



ATTACHMENTS

Planning and Development Committee Meeting

02 December 2015

5.30pm

City of Albany Council Chambers

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AREA PLAN

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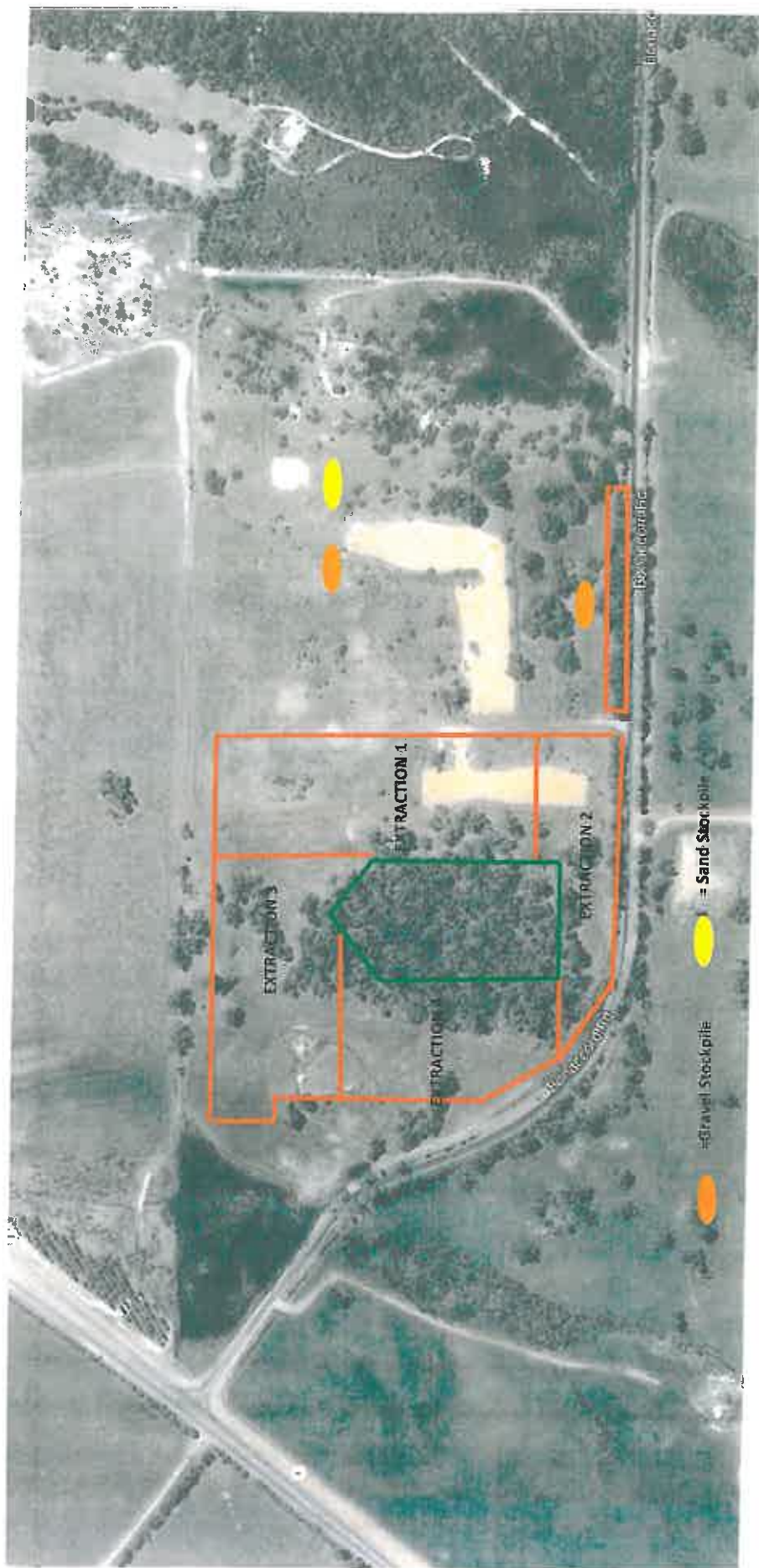


Figure 1

Local Planning Scheme No. 1
Application: Industry Extractive - P2150048
Schedule of Submissions for 105 Bon Accord Road (Lot 110) King River

No.	Submission	Officer Comment
1.	<p>Strongly object to the Proposal.</p> <p>Recommend a condition be applied restricting the use of Bon Accord Road to the east of the site, unless a resident of Bon Accord Road requires product delivered to their address.</p> <p>If it is not the applicant's intention to use Bon Accord Road then this condition needs to be clarified. If it is the applicant's intention, then the reasons for objection are based entirely on safety of the community.</p> <p>There is currently another existing extraction site on Prideaux Road and the expansion of this site will increase the heavy traffic through this residential area to an unacceptable volume.</p> <p>Bon Accord Road is a school bus route and although during term time, trucks can be banned from using the roads at bus route times, this does not allow for the potential danger caused by the large volume of school run traffic that occurs either side of the bus run time slot.</p> <p>This is an active community made up of families and retirees and subsequently there is an unusually high volume of foot traffic that use these roads. This is also an established route for the local cycling clubs.</p> <p>Non-compliance of this (or any other) condition of licence should entail immediate site closure by the City until compliance is achieved or fines are imposed and settled.</p>	<p>Objection Noted.</p> <p>The City of Albany does not have the statutory authority to impose a restriction on the use of an 'as of right' vehicle on a road. If the applicant proposes to use vehicles in excess of 'as of right' specifications they will be obligated to apply for permission with Main Roads Western Australia.</p> <p>Concerns Noted.</p> <p>It is recommended that a planning condition is applied, requiring the applicant to liaise with school bus operators to commence a dialogue and establish a schedule to avoid potential conflict.</p> <p>The City of Albany has established compliance practices for extractive industries. Bonds are held, and the license process in conjunction with the development application process provides a framework for compliance.</p>

No.	Submission	Officer Comment
2.	<p>Opposed to increased industry in our area, especially due to the impact on the roads and hence our children's safety on bikes or when walking.</p> <p>If this proposal is to go ahead, a meaningful limit on the number of trucks, plus visual screening being increased along Bushby Road, plus exit straight out to Chester Pass Road will all lessen impacts.</p>	<p>Concerns noted.</p> <p>The City of Albany does not place a limit on vehicle movements. The applicant has advised that 8 vehicle movements a day is proposed and that the majority of vehicles will utilise Chester Pass Road. Comment is taken to refer to Bon Accord Road. A planning condition requiring screen planting to Bon Accord Road is recommended.</p>
3.	<p>I lodge my objection to the application for Industry – Extractive (Sand & Gravel) at 105 Bon Accord Road, Lower King.</p> <p>I moved here for the special rural lifestyle. However, the introduction of these industries to, and through the immediate area, has had an adverse effect on the amenity of the area.</p> <p>To further allow these industries onto a school bus route that has no safe footpaths or designated bus pull over areas will be irresponsible on the Council's behalf.</p> <p>The submission states that all truck movements will exit the property turning right (west) onto Bon Accord Road unless they need to go left (east through the school bus route) to service a client in that direction.</p> <p>With the developments towards the Gull Rock area and Oyster Harbour this could be the majority of their movements. This represents a huge safety risk to the public and their children, as these trucks pass through the school bus route and into the Grammar School traffic flow at a very dangerous intersection of Prideaux and Nanarup Roads.</p>	<p>Objection Noted.</p> <p>The land in question is zoned 'General Agriculture', with Industry – Extractive being classified as a discretionary land use.</p> <p>It is recommended that a planning condition is applied, requiring the applicant to liaise with school bus operators to commence a dialogue and establish a schedule to avoid potential conflict.</p> <p>The City of Albany does not have the statutory authority to impose a restriction on the use of an 'as of right' vehicle on a road. If the applicant proposes to use vehicles in excess of 'as of right' specifications they will be obligated to apply for permission with Main Roads Western Australia.</p>

No.	Submission	Officer Comment
4.	<p>We are strongly opposed to this application.</p> <p>Past experience has demonstrated clearly the depth of opposition to these industries from the local community and the amount of impact they are having on residents.</p> <p>Past experience has also shown that trucks will be travelling along Prideaux Road and that truck numbers will greatly exceed the numbers declared by the applicants.</p> <p>Do not believe applicants will adhere to conditions and are sceptical that conditions will be closely monitored or enforced by Council.</p>	<p>Opposition Noted.</p> <p>The applicant has advised that 8 vehicle movements a day are proposed and that the majority of vehicles will utilise Chester Pass Road. In reference to truck routing, the City of Albany does not have the statutory authority to impose a restriction on the use of an 'as of right' vehicle on a road.</p> <p>Concerns noted.</p>
5.	<p>Please record this as an objection to the application.</p> <p>The road surface will not handle the truck movements and how are you going to monitor the trucks' direction of passage?</p> <p>The increase traffic from private vehicles has increased tenfold in the past few years with the growth from the Grammar School and this is also a bus run.</p> <p>All of the concerns that were highlighted at the Council meeting concerning the other pit proposal are still my concerns.</p> <p>We have a wonderful rural lifestyle not industrial in this area, with walkers, horse riders and families enjoying all that this area offers.</p> <p>Please don't destroy our clean air and the quietness of country living.</p>	<p>Objection Noted.</p> <p>It is recommended that a planning condition is applied, requiring the applicant to be responsible for the repair of any undue damage to Bon Accord Road caused by the extraction operations. In regards to truck routing, the City of Albany does not have the statutory authority to impose a restriction on the use of an 'as of right' vehicle on a road.</p> <p>Noted.</p> <p>The land in question is zoned 'General Agriculture', with Industry – Extractive being classified as a discretionary land use</p> <p>Noted. Staff consider that the proposed conditions and management plans mitigate the concerns raised.</p>

No.	Submission	Officer Comment
6.	<p>The site is fully exposed to both Bon Accord and Chester Pass Roads with amazingly clear visibility. Albany is a major tourist town and having such a high visibility use on a major arterial road into the city is clearly wrong.</p> <p>There is too much commercial traffic on Bon Accord Road as it is and we were all misled by the application from Jim's Backhoes, which quoted 10 truck movements a day and not the 34 plus we often experience. Palmer's previous and almost identical application on 207 Bon Accord Road talked of between 80 and 100 truck movements a day at peak times yet now he talks about 8 per day, so who do we believe? The number of truck movements from Jim's Backhoes is already having a significant impact on our lifestyles and quiet enjoyment of our properties and a doubling of this number would be intolerable.</p> <p>If Council still wish to approve this application then it must be subject to strict conditions that reflect nearby residents' views and protects their interests.</p> <p>A complete ban on all trucks turning left and eastwards from the subject site, with the only exception being deliveries to properties in Bon Accord, Bushby and Prideaux Roads. The subject site is right next to Chester Pass Road (unlike 207 Bon Accord Road) and Palmers must exit that way and find alternative routes.</p> <p>Truck numbers should be limited to 8 per day and not an average of 8 per day. We request that Council closely monitor all truck movements by log books, GPS, remote control or some other method.</p> <p>There must be a prohibition on bringing any off-site materials on-site.</p>	<p>The closest section of extraction to Chester Pass Road would be approximately 180 metres away. There is also a 180 metre section of screening vegetation which runs north along Chester Pass Road from the intersection of Bon Accord Road. It is recommended that a planning condition is applied, requiring the implementation of screen planting along sections of Bon Accord Road which do not have existing vegetation.</p> <p>Concerns regarding vehicle numbers noted. The previous application on Bon Accord Road was much larger than the current application.</p> <p>The Management Plans which have been supplied, together with the recommended planning conditions, mitigate and manage the issues raised during the consultation process.</p> <p>The City of Albany does not have the statutory authority to impose a restriction on the use of an 'as of right' vehicle on a road. If the applicant proposes to use vehicles in excess of 'as of right' specifications they will be obligated to apply for permission with Main Roads Western Australia.</p> <p>Approval has only been sought for Industry – Extractive. A specific approval would be required for the dumping of waste materials.</p> <p>In order to specifically manage this issue through the rehabilitation process, it is recommended that a planning condition is applied, requiring the inclusion of weed management measures within the Rehabilitation Management Plan.</p>

No.	Submission	Officer Comment
	<p>All weeds and Sydney wattle on the sand quarry portion of the subject site to be removed by Palmers and the area properly rehabilitated. We note the Sydney wattle has escaped the site to the Council owned verge (thus adding to Council maintenance costs) and on to the adjoining Riverview Golf Course.</p> <p>Full screening to be erected all along Bon Accord and Chester Pass Roads in advance of any further quarrying work. The existing quarry operations are an absolute eyesore with no proper screening from the road.</p> <p>A complete ban on weekend work. Sound travels long distances here and Council has already been notified of crushing and associated activities undertaken by Palmers on Sundays.</p> <p>For road safety reasons Council must restrict truck movements during school commuting hours and not just during the school bus run times as is the case with Jim's Backhoes.</p> <p>A licence should not be granted until all conditions have been met.</p>	<p>The closest section of extraction to Chester Pass Road would be approximately 180 metres away. There is also a 180 metre section of screening vegetation which runs north along Chester Pass Road from the intersection of Bon Accord Road. It is recommended a condition be applied requiring the implementation of screen planting along sections of Bon Accord Road which do not have existing vegetation.</p> <p>Extractive Industries are permitted to operate on Saturdays at restricted hours. No Work is permitted to be undertaken on Sundays.</p> <p>It is recommended that a planning condition is applied, requiring the applicant to liaise with school bus operators to commence a dialogue and establish a schedule to avoid potential conflict. It would be impractical to establish a dialogue for commuting times, given that this varies significantly on a case by case basis. School bus times would largely coincide with commuting times.</p> <p>Extractive Industry Licenses are not issued until all the applicable planning conditions are met.</p>
7.	<p>Strongly object against the quarry plan mentioned above and we hope that Council will find legal ways to make the applicant abandon his quarry plan.</p> <p>Why on earth permission could be given to quarries so close to a built-up area. It is an inevitable reality that towns get larger and larger and also our neighbourhood is expanding. Land that had a rural purpose in the past, inevitably is transformed into built-up areas nowadays. Logical consequence is that companies causing noise, dust and truck movements have no</p>	<p>Objection Noted.</p> <p>The subject site and surrounding sites are zoned 'General Agriculture', Industry – Extractive is a discretionary use within this zone. The encroachment of Rural Residential lots onto agricultural land does is one of the reasons factors contributing to the current moratorium on Scheme amendments for new Rural Residential land.</p>

<p>other choice than to move to areas where quarries don't bother a living soul.</p> <p>Ugly and polluting activities should be kept out of sight of tourists at any cost. This particular quarry is proposed on land that is wide open and fully visible to Chester Pass Road.</p> <p>We are concerned about increasing noise, dust and traffic hazards and also about the value of our property, being the major investment for our superannuation.</p> <p>Urgently request Council at least to insist the applicant to strictly respect and obey the conditions attached to his licence. Residents</p> <p>Fine dust and hazardous minerals can be carried along by wind over long distances and I am concerned about air pollution caused by the applicant's quarry.</p> <p>We want to bring under your attention that it is our right to</p>	<p>The closest section of extraction to Chester Pass Road is approximately 180 metres away. There is also a 180 metre section of screening vegetation which runs north along Chester Pass Road from the intersection of Bon Accord Road. A condition for screen planting for Bon Accord Road is recommended.</p> <p>The applicant has submitted dieback, drainage, rehabilitation and noise management plans in support of the application. Staff consider that these management plans, in conjunction with the standard extractive industry conditions It is recommended that the implementation and ongoing compliance with these management plans be applied as a condition of consent.</p> <p>The City of Albany <i>Local Planning Scheme No.1</i> has established provisions for the compliance of planning conditions. Furthermore, for extractive industries there is a licensing requirement. Bonds are held, and the license process in conjunction with the development application process provides a framework for compliance.</p> <p>The applicant has also submitted a dust and particle management plan. The plan incorporates a number of dust mitigation measures, including;</p> <ul style="list-style-type: none"> • Limiting stockpiles to anticipated output for the following days; • Locating stockpiles away from prominent ridges or seasonal prevailing winds and be no more than 3 metres high; • Crushing equipment and conveyors will utilise spray bars as required; • Timing of earthworks will coincide with low wind conditions; and • A dust complaint system will be established, any complaints will be forwarded to the site manager. Site manager details will be on the gate. <p>The applicant has advised that 8 vehicle movements a day are proposed and that the majority of vehicles will utilise Chester Pass</p>
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	<p>demand from the authorities to e.g. strictly enforce the applicant concerned a limit of 8 truck movements per day, forbid truck movements west along Bon Accord Road, forbid digging, crushing or moving activities during weekends and, above all, effectively and consequentially police compliance with all rules involved.</p>	<p>Road. In reference to truck routing, the City of Albany does not have the statutory authority to impose a restriction on the use of an 'as of right' vehicle on a road.</p>
<p>8.</p>	<p>While we respect the need for Palmers Earthmoving to make a living and the need for employment in Albany, there is also a requirement by the Council to provide a safe environment for the community to live in.</p> <p>Only 1 hectare at a time will be permitted to be open at any one time. Rehabilitation will take place prior to opening a new site. It does not mean the property is covered in stockpile and not rehabilitated prior to opening a new area.</p> <p>NO dumping or storage or crushing of salvaged materials (slabs of concrete and building materials) from tenders. The property is NOT a disposal site. Compliance on these matters is to be enforced by Council.</p> <p>Council will enforce compliance to all aspects of the regulations of extractive industry (gravel and sand) and Palmers licence. Not just when the applicant seeks a new licence. Placing heavy industry next to residential properties places more emphasis on council protecting the local residence as well as promoting employment.</p> <p>The proposed quarry sites along with the existing sites are clearly visible to Bon Accord Road and Chester Pass Road. The visual screening from both these roads is inadequate. Both roads carry large volumes of tourists entering Albany and crossing to the tourist attractions of Lower King and the Kalgan area.</p> <p>Truck movements from the property include trucks removing water, sand and gravel to be restricted to the maximum of 8 trucks a day, not the misleading average of.</p>	<p>Comment Noted.</p> <p>This provision is recommended to be a condition of consent and would also be a condition of an extractive industry license.</p> <p>Approval has only been sought for Extractive industry. A specific approval would be required for the dumping of waste materials.</p> <p>The City of Albany has established compliance practices for extractive industries. Bonds are held, and the license process in conjunction with the development application process provides a framework for compliance.</p> <p>The closest section of extraction from Chester Pass Road is approximately 180 metres. There is also a 180 metre section of screening vegetation which runs north along Chester Pass Road from the junction of Bon Accord Road. A condition for screen planting for Bon Accord Road is recommended.</p> <p>The City of Albany does not place a limit on vehicle movements. The applicant has advised that 8 vehicle movements a day is proposed and that the majority of vehicles will utilise Chester Pass Road. The City of Albany does not have the statutory authority to impose a condition for the use of an 'as of right' vehicle on a road. If the applicant proposes to use vehicles in excess of 'as of right' specifications they will be obligated to apply for permission with Main Roads Western Australia.</p>

<p>Truck numbers to be limited as per submission not averages. These larger numbers of truck movements are not safe nor compatible to the amenity of the area.</p> <p>Trucks are to exit WEST only. Trucks go in both directions now as residents of Bon Accord Road and Prideaux Road are fully aware. Residents are quite aware of new developments occurring to the east. Residential properties to the east need to feel safe to exit and enter their properties. Truck movements to the east from existing pits are already unable to safely accommodate these concerns as there is already a mixture of people using the existing roads without foot paths to segregate road users.</p> <p>Truck movements to be excluded from operating between 7.30 to 9am and from 2.30 to 4 pm on school days due to the extra volume of cars, school buses, children waiting to catch buses to the Grammar School, Flinders Park Primary School and Albany Senior High and other schools.</p> <p>Bon Accord and Prideaux Roads are not built for articulated trucks. There is no segregation of trucks, cars, pedestrians and animals. The intersection of Bon Accord and Prideaux is inadequate as articulated and large trucks cannot negotiate it without using the whole road and turning into oncoming traffic. Visibility at the intersection of Bushby Road and Bon Accord Rd is very poor.</p> <p>It is our opinion that should Council approve this application that council takes full responsibility to maintain the road including shoulders in a safe manner for all road users. The repairs made to the road last summer are already breaking down. Council takes responsibility for any accidents caused by excessive numbers of large vehicles on a predominately residential road. Council is responsible for the health, welfare and safety of all residents and road users whilst travelling or using Bon Accord Road.</p>	<p>The City of Albany does not have the statutory authority to impose a condition for the use of an 'as of right' vehicle on a road. If the applicant proposes to use vehicles in excess of 'as of right' specifications they will be obligated to apply for permission with Main Roads Western Australia.</p> <p>It is recommended to apply a condition requiring extractive industry operators to liaise with school bus operators to commence a dialogue and establish a schedule to avoid potential conflict. It would be impractical to establish a dialogue for commuting times given that this varies significantly on a case by case basis. School bus times would largely coincide with commuting times.</p> <p>The City of Albany does not have the statutory authority to impose a condition for the use of an 'as of right' vehicle on a road. If the applicant proposes to use vehicles in excess of 'as of right' specifications they will be obligated to apply for permission with Main Roads Western Australia.</p> <p>Opinion Noted. While the City of Albany has the responsibility of maintain roads, it is recommended that a condition be applied requiring the applicant to be responsible for the repair of any undue damage to Bon Accord Road caused by the extraction operations.</p> <p>The applicant has submitted dieback, drainage, rehabilitation and noise management plans in support of the application. Staff consider that these management plans, in conjunction with the standard extractive industry conditions It is recommended that the implementation and ongoing compliance with these management</p>
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	<p>Council is responsible for monitoring noise, dust levels, pollutants, water contamination on the proposed extraction site, as well as, safety and volume of heavy vehicle traffic on Bon Accord and Prideaux Roads</p>	<p>plans be applied as a condition of consent.</p>
9.	<p>Very concerned about the number of trucks on such a narrow road.</p> <p>Especially trucks that will turn east along a school bus route</p> <p>When approaching any truck on this road cars need to be on the edge of the road, therefore It is imperative that the sides of the road are well maintained</p>	<p>Concerns noted</p> <p>The City of Albany does not have the statutory authority to impose a condition for the use of an 'as of right' vehicle on a road. If the applicant proposes to use vehicles in excess of 'as of right' specifications they will be obligated to apply for permission with Main Roads Western Australia.</p> <p>It is recommended that a condition be applied requiring the applicant to be responsible for the repair of any undue damage to Bon Accord Road caused by the extraction operations.</p>
10.	<p>Respectfully lodge an objection to the proposed quarry request this time for 105 Bon Accord Road, Lower King, Albany.</p>	<p>Objection Noted.</p>
11.	<p>Such a quarry development is not in keeping with or a suitable development for land adjoining an area that the Town has zoned for residential and semi rural living. Further it is not in keeping with the ambiance of the Albany environment.</p> <p>There are inherent environmental risks associated with the proposed quarry. It is adjacent to an identified dieback and watercourse catchment area. There are a number of signs indicating that the area is environmentally fragile and at risk located along the reserve at the corner of Bushby and Bon Accord Roads. Water is being transported from the subject site is inclusive of runoff from an area designated dieback and used to water down areas of works across other sensitive areas of Albany.</p> <p>There are issues of noise pollution. The excavations for the entry road and the incessant beeping of the trucks and equipment are clearly heard as far as the Lower King Bridge.</p>	<p>The subject site is zoned 'General Agriculture', extractive industry is a discretionary use within this zone. The adjoining land is not zoned Residential. The land use conflict between Rural Residential lots with agricultural land is one of the factors contributing to the current moratorium on Scheme amendments for new Rural Residential land.</p> <p>The applicant has submitted a dieback management plan in order to reduce the risk of Dieback spreading. Among other controls, the plan states that equipment will be washed down upon entering/exiting the site and haulage equipment be covered to ensure there is no spillage. It is recommended that the implementation and compliance with the Dieback Management Plan be applied as a condition of consent.</p> <p>In regards to noise, the applicant has submitted a noise management plan. The plan contains a number of provisions to control noise impacts, including;</p>

