10	4.0-10.0
MB08	463173.1	6469492.8	333.53	333.945	0.41	11.25	10	4.0-10.0
MB09	461856.1	6468566.0	307.10	307.439	0.34	11.7	11.7	8.7-11.7
MB10	461920.0	6468767.4	300.44	301.092	0.65	10	8	5.0-8.0
MB11	462456.7	6468764.6	303.37	303.674	0.30	8.5	7	4.0-7.0
MB12	462367.5	6469000.0	316.42	316.911	0.49	13	13	10.0-13.0
MB13	462516.2	6469123.5	321.21	321.595	0.39	16	15.5	12.5-15.5
MB14	462742.0	6469081.7	314.62	315.105	0.49	8	7.5	4.5-7.5
GMB01	462508	6469516	334.34	334.94	0.60	10.4	10.35	5.6-10.3
GMB02	463175	6469492	333.33	333.87	0.54	9.8	9.5	2.1-9.6
GMB03	463287	6469115	328.27	328.85	0.57	10.0	9.9	3.7-9.9
GMB04	463008	6468751	318.44	319.00	0.56	11.49	11.5	5.4-11.5
GMB05	462449	6468760	303.38	303.90	0.52	16.4	16.0	10.0-16.0
GMB06	462522	6469274	325.91	326.43	0.52	21.8	21.5	8.2-21.8
GMB07	461435	6469819	297.06	297.63	0.56	27	26.25	20.3-26.3
GMB08	461156	6469044	314.46	315.08	0.62	33	31.11	25.1-31.1
GMB09	461195	6469450	303.82	304.30	0.48	18	17.52	11.5-17.5
GMB10	461714	6468886	302.05	302.71	0.66	12	11.33	5.3-11.3

Notes: *Coordinates (Zone 50, MGA94). Elevations in metres Australian Height Datum (AHD), m AGL – metres Above Ground Level, m BGL – metres Below Ground Level, SWL – Static Water Level, m BTOC – metres Below Top of Casing. Monitor wells GMB01-GMB06 surveyed by BCE Survey using a differential GPS system on 5 December 2014. Monitor wells GMB07-GMB10 surveyed by Crossland & Hardy using a differential GPS system on 20 March 2015. ? indicates conflicting data in original report.

pdf page 31 of Golders appendix E1



Bore ID	Groundwater Levels (m AHD)													
	22-Aug-12	19-Feb-13	20-Aug-13	18-Feb-14	19-Aug-14	08-Sep-14	11-Nov-14	11-Dec-14	14-Jan-15	11-Feb-15				
GMB1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GMB2	-	-	-	-	-	-	-	-	327.889	327.500	327.220	-	-	-
GMB3	-	-	-	-	-	-	-	-	323.126	322.950	322.750	-	-	-
GMB4	-	-	-	-	-	-	-	-	310.950	310.780	310.600	-	-	-
GMB5	-	-	-	-	-	-	-	-	303.918	302.890	302.740	-	-	-
GMB6	-	-	-	-	-	-	-	-	318.059	317.900	317.770	-	-	-
MB01	295.868	295.729	295.538	295.801	296.269	-	296.108	296.108	296.108	296.058	296.440	-	-	-
MB03	304.271	304.271	304.134	303.145	305.649	-	304.214	304.304	304.304	303.864	303.590	-	-	-
MB04	301.609	301.468	301.486	301.537	301.975	-	300.006	301.931	301.931	301.896	301.760	-	-	-
MB05	299.630	299.444	299.582	299.431	299.875	-	299.842	299.792	299.792	299.732	299.570	-	-	-
MB06	306.847	306.777	306.815	306.840	306.821	-	306.825	306.865	306.865	306.845	307.760	-	-	-
MB07	-	325.956	326.022	326.637	327.629	327.842	327.712	327.502	327.502	327.192	326.900	-	-	-
MB08	327.418	326.467	327.505	327.124	328.188	328.245	328.055	327.885	327.885	327.525	327.240	-	-	-
MB09	-	-	299.489	299.652	301.300	-	301.449	301.129	301.129	300.709	300.420	-	-	-
MB10	-	-	299.472	299.351	300.119	-	299.232	299.812	299.812	299.712	299.560	-	-	-
MB11	-	-	303.674	303.674	303.674	-	303.974	303.774	303.774	303.784	303.740	-	-	-
MB12	-	-	306.061	306.348	306.480	-	306.601	306.551	306.551	306.401	306.280	-	-	-
MB13	-	-	310.745	309.578	309.892	-	309.985	309.935	309.935	309.765	309.550	-	-	-
MB14	-	-	313.565	313.316	313.906	313.905	313.765	313.705	313.705	313.655	313.340	-	-	-



used these levels for contouring and sections



REPORT OF BOREHOLE: GMB08

CLIENT: SITA Australia
 PROJECT: Proposed Allawuna Landfill
 LOCATION: Allawuna Farm, Shire of York
 JOB NO: 147645033

COORDS: 461155.6 m E 6469043.9 m N MGA94 50 (dGPS)
 SURFACE RL: 314.46 m DATUM: AHD (dGPS)
 INCLINATION: -90° DIRECTION: 000°
 HOLE DEPTH: 33.00 m

SHEET: 2 OF 4
 DRILL RIG: Comacchio Geo 305
 CONTRACTOR: Profile Drilling
 LOGGED: JFB DATE: 13/3/15
 CHECKED: D Thomson DATE: 20/3/15

Drilling		Sampling		Field Material Description and Instrumentation				
METHOD	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED GRAPHIC LOG	SOIL/ROCK MATERIAL DESCRIPTION	AIRLIFT YIELD (L/s)	CONSTRUCTION
						<p>SAPROLITE, white. Silt to 2mm angular quartz grains (55%). White powdery clay (45%), low plasticity. Original igneous fabric present in some chips. Dry.</p>		
			13.00 301.46			pink		
						verify groundwater RL 296.46		
			18.00 296.46			red		

1:1750000, FILE: SOLIDWIN.GAP 9, 07 LIBRARY.GLD, Log: GAP.WELL, 147645033, LOGFILE: LOGFILE.GPL, DWG: D1714.GDW, 31/03/2015 13:15, 0.30, 0.04

This report of borehole must be read in conjunction with accompanying notes and abbreviations. It has been prepared for hydrogeological purposes only, without attempt to assess geotechnical properties or possible contamination. Any reference to geotechnical properties or potential contamination are for information only and do not necessarily indicate the presence or absence of the properties stated.