	<p>There are issues of dust resulting from the excavations that will affect residents.</p> <p>The high volume of anticipated traffic on Bon Accord Road will create a significant and quite dangerous safety hazard either entering Chester Pass Road or Prideaux Road, especially given the number of children in the area. For example recently the Town Council has approved a crossover and entrance that has been installed to an existing quarry on Bon Accord Road on a particularly sharp elevated bend. This was extremely dangerous at the time of construction with a number of traffic incidents even with ATM staff managing entry and exit to Bon Accord Road. Given the significant increase proposed in particularly large haulage traffic designated to be entering and exiting this access way I believe that the Council is establishing a significant potential traffic hazard and some future liability issues.</p> <p>Undoubtedly the proposed quarry will impact significantly on extant recreational activities in the area. There are a large</p>	<ul style="list-style-type: none"> • Use of topsoil on the perimeter of the pit area to act as a noise bund; • A Noise complaint system will be established, any complaints relating to noise will be reported to the site manager. Details of the site manager will be erected at the site gate; and • Respond to noise control instructions issued by the City of Albany <p>In addition to the above, any work on the site would also be subject to ongoing compliance with the Environmental Protection (Noise) Regulations 1997.</p> <p>In response to these concerns, the applicant has also submitted a dust and particle management plan. The plan incorporates a number of dust mitigation measures, including;</p> <ul style="list-style-type: none"> • Limiting stockpiles to anticipated output for the following days; • Locating stockpiles away from prominent ridges or seasonal prevailing winds and be no more than 3 metres high; • Crushing equipment and conveyors will utilise spray bars as required; • Timing of earthworks will coincide with low wind conditions; and • A dust complaint system will be established, any complaints will be forwarded to the site manager. Site manager details will be on the gate. <p>It is recommended that the implementation and compliance with the dust management plan be applied as a condition of consent.</p> <p>Concerns noted. The City of Albany does not have the statutory authority to impose a condition for the use of an 'as of right' vehicle on a road. If the applicant proposes to use vehicles in excess of 'as of right' specifications they will be obligated to apply for permission with Main Roads Western Australia.</p>
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	<p>number of both children and adults who ride and agist horses along Bon Accord, Prideaux and Bushby Roads.</p> <p>‘</p> <p>That property values in the Lower King area will be significantly and adversely affected by the presence of such extractive industries as per information supplied by local real estate agents.</p>	<p>Property values are not a consideration under the <i>Matters To Be Considered</i> under <i>Local Planning Scheme No.1</i></p>
<p>12.</p>	<p>We become used to the increased traffic due to subdivision approvals in the area, parents using the road for transporting their child to local schools and people walking their dogs at various times during the day. The roads in the area are only just wide enough to allow to cars to pass each other without going off onto the gravel road shoulder. The proposal for the increase to the gravel and sand pit on Bon Accord Road will mean an increase in trucks on residential roads, leading to a risk of injury to local pedestrians and motorists.</p> <p>We also believe the screening from the road is inadequate. My wife drives past there every morning and has been able to observe clearly the works being carried out, so we feel there needs to be more screening as the view contrasts significantly with the beautiful farm vista across the road i.e it is not an industrial area.</p> <p>Whilst my family and I agree that people need to be able to conduct business, we ask that the Albany City Council restricts the truck movement to go west to Chester Pass Road only as currently there are no residential properties in that immediate area.</p>	<p>Concerns noted. The City of Albany does not have the statutory authority to impose a condition for the use of an ‘as of right’ vehicle on a road. If the applicant proposes to use vehicles in excess of ‘as of right’ specifications they will be obligated to apply for permission with Main Roads Western Australia. While the City of Albany has the responsibility of maintain roads, it is recommended that a condition be applied requiring the applicant to be responsible for the repair of any undue damage to Bon Accord Road caused by the extraction operations.</p> <p>The requirement for screening has been recommended as a condition of consent.</p> <p>Concerns noted. However, The City of Albany does not have the statutory authority to impose a condition for the use of an ‘as of right’ vehicle on a road.</p>
<p>13.</p>	<p>The following points appear incomplete, when compared with "City of Albany Extractive Industries Local Law.</p> <p>Points 2.3 (a) (l) to (x)..these is no map scale no contour lines etc.. each of these points have not been adequately addressed</p>	<p>The Local Law controls the License process. Licenses are only issued once a planning approval is in place and conditions complied with. The City of Albany is satisfied with the ownership details of the property.</p>

<p>(b) (l) to (xv) .again all of these points lack detail and and adequate explanation</p> <p>(c) (l) to (vii) again all of these points either not addressed or given adequate detail</p> <p>(d) no detail</p> <p>(e) no surveyors certificate attached</p> <p>(f) no evidence provided</p> <p>(h) no evidence provided-if the land is not owned by Palmers Company.. and is law owned by Palmer himself.. he should provide written consent to Palmer Co</p> <p>(l) no evidence that this notice has been given nor approved.</p> <p>As this application is incomplete Council should refuse it. As is the law under this section. I should emphasise that Council is subject to the law, as we all are: and a legal challenge is not out of the question in this regard if not complied with.</p> <p>Palmers (under Palmers letterhead) advise in there short note to council that the proposed extraction site is 110 Bon Accord Road Albany. Yet in councils advertised extractive industry application(Weekender Trader newspaper dated 13 August 2015), council states the site is at 105 Bon Accord Road Albany.</p> <p>Palmers, under a Pty Ltd letterhead have provided a short note to council, but NO PERSON; has signed the application or note. How do we know who or what the legal entity is making this application without any signature? A signature is required to make this legal and acceptable, as an application.</p> <p>If the proposed site is in Palmers own name, not owned by Palmers Pty Ltd, then he is required to sign the proposal(as</p>	<p>As mentioned above, the Extractive Industry Local Law controls the License process. The development application before Council is a decision made under the Local Planning Scheme No.1.</p> <p>The subject property is located at 105 Bon Accord, Lot 110.</p> <p>The City of Albany is satisfied with ownership details. The Planning Application form containing this information is not advertised as it is an administrative document.</p>
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	<p>Palmer the person) and have it attached to the application. This has not happened.</p> <p>This area is already a die back area. There does not appear to be any plan to address this issue.</p> <p>Noise from trucks and crushers has not been addressed</p> <p>Crushing of aggregate may cause run off into creek(near Chesterpass RD) and pollute that neighbours property(e.g. silicates from coffee rock)</p> <p>Palmers have given no indication of the "life" or duration of the proposed pit.</p> <p>There is no re generation plan for the site</p> <p>Palmers claim of natural vegetation screen along Bon Accord Rd, to act as visual screening, is totally untrue</p> <p>The map Palmers have used appears to be years out of date and does not reflect the true nature of the already loss of vegetation.</p>	<p>As above.</p> <p>A dieback management plan has been submitted. The implementation of this plan is a proposed condition of consent.</p> <p>A noise management plan has been submitted. The implementation of this plan is a proposed condition of consent.</p> <p>Department of Water provided comment on the application an advised that standard surface water management procedures will be suitable. A drainage management plan has also been submitted.</p> <p>A rehabilitation plan has been submitted. The implementation of this plan is a proposed condition of consent.</p> <p>There are sections of vegetation along the road. However, officers have recommended a screening condition be applied as a condition of consent.</p> <p>Comment noted. Councillors have been provided with a more recent aerial.</p>
<p>14.</p>	<p>The applicant has 110 Bon-Accord Road on his application rather than 105. It may well refer to a different site than that shown on the map supplied.</p> <p>The area depicted by the applicant is around 8-9 hectares falls under a class C, not a B.</p> <p>In terms of the required property, road, and waterway minimum buffers for extractive industry, the applicant's map shows the proposed pits clearly far too close. Pits 2 appear to be placed within a metre or two of the boundary of the property, a decent amount of Pit 4 is also clearly too close to the property boundary, a boundary shared a few metres later with a road.</p>	<p>The proposal is located at No. 105 (Lot 110) Bon Accord Road.</p> <p>The classification is determined by the pit area open at any one time. The application proposes to have no more than 1ha open at any one time.</p> <p>It has been recommended that a ongoing condition be applied requiring compliance with the setbacks under the Extractive Industry policy The required setback from waterways is met and is a condition of consent.</p>

<p>Simultaneously Pit 3 and Pit 4 are visibly far too close to a surveyed water-course and to compound matters, are above a granite sheet with a relatively steep incline. The application proposes ignoring all three minimum council standards.</p> <p>If it was to go ahead, any heavy metals that have leached from the granite in the last few million years, particularly arsenic and similar elements in the laterite layer, will potentially be released via acid-sulphate soil formation from crushed laterite quarrying activity of the kind proposed in winter or deluge conditions above a granite shelf exposed to the air, going by historical precedent this will end up in the King River without doubt during the next heavy flow event. Our next fifty year storm will make a serious mess of the river if this goes ahead.</p> <p>In addition, the stacked material from the recent bulldozing that was peat and has now dried and has most likely gone acid-sulphate, full of heavy metals and most likely heavily laced with dieldrin due to the well known history of the surrounding land, not only was use heaviest in the soak catchments, despite dieldrin propensity to attach to soil, the function of this peat-swamp as the filter of the environment and wetland habitat suggests heavy accumulation over the last thirty years would have occurred.</p> <p>The capacity of this soil to end up in the river has a pretty spectacular historical precedent. I remember more than one occasion where rain moved large amounts of soil above that granite shelf down into the creek, and others with the same effect that downstream destroyed the remnant vegetation along the creek. I remember about fifteen years ago the creek eroded into canyons several metres deep from a previously shallow base, deep fissures cut away across the paddock either side, and the sand-quarry in the paddock below the proposed quarry on the other side of Bon-Accord Road turned into a canyon itself. The insufficient remaining fringing native vegetation was washed away and the now the creek is infested with weed species. With the soak bulldozed and bare, the danger is considerably greater.</p>	<p>A number of the following comments relate to water and runoff and are addressed by the comment below.</p> <p>Department of Water provided comment on the application and advised that standard surface water management procedures will be suitable. A drainage management plan has also been submitted.</p>
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If the proposal goes ahead and it rains, this could get very serious if history is anything to go by, if this really is the location intended. These events hit the region with relative frequency although a decade or more apart perhaps, we are by historical precedent due, rain on farms here seems to be getting less frequent but heavier and Australia's best meteorological scientists have tended to predict more extreme weather in the years ahead. The old-timers if met in the region always say that the heavy-rains that cause these events happen periodically, the photos and stories of the Kalgan in flood and chronic erosion are everywhere. It is a predictable risk and a certainty over the long run. I noticed that no expectable lifespan was mentioned in the application, this is a serious omission.

Due to the bulldozing that has occurred more recently, totallying the wetland directly below the proposed pits at the northern corner of Chester-Pass and Bon-Accord road, on a weekend, there is also now a chance of dieldrin entering the King-River in even greater amounts than during those past erosion events, the next time one of our reliable fifty or even fifteen year deluges occurs. There is also the danger to our

local health if the material taken from the soak and currently oxidising in a pile above the watercourse, should enter home-gardens, vegetables, eggs and or chickens etc. We believe this is proposed and feel deeply concerned.

The half-life dictates that about 1/5th of the original material is present today on the land adjacent, the catchment, and although it tends to bind to the soil rather than evaporate or dissolve, the nature of the living systems in the soak will have moved dieldrin with the bio-mass and water-flow due to the soil chemistry over the last thirty years. Then there is the near-certainty of heavy metals being released by the soil-chemistry now at work as the acid-sulphate processes set in. Either way there is a reasonable chance that this soil is not safe to be in the river or in home gardens, especially if chickens are present. If it goes seriously bad and an acre of the proposed eight or nine hectares goes acid-sulfate and drops down, it

<p>could visibly kill the whole creek and badly effect that part of the river. The precedent is there and the soak that would have slowed it is missing. At that location the width of the deep part of the river is three metres tops, the remaining three metres is a shallow delta exposed at low tide.</p> <p>While the soil may stay still, the heavy metals in acid-sulfate soils travel with the water killing vegetation and stunting or killing trees, a spike in heavy metal content in the fish is not what the local kids need. Life accumulates most readily at the base of the creeks, they are the start of the food chain and the ideal place to deposit persistent organic pollutants if wish to accumulate significant residual toxicity in the mulloway and black bream of the King River.</p> <p>A registered declared rare flora population was recorded at the site by the Department, it was a surprise that this bulldozing occurred, it was a loss for the world, and for a shire with a considerable number of businesses dependent on tourism, it was a sad day for the city. Not only did a known population of a declared rare and protected flora species cease to exist forever The tourism heritage-trifecta was present at an arterial node where the city first becomes visible to arrivals, and adventures await for day-trippers, and it was bulldozed on the weekend and now has quarry proposed directly above it with water still pooling and seeping bellow into a relatively steep creek with a history of serious erosion in deluge conditions. That aside something very special has already been lost there, although the loss to tourism was likely considerable already.</p> <p>Before the current quarries were installed on the ridge above the King, it was not unusual to see tourist coaches on Bon-Accord road on a semi-regular basis, we suspect the lessening in four numbers using the route over the last decade may be linked to the highly visible quarrying from a high vehicle that has radically altered the experience, irreparably if continued. Most of the residents, and past visitors to the region remember it as a very beautiful road. It was and it is used by a growing number of local residents every single day of their lives to and from work. In terms of the tourism reputation of the shire and</p>	<p>If approved, the applicant will be required to apply for a clearing permit from the Department of Environment Regulation if they wish to pursue this course of action. Approval of an extractive industry by the City of Albany does not grant approval to clear the vegetation identified on the plan for removal. The Department of Environment Regulation does not generally consider applications for clearing permits until local government has made a determination on the development proposal.</p> <p>Concerns Noted. There is also a 180 metre section of screening vegetation which runs north along Chester Pass Road from the intersection with Bon Accord Road. The scattered vegetation on the lot boundary adjoining Bon Accord Road will also reduce the visual impact from public vantage points. It is recommended that a planning condition is applied to require the implementation of screen planting along sections of Bon Accord road that do not have existing vegetation.</p>
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<p>city, between Bakers junction and Bon-accord the proposed pits 3-4 will be clearly visible form a few angles. This nexus carries perhaps over half of the tourism transit of the shire.</p> <p>The remnant of native bush, that appears to be halved in this proposal, is known to feed critically endangered cockatoo species due to the banksia and other high-density food it contains. This is important, they have been seen there seasonally forever.-(Baudins or Carnabyâ€™s) For these critically endangered species this remnant is still very important because some of the last trees of sufficient size to produce adequate breeding hollows in this region are on the banks of</p> <p>the King River almost directly below, in an area urbanising.</p> <p>While Bakers Junction is a far larger area, the remnants function as one, and none are as close to those trees with that density to my knowledge as that one, and the density of Banksia is very good comparably. Density and hollows lead to habitation and breeding.</p> <p>The land proposed for quarrying has dead indicator species for Phytophthora Cinnamomi dieback and is visibly infested with invasive weed species such as the Acacia Longifolia or Sydney Golden Wattle, allowing this couple of hectares of vegetation to be halved in size to quarry laterite will not just destroy habitat, it will destroy habitat whilst spreading two of the Key Threatening Processes effecting biodiversity in this region. Acacia Longifolia and dieback.</p> <p>The material and vehicles leaving currently, (no management/remediation plan has been provided by the applicant in this application), has repeatedly left sand or dirt on the road in wet conditions, if infected, which appears likely, this will have and will aid in the spread of dieback, currently receiving millions in funding from Western Australian universities and every level of government and community engagement as the single s greatest threats to thousands of species in Western Australia.</p>	<p>If approved, the applicant will be required to apply for a clearing permit from the Department of Environment Regulation if they wish to pursue this course of action.</p> <p>The proponents have submitted a Dieback Management Plan in order to reduce the risk of Dieback Disease being spread. Among other controls, the plan states that equipment will be washed down upon entering/exiting the site and that the trucks carrying material from the site will be covered to ensure there is no spillage. It is recommended that implementation of, and compliance with, the Dieback Management Plan is required as a condition of approval.</p>
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	<p>The applicant fails to give any meaningful response that acknowledges the fact that two of the proposed pits are directly above a granite shelf on a steep incline above a soak that flows into a creek with a history of high-flow events above one of the two rivers close to town, the King. The food-chain for the fish in the river starts at the mouth of creeks. This seems the ideal circumstance in which to answer this particular question</p> <p>meaningfully.</p> <p>The applicant states that dust suppression is required a water truck would be used. Noise suppression will be kept to a minimum. The position of the site is in a rural area away from roads and houses. This is not reassuring when the question is about; dust nuisance, erosion, watercourse siltation and dangers to the general public. As I divulged, erosion and water-course siltation/pollution is a particular concern the community share about this site. Especially given recent events and our predictable future of high-flow rainfall events, given our deluge history.</p> <p>In the part of this statement that the applicant perhaps meant to address to xii) Noise suppression being kept to a minimum either this is an oxymoron or not reassuring to any of the four or so residences that are within 300 metres and are entitled to a decent noise suppression plan.</p>	<p>Department of Water provided comment on the application and advised that standard surface water management procedures will be suitable. A drainage management plan has also been submitted and will be required to be implemented as a condition of consent.</p> <p>The proponents have submitted Dieback, Drainage, Rehabilitation and Noise Management Plans in support of the application. The implementation of these plans is a proposed condition of consent.</p> <p>As discussed earlier, the proponents have submitted a Noise Management Plan. The Plan contains a number of provisions to control noise impacts, including;</p> <ul style="list-style-type: none"> • Use of topsoil on the perimeter of the pit area to act as a noise attenuation bund; • A noise complaint system will be established, whereby any complaints relating to noise will be reported to the site manager. Details of the site manager will be erected at the site gate; and • A commitment to respond to noise control instructions issued by the City of Albany. <p>It should also be noted that the nearest dwelling is located 500 metres from the extraction area and any operations would be subject to ongoing compliance with the Environmental Protection (Noise) Regulations 1997.</p>
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<p>We were disturbed to see that no description of the existing site environment or report on the predictable off-site effects was included. As mentioned, the proposal clearly shows a hectare or two more of remnant vegetation clearing, in areas with dieback indicators and invasive weed species, our two greatest environmental challenge in the shire and region. It is also situated directly above a watercourse/soak, previously the remnant vegetation may have slowed the movement of material, but the recent bulldozing of the surface of the creek into a large flat area did not change the fundamental hydrology and geology, it invites serious erosion.</p> <p>In relation to visual screening the Applicant states: Natural vegetation grows all along Bon-Accord Rd adjacent to the road. Therefore a natural screen is already provided€ the Council members to take a drive or walk down Bon-Accord road to examine the veracity of that statement personally. For the property in question alone most of the existing and proposed quarries will be and are currently visible from the road. The slope of the hill increases the visible exposure from Chester Pass and Bon-Accord, and half the natural screen, in the sections it exists in, are actually species that are one of the biggest single threats to our regions environment in its entire known history.</p> <p>This is a big concern to local residents due to our experience of watching these quarries progress. The rehabilitated land of yesteryear remains an eyesore and is now profoundly multi-weed-infested. It has not been rehabilitated to the point that it would support pasture, let alone crops, and has certainly not been returned to the bush. Our experience to date is dismal. In terms of revegetation, this property's small forest of invasive weeds is seeding through the Riverview reserve, the Council has been paying for weeding in the reserve for years, and rate-payer money will be spent for decades ahead. When it comes</p> <p>to a return to arable land, an interesting definition of top-soil is at play. No farmer I have ever met would consider it rehabilitated in any sense.</p>	<p>Water related comments are addressed in earlier sections of this Submission.</p> <p>Screening has been applied as a recommended condition of consent.</p> <p>A rehabilitation plan has been submitted to the City of Albany. In order to specifically manage weeds issue through the rehabilitation process, it is recommended a condition is applied requiring the inclusion of weed management measures within the Rehabilitation Management Plan.</p>
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<p>Given that half of the remnant vegetation still remaining today is to be cleared under this proposal, where is the plan to compensate for this by replanting a equal or greater number of previously extant species? Where is the planting to compensate for all the trees already removed? Surely this plan would have to be lodged prior to an application being granted to clear, and surely both of those would have had to occur before Council could accept this application, or expect informed comment to occur on this, or the earlier license by residents and concerned parties. The description provided by the applicant of rehabilitation processes, does not amount to any reasonable definition of rehabilitation in any sense of the word, either as farmland or as bushland, the soil chemistry and weed problems created alone will last generations.</p> <p>It seems apparent that should the applicant have any desire to remove the invasive weed species that have been allowed to colonise at all, then a drive around with a bulldozer would do so in no time. For one of the largest companies in Albany to burden the state, council and local organisations-(tax and rate-payer) with the cost of weed-removal from the adjoining reserve, road-side, river and receiving properties of the material.</p> <p>As a community, we are concerned by what we have seen and experienced so far over the past few decades and believe with good reason that this application should not be approved by Council. The proposed actions are manifestly inadequate or inappropriate for the site and location (according to the location on the map provided). I urge the council to reject the proposal until such a time as a decent plan is forthcoming that can adequately address our concerns to remedy the loss of faith the entire local community has experienced.</p>	<p>As discussed earlier, the Department of Environmental Regulation is the statutory authority for vegetation clearing. The requirement for offset planting would be at the discretion of the Department.</p> <p>As mentioned above, it is recommended a condition is applied requiring the inclusion of weed management measures within the Rehabilitation Management Plan.</p> <p>Concerns Noted. Staff consider that the proposed conditions and management plans mitigate the concerns raised. Extractive Industries are also subject to inspections and a yearly licensing process.</p>
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MINDIJUP ASPHALT PLANT PROJECT
Lot 102 Mindijup Road, PALMDALE

Supporting Documentation

For City of Albany Planning Scheme Consent
&
DER Category 35 Licensing



Version 1. Sept 2015

INTRODUCTION & BACKGROUND

Spinifex Crushing and Screening Services Pty Ltd ('Spinifex') is part of the GSS Group under the Directorship of Martin Shuttleworth, who is also the owner of Lot 102 Mindijup Road.