GAP gINT FN. F05
 RL3

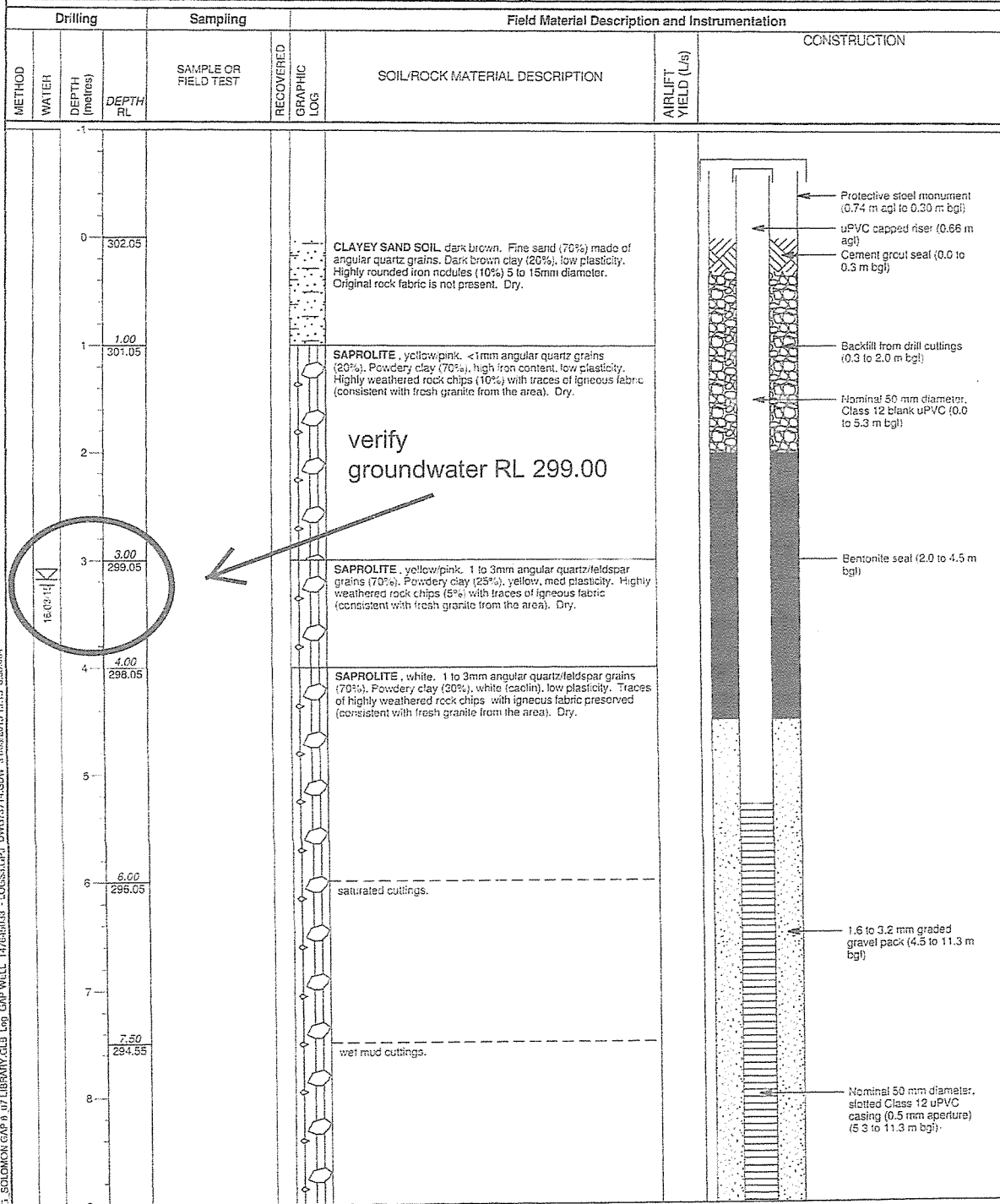


REPORT OF BOREHOLE: GMB10

CLIENT: SITA Australia
 PROJECT: Proposed Allawuna Landfill
 LOCATION: Allawuna Farm, Shire of York
 JOB NO: 147645033

COORDS: 461714.1 m E 6468885.9 m N MGA94 50 (dGPS)
 SURFACE RL: 302.05 m DATUM: AHD (dGPS)
 INCLINATION: -90° DIRECTION: 000°
 HOLE DEPTH: 12.00 m

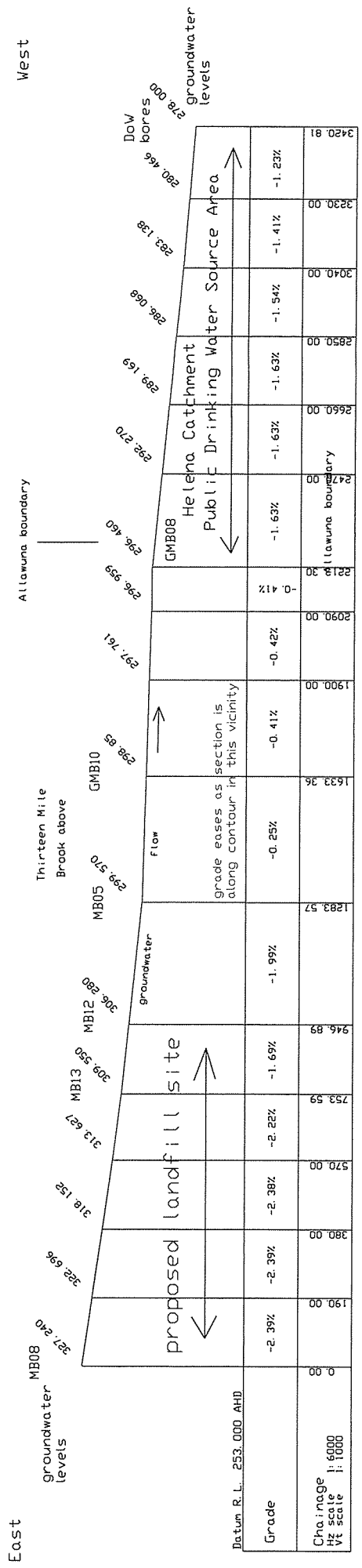
SHEET: 1 OF 2
 DRILL RIG: Comacchio Geo 305
 CONTRACTOR: Proline Drilling
 LOGGED: JFB DATE: 16/3/15
 CHECKED: D Thomson DATE: 20/3/15



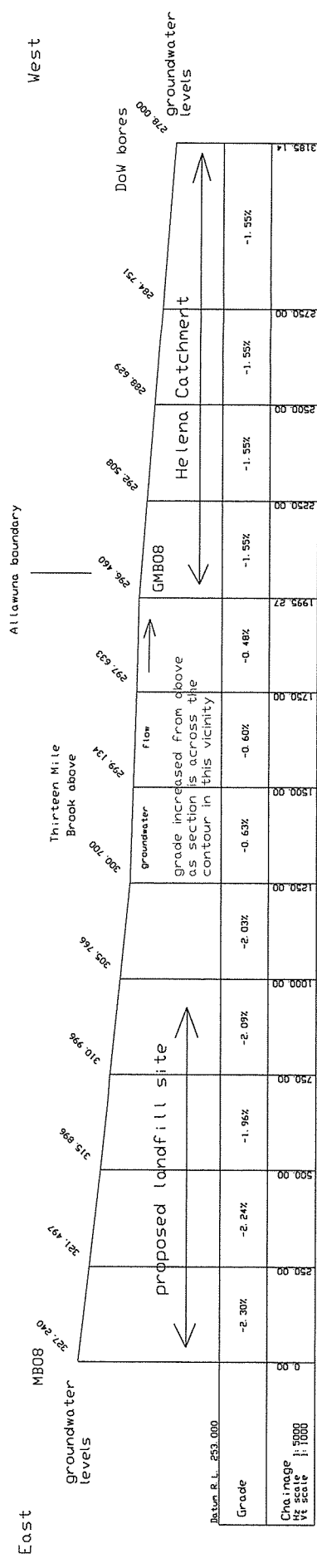
1174645033_FMG_SOLOMON_GAP_9_07_LIBRARY_GLB_Low_GAP_WELL_147645033 - LOGS3.CPJ DWG4711.GDW 3,100x2016 15:19 8,310.CPJ

This report of borehole must be read in conjunction with accompanying notes and abbreviations. It has been prepared for hydrogeological purposes only, without attempt to assess geotechnical properties or possible contamination. Any reference to geotechnical properties or potential contamination are for information only and do not necessarily indicate the presence or absence of the properties stated.