Spinifex is seeking approval to establish and operate a mobile asphalt plant in conjunction with its recent approved quarry project on the property. The proposed location is within a current Licensed Premises area of a related company (Vancouver Waste Services) and a DER P4 form is submitted with this document seeking approval to excise an area of the premises and adjust the licensed boundary for this proposal.

Hotmix asphalt is a mixture of aggregates, crushed rock fines, additives and bitumen which is blended together for use as pavement surfacing. Mixes are designed for different applications by altering the proportions of the aggregates, fillers and binders to suit different service and atmospheric conditions.

The type of asphalt plant proposed is identical to a unit granted DER Works Approval in 2013 as W5327/2012/1 for CATWEST, Foskew Way NARNGULU (Geraldton). The following explanation of the plant and its workings are reproduced from that Works Approval document as follows:

... asphalt will be manufactured in a batch mix process in which an enclosed conveyor feeds aggregate from a cold feed unit into a sealed, insulated and clad rotary dryer. The aggregates are stockpiled in three-sided, concrete bays (which are equipped with water sprinklers for dust suppression) and are transferred to the feed unit via a loader.

In the diesel-fired dryer, aggregate is heated to approximately 160 degrees centigrade (°C) and is transferred to the pug mill. The remainder of the process occurs within the pug mill, which is fully insulated and enclosed to retain heat and minimise dust and odour emissions.

Bitumen is injected hot into the pug mill and is mixed into the hot aggregate with any other required material (e.g. filler, colouring agents etc.) via a twin-shaft paddle mixer. Bitumen is stored onsite in a sealed 40,000 litre tank which is kept heated to prevent the bitumen from solidifying. The mixture is deposited to an elevated heated storage vessel for discharge to asphalt trucks for transport.

The combusted air is exhausted through a baghouse filter. The filter contains 224 bags, with a filter area of 240 square metres (m²). Total capacity of the baghouse filter is 27 000 cubic metres per hour m³/hr). The bag house incorporates an automatic reverse-pulse cleaning system with fines returned to the mixer via a screw conveyor. The manufacturer's specifications for the baghouse state that the dust concentration of the filtered air will be less than or equal to 20 milligrams per cubic metre mg/m³.

All aspects of the process are computer-controlled from a central control cabin.

A schematic of the plant is attached to this submission.

LOCATION

The project is located approximately 35 kilometres northeast of Albany with access off Mindijup Road (Figure 1).

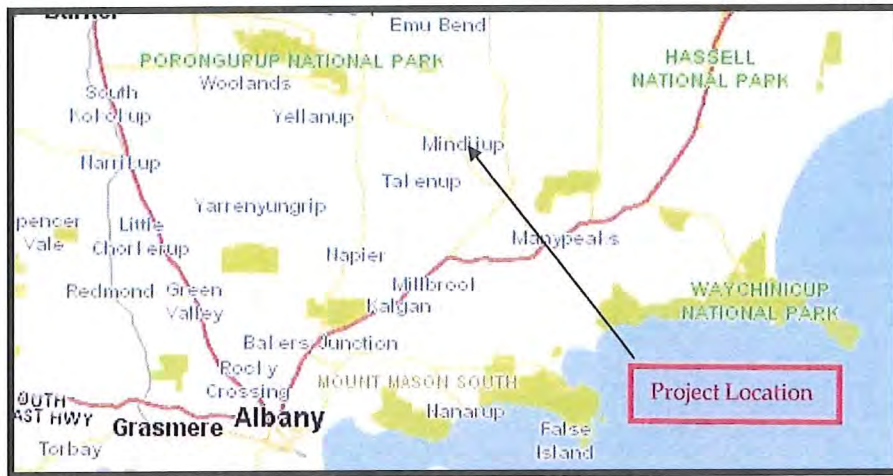


Figure 1: Location of the Mindijup Project

The location of the proposed asphalt plant within the property is given in the attached plan.

OWNERSHIP AND LAND TENURE

The project is situated on Lot 102 on Plan 22860 Mindijup Road owned by Martin Shuttleworth.

Relevant contact details for Spinifex are:

Martin Shuttleworth
 Director
 Mob: 0428464212
 Email: mshuttleworth@shuttleworth.com.au

David Lynch
 Manager
 Mob: 0427 426 177
 Email: david@spinifexcrushing.com.au

16 Anthony Street
 ALBANY WA 6330
 Ph.: (08) 98457688

LOCAL GOVERNMENT

The proposed asphalt plant lies within the City of Albany, and is zoned for Priority Agriculture. Following discussions with Council this proposal may be considered as an ancillary use directed related to the previously approved quarry project.

EXISTING ENVIRONMENT

Climate

The Albany/Manypeaks area is subject to mild Mediterranean with warm to hot dry summers and cool wet winters. July is the coolest wettest month with an average of 15.7°C maximum and 8.1°C minimum,

with over 100 mm of rainfall. February is the hottest month with an average of 22.9°C maximum and 15.4°C minimum and along with January is one of the driest months. The proposed composting site receives an average approximately 703mm of rain per annum (DoW, 2008).

Winds are predominantly from the east and south-east in the summer and from the west and north-west in the winter. The weather pattern is driven by winter low and summer high pressure systems. The relatively low evaporation rates and moderate temperatures during winter contribute to a growing season for primary production of approximately 8 months – mid March to early November.

Surface Water and Groundwater Hydrology

The site is situated on the edge of a plateau element sloping towards the North and West where the Kalgan River is situated. The Kalgan River is located approximately 690m from the proposed project site in a direct line.

The nature of the regolith is such that there will not be any permanent sub-surface water that this proposal would likely impact on.

Surface water from the proposed site are intercepted by an established dam to the NW.

Flora and fauna

The area proposed for the asphalt plant operations have been cleared of vegetation previously for agricultural purposes and therefore the project will have no impact upon vegetation or fauna communities.

There is a small area of native vegetation directly to the south of the proposal but the plant itself will be situated to provide a minimum of 100m buffer to this vegetation to negate any effects of smothering dust, airborne residues or fire hazard issues. Surface water flows away from this vegetation.

Aboriginal and European Heritage

An online search of the of the Department of Indigenous Affairs (DIA) Aboriginal Heritage Inquiry System indicates that there are no sites of heritage significance within the project area (DIA 2014).

There are no areas or sites of European heritage located at the project area.

PROPOSED DEVELOPMENT

Rationale

The Mindijup asphalt project is a value adding process for our approved quarry project. Our rationale is that the GSS Group typically spends considerable on purchasing hotmix from other companies and economically it makes sense to produce our own mixes made from company resources. Further to this the only local hotmix plant is old and unreliable, with users frequently having to put off works for up to 2 weeks at no notice because of breakdowns.

Other than bitumen no materials are required to be imported into the site.

Buildings and Structures

The proposed plant is semi-mobile and designed to be placed on a firm hard surface such as stabilised gravel or concrete. The plant itself takes up approximately 400m² when erected, including aggregate bunkers, control room, mixing barrel, baghouse and finished product bins.

An impression of the plant is attached.

Relationship to Other Prescribed Premises

Although Spinifex Crushing and Screening Services is part of the same company group as Vancouver Waste Services they represent different legal entities and therefore following advice from DER part of this application will require that changes will need to be made to the boundary Prescribed under L7344/1998/1 to accommodate the new licensed premises through a DER P4 application.

Separation and Buffer Distances

The items most critical for this relate to noise, odour, dust and point emissions. The National Pollution Inventory has produced an excellent guide to the estimation of emissions from Hotmix Asphalt plants which can be downloaded at www.npi.gov.au/system/files/resources/f910fad6-7596-6584-310c-15a029d35f8e/files/fasphalt.pdf which should be read in conjunction with this submission.

Noise from the proposed activities will primarily be derived from the operation of the plant, associated heavy vehicle movements and loading of feed hoppers at widely spaced intervals.

The actual noise generated

Asphalt Plant	~85 dB (A)	(predicted only)
Generator (70kVa)	65 dB (A)	
Loader (medium)	105 dB (A)	(full revs + reversing beeper)

The noise produced would not be tonal, modulating or have any 'impulsiveness' as the plant consists of constant revolutions/revolving drums and electric motors.

Environmental Protection Authority Guidance Statement No. 3 (*Separation Distances between Industrial and Sensitive Land Uses*) provides guidance on minimum separation distances. Appendix 1 of that document recommends at least 1000m separation.

The closest sensitive land use (single residence) is 1360m from the site. Although this residence is well shielded by vegetation and landforms from the quarry site the following formula can be used to estimate the sound power remaining after travelling this distance.

$$\text{Decibel Distance} = 20 \times \log (d_2/d_1)$$

Assuming the 1360m separation a sound power drop of 62dB is predicted at the closest receptor without taking into account the ameliorating factors of vegetation and terrain. It is generally accepted that a noise level of 47dB(A) should not be exceeded over the 7AM-10PM period for rural living, although this seems very low considering that even small tractor will produce noise of 85-93 dB(A). Regardless with an estimated drop of 62dB(A) noise produced by the plant falls within such guidelines.

The most likely sources of odour from the plant is from PAH's and VOC's from the heated bitumen. These odours can be effectively controlled by engineering design (all storage of bitumen is within a fully sealed tank) and careful operational control of temperature during the blending process i.e. Not overheating the bitumen eliminates the 'blue haze' emissions. The temperature of the mixing process is strictly computer controlled. The Narngulu plant is expected to have emissions reduced by 37-86% over other plants of a similar size by instigating this control. A visit to this plant when it was operating by Spinifex management confirmed the lack of odour compared to other older plants.

Additionally the separation of the plant by 1.36km to the nearest sensitive receptor reduces the impact of any odours to very low, even negligible, levels.

Dust can be generated by the storage and transport of raw materials (sand and aggregates), and final product from the site along internal gravel roads. The nearest point of an internal gravel road to a sensitive receptor is 680m (see attached mapping) when approaching the exit/entrance to the property. Along this access road speed is restricted to 15 km/hr to assist in prevention of dust. Additionally as part of various Planning Scheme Consents we are required to keep a water tanker onsite at all times for dust and fire control.

The aggregates are stored adjacent to the plant as part of the quarry operation and are at least 2.3km from any residences so the chances of a dust from this storage travelling that distance are negligible.

The asphalt plant area will be watered regularly for the comfort of workers and to prevent dust escaping the immediate area.

Point emissions are significantly reduced by the use of a baghouse filter that will be purchased as part of the plant. Baghouse filters operate at >99% efficiency in removing particulate matter from asphalt plant air emissions. The point emissions for this type of plant have been estimated as:

- Particulates <20 mg/m³ (Target of <50 mg/m³)
- NOx 28 mg/m³ (Target of <1000 mg/m³)
- SOx 26 mg/m³ (Target of <200 mg/m³)

The baghouse filter purchased incorporates a minimum filter area of 240 m² and a computer controlled, self-cleaning vibration system which drops all collected material back into the mixing drum for re-use.

Fuel and Hydrocarbons

No fuel or hydrocarbons associated with mobile equipment will be stored onsite. A fuel/service truck will provide all fuel and servicing requirements for the site.

Fuel for the diesel burner will be stored in a fully bunded enclosure as required under legislation and good industry practise. The diesel that is supplied to Spinifex under contract from Caltex Australia is not classified as a dangerous good for the purposes of transport under the Australian Dangerous Goods Code (2014) as its flash point is in excess of 60°C.

The bitumen will be stored in a 40kL purpose built steel shipping container. In the unlikely event of a spill bitumen does not present any appreciable risk to the environment – when cold it doesn't run and when hot quickly cools and becomes immobile allowing a rapid and effective cleanup.

Servicing

Machine servicing may be carried out on site using industry best practise techniques. These consist of collecting all oils through the service trucks EVAC system and recycling offsite at a licensed facility, full bunding of any temporary oil storage, collection and proper disposal of all oily wastes and rags etc.

Runoff from Area

All runoff from the site is directed naturally into an existing dam downslope.

Domestic and Industrial Waste

All waste products will be removed daily by staff

TRANSPORT AND ACCESS

The proposal will use the current access onto Mindijup Road.

FIRE CONTROL

As part of our due diligence before beginning this process various risks were assessed. There are a few accidents associated with asphalt plants, typically in the USA and those that involved fire were predominantly caused by someone introducing a risk rather than ignition in the plant itself. A good example is www.hotplantconsulting.com/articlefour.html where the majority of the fire related accidents were caused by a person using a propane or oxyacetylene torch on a faulty burner. No reference could be found to any fires in Australian plants since 2003, and this older style plant was of a completely different design.

In all these cases there was an avoidable action taken that was outside of the plants normal operating procedure.

The process of making asphalt does not increase fire risk. Bitumen has a very high flash point (>230 °C) but it is only heated to a maximum of 160°C before mixing into the warmed and dried aggregate mix.

The risk of fire moving into the site is the biggest risk however the site will be completely clear of any vegetation and effectively a mineral earth area separated from the nearest vegetation by approximately 100m. The bitumen would be almost impossible to ignite within a steel container and sparks falling on fuel lines and tanks are equally unlikely to cause ignition.

REPORT ITEM PD106 REFERS

It must be noted that the process used by the asphalt plant is batch driven. The heaters etc are only turned on when it is required to produce asphalt then turned off, and therefore is manned throughout periods of activity.

A readily available source of water is available 300m from the site, and a water truck is permanently based at Mindijup as part of DER licensed activities (composting).

It is Spinifex policy not to operate on any day of heightened fire risk such as Movement or Harvest Ban days, and no exemptions will be applied for.

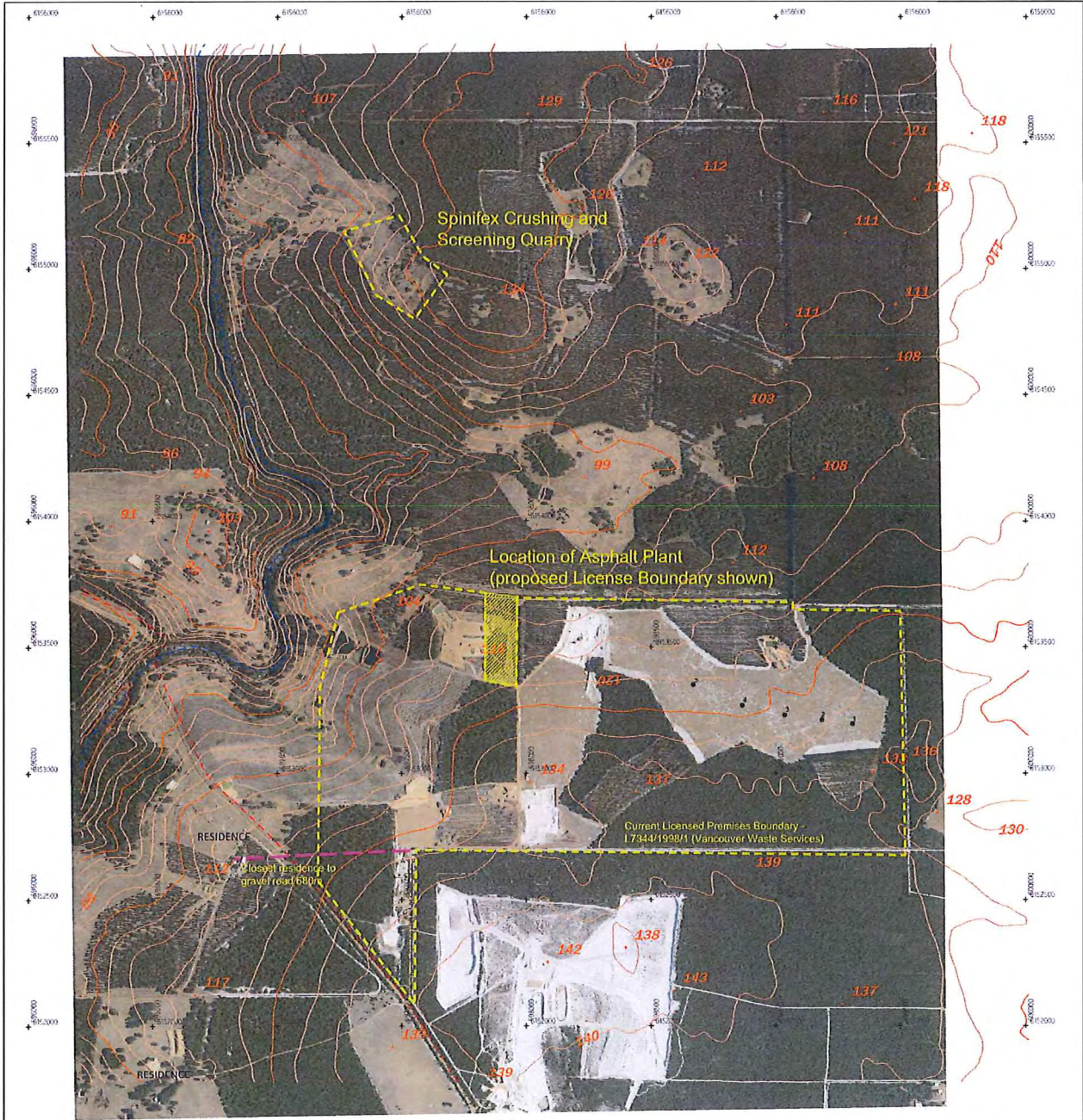
Prescribed Premises Boundary

The proposed boundary is shown on the attached plans. Coordinates (GDA94, Z50) are:

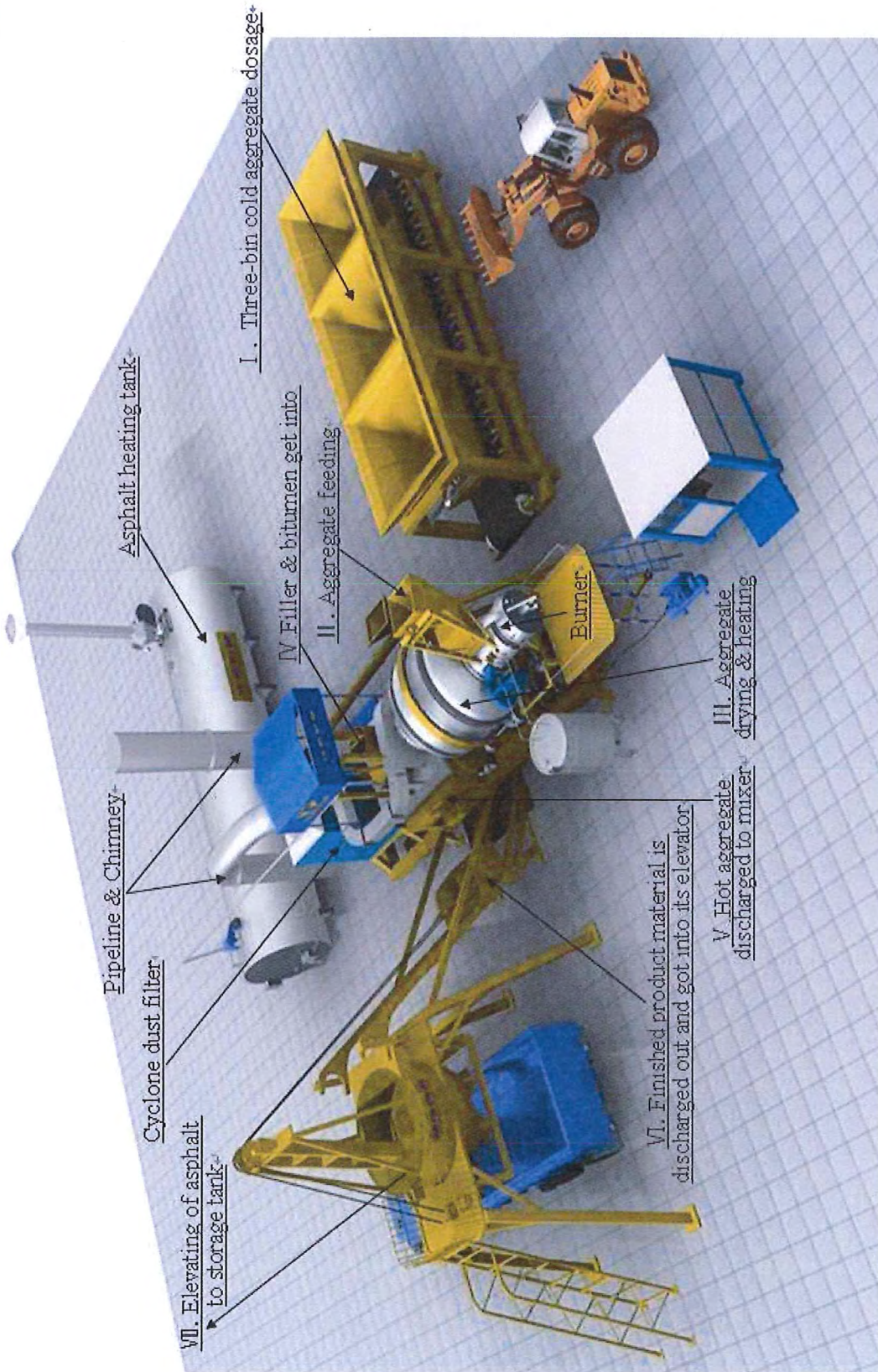
Easting	Northing
597835	6153715
597835	6153373
597960	6153358
597964	6153698

This area is to be excised from the Vancouver Waste Services Premises Boundary whose coordinates will be (once approved):

Easting	Northing
597244	6153638
597577	6153749
597835	6153715
597834	6153367
597960	6153344
597964	6153698
597988	6153695
599067	6153677
599068	6153648
599498	6153643
599520	6152676
597558	6152697
597552	6152085
597162	6152577
597170	6153340



Location of Asphalt Plant Site, Lot 102 Mindijup Road, Palmdale
(Scale 1:17,500 @ A3, All grid references are GDA94, Zone 50)



Schematic of asphalt as supplied by manufacturers. Please note that the baghouse shown is not correct. Refer to photograph on front cover of report for true sizing.