GAP GINT FN. F05
RL3



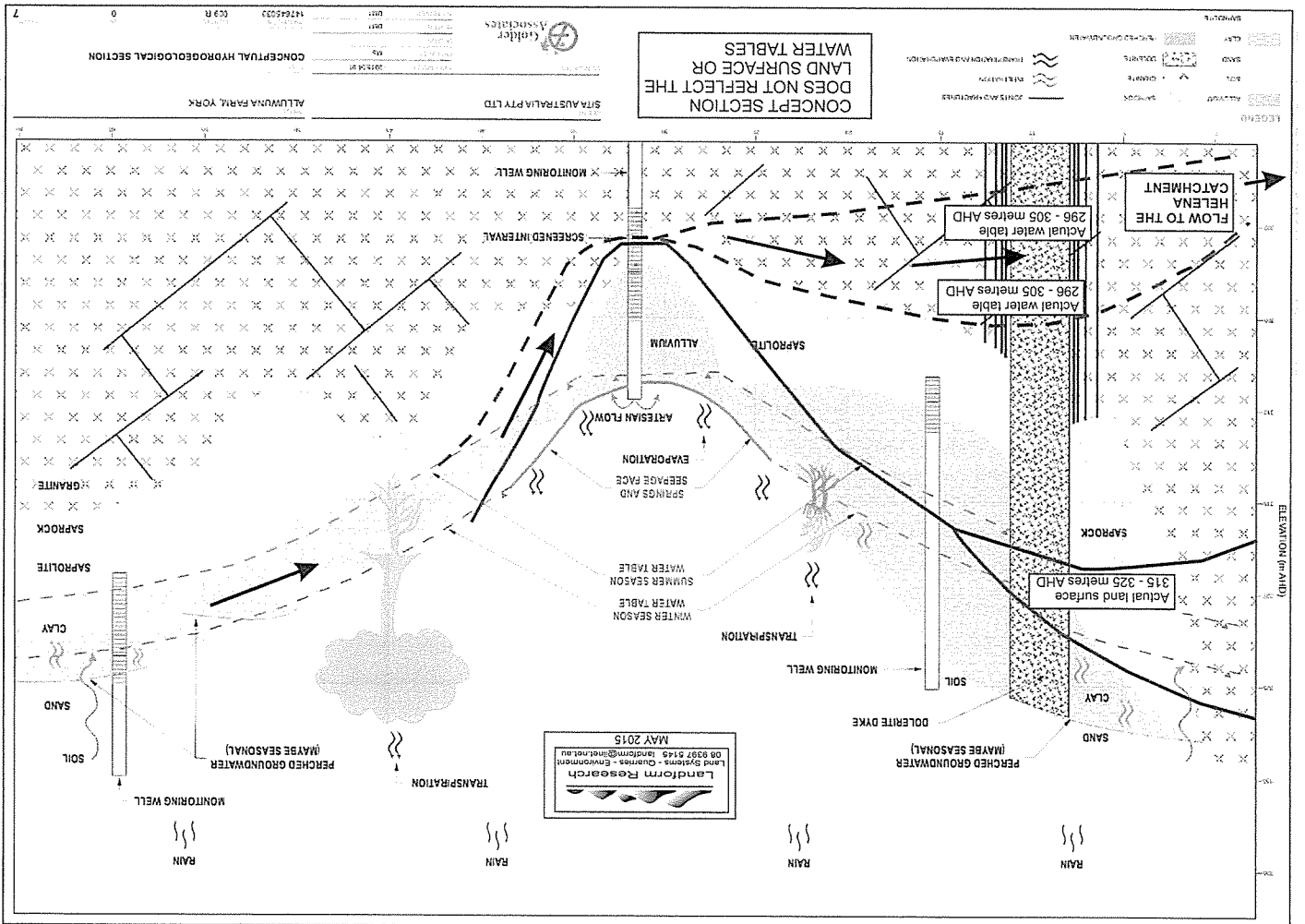
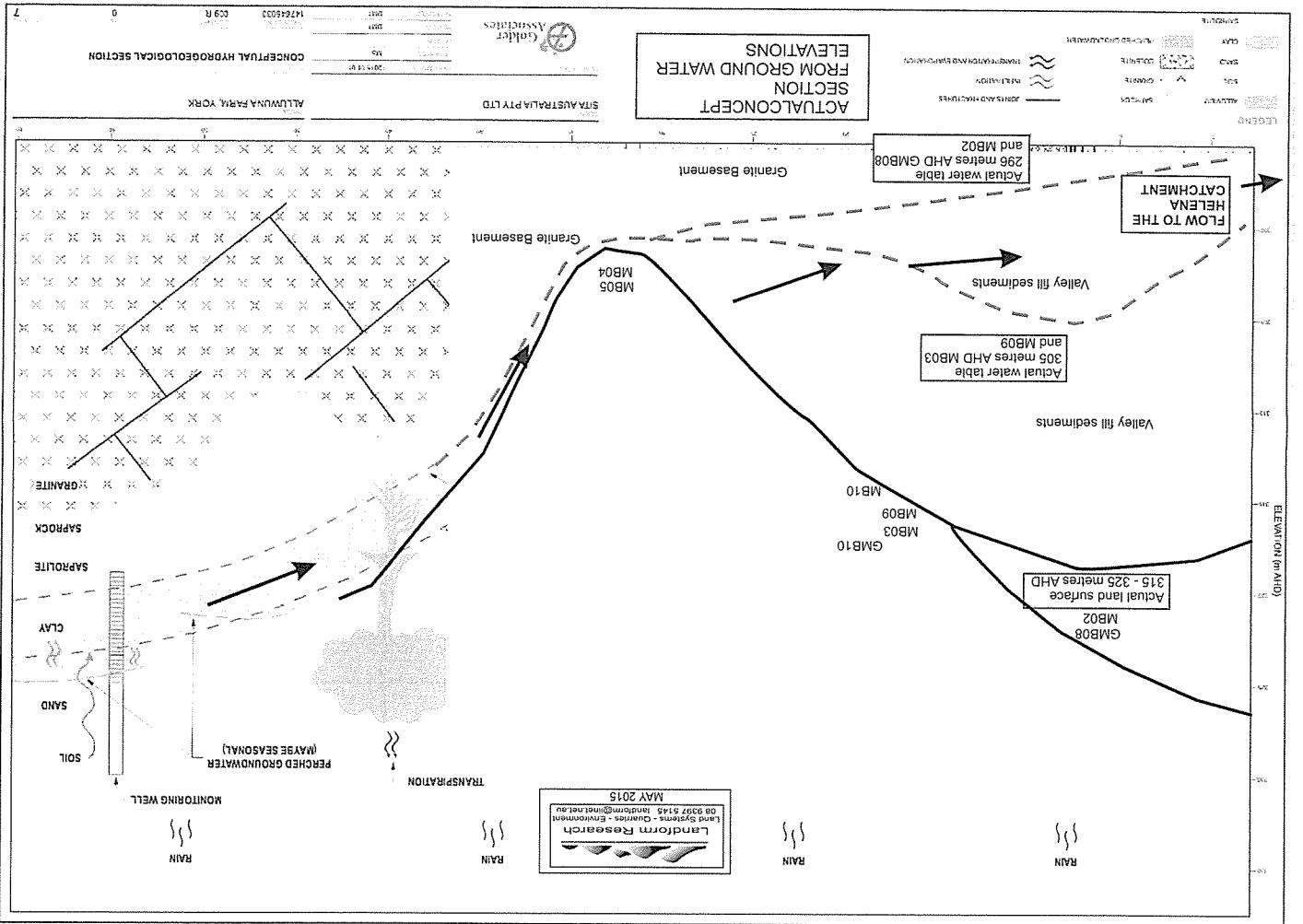
Section of westerly GW flow from bore MB08 through MB13, MB12, MB05, GMB10, GMB08 to Dow bores

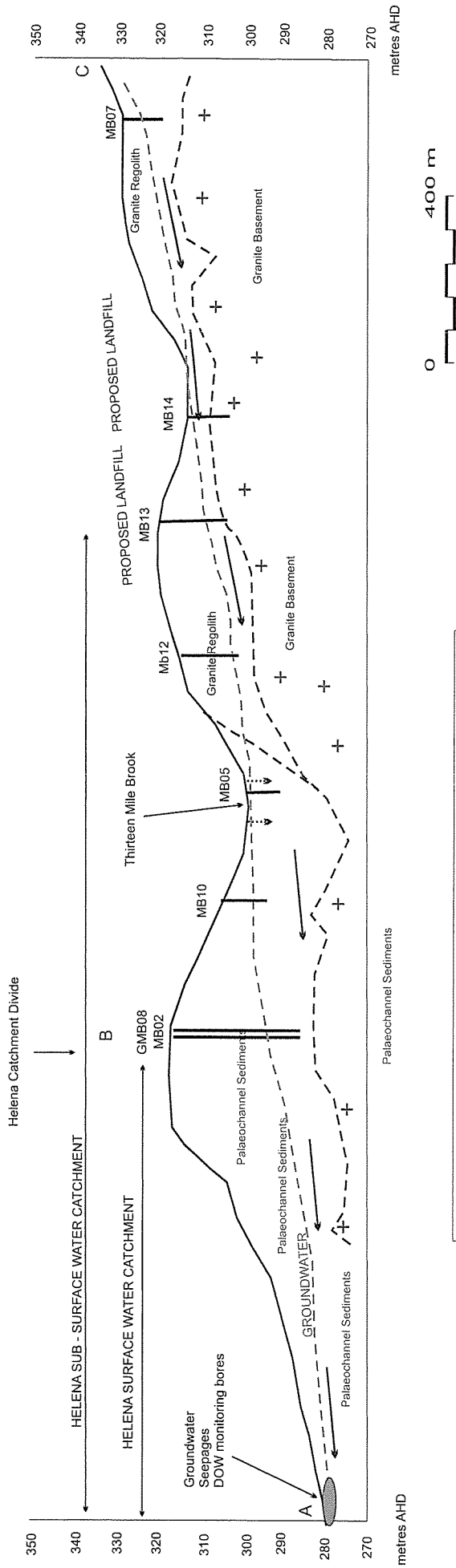


Section of westerly GW flow from MB08 to GMB08 and Dow bores

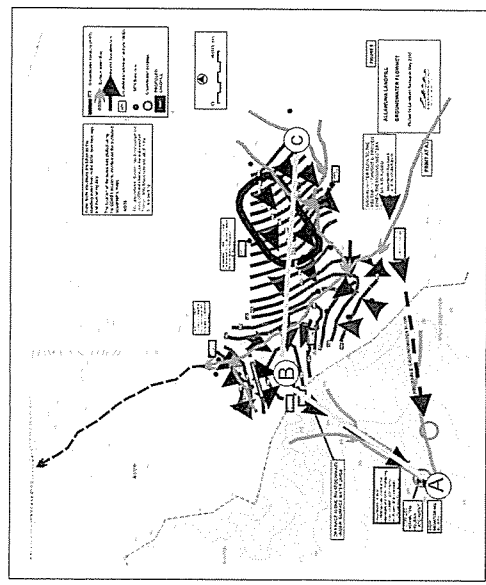
[Signature]

22nd May 2015





HYDROGEOLOGICAL SECTION A - B - C



PRINT AT A3

Water table elevations are taken as the standing water level in the SITA bore hole logs and monitoring data.