Jessica Anderson

From: David [david@spinifexcrushing.com.au]
Sent: Wednesday, 16 September 2015 1:44 PM
To: Jessica Anderson
Cc: Jan Van Der Mescht
Subject: EF15194436 - A215306 - Mindijup Asphalt Plant
Attachments: QLB40.pdf

SynergySoft: EF15194436 - A215306

Hi Jess,

Just got this through from the manufacturers. We modified some of the accessways to accommodate the more beefy aussie physique hence there was a delay in the final drawings.

Regards

David Lynch
0427 426 177



Jessica Anderson

From: Mobile Planning
Sent: Friday, 6 November 2015 10:54 AM
To: Jessica Anderson
Subject: Fwd: Mindijup Asphalt

Sent from my iPad

Begin forwarded message:

From: David <david@spinifexcrushing.com.au>
Date: 6 November 2015 at 8:01:58 AM AWST
To: 'Mobile Planning' <mobileplanning@albany.wa.gov.au>
Subject: RE: Mindijup Asphalt

I can provide the log but it is huge. It runs from our GPS Navman system - I will see if I can cut it down a bit.

As for emissions I have been to the identical plant in Geraldton. When asked whether it would be possible to start it up the owner laughed and said it was already running. Certainly no dust because the baghouse takes that all out. The baghouse has a 'surface area' of around 240m² and all dust is automatically cleaned and put back into the mix. You get some smell of the diesel heating burner but it is equivalent to a running truck. The bitumen isn't heated to the point where you get much smell from it. I don't know if you have ever been present when asphalt is being laid on a road but I would guess that 20-30m is the radius where it is noticeable.

My thoughts are that the 1000m buffer is mostly related to the old style plants which don't have the baghouse etc to minimise emissions. Even then I think it is overkill when you consider that a hard rock quarry buffer is 1000m, fellmongering is 500m and 500m for putrescible waste. I think I would much rather live close to an asphalt plant than a tip !!!

If you have Google maps on your computer look up 21 Foskew Way, Geraldton WA 6530. This is the Catwest plant - if you go to street view you can actually see the plant.

David Lynch
0427 426 177

-----Original Message-----

From: Mobile Planning [<mailto:mobileplanning@albany.wa.gov.au>]

Jessica Anderson

From: Mobile Planning
Sent: Friday, 6 November 2015 10:54 AM
To: Jessica Anderson
Subject: Fwd: Mindijup Asphalt traffic log
Attachments: 3_mnthrs_filtered.xlsx; ATT00001.htm; 3_mnthrs_raw.xlsx; ATT00002.htm

Sent from my iPad

Begin forwarded message:

From: David <david@spinifexcrushing.com.au>
Date: 6 November 2015 at 9:11:38 AM AWST
To: 'Mobile Planning' <mobileplanning@albany.wa.gov.au>
Cc: <janv@albany.wa.gov.au>
Subject: RE: Mindijup Asphalt

You are going to love this. Attached are two files. This report comes direct from our Navman system. The raw data is completely unfiltered and shows every truck movement for GSS / Spinfex / VWS / WA Biofuels for the past 3 months ie. Every truck we own including utes and service vehicles.

The other file is filtered to only include end location at either Lot 102 or Lot 3 Mindijup Road. The GPS records every 5 minutes and as these lots are adjacent to one another so sometimes it doesn't discriminate because of the narrowness of the battleaxe. Either way for the past 3 months there has been a total of 674 vehicle trips - assuming 12 weeks no Sunday work the average is 9.4 trips per day, if you take out Saturdays (although we do work Saturdays sometimes) the average is 11.2.

If you take out the LV of the Site Supervisor over 60 days the average drops to 10.8, and if you remove the Service truck which is not a heavy vehicle (it is a Medium Rigid) you only get a value of 457 vehicle movements in 60 days = 7.6 heavy vehicle movements per day on average.

Wish I had put this information into Council earlier rather than guessing but I only just found out how to extract this.

David Lynch
0427 426 177

-----Original Message-----

From: Mobile Planning [<mailto:mobileplanning@albany.wa.gov.au>]
Sent: Friday, 6 November 2015 6:00 AM
To: david@spinifexcrushing.com.au

REPORT ITEM PD106 REFERS

MACK T50	1CB673	16/09/2015	10:39 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	10:40 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	6
MACK T50	1CB673	16/09/2015	10:46 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	10:47 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	8
MACK T50	1CB673	16/09/2015	11:28 AM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	1:44 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	136	94.9	7
MACK T50	1CB673	17/09/2015	7:03 AM	Douglas Rd, Milpara WA 6330, Australia	7:53 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	50	39.4	8
MACK T50	1CB673	17/09/2015	8:09 AM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	8:11 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2	0	7
SERVICE TRL	AS9258	6/08/2015	11:09 AM	16 Affleck Road, Kalgan WA 6330, Australia	11:52 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	43	31.5	2
SERVICE TRL	AS9258	6/08/2015	11:54 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	12:08 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	14	0.4	0
SERVICE TRL	AS9258	10/08/2015	10:43 AM	LOT 102 Mindjup Road, Palmdale WA 6328, Australia	11:33 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	51	4.8	18
SERVICE TRL	AS9258	13/08/2015	11:19 AM	LOT 102 Mindjup Road, Palmdale WA 6328, Australia	12:09 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	50	3.7	2
SERVICE TRL	AS9258	13/08/2015	12:11 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	12:12 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	1
SERVICE TRL	AS9258	17/08/2015	10:37 AM	LOT 102 Mindjup Road, Palmdale WA 6328, Australia	10:40 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3	0.8	39
SERVICE TRL	AS9258	17/08/2015	11:19 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:27 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	8	0.8	23
SERVICE TRL	AS9258	17/08/2015	11:50 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:51 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	10
SERVICE TRL	AS9258	18/08/2015	8:54 AM	524 Down Road West, Drome WA 6330, Australia	9:54 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	60	52.6	46
SERVICE TRL	AS9258	18/08/2015	2:14 PM	16 Affleck Road, Kalgan WA 6330, Australia	2:45 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	21	32.5	14
SERVICE TRL	AS9258	18/08/2015	2:59 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3:03 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3	0.7	11
SERVICE TRL	AS9258	21/08/2015	1:01 PM	570 Mindjup Road, Palmdale WA 6328, Australia	1:47 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	46	4	16
SERVICE TRL	AS9258	21/08/2015	2:29 PM	LOT 102 Mindjup Road, Palmdale WA 6328, Australia	2:37 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	8	3.6	15
SERVICE TRL	AS9258	21/08/2015	2:52 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:53 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0.1	11
SERVICE TRL	AS9258	24/08/2015	9:26 AM	Menang Drive, Wilyung WA 6330, Australia	10:22 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	56	36	28
SERVICE TRL	AS9258	24/08/2015	10:49 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	10:52 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2	0.5	66
SERVICE TRL	AS9258	25/08/2015	8:59 AM	Menang Drive, Wilyung WA 6330, Australia	9:36 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	37	35.3	2
SERVICE TRL	AS9258	25/08/2015	10:29 AM	LOT 102 Mindjup Road, Palmdale WA 6328, Australia	11:04 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	35	3.6	0
SERVICE TRL	AS9258	25/08/2015	12:00 PM	LOT 102 Mindjup Road, Palmdale WA 6328, Australia	12:01 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2	0.6	4
SERVICE TRL	AS9258	25/08/2015	1:54 PM	9 Newbey Street, Milpara WA 6330, Australia	2:24 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	30	40.1	1
SERVICE TRL	AS9258	25/08/2015	2:25 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:25 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	60
SERVICE TRL	AS9258	26/08/2015	1:29 PM	6 Anthony Road, Milpara WA 6330, Australia	2:02 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	33	39.6	59
SERVICE TRL	AS9258	26/08/2015	3:02 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3:04 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2	0.4	11
SERVICE TRL	AS9258	26/08/2015	3:14 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3:15 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	83
SERVICE TRL	AS9258	27/08/2015	8:52 AM	Menang Drive, Wilyung WA 6330, Australia	9:20 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	28	36.3	8
SERVICE TRL	AS9258	27/08/2015	9:29 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	9:31 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0.3	32
SERVICE TRL	AS9258	27/08/2015	10:18 AM	LOT 102 Mindjup Road, Palmdale WA 6328, Australia	10:20 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0.3	139
SERVICE TRL	AS9258	27/08/2015	12:39 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:09 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	90	0	67
SERVICE TRL	AS9258	31/08/2015	9:12 AM	16 Affleck Road, Kalgan WA 6330, Australia	9:40 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	28	31.9	67
SERVICE TRL	AS9258	31/08/2015	10:47 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	10:48 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	8
SERVICE TRL	AS9258	31/08/2015	10:56 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:09 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	13	0.4	7
SERVICE TRL	AS9258	31/08/2015	11:16 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:35 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	19	7.5	1
SERVICE TRL	AS9258	2/09/2015	10:11 AM	11 Christine Street, Milpara WA 6330, Australia	10:48 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	38	40.9	21
SERVICE TRL	AS9258	2/09/2015	11:09 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:12 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3	0.6	6
SERVICE TRL	AS9258	2/09/2015	11:19 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:32 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	13	5.5	29
SERVICE TRL	AS9258	2/09/2015	12:01 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	12:16 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	16	0.3	0
SERVICE TRL	AS9258	2/09/2015	12:16 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:27 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	130	0	15
SERVICE TRL	AS9258	3/09/2015	10:57 AM	16 Affleck Road, Kalgan WA 6330, Australia	11:29 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	32	31.3	10
SERVICE TRL	AS9258	3/09/2015	11:39 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:40 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	69
SERVICE TRL	AS9258	3/09/2015	12:49 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1:50 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	61	7.9	57
SERVICE TRL	AS9258	4/09/2015	11:44 AM	LOT 102 Mindjup Road, Palmdale WA 6328, Australia	11:47 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3	1.7	2
SERVICE TRL	AS9258	4/09/2015	11:49 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:50 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	1
SERVICE TRL	AS9258	7/09/2015	11:56 AM	16 Affleck Road, Kalgan WA 6330, Australia	12:24 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	28	31.5	2
SERVICE TRL	AS9258	7/09/2015	12:27 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1:39 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	72	0.6	65
SERVICE TRL	AS9258	8/09/2015	9:29 AM	168-178 Princess Avenue, Torndirrup WA 6330, Australia	10:17 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	49	48	8
SERVICE TRL	AS9258	8/09/2015	10:26 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	10:29 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3	0.7	13
SERVICE TRL	AS9258	8/09/2015	10:42 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	10:51 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	9	0.6	29
SERVICE TRL	AS9258	8/09/2015	11:20 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:21 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	77
SERVICE TRL	AS9258	8/09/2015	3:14 PM	6 Anthony Road, Milpara WA 6330, Australia	3:50 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	36	39.8	40
SERVICE TRL	AS9258	9/09/2015	10:19 AM	Menang Drive, Wilyung WA 6330, Australia	10:49 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	30	35.9	11
SERVICE TRL	AS9258	9/09/2015	11:00 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:01 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	20
SERVICE TRL	AS9258	9/09/2015	11:21 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:26 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	6	1.3	1
SERVICE TRL	AS9258	10/09/2015	10:27 AM	6 Anthony Road, Milpara WA 6330, Australia	11:25 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	67	39.6	20
SERVICE TRL	AS9258	10/09/2015	11:55 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	12:05 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	9	0	0
SERVICE TRL	AS9258	15/09/2015	9:10 AM	LOT 301 Princess Ave, Torndirrup WA 6330, Australia	10:05 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	56	49.5	11
SERVICE TRL	AS9258	15/09/2015	1:51 PM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	1:55 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	4	1	2
SERVICE TRL	AS9258	15/09/2015	1:57 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:11 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	14	1.5	0
SERVICE TRL	AS9258	15/09/2015	2:11 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:11 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	4
SERVICE TRL	AS9258	17/09/2015	7:46 AM	6 Anthony Rd, Milpara WA 6330, Australia	8:31 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	44	39.1	10
SERVICE TRL	AS9258	17/09/2015	9:46 AM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	9:49 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	3	0.8	10
SERVICE TRL	AS9258	17/09/2015	12:07 PM	11 Christine Street, Milpara WA 6330, Australia	12:48 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	41	39.2	7
T11	AS3646	31/08/2015	7:08 AM	11 Christine Street, Milpara WA 6330, Australia	11:04 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	236	120.2	29
T11	AS3646	31/08/2015	11:33 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1:04 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	101	79.6	25
T11	AS3646	2/09/2015	11:05 AM	Menang Drive, Wilyung WA 6330, Australia	12:24 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	59	35.3	1
T11	AS3646	2/09/2015	12:05 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	12:05 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	157
T12	A12146	10/08/2015	10:27 AM	11 Christine Street, Milpara WA 6330, Australia	1:46 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	199	82.3	13
T12	A12146	7/09/2015	10:18 AM	11 Christine Street, Milpara WA 6330, Australia	11:10 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	52	39.2	19
T12	A12146	11/09/2015	6:53 AM	26 Newbey Street, Milpara WA 6330, Australia	7:55 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	62	40.5	10
T12	A12146	11/09/2015	8:14 AM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	8:15 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	19
T12	A12146	11/09/2015	8:35 AM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	10:06 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	91	85.8	22
T12	A12146	11/09/2015	10:27 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	12:03 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	96	85.8	18
T12	A12146	11/09/2015	12:21 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1:43 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	83	85.8	14
T26	1crb432	16/09/2015	8:48 AM	152 Chester Pass Rd, Lanze WA 6330, Australia	10:32 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	103	42	30
T26	1crb432	16/09/2015	11:02 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:04 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	7
T26	1crb432	16/09/2015	11:11 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:11 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	0
T26	1crb432	16/09/2015	11:11 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:11 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	7
T26	1crb432	16/09/2015	11:18 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:18 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	0
T26	1crb432	16/09/2015	11:19 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	11:18 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	0
T26	1crb432	16/09/2015	2:12 PM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	11:19 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	9
T26	1crb432	16/09/2015	2:26 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:19 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	7	0.1	7
T26	1crb432	16/09/2015	2:32 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:27 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	5
T26	1crb432	17/09/2015	2:32 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2:32 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	6
T26	1crb432	17/09/2015	12:57 PM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	12:59 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	2	0.1	16
T26	1crb432	17/09/2015	1:14 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1:15 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	10
T26	1crb432	17/09/2015	1:25 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1:26 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	0
T26	1crb432	17/09/2015	1:26 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1:27 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	38
T26	1crb432	18/09/2015	7:12 AM	44 John Street, Milpara WA 6330, Australia	9:02 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	111	63.2	29
T26	1crb432	18/09/2015	9:31 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	9:32 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	11
T26	1crb432	18/09/2015	9:43 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	9:43 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	20
T26	1crb432	23/09/2015	12:25 PM	LOT 3 Mindjup Rd, Palmdale WA 6328, Australia	12:25 PM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	0	0	31
T26	1crb432	24/09/2015	10:40 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	10:41 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	1	0	12
T27	UD CW385	24/08/2015	7:05 AM	Douglas Road, Milpara WA 6330, Australia	8:49 AM	LOT 3 Mindjup Road, Palmdale WA 6328, Australia	104	45	44
WESTERN ST 1DK									

Jessica Anderson

From: David [david@spinifexcrushing.com.au]
Sent: Friday, 23 October 2015 11:01 AM
To: Jessica Anderson
Cc: Jan Van Der Mescht
Subject: EF15201637 - A215306 - FW: Mindijup Asphalt concerns
Attachments: Buffer distances.pdf

SynergySoft: EF15201637 - A215306

With the attachment

David Lynch
0427 426 177



From: David [mailto:david@spinifexcrushing.com.au]
Sent: Friday, 23 October 2015 10:59 AM
To: Jessica Anderson (jessicaa@albany.wa.gov.au)
Cc: janv@albany.wa.gov.au
Subject: Mindijup Asphalt concerns

Good morning,

In regard to the objections raised against our application for the above I have summarised the main points below:

Cumulative effects of development of the property

- Mindijup is a very large property under single ownership. As the attached map indicates each current and future business has a clearly defined buffer which in total is marked in red. When we make application we are very careful to site proposals so that the buffer is a combination of being within the property or if outside does not impact upon something unreasonable. The only areas outside the property are related to sand extraction and impinge upon the sand mine (which in turn covers a portion of our property ie. Like uses only).
- Each of the businesses run from the premises have Planning approval or are under application. The GSS group is very careful to maintain the highest possible standards of compliance with various Acts, Regulations, Code of Practise etc. We have regular contact with 3 agencies in particular (Council, DER and Dept. Mines and Petroleum) and as a general rule we are found to be compliant during inspections with only minor transgressions resulting easily and quickly rectified.
- A common thread of objections is the number of trucking movements – the GSS group has a limited number of trucks ranging from 6 wheel tippers to semitrailers/pocket roadtrains (11 in total). Each proposal cannot therefore use all of these trucks at any one time and they are generally used sporadically at best ie. There is not a constant stream of 11 trucks going in and out of the property 5 times daily. All our uses are based on commercial demand and trucking goes up and down related to that demand.
- Each of the operations (current and future) are permissible with the General Agriculture zone and are actually best suited in the relative isolation of the property, and additionally are regarded as "Low Impact".

REPORT ITEM PD106 REFERS

- I see some of the objections are of a 'Not in my backyard' type but this needs to be tempered with the realization that the property contains some natural resources that cannot be economically obtained elsewhere. For instance our primary sand extraction area provides the only source of high quality concrete sand in the City of Albany area removed from populous areas (the other is the Bon Accord area surrounded by Rural Residential development). The next closest source is St Werburghs Rd in Mt Barker which is nearly depleted and is located on a poor quality, low visibility road that cannot cater safely for roadtrains. The next source after this of any note is near Tambellup. In each of the latter cases shifting production to them would not only significantly increase the cost of concrete to Albany residents but also put more trucks on the road for greater distances.
- Another good example is the greenwaste. If not recycled at Mindijup it would have to be disposed of at Hanrahan Road or Bakers Junction and in neither case is there the space to waste or the money to spend on another composting facility. Both major refuse sites are nearing the end of their useful lives and in the not distant future the City of Albany is going to have to allocate many millions of \$ to shift these facilities – why not try and extend their lives as much as possible.

Environmental Impacts

- The asphalt proposal will be the first time that we will store diesel on the property and then only 1000L in a fully bunded pod for use in the diesel powered bitumen heater. All other diesel is brought onto the site as required by our fully Mines compliant service truck on a as needs basis. I would ask you to compare that to what a 'typical' farmer would store and the conditions that are commonly applicable to that storage (ie. No bunding, old probably non-compliant tank etc.)
- I note one objection seemed to think that the proposal would have asphalt and bitumen being spilled on the ground and ending up in the Kalgan River. One of the principal factors in our location of the proposal is that all runoff from the site is intercepted in a dam downslope of the proposal. This also needs to be tempered with the following:
 - I. You need to heat the bitumen for asphalt production to around 160 deg before it becomes liquid enough to coat the aggregate (which is also heated to keep the resulting asphalt malleable) hence why bitumen sprayers for chip sealing have large gas burners on the truck. If you spill this bitumen on the ground it cools very rapidly and forms as solid lump.
 - II. The material used to clean the lines is not 'diesel' but approved cutting oil and is mixed with the asphalt during the process. All bitumen whether sprayed onto a road or used in asphalt needs this cutter oil for workability – hence the common specification of 95/5 (5% cutter to 95% bitumen) for roadworks.
 - III. The whole bitumen tank is not heated all at once – the plant we have ordered only heats up the amount required for each batch. The container for the bitumen is purpose built and double steel skinned so you frankly you would need explosives to rupture it. It is specifically designed to take an enormous impact (even a point contact) and not rupture.
 - IV. Asphalt is even less of a spill risk, ask anyone in the business. The trick is keeping it workable not the other way around. If anyone wants to see an asphalt spill then I suggest that they observe a laying crew – isn't that dumping asphalt on the ground? You are lucky to get 2-3 mins of workability out of it once it is out of the truck and is certainly doesn't flow – it actually takes quite a bit of energy to move it out of a paver onto the road in controlled fashion. When a paver breaks down you end up with a huge problem if you can't get it out before it cools and hardens.
 - V. Cold mix asphalts are available for patching which are malleable at ambient temperatures but once exposed to the air in a thin layer quickly solidify – Council maintenance staff or MRWA can attest to this. I will bring a bag of a commercial product (Fulton Hogans EZISTREET) to the site meeting and demonstrate it noting that we are not going to be producing this form of material.

- VI. As a general observation the objectors possibly haven't noticed that they drive on sealed roads (chip or asphalt surfaces) on a daily basis – asphalt and bitumen is used for sealing immediately adjacent to rivers (bridges), waterways and the ocean, all without impact.

Removal of the Site from Agricultural uses

The site is still partially used for agricultural purposes as a large area is cropped annually for feed and hay. It was not used for this purpose this year as the owner has been making strenuous attempts to rid the paddocks near the Kalgan River of various feral weeds (principally Patterson Curse) before they spread into the reserve. These weeds are historical and their control has been totally at the landowners cost and desire to do so. Considerable areas of the property have been planted to bluegums, as have many other areas in the locality – bluegums are a well established agricultural use which has significant benefits to controlling salinity and improving water quality.

The site has been totally destocked by the owner. One thing he is never given credit for is his views and actions on preservation of the environment – the property contains significant areas of very well preserved vegetation of a number of represented vegetation communities (Jarrah/Marri, *Banksia* heath, wetlands etc.). The decision to de-stock the property was made on the basis of preserving these areas, he has never advertised this fact nor sought any funding etc. Basically just got into it on his own using his own funds and his way of balancing the industrial uses like sand extraction.

His views on environmental preservation also sparked his interest and then his business approach to recycling materials (green waste), composting and recently charcoal production (as a way of reducing the impacts on the current sources of charcoal). I bet there are not many people aware that much of charcoal available at the local hardware stores for BBQ's etc comes from tropical hardwood sources that are anything but sustainable.

It would be an interesting comparison to view the carbon footprint of his activities against the average agricultural property when you take into account the vegetation preservation and environmental aspects balanced against his business activities.

In summary I can understand from viewing the nature of the objections that many were probably made out of not receiving information. If any of the objectors would like further information I am more than happy to explain any aspects that they would like answered.

Regards

David Lynch
0427 426 177



Jessica Anderson

From: David [david@spinifexcrushing.com.au]
Sent: Monday, 14 September 2015 10:52 AM
To: Jessica Anderson
Subject: EF15194435 - A215306 - RE: Mobile Asphalt Plant - P215306

SynergySoft: EF15194435 - A215306

Like everything commercial it's a case of how long a piece of string. I am told that the total market for asphalt in the Albany, Mt Barker, Denmark region is 11,000 tonnes per annum. About half of this can come directly from Perth (via BGC) and Bunbury (Malatesta's) – you can keep asphalt gong for up to 10 hours with the right additives, mainly waxes. The remainder is from the existing plant at Willyung Quarry. If we can pick up at least 1000 tonnes per year we will be happy – which is basically what we use ourselves for our own work.