The location of the bores was plotted using the GDA94 locations, overlaid on the published topographic maps.

NOTE

The groundwater flownet has been completed using SITA data because the data west of Thirteen Mile Brook was excluded in the SITA reporting.

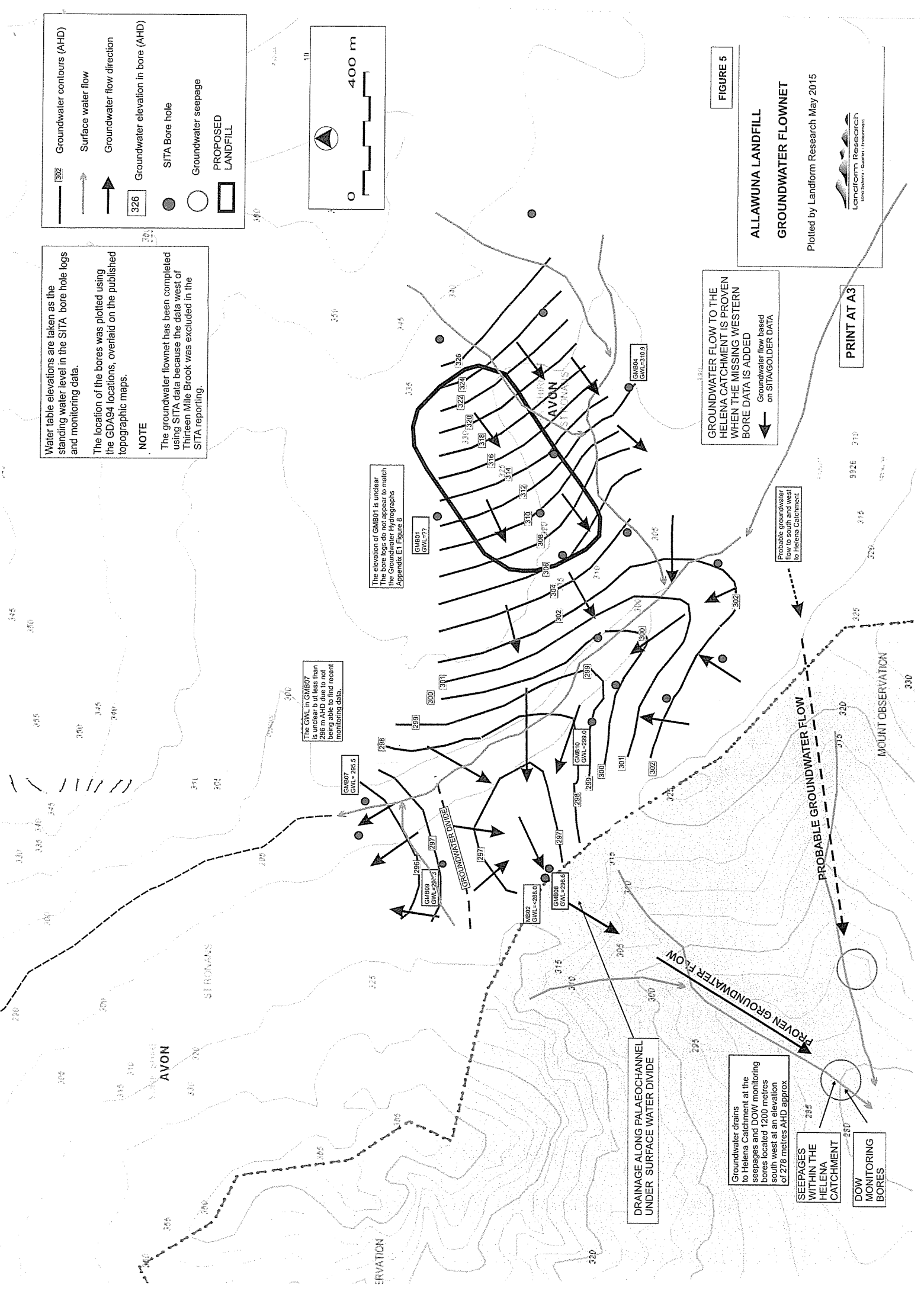
Legend:

- Groundwater contours (AHD)
- Surface water flow
- Groundwater flow direction
- Groundwater elevation in bore (AHD)
- SITA Bore hole
- Groundwater seepage
- PROPOSED LANDFILL

Scale: 1:10

400 m

North arrow



The GWL in GMB07 is unclear as it is less than 295 m AHD due to not having any recent monitoring data.

The elevation of GMB01 is unclear. The bore logs do not appear to match the Groundwater Hydrographs Appendix E1 Figure 8

GROUNDWATER FLOW TO THE HELENA CATCHMENT IS PROVEN WHEN THE MISSING WESTERN BORE DATA IS ADDED

Groundwater flow based on SITA/GOLDER DATA

Probable groundwater flow to south and west to Helena Catchment

DRAINAGE ALONG PALAEOCHANNEL UNDER SURFACE WATER DIVIDE

Groundwater drains to Helena Catchment at the seepages and DOW monitoring bores located 1200 metres south west at an elevation of 276 metres AHD approx

SEEPAGES WITHIN THE HELENA CATCHMENT

DOW MONITORING BORES

FIGURE 5

ALLAWUNA LANDFILL GROUNDWATER FLOWNET

Plotted by Landform Research May 2015



PRINT AT A3

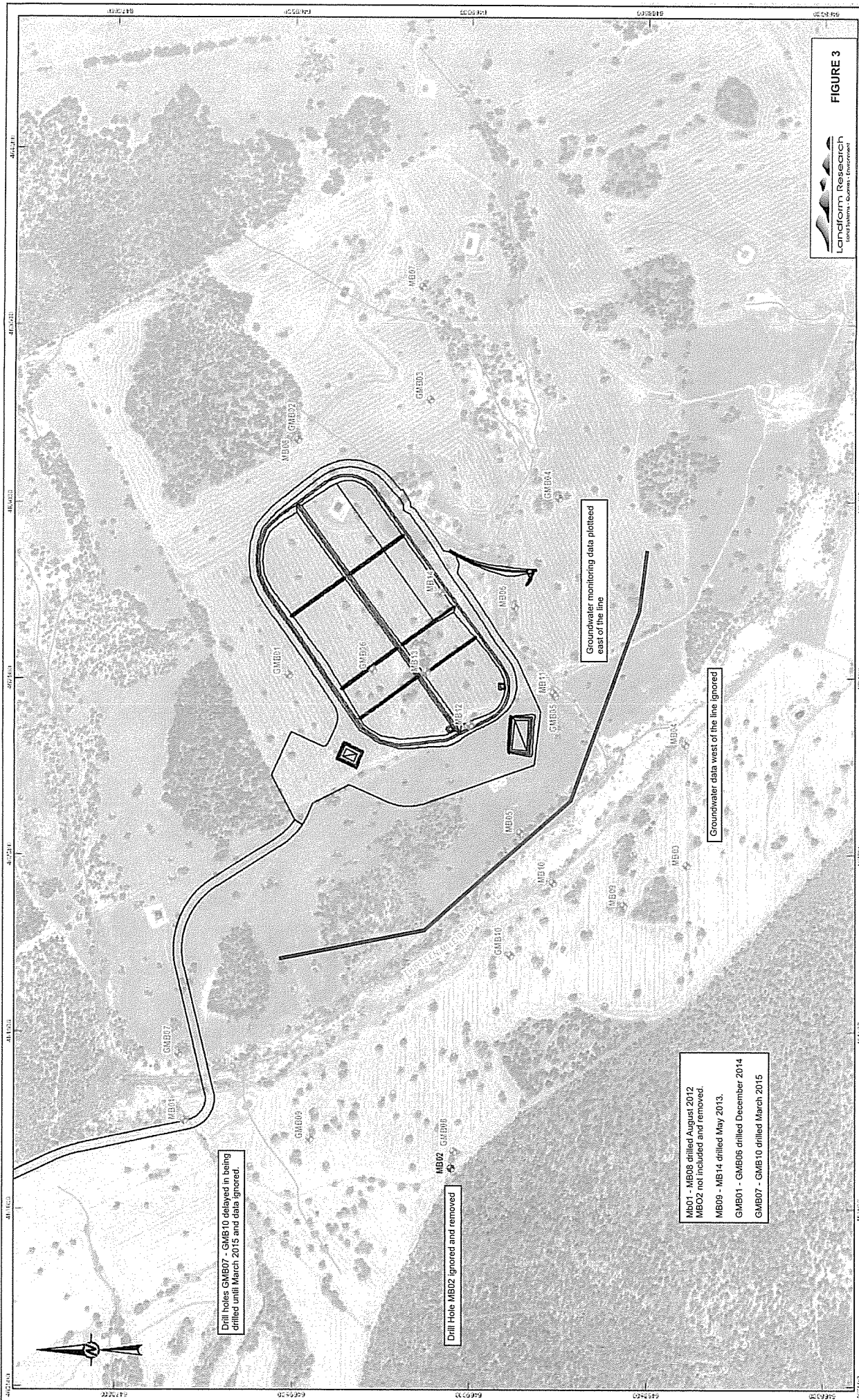


FIGURE 3
Landform Research
 LANDFORM RESEARCH
 LANDFORM RESEARCH

TABLE 1
ALLUWUNA FARM, YORK

FILE	20140323
DATE	VS
PROJECT	061301
DATE	18/03/14
PROJECT NO.	147645033
DATE	009 R
FIGURE	0
	2

SITA AUSTRALIA PTY LTD



NOTES
 * COORDINATE SYSTEM: GDA 1984 MGA 42SR 50

REFERENCE
 ENVIRONMENTAL WORKING AND SHOWN AS POSSIBLE AND NEARBY
 LAND FOR GRANTING OF AUTHORITY TO TAKE AS AN APPROPRIATE DATE



Drill holes GMB07 - GMB10 delayed in being drilled until March 2015 and data ignored.

Drill Hole MB02 ignored and removed

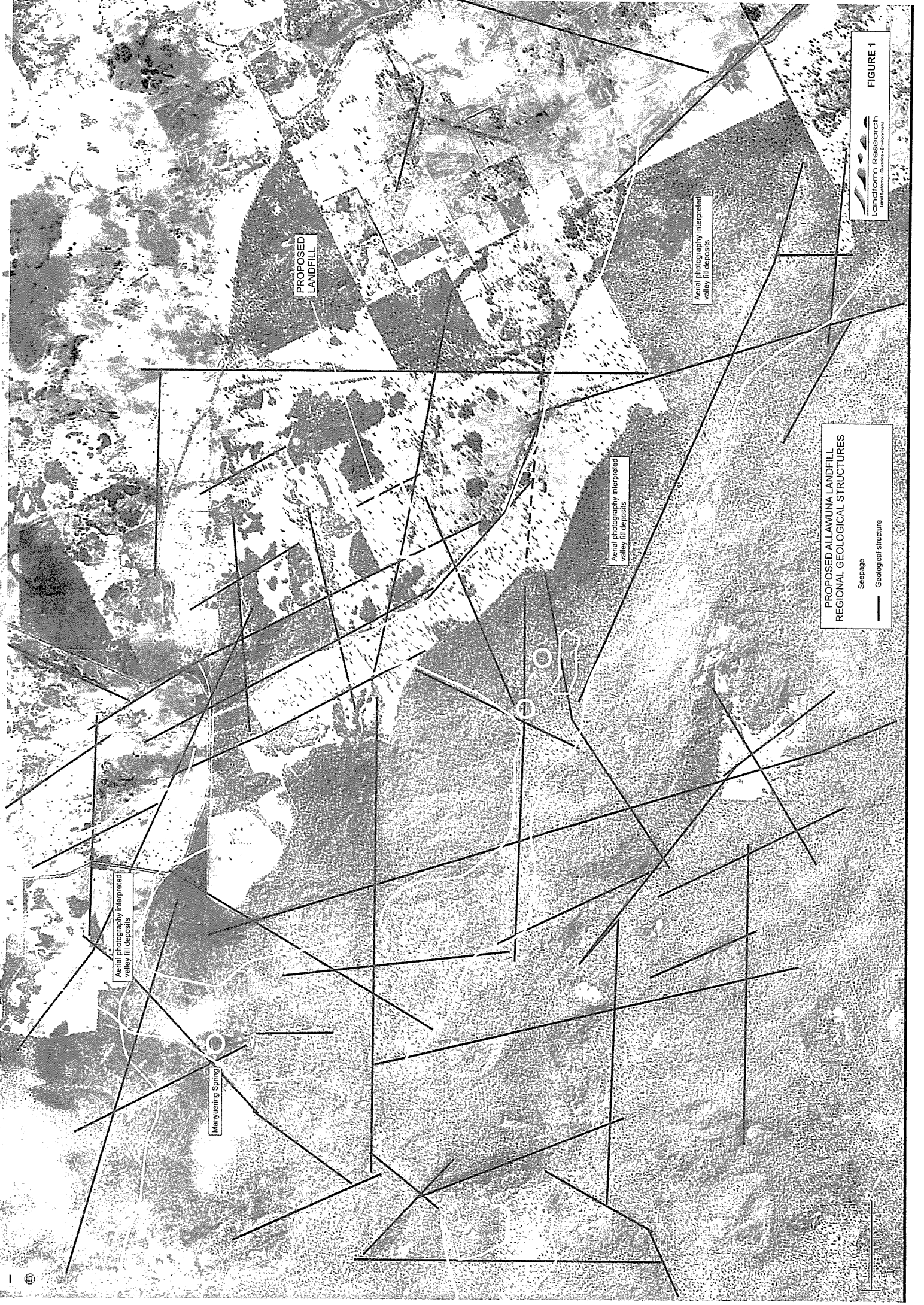
MB01 - MB08 drilled August 2012
 MB02 not included and removed.
 MB09 - MB14 drilled May 2013.
 GMB01 - GMB06 drilled December 2014
 GMB07 - GMB10 drilled March 2015

Groundwater monitoring data plotted east of the line

Groundwater data west of the line ignored

LEGEND

- ☉ GROUNDWATER MONITORING POINT
- ⊕ ABANDONED DRILL HOLE
- LANDFILL DESIGN
- ⊙ 5 Meter



PROPOSED
LANDFILL

Aerial photography interpreted
valley fill deposits

Aerial photography interpreted
valley fill deposits

Aerial photography interpreted
valley fill deposits

Manyueung Springs

PROPOSED ALLAWUNA LANDFILL
REGIONAL GEOLOGICAL STRUCTURES

Seepage
Geological structure

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

267

SHIRE OF YORK	
FILE	15-Gen.PP0.31
SEARCHED	INDEXED
KIRA	<i>[Signature]</i>
25 MAY 2015	
1147869	
REFERRED TO COUNCIL	
DATE	INITIAL

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

The proposed landfill is not acceptable with the Shire of York's Local Planning Strategy, which states "protection of sustainable agriculture and preserve and enhance the environment and natural resources." The proposal does not meet the objectives of York's Community Strategic Plan which states, "Protect and Enhance our rural land and spaces" and has a priority to "Establish land use strategy to ensure rural and farming land is protected." Landfill does not enhance nor preserve and should not be placed in our agricultural areas, especially near important water sources.

The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Yours sincerely

NAME BEVEN JAMES MEREPITH
ADDRESS _____
DATE 24 MAY 2015
SIGNATURE *[Signature]*

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

268

SHIRE OF YORK	
FILE	PS-GEN-APP-3-1
OFFICER	INITIALS
K. K. A.	JK
25 MAY 2015	
1147870	
REFERRED TO COUNCIL	
DATE	INITIALS

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

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The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

There are other areas that could be utilized for the purpose of landfill, not the prime agricultural region as stated.

The possibility/probability of water contamination to both the Swan River and Mundaring catchment is as should be of the up most concern.

Yours sincerely

NAME

Wendy Hoffmann

ADDRESS

[Redacted] YORK

DATE

15/5/15

SIGNATURE

W. Hoffmann

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

269

FILE	PS GEN. VPO. 3-1
OFFICER	KINA
INITIALS	
25 MAY 2015	
1147871	
REFERRED TO COUNCIL	
DATE	INITIALS

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

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The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

I concur completely with the above, acknowledging that it is sheer folly to allow prime agricultural land to be utilised for any activity other than to produce food.

Also, the possibility of our precious water supplies (even the slightest possibility) is abhorrent being polluted, is abhorrent
apart from environmental concerns, I have great misgivings for the safety of drivers using the Great Southern Highway between Great Eastern Highway and the town of York, if the landfill operation has, as it has stated, one truck entering and one truck exiting the property every 20 minutes. The road is very narrow, winding and is degrading very quickly due to the increased heavy transport vehicle usage. The significant increase in heavy vehicles would put all road users at risk.

Yours sincerely

NAME PAMELA DOUGALL

ADDRESS _____, YORK 6302.