Now the tricky bit – most asphalt jobs in Albany by number are around 1-2 cum which is effectively 2-4 tonnes which only involves a little 5 tonne truck (you would have seen them running around) so 250-500 vehicle movements annually for this size. Some jobs are obviously bigger – say for instance you are doing a carpark you have to allow for each cum of asphalt to cover ~25m² (40mm AC14) – Coles ORANA took approximately 140 cum which is 20 x 6 wheeler loads over 3 days. These jobs are rare.

How about saying something like average 5 daily which is probably well over the top but since most jobs happen in the 5 months of warmer weather more realistic?

David Lynch
0427 426 177



From: Jessica Anderson [<mailto:jessicaa@albany.wa.gov.au>]
Sent: Monday, 14 September 2015 10:14 AM
To: David
Subject: Mobile Asphalt Plant - P215306

Hi David

Before I place the Mobile Asphalt Plant on advertising, I need to know the predicted generated truck movements as a result of the proposed use. Can you please provide this information at your earliest convenience?

Regards

Jess

Jessica Anderson Planning Officer	Tel: (08) 9841 9262 Fax: (08) 9841 4099
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CITY OF ALBANY LOCAL PLANNING SCHEME 1

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
Concerns specific to proposed Asphalt Plant – P2150459				
1	Department of Environment Regulation Locked Bag 33 Cloisters Square WA 6850	Submission received - No comment. Advised that they assess the environmental acceptability of emissions and discharges against their policies and standards through the lodgement of a Works Approval once Planning Approval has been received.		The submission is noted.
2	Department of Water PO Box 525 ALBANY WA 6331	No objections – however all surface water should be directed into the dam through the implementation of drains around the operation area.		This advice will form a planning condition should the proposal be supported.
3	Mindijup Road Palmdale, WA 6330	<p>Raised the following concerns:</p> <ul style="list-style-type: none"> a) Emissions from the plant b) Proximity to the Kalgan River c) Visual Amenity from their lot d) Would like the Council to consider extending the sealed section of the road to the entrance of the lot due to the poor state of the unsealed section of Mindijup Road. 	<ul style="list-style-type: none"> a) The proposal was referred to the Department of Environment Regulation due to the nature of the proposal. No objections were received. <p>The EPA suggests a buffer of 1000m between this activity and sensitive land uses (dwelling). The closest dwelling is in excess of this (1.36km).</p> <ul style="list-style-type: none"> b) The proposal was referred to the Department of Water due to the proximity to the Kalgan River. Advice was received and it will be conditioned to mitigate concerns in relation to 	The submission is noted.

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD106 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
			<p>the Kalgan River.</p> <p>c) A site visit conducted on the 09/11/2015 confirmed that the operation area is well screened by vegetation and not visible from adjoining lots.</p> <p>d) Will be managed through the following condition recommended by Paul Camins (City of Albany Engineer):</p> <p><i>'The unsealed section of Mindijup Road, from the sand mine entrance to the north of the GSS Operations entrance (approx. 550m), is to be upgraded and drained at the full cost to the developer, to the specifications and satisfaction of the City of Albany. This includes a 2 coat seal to a width of 6.2m'.</i></p>	
4	PO Box 5428 ALBANY WA 6332	<p>Raises the following concerns:</p> <p>a) Cumulative effect of current and proposed activities onsite</p> <p>b) Impact the activities will have on the environment</p>	<p>a) All approved and proposed uses are uses that can be considered within this zone and the required EPA buffers have been met.</p> <p>b) Referred to both the Department of Environment Regulation and Department of</p>	The submission is noted.

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD106 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>c) Wants the proposal to be considered in relation to the other activities and not in a piecemeal fashion</p> <p>d) Requests the City undertake a Strategic Environmental Assessment to identify the cumulative impacts of the proposed activities in relation to the landscape, flora, fauna, public amenity, soil, water, resources, wastes, noise, transport, and road safety.</p> <p>e) If the proposal is approved, requests that a condition is placed on the approval that stakeholders are notified of any breaches to licence conditions, including any incidences (e.g. spills, run-off).</p> <p>f) Requests that the annual inspection reports be circulated to local stakeholders.</p>	<p>Water for assessment.</p> <p>They do not object to the proposal and required buffers have been met.</p> <p>c) Each use meets the suggested EPA buffer.</p> <p>d) Noted</p> <p>e) The Department of Environment Regulation confirmed that although they have a schedule of inspections, they do not make the reports available to the public.</p> <p>f) This information can be requested through the Freedom of Information Act.</p>	
5	Tackenu Rd NAPIER WA 6330	<p>Objects for the following reasons:</p> <p>a) Concerns regarding contamination of the Kalgan River.</p> <p>b) Concerns regarding the impact of the flora and fauna on the adjoining reserve.</p>	<p>a) Referred to both the Department of Environment Regulation and Department of Water for assessment. They do not object to the proposal and concerns can be mitigated through standard conditions.</p> <p>b) As above</p>	The submission is noted.

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD106 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>c) Cumulative effect of the multiple non-agricultural activities occurring on the site.</p> <p>d) Concerns regarding increase in potential for fire due to the storage of diesel onsite. Requests a fire management report.</p> <p>e) Concerns that the water runoff from fighting a fire will contaminate the river should there be a fire.</p> <p>f) Concerns regarding further increase in traffic movement</p> <p>g) The condition of the unsealed section of Mindijup Road.</p> <p>h) Believes this is wrongly being assessed as an 'Extractive Industry' and should be assessed as a 'General Industry'. Points out that 'General Industry' is not permitted within this zone.</p> <p>i) Proposal not consistent with the intent of the zone</p> <p>j) Amenity of the area</p> <p>k) Community Strategic Plan, Clean Green and Sustainable – states we</p>	<p>c) As above</p> <p>d) With the exception of 1000 litres of diesel within a fully bunded pod, there will be no storage of diesel onsite.</p> <p>A readily source of water is available 300m from the site, and a water truck is permanently based on the site as part of DER licensed activities (composting).</p> <p>It is Spinifex Policy to not operate on any day of heightened fire risk such as movements or harvest bans.</p> <p>The application was referred to the City of Albany's Emergency Management Team. Their advice was that as the proposal is within a cleared portion of land in close proximity to the Charcoal Plant, the same conditions apply.</p> <p>e) Drains surrounding the operation area will direct all</p>	

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD106 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p align="center">need to protect and enhance our natural environment by protecting and enhancing the health of our catchments and waterways.</p> <p>l) Risk reduction – rather than applying conditions to reduce the risk to the river, eliminate the risk altogether and find a location not in close proximity to a river.</p>	<p>surface water runoff to the dam.</p> <p>f) The proposed vehicles are classed as ‘as of right vehicles’ and the City does not have the statutory authority to restrict these.</p> <p>g) It will be conditioned that the unsealed section of Mindijup Road will be sealed should the application be supported.</p> <p>h) The definition of ‘Extractive Industry’ also includes the manufacturing of materials which area extracted off the lot.</p> <p>i) All uses proposed and existing are permissible within this zone.</p> <p>j) After a site visit, it became apparent that no activities were visible from any adjoining lot. Staff were in the opinion that the only impact on the amenity of the area would be the truck movements, however the increase would be negligible.</p>	

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD106 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
			<p>k) The proposals were referred to the Department of Water who are the responsible body. They have no objections provided that cut off drains are installed around the operation area and all run off is directed to the dam.</p> <p>l) In regards to the risk to the river, the Department of Water are the responsible body for determining the risk to the waterway.</p>	
6	<p>Mindijup Road and Takenup Road Palmdale WA 6330</p>	<p>Objects for the following reasons:</p> <p>a) Concerns regarding toxins from the asphalt plant resulting in contamination of the Kalgan River.</p> <p>b) Believes this should not be able to be considered within this area.</p>	<p>a) Referred to both the Department of Environment Regulation and Department of Water for assessment. They do not object to the proposal.</p> <p>b) Under the Local Planning Scheme No. 1, this use can be considered within this zone. The required EPA buffers have been met.</p>	<p>The submission is noted.</p>
7	<p>Moirs Road Kalgan WA 6330</p>	<p>Provides the following comments:</p> <p>a) Increasing volume of heavy haulage and associated services that this application will bring</p>	<p>a) The applicant has advised that the proposal will not affect the daily vehicle movements as</p>	<p>The submission is noted</p>

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD106 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<ul style="list-style-type: none"> b) Palmdale and Mindijup Roads are already servicing a number of heavy haulage industries c) The intersection of Palmdale and Moirs Road was realigned several years ago, yet the sign post (Moirs Road) is again damaged because of trucks having to travel very close / into the road side verge when passing another vehicle. d) At times it appears that some (all) are running a 24 hour programme. e) The condition of the unsealed section of Mindijup Road is in a very poor state. f) The advent of increasing heavy haulage vehicles and associated services on rural roads requires them to be managed in a meaningful manor that reflects an understanding for both local residents and business. 	<p>due to the restricted number of trucks available by the company, they will not occupy all the uses at the same time.</p> <ul style="list-style-type: none"> b) In terms of restricting the use of Mindijup Road and Palmdale Road, the City of Albany does not have the statutory authority to control the direction of vehicles which are classified as 'as of right' vehicles by Main Roads WA. c) Whilst travelling to the site on 09/11/15, staff passed two semi-trailer trucks on Palmdale Road and one on Mindijup Road. Staff believed that there was ample room for two vehicles to pass. d) The operation is restricted to 7.00am – 6.00pm Monday to Friday, 8.00am-5.00pm Saturday, with no operation permitted on Sundays or Public Holidays. e) The unsealed section of Mindijup Road will be sealed as a condition of the approval should the application be supported. 	

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD106 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
			f) Noted	
Concerns relevant to both proposals – Proposed Asphalt Plant and Proposed Extractive Industry (Gravel and Clay)				
8	Mindijup Road Palmdale WA 6330	No objections to the proposals, however provides the following comment: a) Raises concerns in relation to the condition of the unsealed section of Mindijup Road, and requests that it is widened and sealed for the safety of other road users.	a) Will be managed through the following condition recommended by Paul Camins (City of Albany Engineer): <i>‘The unsealed section of Mindijup Road, from the sand mine entrance to the north of the GSS Operations entrance (approx. 550m), is to be upgraded and drained at the full cost to the developer, to the specifications and satisfaction of the City of Albany. This includes a 2 coat seal to a width of 6.2m.’</i>	The submission is noted.
9	Takenup road Napier WA 6330	No objections to the proposals.		The submission is noted
10		No objections to the proposal but would like to provide the following comment: a) Would like to see Mindijup Road sealed due to the poor state.	b) The unsealed section of Mindijup Road will be sealed as a condition of the approval should the application be supported.	The submission is noted
11	PO Box 5428 ALBANY WA 6332	Raised concerns in regards to the cumulative impact of activities	Addressed in the full submission summary above under point 4.	The submission is noted

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD106 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
12	Tackenu Rd NAPIER WA 6330	Raised concerns in regards to: a) the cumulative impact of activities b) Lack of scrutiny and concerns that the operations are not run in accordance with the approvals	Addressed in the full submission summary above under point 5	The submission is noted
13	↪ Moirs Road Kalgan WA 6330	Concerns in relation to: a) Increase in heavy haulage traffic. b) Impact on infrastructure	Addressed in the full submission summary above under point 7.	The submission is noted



MINDIJUP GRAVEL AND CLAY EXTRACTIVE INDUSTRY
Lot 102 Mindijup Road, PALMDALE

August 2015

INTRODUCTION & BACKGROUND

Great Southern Sands is part of the GSS Group under the Directorship of Martin Shuttleworth, who is also the owner of Lot 102 Mindijup Road.

GSS seeks approval to extract gravel and clay located on Lot 102 Mindijup Road in the City of Albany, using standard mining techniques.

The site has some previous extraction of gravel for internal roading purposes, and a small amount of gravel supplied to the City of Albany for the re-sheeting and maintenance of Mindijup Road.

LOCATION

The project is located approximately 35 kilometres northeast of Albany with access off Mindijup Road (Figure 1).

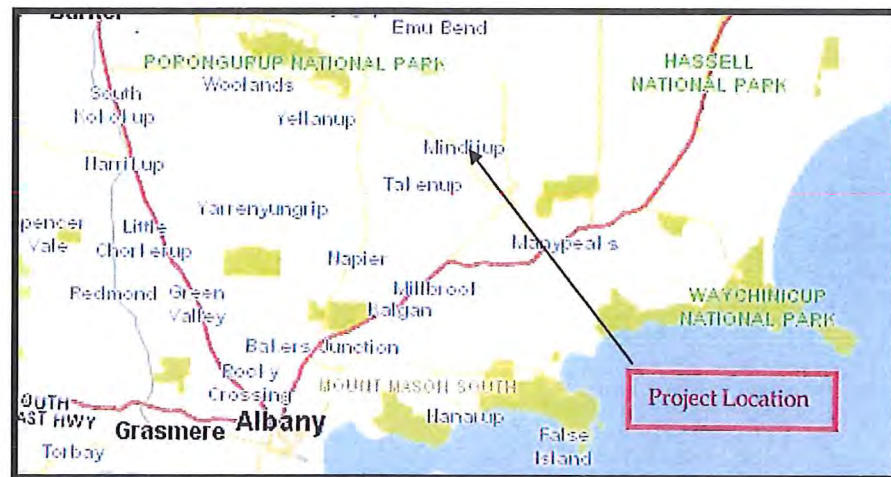


Figure 1: Location of the Wandena Project

OWNERSHIP AND LAND TENURE

The project is situated on Lot 102 on Plan 22860 Mindijup Road owned by Martin Shuttleworth.

As this is freehold land the quarry project falls outside of the Mines Act, but its operation will be governed by the Mines Safety and Inspection Act and Regulations.

Relevant contact details for GSS are:

Martin Shuttleworth
 Director
 Mob: 0428464212
 Email: mshuttleworth@shuttleworth.com.au

David Lynch
 Manager
 Mob: 0427 426 177
 Email: david@GSScrushing.com.au

16 Anthony Street
ALBANY WA 6330
Ph: (08) 98457688

LOCAL GOVERNMENT

The proposed quarry lies within the City of Albany, and is zoned for Priority Agriculture. An Extractive Industry is a Discretionary Use as defined by the Local Planning Scheme No. 1 and requires Council permission to proceed.

EXISTING ENVIRONMENT

Climate

The Albany/Manypeaks area is subject to mild Mediterranean with warm to hot dry summers and cool wet winters. July is the coolest wettest month with an average of 15.7°C maximum and 8.1°C minimum, with over 100 mm of rainfall. February is the hottest month with an average of 22.9°C maximum and 15.4°C minimum and along with January is one of the driest months. The proposed composting site receives an average approximately 703mm of rain per annum (DoW, 2008).

Winds are predominantly from the east and south-east in the summer and from the west and north-west in the winter. The weather patterns are driven by winter low and summer high pressure systems. The relatively low evaporation rates and moderate temperatures during winter contribute to a growing season for primary production of approximately 8 months – mid March to early November.

Landforms and Geology

Mindijup Road is located in the Stirling Range Province of Western Australia, on the Albany Sand Plain Zone according to the soil-landscape mapping in the south-western Australia. This zone is a "gently undulating plain dissected by a number of short rivers flowing south. The base geology is comprised of Eocene marine sediments, unconformably overlying Proterozoic granite, and metamorphic rocks, variously weathered. Soils are sandy duplex soils, often alkaline and sodic, with some sands and gravels" (Schocknecht et al., 2004). The soils present are from the late Tertiary Period in the Cainozoic Era and consist of 'sand – white, grey or brown: commonly contains iron pisoliths and overlies laterite" (Australian Geoscience Mapping).

The area to be quarried has a general profile of :

1. 0-0.2m of sandy gravel forming the topsoil
2. 0.4-0.9m of hard durable ferricrete suitable for high quality gravel, and
3. Approximately 1m of brown friable light to medium clay underlying the gravel horizon
4. Sheet laterite, varying friable.

Horizons 2 and 3 are of commercial value, the gravel for road works and the brown friable clay as embankment fill (likely to be utilised by the City of Albany at the Hanrahan Waste Disposal Site).

A total resource of 50,000m³ of gravel and 15,000 m³ of clay is estimated for the site.

Surface Water and Groundwater Hydrology

Broadly the site is situated on the edge of a plateau element sloping towards the North and West where the Kalgan River is situated. The Kalgan River is located approximately 1500m from the proposed project site.

Locally the site sits in depression formed by a granitic hills to the north, ferricrete ridge to the south covered with native vegetation and localised low ridges to the west and east.

As the pit forms a depression surface water will collect in the pit over time. A portion of the end use of the pit will be a dam for agricultural purposes so the collection of surface water is encouraged. This dam will be towards the eastern end of the proposal.

The nature of the regolith (underlying geology) is such that there will not be any permanent sub-surface water that this proposal would impact on.

Flora and fauna

The area proposed for the quarry and crushing operations have been cleared of vegetation previously for agricultural purposes and therefore the project will have no impact upon vegetation or fauna communities.

Aboriginal and European Heritage

An online search of the of the Department of Indigenous Affairs (DIA) Aboriginal Heritage Inquiry System indicates that there are no sites of heritage significance within the project area (DIA 2015).

There are no areas or sites of European heritage located at the project area.

PROPOSED DEVELOPMENT

The gravel and clay extraction will only occur on previously cleared land. Some of which has been utilised for poorly performing bluegum plantation.

No permanent structures are required as part of this proposal.

Mining

The resource will be extracted using typical techniques of :

- Strip topsoil and store to the sides of the pit,
- rip and push the lateritic gravel with a large bulldozer,
- load out the resulting gravel with semi-trailers and road trains, and
- progressively rehabilitate the pit as stockpiled material is removed.

Transport

This proposal will not alter the overall transport in and out of the site, currently estimated at a average maximum of 5 roadtrains daily carting extracted materials. This is primarily due to the limited number of trucks GSS has available ie. They are either carting sand or if gravel/clay is required then that is what they will cart.

Water for Dust Suppression

Typically gravel extraction doesn't involve much dust except for the haulroads. Ample water is available on the property for dust suppression as required, including the permanent positioning of a water tanker on the premises.

As there are no residences within kilometres of the extraction site any dust produced will not affect them. The closest sensitive premises are some 800m from the closest point of the haul road nearby Mindijup Road. Council has previously accepted that the chances of dust affecting this property are minimal – please refer to email correspondence David Lynch/Alex Bott 8th July 2015 in respect of PSC P2140484 the text of which is reproduced below.

In regards to Condition A1 of P2140484 we do not believe that the very low volumes of traffic expected as a result of this new venture, and the lack of any sensitive areas such as residences within any appreciable distance. The only two houses on the unsealed portion of Mindijup are +800m and ~1050m respectively from our entrance. The closest point to the former is 715m from the internal road.

Given this if there is a dust issue directly attributable to the operations of this planning consent, Spinifex will take reasonable steps to mitigate the impact. These measures may include:

- *Ceasing trucking activities if wind directions are unfavourable,*
- *Watering the internal road, and*
- *Watering Mindijup Road.*

I trust that this will satisfy the requirements of this condition.

This was accepted by Mr Bott by return email on Thursday 9th July 2015.

Fuel and Hydrocarbons

Fuel consumption for the project has been estimated at approximately 500 L per day during the initial extraction and stockpiling by bulldozer, and will be supplied by a service truck. The total resource volume of approximately 65,000 m³ is estimated to burn approximately 42kL of diesel over the 3-5 year period that the pit will be operational (best commercial case) including all aspects of the extraction and haulage back to Albany.

No fuel or hydrocarbons will be stored onsite. A fuel/service truck will provide all fuel and servicing requirements for the site.

Servicing

Machine servicing may be carried out on site using industry best practise techniques. These consist of collecting all oils through the service trucks EVAC system and recycling offsite at a licensed facility, full bunding of any temporary oil storage, collection and proper disposal of all oily wastes and rags etc.

Domestic and Industrial Waste

All waste products will be removed daily by staff

Gas emissions

Gas emissions will be generated from the plant operation and haulage.

Gas emissions from the project comprise exhaust emissions from the crushing/screening plant and the diesel generator. Based on an total diesel usage of ~42kL, approximately 173.6 t of CO₂-e will be generated by the project.

Based on 2009 gas inventory, WA's greenhouse gas emissions were estimated at 69.9 Mt of CO₂-e in 2009 (Department of Climate Change and Efficiency, 2011). The greenhouse gas emissions generated by the project represents 0.0002% of the annual WA emissions, noting that over the predicted 5 year life of the project the annual percentage is considerably less.

These emissions will not have a significant impact on the local or regional air quality.

All vehicles and machinery will be regularly serviced to minimise the emissions of combustion gases.

TRANSPORT AND ACCESS

The proposal will use the current access onto Mindijup Road. The proposed transport route through the property is shown on Figure 1.

QUARRY MANAGEMENT

GSS complies with all aspects of the Mines Safety and Inspection Act and Regulations, and all of our quarries and construction materials pits are registered with that body. GSS has a standing exemption on the requirement for a Quarry Manager for its smallscale operations. The pit will be under the direct control of our Earthworks Manager who is the 'Registered Manager' for the purposes of the MSIA and Regs.

EHS&Q

General Safety Procedures

In addition to various Acts and Regulations, GSS operates under a comprehensive safety system, developed from many years of experience in mining and civil contracting. GSS is currently undergoing the certification process towards ISO 9001, 14001 and AS 4801.

Environmental Regulation and Management

The activities involved in the gravel and clay extraction do not require DER licensing. The general principles of the Environmental Protection Act and Regulations will be adhered to.

Fire Control

The potential for fire is regarded as very low. All activities in an extraction pit occur on bare mineral earth and diesel powered machinery does not have any appreciable ability to produce sparks. All transport will be along wide (~8m) gravel roads already established on the property.