DATE MAY 13, 2015

SIGNATURE P.M. Dougall

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

270

SHIRE OF YORK	
FILE	INITIALS
PS-GEN-PRO-3-1	
KGA	
25 MAY 2015	
1147872	
REFERRED TO COUNCIL	
DATE	INITIALS

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

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The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Yours sincerely

NAME Sharon and Keith Miller
ADDRESS _____ YORK
DATE 19th May 2015
SIGNATURE S. Miller

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

271

SHIRE OF YORK	
FILE	P5- GEN. PRO. 3-1
OFFICER	KIRA
INITIALS	
25 MAY 2015	
1147873	
REFERRED TO COUNCIL	
DATE	INITIALS

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

The proposed landfill is not acceptable with the Shire of York's Local Planning Strategy, which states "protection of sustainable agriculture and preserve and enhance the environment and natural resources." The proposal does not meet the objectives of York's Community Strategic Plan which states, "Protect and Enhance our rural land and spaces" and has a priority to "Establish land use strategy to ensure rural and farming land is protected." Landfill does not enhance nor preserve and should not be placed in our agricultural areas, especially near important water sources.

The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

AND MAKING THE LAKES RD MORE DANGEROUS THAN IT ALREADY IS

Yours sincerely
NAME
ADDRESS
DATE
SIGNATURE

Joe Carboni

JOE CARBONI

24-5-2015

Joe Carboni

YORK 6302

Due 25th May 2015

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

272

SHIRE OF YORK	
FILE	PS GEN-PP0.3.1
OFFICER	INITIALS
KIDA	
25 MAY 2015	
1147852	
REFERRED TO COUNCIL	
DATE	INITIALS

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

The proposed landfill is not acceptable with the Shire of York's Local Planning Strategy, which states "protection of sustainable agriculture and preserve and enhance the environment and natural resources." The proposal does not meet the objectives of York's Community Strategic Plan which states, "Protect and Enhance our rural land and spaces" and has a priority to "Establish land use strategy to ensure rural and farming land is protected." Landfill does not enhance nor preserve and should not be placed in our agricultural areas, especially near important water sources.

The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

We are also very concerned about the additional large vehicles that will be continuously using the road.

Yours sincerely
NAME Adelphie KING
ADDRESS York WA 6302
DATE 25.5.15
SIGNATURE A. King

L14 1072

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

273

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

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The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Yours sincerely

NAME Walter King
ADDRESS _____ YORK
DATE 25-5-13
SIGNATURE Walter King

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

SHIRE OF YORK	
FILE	PS - Gen. P.P.O. 3-1
OFFICER	KIR
INITIALS	K
25 MAY 2015	
1147874	
REFERRED TO COUNCIL	
DATE	INITIALS

274

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

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The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Yours sincerely
NAME J & E GIBBONS YORK
ADDRESS
DATE 7/5/15
SIGNATURE *E Gibbons*

Shire of York
P O Box 22, York WA 6302
records@york.wa.gov.au

SHIRE OF YORK	
FILE	PS-GENI-PRO-3-1
OFFICER	KIAA
INITIALS	
25 MAY 2015	
1147853	
REFERRED TO COUNCIL	
DATE	INITIALS

275

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

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The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Over a great many years, the people of York have been proud of their historic claim as the state's first inland town. Battles have been fought and won to keep our town's historic buildings and environs safe. York has become a Mecca for tourists in spite of the ever decreasing state of our roads.

SITA's plans on paper sound feasible, but there is a great deal of anxiety about safety on so many levels.

* No one can guarantee that this site would remain intact if and when another earthquake occurs. Toxic waste escaping into our underground water would be a disaster.

* There seems to be no forthcoming improvement to our roads from York to the Lakes and this road, despite assurances, will become even more hazardous. A side effect will almost certainly be a lessening of the tourists we have fought so hard to encourage.

* There is the worry that so many of the native species will be at risk while feral animals, encouraged to scavenge by the smell of rubbish, will thrive.

* Air pollution? It is said not, but do we really know? York is in a valley and is a trap for air pollutants.

Why are we taking a chance? Why don't we err on the side of caution. We have such a lot to lose and really ... just what is there to gain?

Yours sincerely

NAME: Lorraine Wheeler

ADDRESS:

DATE: 24th July 2015

SIGNATURE:

L. Wheeler

SHIRE OF YORK	
FILE	PS GEN PPO.3-1
OFFICER	KIRA
INITIALS	[Signature]
25 MAY 2015	
114 7859	
REFERRED TO COUNCIL	
DATE	INITIALS
	/

276

M Sharp

York WA 6302

21st May 2015

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

To Commissioner James Best and the Shire of York,

With reference to the SITA Allawuna Landfill Proposal on Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I am writing to object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is a contradiction to State Planning as stated by the WA Planning Commission the "Wheatbelt is the State's agricultural powerhouse, producing much of the State's grain supply" and that "broadacre farming is to be the dominant land use".

The proposal is also against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

The proposal does not meet the objectives of York's Community Strategic Plan which states, "Protect and Enhance our rural land and spaces" and has a priority to "Establish land use strategy to ensure rural and farming land is protected." Landfill does not enhance nor preserve and should not be placed in our agricultural areas, especially near important water sources.

The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Yours sincerely

[Handwritten signature]

Mrs M Sharp

X

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

277

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

The proposed landfill is not acceptable with the Shire of York's Local Planning Strategy, which states "protection of sustainable agriculture and preserve and enhance the environment and natural resources." The proposal does not meet the objectives of York's Community Strategic Plan which states, "Protect and Enhance our rural land and spaces" and has a priority to "Establish land use strategy to ensure rural and farming land is protected." Landfill does not enhance nor preserve and should not be placed in our agricultural areas, especially near important water sources.

The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Yours sincerely

NAME MARGARET KEHANE

ADDRESS _____ YORK 6302

DATE 25.5.15

SIGNATURE M Kehane.

Due 25th May 2015

TO: SHIRE OF YORK,
P.O. Box 22,
YORK, W.A., 6302.

Re: SITA ALLAWUNA FARM LANDFILL.

SHIRE OF YORK	
FILE	PS-CEN-PP0-3-1
OFFICER	INITIALS
KIRA	AK
25 MAY 2015	
1147860	
REFERRED TO COUNCIL	
DATE	INITIALS

278

DATE 11/5/15

NAME: Chris Hill
ADDRESS: [REDACTED]
Mount Lawley 6050

Dear Sir,

The amended application from Sita Allawuna Farm Landfill proposed use does not change, the proposal is still the same as original, therefore the previous submissions to the Shire of York against the original application are still valid. The Shire of York's Planning Officer's report is therefore still valid. The JDAP's reasons for upholding the Shire of York's Council's decision and refusing the Sita Allawuna Farm Landfill, are still valid.

I object to this proposed Sita Allawuna Farm Landfill (rubbish dump). This should not be permitted as it does not fit within the Shire of York's Town Planning Scheme No.2, which states, under the General Agriculture zone "...to ensure the continuation of broad-acre agriculture as the principal land use in the district, encouraging where appropriate the retention and expansion of agricultural activities". Landfill enterprises are not an agricultural activity, should not be placed in our broad-acre farms, but instead Landfills destroy and poison our environment. This area produces sheep, cattle, wool, grain etc. for human consumption. Good farmland in a high and consistent rainfall area should be protected. Metropolitan population is expected to reach 3 million in the near future, creating more rubbish. Allawuna Farm and surrounds has abundant paleo water channels, flowing into the Mundaring Weir Water Catchment area. Fresh water is a precious and finite commodity and must be protected. The main access road to York, The Great Southern Highway, is extremely dangerous and is not suitable for the extra trucks and roadtrains this proposal will bring.

York is a historic tourist town, and is a popular destination for tourists, retiree's and growing young families, and is a lovely town to live, work and visit.

This proposed Landfill will not benefit York. I ask that the proposal not be accepted.

Yours sincerely,

Chris Hill.

SIGNATURE



I147300 ✕

TO: SHIRE OF YORK,
P.O. Box 22,
YORK, W.A., 6302.

279

Re: SITA ALLAWUNA FARM LANDFILL.

DATE 25-5-15

NAME: DANIEL KEHANE
ADDRESS: York, 6302

Dear Sir,

The amended application from Sita Allawuna Farm Landfill proposed use does not change, the proposal is still the same as original, therefore the previous submissions to the Shire of York against the original application are still valid. The Shire of York's Planning Officer's report is therefore still valid. The JDAP's reasons for upholding the Shire of York's Council's decision and refusing the Sita Allawuna Farm Landfill, are still valid.