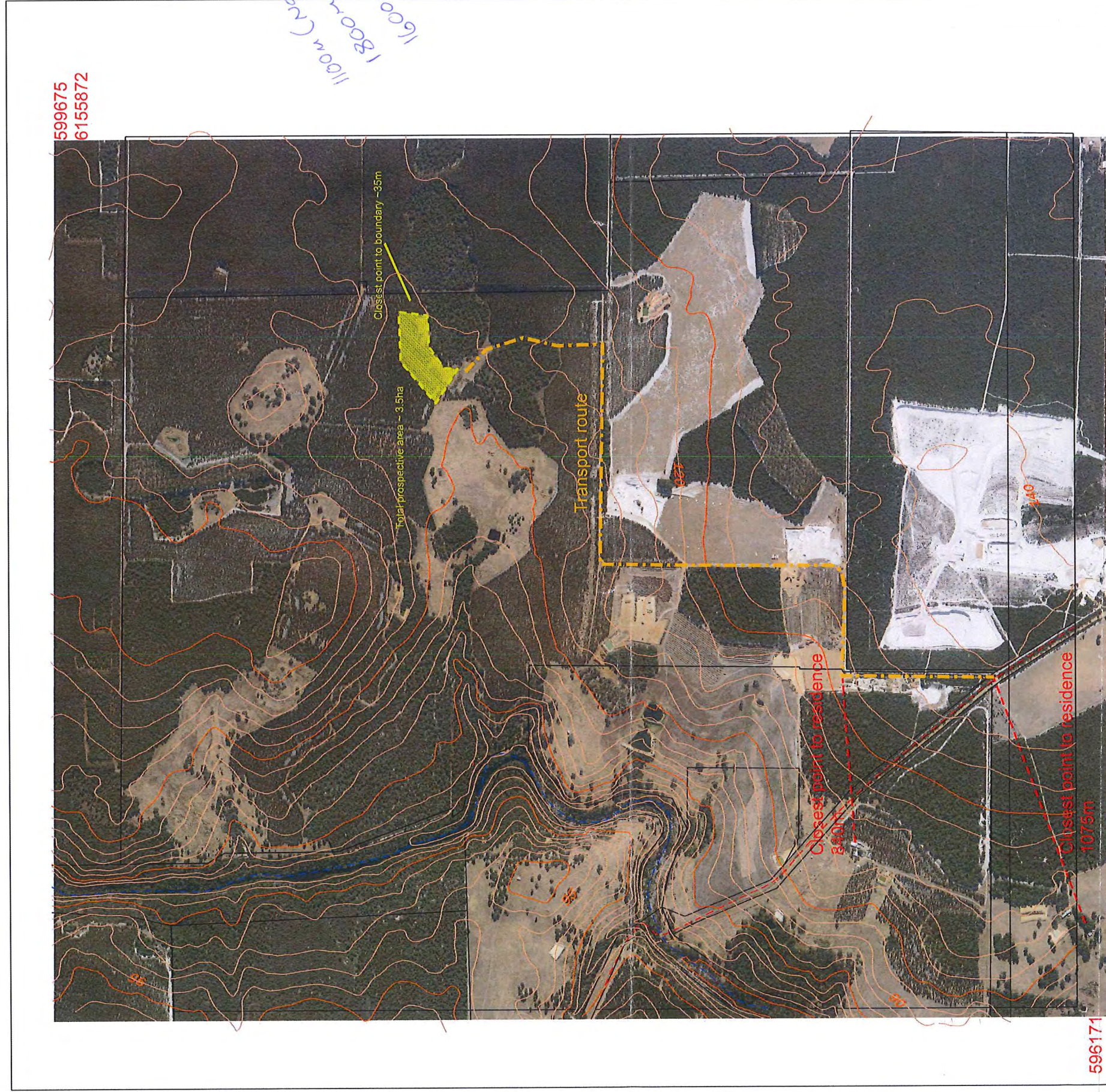
A readily available source of water is available 400m from the site, and a water truck is permanently based at Mindijup as part of DER licensed activities (composting).

It is GSS policy not to operate on any day of heightened fire risk such as Movement or Harvest Ban days.

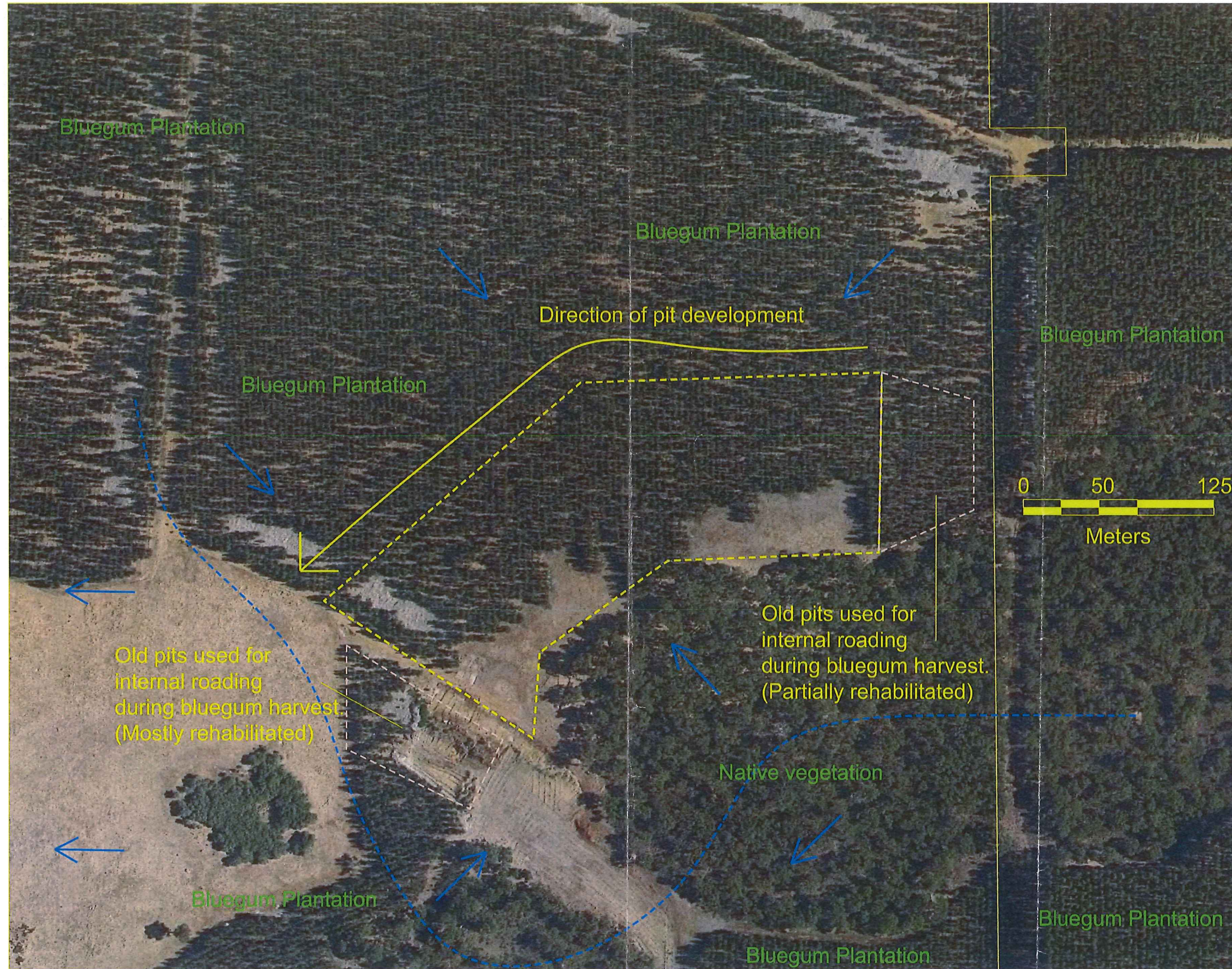
CLOSURE & REHABILITATION

All requirements of the DMP in regards closure at the end of mine life will be adhered to. Given that the quarry is not on a Mine Lease, and that the resource is extensive, complete closure will not occur for a number of years (3-5).

Progressive works towards closure will occur through mine life, especially safety related items such as scaling down walls, abandonment bunds around exposed quarry faces, bunds at the base of high walls to prevent unauthorised access to the face and to prevent any loose material breaking off the face and rolling out in the quarry area where they will present a hazard.



Location of Proposed Gravel Extraction Site, Lot 102 Mindijup Road, Palmdale
(Scale 1:17,500 @ A3, All grid references are GDA94, Zone 50)



Proposed pit location. Northern boundary approximate due to inability to test material under bluegum plantation. (Blue arrows indicate surface water flow direction) Scale 1:2,500 @ A3

CITY OF ALBANY LOCAL PLANNING SCHEME 1

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
Concerns specific to proposed Asphalt Plant – P2150459				
1	Department of Environment Regulation Locked Bag 33 Cloisters Square WA 6850	Submission received - No comment. Advised that they assess the environmental acceptability of emissions and discharges against their policies and standards through the lodgement of a Works Approval once Planning Approval has been received.		The submission is noted.
2	Department of Water PO Box 525 ALBANY WA 6331	No objections – however all surface water should be directed into the dam through the implementation of drains around the operation area.		This advice will form a planning condition should the proposal be supported.
3	Mindijup Road Palmdale, WA 6330	<p>Raised the following concerns:</p> <ul style="list-style-type: none"> a) Emissions from the plant b) Proximity to the Kalgan River c) Visual Amenity from their lot d) Would like the Council to consider extending the sealed section of the road to the entrance of the lot due to the poor state of the unsealed section of Mindijup Road. 	<ul style="list-style-type: none"> a) The proposal was referred to the Department of Environment Regulation due to the nature of the proposal. No objections were received. <p>The EPA suggests a buffer of 1000m between this activity and sensitive land uses (dwelling). The closest dwelling is in excess of this (1.36km).</p> <ul style="list-style-type: none"> b) The proposal was referred to the Department of Water due to the proximity to the Kalgan River. Advice was received and it will be conditioned to mitigate concerns in relation to 	The submission is noted.

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD107 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
			<p>the Kalgan River.</p> <p>c) A site visit conducted on the 09/11/2015 confirmed that the operation area is well screened by vegetation and not visible from adjoining lots.</p> <p>d) Will be managed through the following condition recommended by Paul Camins (City of Albany Engineer):</p> <p><i>'The unsealed section of Mindijup Road, from the sand mine entrance to the north of the GSS Operations entrance (approx. 550m), is to be upgraded and drained at the full cost to the developer, to the specifications and satisfaction of the City of Albany. This includes a 2 coat seal to a width of 6.2m'.</i></p>	
4	PO Box 5428 ALBANY WA 6332	<p>Raises the following concerns:</p> <p>a) Cumulative effect of current and proposed activities onsite</p> <p>b) Impact the activities will have on the environment</p>	<p>a) All approved and proposed uses are uses that can be considered within this zone and the required EPA buffers have been met.</p> <p>b) Referred to both the Department of Environment Regulation and Department of</p>	The submission is noted.

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD107 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>c) Wants the proposal to be considered in relation to the other activities and not in a piecemeal fashion</p> <p>d) Requests the City undertake a Strategic Environmental Assessment to identify the cumulative impacts of the proposed activities in relation to the landscape, flora, fauna, public amenity, soil, water, resources, wastes, noise, transport, and road safety.</p> <p>e) If the proposal is approved, requests that a condition is placed on the approval that stakeholders are notified of any breaches to licence conditions, including any incidences (e.g. spills, run-off).</p> <p>f) Requests that the annual inspection reports be circulated to local stakeholders.</p>	<p>Water for assessment.</p> <p>They do not object to the proposal and required buffers have been met.</p> <p>c) Each use meets the suggested EPA buffer.</p> <p>d) Noted</p> <p>e) The Department of Environment Regulation confirmed that although they have a schedule of inspections, they do not make the reports available to the public.</p> <p>f) This information can be requested through the Freedom of Information Act.</p>	
5	<p>Tackenu Rd NAPIER WA 6330</p>	<p>Objects for the following reasons:</p> <p>a) Concerns regarding contamination of the Kalgan River.</p> <p>b) Concerns regarding the impact of the flora and fauna on the adjoining reserve.</p>	<p>a) Referred to both the Department of Environment Regulation and Department of Water for assessment. They do not object to the proposal and concerns can be mitigated through standard conditions.</p> <p>b) As above</p>	<p>The submission is noted.</p>

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD107 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>c) Cumulative effect of the multiple non-agricultural activities occurring on the site.</p> <p>d) Concerns regarding increase in potential for fire due to the storage of diesel onsite. Requests a fire management report.</p> <p>e) Concerns that the water runoff from fighting a fire will contaminate the river should there be a fire.</p> <p>f) Concerns regarding further increase in traffic movement</p> <p>g) The condition of the unsealed section of Mindijup Road.</p> <p>h) Believes this is wrongly being assessed as an 'Extractive Industry' and should be assessed as a 'General Industry'. Points out that 'General Industry' is not permitted within this zone.</p> <p>i) Proposal not consistent with the intent of the zone</p> <p>j) Amenity of the area</p> <p>k) Community Strategic Plan, Clean Green and Sustainable – states we</p>	<p>c) As above</p> <p>d) With the exception of 1000 litres of diesel within a fully bunded pod, there will be no storage of diesel onsite.</p> <p>A readily source of water is available 300m from the site, and a water truck is permanently based on the site as part of DER licensed activities (composting).</p> <p>It is Spinifex Policy to not operate on any day of heightened fire risk such as movements or harvest bans.</p> <p>The application was referred to the City of Albany's Emergency Management Team. Their advice was that as the proposal is within a cleared portion of land in close proximity to the Charcoal Plant, the same conditions apply.</p> <p>e) Drains surrounding the operation area will direct all</p>	

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD107 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p align="center">need to protect and enhance our natural environment by protecting and enhancing the health of our catchments and waterways.</p> <p>l) Risk reduction – rather than applying conditions to reduce the risk to the river, eliminate the risk altogether and find a location not in close proximity to a river.</p>	<p>surface water runoff to the dam.</p> <p>f) The proposed vehicles are classed as ‘as of right vehicles’ and the City does not have the statutory authority to restrict these.</p> <p>g) It will be conditioned that the unsealed section of Mindijup Road will be sealed should the application be supported.</p> <p>h) The definition of ‘Extractive Industry’ also includes the manufacturing of materials which area extracted off the lot.</p> <p>i) All uses proposed and existing are permissible within this zone.</p> <p>j) After a site visit, it became apparent that no activities were visible from any adjoining lot. Staff were in the opinion that the only impact on the amenity of the area would be the truck movements, however the increase would be negligible.</p>	

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD107 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
			<p>k) The proposals were referred to the Department of Water who are the responsible body. They have no objections provided that cut off drains are installed around the operation area and all run off is directed to the dam.</p> <p>l) In regards to the risk to the river, the Department of Water are the responsible body for determining the risk to the waterway.</p>	
6	Mindijup Road and Takenup Road Palmdale WA 6330	<p>Objects for the following reasons:</p> <p>a) Concerns regarding toxins from the asphalt plant resulting in contamination of the Kalgan River.</p> <p>b) Believes this should not be able to be considered within this area.</p>	<p>a) Referred to both the Department of Environment Regulation and Department of Water for assessment. They do not object to the proposal.</p> <p>b) Under the Local Planning Scheme No. 1, this use can be considered within this zone. The required EPA buffers have been met.</p>	The submission is noted.
7	Moirs Road Kalgan WA 6330	<p>Provides the following comments:</p> <p>a) Increasing volume of heavy haulage and associated services that this application will bring</p>	<p>a) The applicant has advised that the proposal will not affect the daily vehicle movements as</p>	The submission is noted

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD107 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<ul style="list-style-type: none"> b) Palmdale and Mindijup Roads are already servicing a number of heavy haulage industries c) The intersection of Palmdale and Moirs Road was realigned several years ago, yet the sign post (Moirs Road) is again damaged because of trucks having to travel very close / into the road side verge when passing another vehicle. d) At times it appears that some (all) are running a 24 hour programme. e) The condition of the unsealed section of Mindijup Road is in a very poor state. f) The advent of increasing heavy haulage vehicles and associated services on rural roads requires them to be managed in a meaningful manor that reflects an understanding for both local residents and business. 	<p>due to the restricted number of trucks available by the company, they will not occupy all the uses at the same time.</p> <ul style="list-style-type: none"> b) In terms of restricting the use of Mindijup Road and Palmdale Road, the City of Albany does not have the statutory authority to control the direction of vehicles which are classified as 'as of right' vehicles by Main Roads WA. c) Whilst travelling to the site on 09/11/15, staff passed two semi-trailer trucks on Palmdale Road and one on Mindijup Road. Staff believed that there was ample room for two vehicles to pass. d) The operation is restricted to 7.00am – 6.00pm Monday to Friday, 8.00am-5.00pm Saturday, with no operation permitted on Sundays or Public Holidays. e) The unsealed section of Mindijup Road will be sealed as a condition of the approval should the application be supported. 	

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD107 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

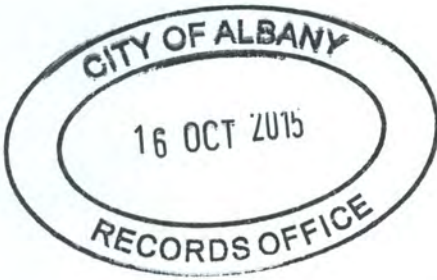
No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
			f) Noted	
Concerns relevant to both proposals – Proposed Asphalt Plant and Proposed Extractive Industry (Gravel and Clay)				
8	Mindijup Road Palmdale WA 6330	No objections to the proposals, however provides the following comment: a) Raises concerns in relation to the condition of the unsealed section of Mindijup Road, and requests that it is widened and sealed for the safety of other road users.	a) Will be managed through the following condition recommended by Paul Camins (City of Albany Engineer): <i>‘The unsealed section of Mindijup Road, from the sand mine entrance to the north of the GSS Operations entrance (approx. 550m), is to be upgraded and drained at the full cost to the developer, to the specifications and satisfaction of the City of Albany. This includes a 2 coat seal to a width of 6.2m.’</i>	The submission is noted.
9	Takenup road Napier WA 6330	No objections to the proposals.		The submission is noted
10		No objections to the proposal but would like to provide the following comment: a) Would like to see Mindijup Road sealed due to the poor state.	b) The unsealed section of Mindijup Road will be sealed as a condition of the approval should the application be supported.	The submission is noted
11	PO Box 5428 ALBANY WA 6332	Raised concerns in regards to the cumulative impact of activities	Addressed in the full submission summary above under point 4.	The submission is noted

CITY OF ALBANY LOCAL PLANNING SCHEME 1 REPORT ITEM PD107 REFERS

Lot 102 Mindijup Road – Proposed Asphalt Plant P2150459 and Proposed Extractive Industry (Gravel and Clay) P2150438

SCHEDULE OF SUBMISSIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
12	Tackenu Rd NAPIER WA 6330	Raised concerns in regards to: a) the cumulative impact of activities b) Lack of scrutiny and concerns that the operations are not run in accordance with the approvals	Addressed in the full submission summary above under point 5	The submission is noted
13	Moirs Road Kalgan WA 6330	Concerns in relation to: a) Increase in heavy haulage traffic. b) Impact on infrastructure	Addressed in the full submission summary above under point 7.	The submission is noted



Andrew Sharpe
Chief Executive Officer
City of Albany
PO Box 484
Albany WA 6331

City of Albany Records
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Attention: Alex Bott

Dear Alex

Local Development Plan - Lot 1005 Catalina Road, Lange

I refer to recent correspondence and discussions regarding the above.

On behalf of our client, Nigel and Leah Ryde, Edge Planning & Property seek the Council's approval of the Local Development Plan (LDP).

In support of the request, please find attached three copies of the LDP documentation. Our client has separately paid the City's processing fee.

In summary, the site is considered suitable and capable of accommodating the proposed R25 residential development, the LDP is consistent with the planning framework and the LDP is consistent with the principles of orderly and proper planning. Accordingly, implementation of the LDP will positively contribute to the area's amenity and provide an important supply of housing adjoining the neighbourhood centre.

Please contact me on 0409107336 or steve@edgeplanning.com.au should you have any questions, seek clarification or require additional information.

On behalf of our client, Edge Planning & Property look forward to Council's approval.

Yours sincerely

Steve Thompson
PARTNER

16 October 2015



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Local Development Plan

Lot 1005 Catalina Road, Lange

October 2015



www.edgeplanning.com.au

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LOCAL DEVELOPMENT PLAN REPORT – LOT 1005 CATALINA ROAD, LANGE

1.0 INTRODUCTION

This report supports the Local Development Plan (LDP) for Lot 1005 Catalina Road, Lange (the site) shown in Figure 1. In particular, it sets out the context, planning framework, the proposal and planning considerations.

The LDP (Figure 2) is prepared pursuant to Clause 5.9.1.7 of the *City of Albany Local Planning Scheme No. 1* (LPS1).

The purpose of the LDP is to:

- enhance, elaborate and expand on the details and provisions contained in the *Catalina Central Planning Framework*;
- set out variations to the *Residential Design Codes of Western Australia* (R Codes) in order to facilitate better design outcomes, provide greater flexibility, make an effective use of land and create attractive streetscapes;
- provide increased certainty to the City, the developer and future landowners regarding urban design and the overall look of the built area; and
- ensure a coordinated approach to development.

2.0 THE SITE AND ITS CONTEXT

2.1 Cadastral details

The site is legally described as Lot 1005 on Diagram 49235 contained on Volume 2704 and Folio 627. It has an area of 1.6291 hectares and is owned by N.P and L.G Ryde. The Certificate of Title is set out in Attachment 1.

The site is divided by an east-west public access way (PAW). The site does not have legal access to the service vehicle access (laneway) to the west given this forms part of adjoining Lot 1001 owned by Federation Pty Ltd.

There are burdens relating to the site. In particular a restrictive covenant restricts certain commercial uses, there is a drainage easement on the southern boundary and a 70A Notification requires the subdivider/developer to construct the PAW.

2.2 Context

The site is located approximately 3.5 kilometres north of the Albany city centre (see Figure 3).

Figure 4 shows the Context Plan. The site is near the Brooks Garden Shopping Centre, the St Ives Retirement Village, residential development and future residential development. A laneway, loading dock and customer car park are west of the site.

2.3 Physical characteristics and servicing

Figures 1 and 5 show some of the site's characteristics. Additionally, the site has the following characteristics and features:

Local Development Plan Lot 1005 Catalina Road

- it has an elongated north-south axis;
- it has previously been cleared of remnant native vegetation through previous agricultural land use activities and it contains no environmental assets;
- the site has a gentle gradient with a cross-fall of approximately 1 in 25. Elevation varies from 50 metres AHD at the lowest point on the eastern boundary to 53 metres AHD on the western boundary;
- it has views down the valley generally to the east;
- the soil types are consistent with those of the Dempster (Dc) map unit which is characterised by broad ridge crests with slopes less than 5%. These soils have light brownish grey fine sand topsoils generally with lateritic gravel subsoils. The soils are well suited to urban development as outlined in Attachment 5;
- it contains no buildings;
- the site has legal vehicular access to Stirling View Drive, Catalina Road and Brooks Garden Boulevard; and
- all relevant services are available to the site.

The PAW which divides the site is vested with the City. The PAW has a width of 8 metres and is currently unconstructed.

2.4 Heritage

The Department of Aboriginal Affairs database has no known sites of Aboriginal significance on the site. Additionally, the site does not contain any structure or place of historic heritage significance on the *City of Albany Municipal Inventory*.

3.0 PLANNING FRAMEWORK

3.1 Overview

The LDP is considered consistent with the planning framework including:

- *State Planning Strategy 2050*, the *Lower Great Southern Strategy* and the draft *Great Southern Regional Planning and Infrastructure Framework* which classify Albany as a regional centre and a focus for population growth;
- *State Planning Policy No. 3 Urban Growth and Settlement* – this promotes a sustainable settlement pattern, using land efficiently, the provision of a wide variety and choice of housing and building on and within existing communities;
- *State Planning Policy No. 3.1 Residential Design Codes* – the LDP is consistent with the lot sizes for the R25 code. The LDP proposes minor modifications to the R Codes which are outlined in this report;
- *Liveable Neighbourhoods* – this promotes walkable neighbourhoods, the provision of a range of housing types and lot sizes and to efficiently use land. It promotes medium density housing in close proximity to areas with higher amenity such as neighbourhood/activity centres. It recognises that cul-de-sacs are a legitimate component of the movement network as outlined in requirements R21, R22 and R23;
- *Development Control Policy 2.2 Residential Subdivision* – new residential lots are required to be capable of development, be located within an area

which is suitable for subdivision in terms of its physical characteristics and be provided with an appropriate vehicle movement network;

- *DC 2.6 Residential Road Planning* – recognises that access places (short cul-de-sacs) are a legitimate component of the road hierarchy. Access places are shared pedestrian and vehicular spaces with pedestrians given priority and traffic speeds kept to a minimum. The reserve widths are in the range of 10 – 14.5 metres, have a carriageway of 4 – 5.5 metres in width, with the potential for widths to 3 metres where four or less dwellings are served. Section 3.6.6 states 'Footpaths will generally not be required for access places';
- *Albany Local Planning Strategy* – relevant aims include supporting infill and consolidation of development within existing urban areas and correspondingly to contain the spread of fragmented urban and rural living areas. The site is identified as 'urban' on Strategic Plan – Urban;
- *City of Albany Local Planning Scheme No. 1* - the site is zoned 'Future Urban'. Further details are outlined in section 3.2; and
- *Catalina Central Planning Framework* - details are outlined in section 3.3.

3.2 City of Albany Local Planning Scheme No. 1

LPS1 zones the site as 'Future Urban'. Figure 6 shows the zoning map for the area. Clause 4.2.3 of LPS1 sets out objectives for the Future Urban Zone while the Zoning Table (Table 1) states 'All land use and development to comply with clause 5.5.3'.

Sub-clause 5.5.3.1 states 'Notwithstanding any other requirement of the Scheme, for any lot within the Future Urban zone, the Local Government may only permit the following land uses...unless a Structure Plan has been prepared and adopted under clause 5.9 of the Scheme.'

As outlined in section 3.3 of this report, there is an adopted Structure Plan covering the site which addresses clause 5.9 of LPS1.

Clause 5.9 titled 'Structure Plans, Development Contribution Plans and Local Development Plans' sets out the procedures for the preparation and approval of Structure Plans, Development Contribution Plans and Local Development Plans. Sub-clause 5.9.1.7 titled 'Local Development Plans' is of particularly relevance to this LDP. The sub-clause outlines the purpose, process and details relating to LDP's.

3.3 Catalina Central Planning Framework

The *Catalina Central Planning Framework* (CCPF) was adopted as Council policy on 15 March 2011 and this addresses clause 5.9 of LPS1. The CCPF includes a Structure Plan and Precinct Plan and it provides guidance to the City, proponents and other stakeholders as to what constitutes envisaged and suitable development.

The site forms part of the neighbourhood centre. The CCPF shows the site as medium density residential development; however it does not show an R Code. The site is located in Precinct 1, while Plan 4 shows the site as a Special Development Area and details requirements for residential development primarily addressing land use compatibility with the shopping centre. Some of the relevant plans and sections of the CCPF report are outlined in Attachment 2. Section 5 of this report considers key

Local Development Plan Lot 1005 Catalina Road

elements of the CCPF relevant to the site and the LDP including where there are variations, elaborations or enhancements to the CCPF.

The LDP meets the aims, objectives and intentions of the CCPF. This includes the provision of a medium density development, limiting noise impacts from neighbouring retail and commercial development and achieving an appropriate level of surveillance to roads and the PAW.

While noting the above, the layout of the dwellings and their distribution across the site varies from that depicted in the CCPF. A key variation is that there is no vehicle access from the service vehicle laneway on Lot 1001 to garages.

3.4 Previous grouped dwelling planning approval

The Council at its ordinary meeting on 11 October 2011 granted conditional development approval for 86 grouped dwellings. The approved site plan is provided in Attachment 3.

4.0 PROPOSAL

4.1 LDP summary

The LDP (Figure 2) proposes 35 residential lots between 392m² and 496m² in area and 35 associated dwellings. The average lot size is 413m² and the LDP applies an R25 Code to the site.

The development will be serviced by six access places. These will be short cul-de-sacs that generally provide access to six dwellings. The access places will be common property and will not be vested with the City as public roads. The access places will have a 'reserve' width of 6 metres and an expected carriageway of between 4 – 5 metres. The cul-de-sac turning heads will be constructed in a 'hammerhead' design. It is not proposed that waste disposal/recycling trucks will enter the access places.

Complementing the LDP are sample dwelling designs (floor plans and elevations) which are provided in Attachment 4. This shows the provision of generally 3 bedroom dwellings each with their own double garage and alfresco courtyard. An indicative east-west street elevation (Figure 7) further illustrates the proposed form of development.

The proposed lots and dwellings will be connected to standard services including reticulated sewerage, reticulated water, power and drainage. Only minor cut, fill, levelling and retaining will be required given the site's gentle slopes.

4.2 Design considerations

The LDP responds to the site's opportunities and constraints, the site's location, the market research undertaken by the current landowner (to be called the proponent), feasibility considerations along with the planning framework. The R25 density is considerable marketable and consistent with surrounding development.

In particular, the design has considered the opportunities and constraints outlined in Figure 5. This includes that the site does not have legal access to the service vehicle laneway to the west given this forms part of adjoining Lot 1001.

The design creates 6 'precincts' each with their own communal access place which generally consists of 6 dwellings. The precincts will accommodate flexibility in staging of construction and marketing. The access places will be named to give occupants a greater sense of place.

There will be a range of different architecturally designed dwellings offered to suit each lot. The single storey dwellings will promote a diversity of housing choice.

While the dwellings and lots are expected to be suitable for a range of people and lifestyles, they are expected to be particularly attractive for 'empty nesters'. This includes that there will be room for vehicles and a caravan on-site.

The LDP offers housing choice in a walkable community with immediate access to shopping and other local infrastructure. The development promotes affordable housing and affordable living.

Further details relating to design considerations are outlined in section 5.

4.3 Landowner intentions

The landowner, who is also the proponent, is an experienced builder (Ryde Building Company). The proponent proposes to build the majority of the dwellings on the site in various stages. The proponent considers that the dwellings will represent excellent value for money for future residents.

It is highlighted that Ryde Building Company have a wide range of house designs that account for resident's lifestyles and will suit each proposed lot. This will ensure there is a coordinated approach to development and attractive streetscapes.

It is intended that the development will be staged, based on market conditions, with staging generally undertaken one precinct at a time. The design and construction sequencing provides flexibility for the proponent and reduces risk.

The proponent has a particular focus on constructing dwellings in the western and central sections of the site. These dwellings are expected to be constructed and then given separate title in the form of a built strata or a survey strata.

The eastern lots, fronting Stirling View Drive, are expected to be created as freehold lots. Buildings on the eastern lots may be constructed by the Ryde Building Company or may be constructed by other builders.

4.4 Modifications to the Residential Design Codes

As outlined in Figure 2, the LDP establishes the R25 Code for the site. The LDP also proposes that the some of the deemed-to-comply provisions of the R Codes are varied to facilitate better design outcomes, provide greater flexibility, assist to

effectively use land and to create attractive streetscapes. These proposed variations to the R Codes are summarised as follows:

- reducing the access place (communal street) 'reserve' width from a minimum of 12 metres to 6 metres. While noting recent changes to the R Codes, which inserted clause 5.3.5 C5.7, the LDP design incorporating six access places will have different traffic and pedestrian implications compared to a similar sized development with one or two access places;
- reducing the minimum open space from 50% to 40% on each lot;
- a reduced front setback from the primary street (access place) from 6 metres to 4 metres to (excluding eaves), to allow better utilisation of the lot and in recognition that front garden areas are likely to be used only for low maintenance landscaping as opposed to usable space and the emphasis is therefore on quality not quantity. Given that the access places are 'internalised' there is limited off-site impact. Additionally, Stirling View Drive is a wide road reserve and the potential for 4 metre setbacks is consistent with the setbacks of various dwellings on the eastern side of the Stirling View Drive; and
- for lots on the corner of Stirling View Drive and an access place, the garage door and its supporting structure can occupy up to 60% of the frontage of the access place (compared to the R Code standard of 50%).

The proposed variations to the R Code are considered appropriate and will have limited impact on streetscapes or nearby development.

5.0 PLANNING CONSIDERATIONS AND PLANNING JUSTIFICATION

5.1 Suitability of the site for residential subdivision and development

The site is considered suitable for medium density residential subdivision and associated development. The reasons include:

- the site is identified for grouped dwellings/medium density residential development in the planning framework;
- the site adjoins a neighbourhood centre which promotes walking and decreases car dependency;
- the City previously issued conditional planning approval for 86 grouped dwellings;
- the site is gently sloping; and
- the development will be appropriately serviced.

It is recognised that there will be a need for detailed engineering plans, approval and associated implementation to meet the requirements of the WAPC, other State Government departments and the City at the subdivision application, development application (if required) and building permit stages. This includes the construction of the access places, drainage and ensuring that site works create lots which are physically capable of residential development.

5.2 Previous development approval

As previously mentioned, the Council issued conditional planning approval in October 2011 for 86 grouped dwellings. In comparison, the LDP proposes 35

Local Development Plan Lot 1005 Catalina Road

dwellings/residential lots. The reduction in lot yield is primarily based on the proponent's market research as to what is appropriate and feasible given the site's location and characteristics.

5.3 Compatibility with adjoining and nearby development

The proposed residential use and associated LDP are considered compatible with adjoining and nearby land uses. The proposed R25 development on the site is consistent with surrounding residential development which is generally a mix of R20 and R30 development. Nearby residential development includes the St Ives Retirement Village, grouped dwellings and single houses. The land on the south side of Catalina Road, within the *Lot 30 -35 Catalina Road Outline Development Plan* is mostly coded R20 with pockets of R30 and R40 opposite the shopping centre.

In particular, the LDP integrates and is compatible with the area's amenity and existing environment. Implementation of the LDP will retain and/or enhance the area's character and amenity, given the anticipated design of the dwellings. Additionally, landscaping to be undertaken by the proponent and future landowners will enhance the area's amenity.

Future development will comply with the R Codes requirement for solar access on nearby properties. In particular, single storey development is proposed on a site that is bounded by public roads and the shopping centre service road. There are no adjoining residential lots.

5.4 Noise impacts from the shopping centre loading dock

There is considered to be minimal risk of land use conflict between the proposed residential uses on the site and the shopping centre service area/loading dock to the west. The key issue is noise levels from unloading activities at the shopping centre including service vehicles reversing and ensuring there is appropriate noise attenuation.

It is suggested there will be suitable mitigation provided against possible noise from 'back of house' activities associated with the shopping centre. The reasons for this include:

- future dwellings will be located at a lower level (see Figure 7);
- the service vehicle laneway provides a buffer;
- the Council at its meeting in October 2011 concluded the impacts were manageable and could be addressed through conditions;
- a noise assessment was undertaken by Herring Storer Acoustics in March 2011 and set out in a report in May 2011. The assessment was to monitor noise activities associated with the adjoining shopping centre. Herring Storer Acoustics concluded that noise generated from the shopping centre is at acceptable levels for nearby residents and in accordance with the *Environmental Protection (Noise) Regulations 1997*. Herring Storer Acoustics advised that further mitigation measures including the construction of a solid 1.8 metre high wall would have the effect of lowering noise levels further. Double glazing of windows is not considered necessary based on the acoustic assessment;

- truck movement (loading dock noise) is infrequent and short-term; and
- mitigation measures outlined below.

While noting the above, a range of mitigation measures are proposed to address potential noise impacts. The measures include:

- a brick or alternative construction solid wall 1.8 metres in height will be constructed by the proponent on the western boundary of Lot 1005 consistent with the CCPF (see Figure 2);
- the provision of 8mm thick glass for windows, except the front door, to habitable rooms on the western, northern and southern side of dwellings on proposed Lots 1, 4, 6, 9, 12, 15, 18, 21, 24, 27, 30 and 33;
- encouraging 'quiet house' design principles;
- notifications for proposed Lots 1, 4, 6, 9, 12, 15, 18, 21, 24, 27, 30 and 33; and
- the western dwellings will provide a further noise barrier to the central and eastern dwellings

Quiet house design principles include:

- using materials and building construction methods to limit the entry of noise through upgraded glazing, ceiling insulation and sealing of air gaps;
- locating sensitive rooms (such as bedrooms) and high usage areas (such as primary courtyards) away from the noise source;
- limiting the size and height of openings to habitable rooms in direct line of sight to the noise source; and
- planting landscaping to buffer the dwelling from the noise source.

There are also opportunities for the owner of adjoining Lot 1001 and/or Woolworths to undertake measures to reduce noise impacts including measures outlined in the CCPF. This includes:

- undertaking dense tree and under storey planting between the service area and the eastern boundary of Lot 1001 to provide a physical and visual buffer;
- promoting most deliveries between 7am and 7pm; and
- ensuring that future expansion of the shopping centre site appropriately considers and addresses impacts of noise on dwellings on Lot 1005.

5.5 Traffic impact

Various traffic impact studies have been prepared for the area including by Arup in 2002. In summary, the adjoining and nearby road network and intersections have sufficient capacity to address traffic generation from the proposed development.

It is highlighted that the proposal for 35 dwellings will create considerably less traffic than the previously approved 86 grouped dwellings in 2011. In addition, there are good vehicular sight distances from proposed access places to Stirling View Drive which will facilitate safety for road users.

Given the above, there is no need for a new traffic impact study. While noting this, the proponent supports appropriate Local Area Traffic Management measures on Stirling View Drive. Stirling View Drive is wide for a residential access street and there

Local Development Plan Lot 1005 Catalina Road

are opportunities to enhance safety and amenity. This may include a realignment of kerbs, marking of street parking bays and the planting of street trees.

5.6 Access places

The LDP proposes six access places (short cul-de-sacs around 40 metres in length) coming off Stirling View Drive. As outlined in section 4.1, the access places will have a 'reserve' width of 6 metres and an expected carriageway of between 4 – 5 metres. The cul-de-sac turning heads will have a hammerhead design.

The access places will be appropriately designed, sealed and drained. In particular, the access places will be designed for local resident traffic only, in a controlled low-speed environment that enables vehicles and pedestrians to safely use at the same time. The access places may incorporate a change of pavement colour and/or materials at their intersection with Stirling View Drive.

The design recognises the context including that the site does not have legal access to the service vehicle laneway to the west given this forms part of adjoining Lot 1001.

While recognising that *Liveable Neighbourhoods* and other policy documents seek interconnected communities and limiting the use of cul-de-sacs, *Liveable Neighbourhoods* (including requirements R21, R22 and R23) and *DC 2.6 Residential Road Planning* recognise that access places/short cul-de-sacs are a legitimate component of the movement network/road hierarchy.

The LDP complies with *Liveable Neighbourhoods* and DC2.6 in terms of the length of the cul-de-sac, the number of dwellings to be served and the percentage of cul-de-sacs in the locality. Additionally, the hammerhead design cul-de-sac turning heads will comply with *Liveable Neighbourhoods* (Figure 25). As outlined in section 4.1, waste disposal/recycling trucks are not proposed to enter the access places.

5.7 Vehicular access

All lots will have vehicular access from the access places to promote safety for road users. The access places will be the main vehicular access for lots that also front Stirling View Drive. The LPD shows preferred crossover locations for lots adjoining Stirling View Drive.

Subject to City approval, vehicular access to garages and carports could occur from Stirling View Drive. Amongst matters, the City would require that the crossover is appropriately setback from intersections and the crossover location is consistent with proposed Local Area Traffic Management measures.

Based on the Council's decision in October 2011 and recent advice from the City administration, the lots will not have direct vehicular access from Catalina Road or Brooks Garden Boulevard as shown on the LDP (Figure 2). This will be complemented by fencing installed by the proponent preventing direct vehicle access onto Catalina Road and Brooks Garden Boulevard.

Crossovers and driveways will be constructed in accordance with the City's specifications. The proponent or other builders will seal and drain the crossovers and driveways prior to the dwellings being occupied.

5.8 Parking

The LDP will comply with the R Codes in terms of parking provision.

5.9 Public access way and dual use paths

The CCPF shows two PAW's through the site. While noting this, the WAPC granted subdivision approval for the creation of Lot 1005 with only the southern PAW and not the northern PAW. Given the site's narrow width, one PAW was considered appropriate to provide pedestrian and cyclist connections to the east of the site and the Brooks Garden Shopping Centre. Given the WAPC's decision, the Council's decision in October 2011 and recent City administration advice, there is no requirement to provide a second east-west PAW.

The proponent is responsible for constructing a dual use path in the PAW. The proponent will also provide a dual use path adjoining the Stirling View Drive, Catalina Road and Brooks Garden Boulevard frontage of the site. All dual use paths will have a width of 2.5 metres.

The proposed dual use paths will benefit future residents on the site as well as existing and future residents in surrounding areas. The dual use paths will promote pedestrian/cyclist activity.

The proponent is not responsible for constructing dual use paths in the access places given the low traffic volumes and low traffic speeds.

5.10 Stormwater management

The site forms part of the Yakamia Creek catchment which drains into Oyster Harbour. Stormwater from the subdivision/development is required to be effectively managed to ensure there are no off-site impacts and to meet the requirements of the City. This will require a water sensitive design that detains stormwater, promotes at source infiltration and removes nutrients and contaminants.

In particular, subdivision/development is required to ensure that stormwater is designed to ensure that post development run-off rates are no greater than pre-development run-off rates. This will require at source retention through under-eave rainwater tanks and on-site infiltration including soak wells/storage pits and revegetating/landscaping sections of the site.

While noting the above, stormwater in major rainfall events will be directed to a legal point of discharge into the City's drainage system along Stirling View Drive.

There have previously been stormwater management plans prepared for the area including by Arup and a review by Opus. A stormwater management plan is required be submitted to and approved by the City for the site. Based on anticipated project timing, it is expected this will be required as condition of

Local Development Plan Lot 1005 Catalina Road

subdivision approval. The stormwater management plan is required to be designed and certified by a suitably qualified civil engineer.

A geotechnical report has been commissioned by the proponent and is outlined in Attachment 5. The summary (section 1) states:

'This Geotechnical Report addresses the following issues:

- (a) The suitability of the site for development
- (b) Requirements for management of stormwater in the development area
- (c) Site classification under the requirements of Australian Standard AS 2870 Residential slabs and footings – Construction.

It is concluded that land is physically capable of development and no specific requirement exists for remediation prior to development.

It is concluded that, for development of 35 lots on Lot 1005 Stirling View Drive, site stormwater can be contained on lots of the proposed approx. 360-450 sqm size.

For the purpose of house development the overall area represented by the test pits, is classified "A" to AS 2870-2011: Residential slabs and footings. To ensure economical and effective footing and slab design of individual slab-on-ground houses, this be certified by a suitably qualified and experienced Engineer.'

Building pads will need to be raised to ensure there is effective drainage and to ensure that buildings are above the crown of roads and access places.

5.11 Other services

The site will be appropriately serviced in accordance with City and State Government policies including reticulated sewerage, reticulated water and power. Servicing infrastructure is readily available through minor infrastructure upgrades and extension of services.

Services to the freehold lots will be located in the road reserves. It is expected that services to the survey lots will be located under the sealed section of the access places and/or located in easements in the survey lots.

Household waste, recycling and green waste will be picked up on Stirling View Drive. Given the wide reserve width, there is sufficient space within the road reserve to appropriately locate the bins from all dwellings on the site.

5.12 Public open space

The CCPF is silent regarding public open space (POS) and implications for the site. Based on the provision of nearby POS, to the east of the site, it appears that a previous subdivider has already contributed the necessary POS. Additionally, the previous subdivider (Kingopen Pty Ltd) has given up land free-of-cost to create the PAW on Lot 1005.

5.13 Private open space and outdoor living areas

It is proposed that the minimum open space provision on each lot is 40%. This complies with the previous planning approval issued by the Council in 2011.

Future development will provide at least 30m² of private outdoor living space. This is reinforced with Attachment 4 which shows all proposed dwellings having generous courtyards/alfresco areas with appropriate winter sun, light and ventilation.

5.14 Landscaping

Given the site has been completely cleared, future replanting and landscaping will enhance the area's amenity including positively contributing to the streetscape.

The site will be progressively landscaped relevant to the development staging. The preliminary concept is to use a mixture of local native and water-wise exotic species that are appropriate in an urban setting which are approved by the City.

The proponent will establish street trees in the road reserves of Stirling View Drive, Catalina Road and Brooks Garden Boulevard adjoining the site. Street trees may also be planted in the access place 'reserves' (common property) subject to detailed design.

5.15 Setbacks

Building setbacks will comply with the deemed-to-comply requirements of the R25 Code with the exception of the front setback from the primary street from 6 metres to 4 metres. Averaging is permitted for building setbacks.

5.16 Building height

Future dwellings are expected to be single storey. Accordingly, building height will comply with the R Codes and the CCPF which specifies an 'overall building height benchmark' of 9 metres.

5.17 Building design and features

Sample dwelling designs (floor plans and elevations) are shown in Attachment 4. The floor plans and elevations are a fair representation of the proponent's preferred final aesthetic. The proponent has a demonstrated track record of delivering a quality built product.

Future dwellings will:

- generally have 3 bedrooms, be generally be provided with a double garage (although some dwellings could have a single carport) and will have an alfresco courtyard;
- have a design, scale and form with a high quality finish which is consistent with surrounding development;
- have materials and colours consistent with the CCPF and surrounding development;

- have adequate standard of light, winter sun, privacy and amenity; and
- have an appropriate energy rating and be provided with a rainwater tank.