I object to this proposed Sita Allawuna Farm Landfill (rubbish dump). This should not be permitted as it does not fit within the Shire of York's Town Planning Scheme No.2, which states, under the General Agriculture zone "...to ensure the continuation of broad-acre agriculture as the principal land use in the district, encouraging where appropriate the retention and expansion of agricultural activities". Landfill enterprises are not an agricultural activity, should not be placed in our broad-acre farms, but instead Landfills destroy and poison our environment. This area produces sheep, cattle, wool, grain etc. for human consumption. Good farmland in a high and consistent rainfall area should be protected. Metropolitan population is expected to reach 3 million in the near future, creating more rubbish. Allawuna Farm and surrounds has abundant paleo water channels, flowing into the Mundaring Weir Water Catchment area. Fresh water is a precious and finite commodity and must be protected. The main access road to York, The Great Southern Highway, is extremely dangerous and is not suitable for the extra trucks and roadtrains this proposal will bring.

York is a historic tourist town, and is a popular destination for tourists, retiree's and growing young families, and is a lovely town to live, work and visit.

This proposed Landfill will not benefit York. I ask that the proposal not be accepted.

Yours sincerely,

SIGNATURE



SHIRE OF YORK	
FILE	PS-Gen. PPO. 3-1
OFFICER	INITIALS
K. RA	

Records

From: _____
Sent: Monday, 25 May 2015 3:12 PM
To: Records
Subject: 1147892 - THE SITA ALLAWUNA LANDFILL PROPOSAL LOTS 9926, 4869, 5931 AND 26934 GREAT SOUTHERN HIGHWAY SO RONANS YORK

25 MAY 2015
REFERRED TO COUNCIL

SynergySoft: 1147892

280

To the Commissioner James Best and the Shire of York.

My husband and I own approximately 100 acres of land north east of the proposed property purchase of Allawuna - a distance of less than 1.5km.

We strongly object the the proposed landfill by Sita and believe that should be not permitted on the following grounds:-

The Shire of Yorks's Town Planning Scheme zones this land as General Agriculture "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill and the associated industries of extraction, processing, burning of waste etc are far removed from agricultural activity and will destroy valuable farming land. It will never again be suitable for raising of stock or growing of crops as although there may be "revegetation" the contamination stays in the ground forever and whatever is grown or eats grass grown on this land carries contaminants.

The proposal does not meet the objectives of the Shire of Yorks local planning strategy which states "to protect and enhance, protection of farming land...."

Continuation of this project will cause the financial and historic downfall of the town. Investors and visitors will not have any interest to compete with 60 trucks a day along Great Southern Highway from the Lakes to York and existing small landholders such as we are, will be forced to move from the area as commuting will become an impossible dangerous task.

The planned proposal is for the total of 3500 acres and as such will give Sita an open cheque book to offer rubbish dumping for every shire and council in Western Australia.

We have opposed this proposal from the beginning and we urge absolute integrity from the Shire to ensure that the feelings of all ratepayers against this are noted and represented.

Yours faithfully

Lynley Bashford and Chris Meadmore

St Ronans

Records

From: William _____
Sent: Monday, 25 May 2015 1:39 PM
To: Records
Subject: I147864 - William Bloxsome - Allawuna Farm – Lot 4869(PT) 2948 Great Southern Highway, Saint Ronans - Submission
Attachments: William Bloxsome - Allawuna Farm – Lot 4869(PT) 2948 Great Southern Highway, Saint Ronans - Submission.pdf
SynergySoft: I147864


Good afternoon,


Please find my submission attached. Can you please reply to this e-mail to confirm you have received this submission.

Kind regards,

William Bloxsome

*Emailed 9/6/15
to confirm receipt of
submission*



SHIRE OF YORK	
FILE	PS-Gen PPO. 3-1
OFFICER	INITIALS
KIRA	
25 MAY 2015	
REFERRED TO COUNCIL	
DATE	INITIALS

Allawuna Farm – Lot 4869(PT) 2948 Great Southern Highway, Saint Ronans

NAME: William Alexander Bloxsome

Date: 25/5/15

ADDRESS: _____

Dear Sir,

The amended application from Sita Allawuna Farm Landfill proposed use does not change, the proposal is still the same as the original, therefore the previous submissions to the Shire of York against the original application are still valid. The Shire of York's Planning Officer's report is therefore still valid. The JADAP's reasons for upholding the Shire of York Council's decision and refusing the Sita Allawuna Farm Landfill, are still valid.

I object to this proposed Sita Allawuna Farm Landfill (rubbish dump). This should not be permitted as it does not fit within the Shire of York's Town Planning Scheme No 2, which states, under the General Agriculture zone *"...to ensure the continuation of broad-acre agriculture as the principal land use in the district, encouraging where appropriate the retention and expansion of agricultural activities"*. Landfill enterprises are not an agricultural activity, should not be placed in our broad-acre farms, but instead landfills destroy and poison our environment. This area produces sheep, cattle, wool, grain etc. for human consumption. Good farmland in a high and consistent rainfall area should be protected. The metropolitan population is expected to reach 3 million in the near future, creating more rubbish. Allawuna Farm and surrounds has abundant paleo water channels, flowing into the Mundaring Weir Water Catchment area. Fresh water is a precious and finite commodity and must be protected. The main access road to York, the Great Southern Highway, is extremely dangerous and is not suitable for the extra trucks and road trains this proposal will bring. The extra trucks on the road will also discourage tourists from driving to York, this will decrease tourism in the area and reduce the viability of many businesses here.

The reduction in the lifespan of this landfill by almost half only means that this problem will move to another area in half the time. A location that is suitable for this activity for the full original timeframe would be a much better utilisation of resources.

York is a historic tourist town, and is a popular destination for tourists, retiree's and growing young families, and is a lovely town to live, work and visit. Tourism provides many jobs in York and the scope for future growth in the town is heavily reliant on Tourism. Tourists will be much less likely to visit York if they know the town is located near a landfill containing all of Perth's rubbish.

This proposed Landfill will not benefit York. I ask that the proposal be refused.

Yours sincerely,



William Bloxsome

25/5/15

Records

From: Katherine Davies
Sent: Monday, 25 May 2015 3:57 PM
To: Records
Subject: Allawuna landfill objection
Attachments: Shire of York 2 RAR Report KDavies.docx

SHIRE OF YORK	
FILE	PS GEN. No. 3-1
OFFICER	INITIALS
KRA	AK
25 MAY 2015	
1147909	
REFERRED TO COUNCIL	
DATE	INITIALS

To whom it may concern,

Find attached objection to Allawuna landfill proposal.

Katherine Davies

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

The proposed landfill is not acceptable with the Shire of York's Local Planning Strategy, which states "protection of sustainable agriculture and preserve and enhance the environment and natural resources." The proposal does not meet the objectives of York's Community Strategic Plan which states, "Protect and Enhance our rural land and spaces" and has a priority to "Establish land use strategy to ensure rural and farming land is protected." Landfill does not enhance nor preserve and should not be placed in our agricultural areas, especially near important water sources.

The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

I feel that the town of York will be greatly affected by the construction of a landfill. In conversations with many people throughout my travels in regional Western Australia, people often comment about what a beautiful town York is, and many people hold such affection for it. Over the last few years meeting people in the regions I have had many people make comments to me about the potential for the landfill site at Allawuna and their perception of it. I think that many people's ideas and perceptions of the town and shire of York would be affected by the construction of a landfill.

York is seen as a great tourist location because of its close proximity to Perth, and because of this we attract many city dwellers for day trips to the area.

I have a great concern for the traffic loads on Great Southern Highway between York and the Lakes roadhouse. An increase in the volume of traffic on the road will mean an increase in the potential for collisions on that dangerous road. This could potentially lead to an increased reliance on volunteer emergency service who already struggle to find adequate numbers of volunteers.

Farming is a huge part of the identity of York. Using Allawuna farm as a landfill is a waste of valuable agricultural land and has the potential to affect nearby farmer's land values and therefore their equity. Equity plays a large factor in finance from banks, and it could only mean a couple of poor seasons to reduce the business equity to a point where funding may be withdrawn. This could pose all sorts of problems.

Yours sincerely
Katherine Davies

25/5/15
SIGNATURE

A handwritten signature in black ink, appearing to read 'Katherine Davies', written in a cursive style.

Records

From: Harley Davies
Sent: Monday, 25 May 2015 12:01 PM
To: Records
Cc: Erin Davies; harley.davies@live.com.au
Subject: Letter of Objection to Landfill Proposal At Allawuna Farm
Attachments: Shire of York E&H Davies.pdf; Signed E&H Davies.pdf

SHIRE OF YORK	
FILE	PS GEN. 110.3.1
OFFICER	INITIALS
KIRA	AK
25 MAY 2015	
1147857	
REFERRED TO COUNCIL	
DATE	INITIALS

To whom it may concern,

Please find attached our letter of objection to the proposed rezoning and landfill development at Allawuna Farm. We have attached an unscanned electronic copy and also a signed copy.

Kind Regards,

Harley Davies

25th May 2015

Shire of York
P O Box 22
York WA 6302

To the Shire of York,

RE: The SITA Allawuna Landfill Proposal

We write to you in objection to the proposed landfill at Allawuna by SITA Australia and ask that the Shire of York not allow the proposal to be permitted.

The construction of a landfill facility in the Shire of York contradicts the town's planning strategy in three ways:

- A landfill facility in an agricultural area has the potential to contaminate farm produce throughout the region. This would be detrimental to the town's primary industry and affect business prospects within the area, as well as impacting the health and well-being of consumers of the farm produce from the area;
- The use of good quality agricultural land for a landfill site is shortsighted as it will be unable to be rehabilitated to its former condition and thus limit the land's capacity for use following the closure of the landfill facility; and
- A landfill site located along the town's main highway link to Perth will deter tourism, which is another major source of the town's pride and income.

The site of the proposed landfill is currently zoned as "General Agricultural" by the Shire of York. Under the Town of York's Planning Scheme No 2, Part 4, Section 15, Subsection 2, development may be refused if the development "will have a detrimental effect on the rural character and amenities". As we have outlined above, landfill is not a rural land usage and will have a long lasting and widespread detrimental effect on the region's rural character and amenities. While landfill is an extensive land usage, this does not by definition make it suitable for placement within an agricultural/food production area.

It should be noted that in the past, contaminated towns that receive unfavourable publicity from poor land use, particularly environmentally contaminated sites, lose property value, tourism, and reputation (for example, lead contamination in Esperance).

Other causes for concern for the location of the proposed landfill at Allawuna include:

- The placement of a waste facility near a water catchment zone could cause contamination throughout a primary water source for Western Australia, having the potential to impact the health of those who access this water supply, now and in the future; and

- Increased traffic for waste transport, particularly trucks and heavy vehicles, on the Great Southern Highway will greatly increase the risk of road accidents and thus put the safety of all road users in jeopardy.

The people of York have very little to gain from the location of this facility within their shire, and we believe it is the duty of the Shire of York to oppose SITA's application to develop a landfill site at Allawuna. The resubmission of the landfill proposal should be seen by the Shire of York as an opportunity to do what was not done for the original submission: reject the placement of waste disposal in the agricultural and tourism hub that is York.

Yours sincerely,

Harley and Erin Davies

Harley and Erin Davies

25th May 2015

Shire of York
PO Box 22
York WA 6302

To the Shire of York,

RE: The SITA Allawuna Landfill Proposal

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- A landfill site located along the town's main highway link to Perth will deter tourism, which is another major source of the town's pride and income.

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It should be noted that in the past, contaminated towns that receive unfavourable publicity from poor land use, particularly environmentally contaminated sites, lose property value, tourism, and reputation (for example, lead contamination in Esperance).

Other causes for concern for the location of the proposed landfill at Allawuna include:

- The placement of a waste facility near a water catchment zone could cause contamination throughout a primary water source for Western Australia, having the potential to impact the health of those who access this water supply, now and in the future; and

- Increased traffic for waste transport, particularly trucks and heavy vehicles, on the Great Southern Highway will greatly increase the risk of road accidents and thus put the safety of all road users in jeopardy.

The people of York have very little to gain from the location of this facility within their shire, and we believe it is the duty of the Shire of York to oppose SITA's application to develop a landfill site at Allawuna. The resubmission of the landfill proposal should be seen by the Shire of York as an opportunity to do what was not done for the original submission: reject the placement of waste disposal in the agricultural and tourism hub that is York.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Harley and Erin Davies". The signature is written in a cursive, flowing style.

Harley and Erin Davies

LATE

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

284

SHIRE OF YORK	
FILE	PS-GEN-PP-3-1
OFFICER	KIRA
INITIALS	X
26 MAY 2015	
1147951	
REFERRED TO COUNCIL	
DATE	INITIALS

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

The proposed landfill is not acceptable with the Shire of York's Local Planning Strategy, which states "protection of sustainable agriculture and preserve and enhance the environment and natural resources." The proposal does not meet the objectives of York's Community Strategic Plan which states, "Protect and Enhance our rural land and spaces" and has a priority to "Establish land use strategy to ensure rural and farming land is protected." Landfill does not enhance nor preserve and should not be placed in our agricultural areas, especially near important water sources.

The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Hard to believe that this could happen on a road that has already claimed lives & so many other accidents? What about the safety of the people of York on that road...

Yours sincerely

NAME Sharon Ann Moseley
 ADDRESS ? YORK 6302
 DATE 7 May 2015
 SIGNATURE SA Moseley

Records

From:
Sent: Friday, 29 May 2015 7:27 PM
To: Records
Subject: Objection to SITA landfill 2015

285

SHIRE OF YORK	
FILE	PS - GEN. PRO. 3.1
OFFICIAL	INITIALS
KIRA	OX
2 - JUL 11 2015	
1148046	
REFERRED TO COUNCIL	
DATE	INITIALS

The Shire of York

PO Box 22

York WA 6302

29th May 2015

To: The Commissioner, James Best and the Shire of York.

On behalf of the residents and ratepayers of the Helena Valley Estate Residents Association I make this submission **against the Landfill Proposal by SITA on Allawuna Farm - Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St Ronans, York.**

1. I/we are concerned at the likelihood of a great increase in heavy truck/vehicle movements through our area Hazlemere, Helena Valley, Midvale and Greemnmount Hill. Over recent times there has been a visible increase in heavy vehicluar traffic due to the Tier 3 rail fiasco with Brookfield Rail and CBH. Even with the SITA data on truck numbers projection seems too high and it is expected that the real numbers will be much greater. This in turn will drive the safety factor higher for general road users.

How do we know that operations will be restricted to the daytime? There is suspicion that this could also run into the night.

2. There are a variety of events which could cause problems for this proposal.

A. High rainfall could flood the leachate ponds and contaminate surface water reaching the Helena River.

B. Earthquakes or a tip fire could rupture the sealing membrane allowing underground leakage to reach the river.

C. Should the leachate ponds ever dry out, strong local winds could carry leachate dust into the Helena River catchment area.

D. In its proposed 20 year life, the chance of a catastrophic event is quite likely. As SITA will not comment on lodging further applications the original 40 year life should apply.

3. As has been raised many times in the past, the Great Southern Highway Highway from the Lakes to Allawuna Farm should be upgraded for the usage of large trucks. My and other persons experience while travelling on this stretch of road is that it is deadly, being too narrow and basically rough. Extreme heavy vehicle traffic will only make this worse and more treacherous.

A. The Metropolitan Local Government Review Panel previously recommended that **ALL** Perth waste should be transported on **rail only**.

Thank you for considering this submission.

Regards

Rob Rowe - president

Helena Valley Estate Residents Association

LATE

286

SHIRE OF YORK	
FILE	PS. GEN. M.B. 3-1
NUMBER	KIRA
DATE	2 - JUN 2015
1148036	
REFERRED TO COUNCIL	
DATE	INITIALS

Shire of York
 P O Box 22
 York WA 6302
 records@york.wa.gov.au

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

The proposed landfill is not acceptable with the Shire of York's Local Planning Strategy, which states "protection of sustainable agriculture and preserve and enhance the environment and natural resources." The proposal does not meet the objectives of York's Community Strategic Plan which states, "Protect and Enhance our rural land and spaces" and has a priority to "Establish land use strategy to ensure rural and farming land is protected." Landfill does not enhance nor preserve and should not be placed in our agricultural areas, especially near important water sources.

The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Yours sincerely

NAME

ROY BERNARD CARTER
 YORK WA 6302

ADDRESS

DATE

29 MAY, 2015

SIGNATURE

RB Carter

LATE

Shire of York
P O Box 22
York WA 6302
records@york.wa.gov.au

SHIRE OF YORK	
FILE PS-GEN-PP-3-1	
OFFICER	INITIALS
KIRA	OK
2 - JUN 2015	
1148035	
REFERRED TO COUNCIL	
DATE	INITIALS

287

To The Commissioner James Best and the Shire of York,

RE: The SITA Allawuna Landfill Proposal Lots 9926, 4869, 5931 and 26934 Great Southern Highway, St. Ronan's, York.

I object to the proposed landfill at Allawuna by SITA Australia and believe that the proposal should not be permitted.

The proposal is against the principals of the Shire of York's Town Planning Scheme, which states under general agriculture zone "to ensure the continuation of broad acre agriculture as the principal land use in the district encouraging where appropriate the retention and expansion of agricultural activities." Landfill is not an agricultural activity and will only destroy valuable agricultural land.

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The landfill will not benefit York in anyway, but has the potential to destroy our agriculture industry, our tourism and hospitality industries and valuable employment that these industries bring to York. I therefore ask that this proposal be rejected.

Yours sincerely
NAME
ADDRESS
DATE
SIGNATURE

~~Neville Ian BYRNE~~ York WA 6302

29 May 2015