The above matters will be considered in further detail at the Building Permit stage.

5.18 Boundary fencing

As previously outlined, the proponent will construct a brick or alternative construction solid wall 1.8 metres in height on the western boundary of Lot 1005 and construct uniform fencing on the Catalina Road or Brooks Garden Boulevard frontages.

Additionally, the proponent will construct uniform fencing adjoining the PAW in accordance with the requirements of the City. The fencing will be designed to offer surveillance of the PAW. Should the fence be above 1.2 metres, the fence will be visually permeable above 1.2 metres to a height of 1.8 metres above the finished ground level.

Fencing within the primary street frontage is not encouraged. Where fencing is proposed in the primary street frontage, it will be no higher than 1.2 metres and not constructed in colourbond. Fencing along the secondary street frontage is to be visually permeable above 1.2 metres to a height of 1.8 metres above the finished ground level.

The visually permeable fencing will allow passive surveillance. This will be complemented with the location of habitable room windows having views of the access places and the PAW.

5.19 Development encroachment

During construction of the service vehicle laneway on the shopping centre site, a small encroachment has occurred on the site's north-west corner (refer to Figures 1 and 5) or on proposed Lot 1. The proponent will pursue this matter with the owner of Lot 1001 in order to resolve the encroachment. It is expected that this will result in a small portion of the site being transferred through a boundary adjustment to adjoining Lot 1001.

6.0 CONCLUSION

This report confirms that the LDP is consistent with the planning framework, the design recognises the site's context and the constraints and the site is considered to be both suitable and capable of accommodating the proposed R25 residential development.

Justification has been provided in support of variations from the deeded-to-comply criteria of the R Codes.

The LDP is consistent with the principles of orderly and proper planning.

Implementation of the LDP will positively contribute to the area's amenity and provide an important supply of housing adjoining the neighbourhood centre.

Local Development Plan Lot 1005 Catalina Road

ATTACHMENT 1

WESTERN



AUSTRALIA

REGISTER NUMBER 1005/DP49235	
DUPLICATE EDITION 3	DATE DUPLICATE ISSUED 29/3/2012

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME 2704 FOLIO 627

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.


REGISTRAR OF TITLES 

LAND DESCRIPTION:

LOT 1005 ON DEPOSITED PLAN 49235

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

KINGOPEN PTY LTD OF LOT 101 CHESTER PASS ROAD, ALBANY
(T K772438) REGISTERED 14 NOVEMBER 2008

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. EASEMENT BENEFIT CREATED UNDER SECTION 136C T.L.A. FOR RIGHT OF CARRIAGEWAY PURPOSES - SEE DEPOSITED PLAN 41555.
2. EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT FOR DRAINAGE PURPOSES TO LOCAL AUTHORITY - SEE DEPOSITED PLAN 49235
3. *K772437 NOTIFICATION CONTAINS FACTORS AFFECTING THE WITHIN LAND. LODGED 14.11.2008.
4. K772438 RESTRICTIVE COVENANT BURDEN. REGISTERED 14.11.2008.
5. K785397 MORTGAGE TO PERMANENT TRUSTEE AUSTRALIA LTD REGISTERED 28.11.2008.
6. K785398 MORTGAGE TO LM INVESTMENT MANAGEMENT LTD REGISTERED 28.11.2008.
L856310 TRANSFER OF MORTGAGE K785398 , MORTGAGEE NOW THE TRUST COMPANY (PTAL) LTD REGISTERED 13.2.2012.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP49235.
PREVIOUS TITLE: 2623-480.
PROPERTY STREET ADDRESS: 35 CATALINA RD, LANGE.
LOCAL GOVERNMENT AREA: CITY OF ALBANY.

LANDGATE COPY OF ORIGINAL NOT TO SCALE Fri Jul 3 09:40:43 2015

JOB 48209033

www.landgate.wa.gov.au

VERSION	AMENDMENT	BY	DATE
2	ADDITION OF PA.W. DRAINAGE EASEMENT & PA.FSC & SURVEY SHEET ADDED	J. KINNEAR	08/08/08
3		LANDGATE	22-9-2008

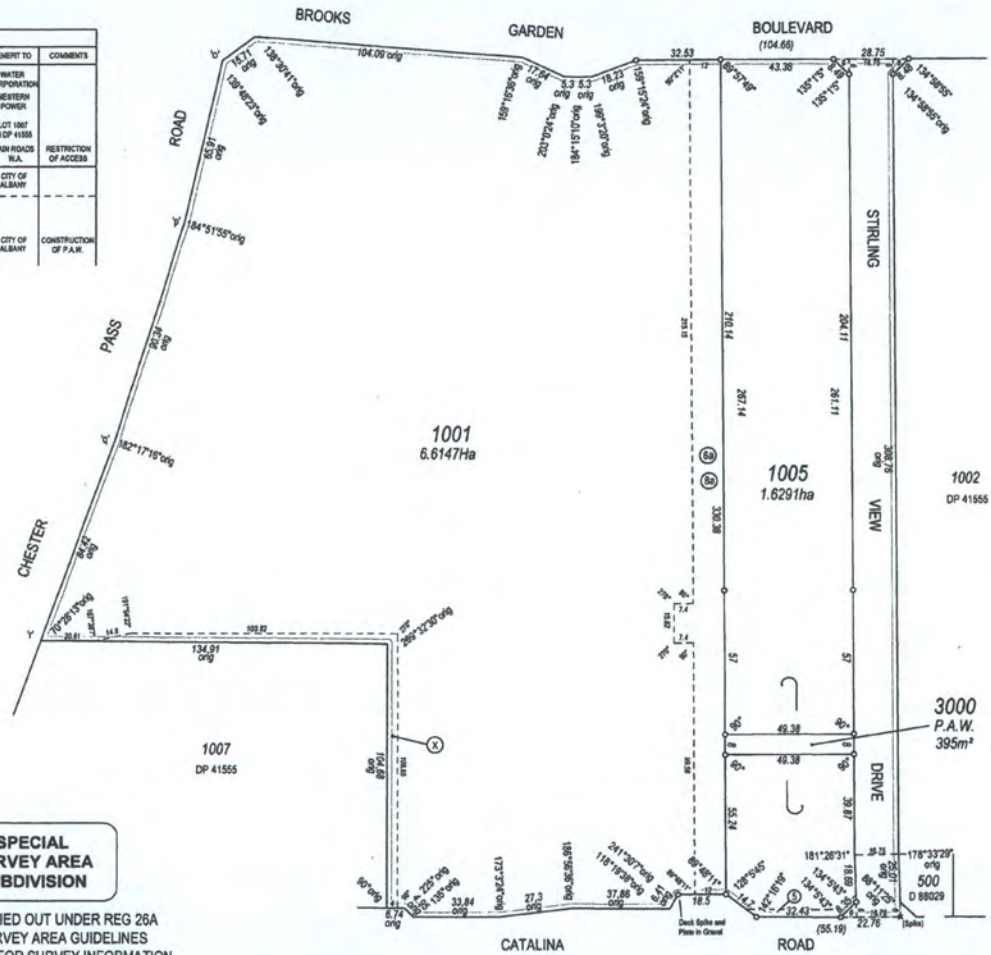
INTERESTS AND NOTIFICATIONS						
SUBJECT	PURPOSE	STATUTORY REFERENCE	ORIGIN	LAND BURDENED	BENEFIT TO	COMMENTS
(M)	EASEMENT (SEWERAGE)	SEC 37A OF THE T.P. & D. ACT REG 6	DP 41555	LOT 1001	WATER CORPORATION	
(N)	EASEMENT (UNDERGROUND ELECTRIC)	SEC 37A OF THE T.P. & D. ACT REG 6	DP 41555	LOT 1001	WESTERN POWER	
(X)	RIGHT OF CARRIAGEWAY	SEC 136C OF THE T.L.A.	DP 41555	LOT 1001	LOT 1007 ON DP 41555	
V-Y-Y-Y-Y	RESTRICTIVE COVENANT	SEC 128A OF THE T.L.A.	DOC. J19429	LOT 1001	MAIN ROADS WA.	RESTRICTION OF ACCESS
(I)	EASEMENT (DRAINAGE)	SEC 162 OF THE P. & D. ACT REG 5	THIS PLAN	LOT 1005	CITY OF ALBANY	
LOT 3000	PEDESTRIAN ACCESS WAY NOTIFICATION	VESTS IN THE CROWN UNDER SEC. 153 OF THE P. & D. ACT SEC 76A OF THE T.L.A.	DOC. K.7724.37	LOT 1005	CITY OF ALBANY	CONSTRUCTION OF PA.W.



SPECIAL SURVEY AREA SUBDIVISION

SURVEY CARRIED OUT UNDER REG 26A SPECIAL SURVEY AREA GUIDELINES SEE SHEET 2 FOR SURVEY INFORMATION

JOHN KINNEAR & ASSOCIATES
Consulting Surveyors
254 STIRLING TERRACE
PO BOX 255
ALBANY WA 6351
PHONE (08) 942 1553 FAX (08) 942 1570
JKA REF: 7891/2815



TYPE FREEHOLD	
PURPOSE SUBDIVISION	
PLAN OF	
LOTS 1001, 1005, 3000, ROAD AND EASEMENT	
DISTRICT PLANTAGENET	SSA: YES
TOWNSITE	FORMER TOWN
FILE LOT 9000 ON DP 41555 C/T 2823 / 480	
LOCAL AUTHORITY CITY OF ALBANY	FIELD BOOK 98328
LOCALITY LANGE	
INDEX BK26 (2) 10.08, 11.08	
PUBLIC	
SCALE: (AT A2) ALL DIMENSIONS AND IN METRES	1:1250 0 25 50 75
SURVEYOR'S CERTIFICATE - Reg 54 I, J. KINNEAR, hereby certify that this plan is accurate and is a correct representation of the - (a) "survey" and/or (b) "valuation" from measurement, undertaken for the purpose of this plan and that it complies with the relevant written law in relation to which it is lodged. Date of registration: 08.08.08 08.08.08 08:00:59 +0800	SURVEYOR'S CERTIFICATE - Complete I, J. KINNEAR, hereby certify that this completed plan (a) is a correct and accurate representation of the surveyor's (b) of the surveyor's (c) and (d) is in accordance with the relevant law in relation to which it is lodged.
Licensed Surveyor	Doc
SURVEY FIRM JOHN KINNEAR & ASSOCIATES	
LOGGED DATE 25-Jun-08	TYPE OF VALIDATION FULL RATE
FEE PAID \$295.00	LEGAL CONSULTANT G. FONG
ASSESS NO. 3988391	DOCKET 1675-05/05
	COMPLETED BY [Signature]
	DATE 16-9-2008
IN ORDER FOR DEALING	
SUBJECT TO Sec 16A(1)(a) of the P & D Act Sec 16A of the P & D Act Sec 15B of the P & D Act Sec 70A of the T.L.A. [Signature] 23-9-08	
FOR INSPECTOR OF PLANS & SURVEY AUTHORIZED LAND OFFICER DATE	
APPROVED 14.11.08	
INSPECTOR OF PLANS & SURVEY AUTHORIZED LAND OFFICER DATE	
Landgate Western Australian Land Information Authority	
DEPOSITED PLAN 49235 ORIGINAL SHEET 1 OF 2 VERSION 1.3	

OUR REF. DWG170/1815

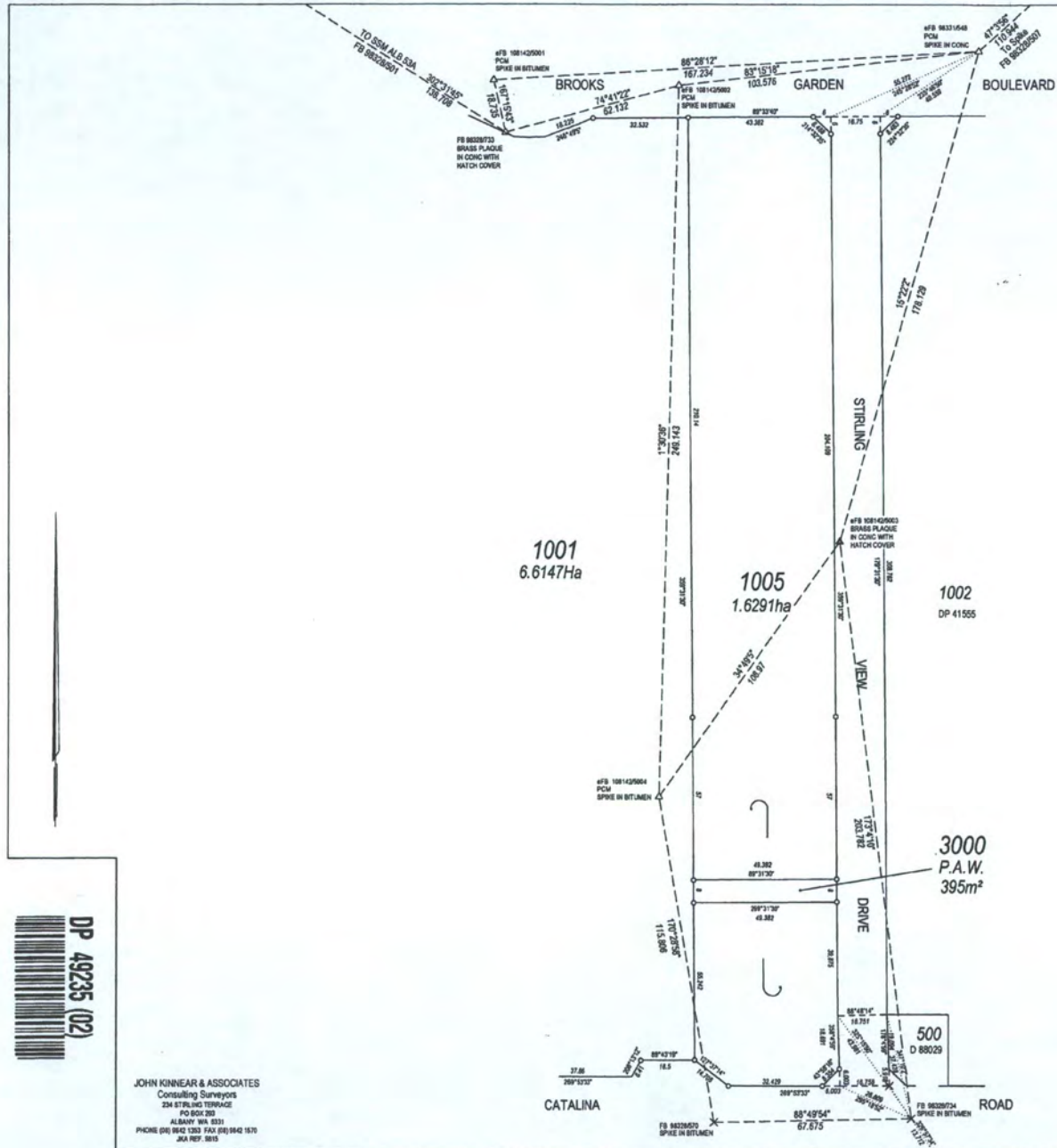
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JOB 48209033



DP 49235 (02)

JOHN KINNEAR & ASSOCIATES
 Consulting Surveyors
 204 STIRLING TERRACE
 PO BOX 283
 ALBANY WA 6331
 PHONE (08) 942 1363 FAX (08) 942 1570
 JKA REF. 5815



SURVEY SHEET
 FOR HEADING SEE SHEET 1
 FOR INTERESTS AND NOTIFICATIONS SEE SHEET 1
SURVEY INFORMATION ONLY
 SURVEY CARRIED OUT UNDER REG 28A
 SPECIAL SURVEY AREA GUIDELINES
 BEARINGS AND DISTANCES SHOWN ARE THE
 RESULTS OF ADJUSTED FIELD OBSERVATIONS

- ▲ DENOTES PERMANENT SURVEY MARK
- △ DENOTES PERMANENT CONTROL MARK
- × DENOTES SPIKE
- DENOTES STANDARD MARK

SURVEY SHEET AUDITED
 DATE: 4.12.08 MB
 DOCKET: 02787-2008

SCALE (X1:AD) ALL DISTANCES ARE IN METRES	1:1000 (A2)	0 10 20 30 40 50
2015 Yearbook 2008.05.19 15:45:04 -0800 Date		
APPROVED BY WESTERN AUSTRALIAN PLANNING COMMISSION		
DELEGATED UNDER S.16 PAO ACT 2005	DEPOSITED PLAN	
DATE	49235	
SHEET 2 OF 2	ORIGINAL	
VERSION 1.3		

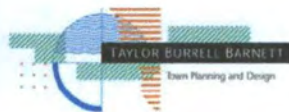
ATTACHMENT 2



SCALE 1:4000 @ A4

— STRUCTURE PLAN BOUNDARY

NOTE: USES ARE INDICATIVE ONLY OUTSIDE THE CCSP AREA



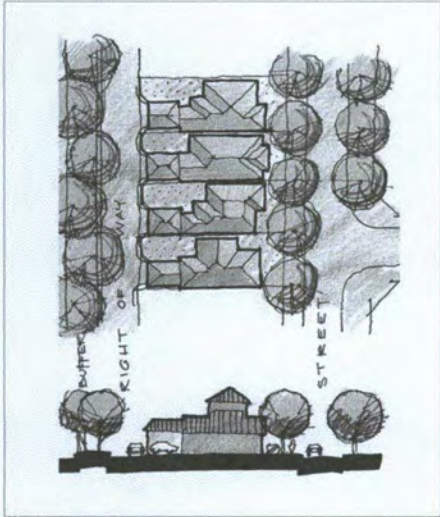
Catalina Central
STRUCTURE PLAN

FIGURE 1



Catalina Central
PRECINCTS

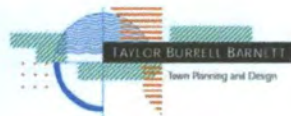
FIGURE 4

<p>Special Development Area</p> <p>The area identified on Plan 4 is considered to be a Special Development Area where the following design criteria are required:</p> <p>Criteria 1: Solid brick wall</p> <p>Criteria 2: Dense tree and under storey planting</p> <p>Criteria 3: Minimum separation of 27m from the rear wall of the shopping centre to adjoining residential development (refer Plan 4).</p> <p>Criteria 4: Possibility of double glazed windows at the rear of the dwelling.</p> 	<p>Careful design consideration is required at the interface of the shopping centre and adjoining residential development to ensure that any adverse impacts are minimised.</p> <p>It is likely that the shopping centre will be developed prior to residential development and therefore, criteria 1-3 will be required at the time of developing the shopping centre site.</p> <p>If such measures are not considered sufficient to buffer noise generated from the shopping centre, it will be necessary to require double glazing for rear windows of any residential development, as per criteria 4.</p>
<p>Fencing to Street</p> <p>Fencing which controls access between public spaces and private or semi-private areas should be transparent to allow visibility and cross-surveillance.</p> <p>Blank, non-transparent fences above 0.75 metres in height to public spaces is not supported.</p> <p>No front fence, inclusive of transparent components, but excluding pillars or columns, shall be more than 1.8 metres in height.</p>	<p>In some instances (i.e., for the day hospital and nursing home) proponents may wish to secure front setback areas by the installation of fencing along the front boundary.</p> <p>Fencing which controls access between public spaces and private or semi-private areas should be transparent to allow visibility and cross-surveillance.</p>
<p>Footpaths – Infill Paving</p> <p>Footpaths shall be provided in accordance with Plan 5.</p>	<p>Given the relationship between the neighbourhood centre and surrounding uses such as the Aged Persons Development, there are obvious desire lines to the shopping centre. It is important to promote pedestrian access throughout and adjoining the precinct.</p>



SCALE 1:4000 @ A4

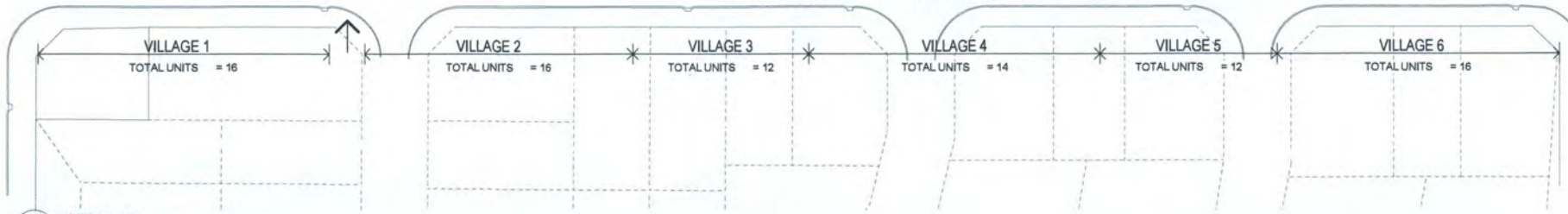
 SPECIAL DEVELOPMENT AREA



Catalina Central
SPECIAL DEVELOPMENT AREA

PLAN 4

ATTACHMENT 3



SITE PLAN Scale 1:500

LEGEND:

	1 BED	10 UNITS (12%)
	2 BED TYPE 1	32 UNITS (37%)
	2 BED TYPE 2	34 UNITS (39%)
	2 BED TYPE 3	5 UNITS (6%)
	2 BED + STUDY	5 UNITS (6%)
TOTAL	86 UNITS	

CARPARKING

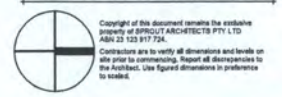
	REQUIRED	PROVIDED
1 BED	1 CAR PER UNIT (x10 UNITS) = 10	= 14
2 BED TYPE 1	2 CARS PER UNIT (x32 UNITS) = 64	= 61
2 BED TYPE 2	2 CARS PER UNIT (x34 UNITS) = 68	= 59
2 BED TYPE 3	2 CARS PER UNIT (x5 UNITS) = 10	= 10
2 BED + STUDY	2 CARS PER UNIT (x5 UNITS) = 10	= 10
VISITOR	1 CAR PER 4 UNITS = 22	= 31
TOTAL CARS	= 184	= 185



sprout architects
 SUNCOAST RESORT BUSINESS CENTRE
 SUITE 2 CNR GARDAK ST & SURF RD
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 PO BOX 6232 MAROOCHYDORE BC Qld 4558
 PH : 07 5443 5028 FAX: 07 5479 2380
 ABN 23 123 917 724
 EMAIL: admin@sproutarch.com.au

project
PROPOSED GROUPED HOUSING DEVELOPMENT
 for
KINGOPEN PTY LTD
 at
LOT 1005 CATALINA ROAD, LANGE WITHIN THE CATALINA CENTRAL STRUCTURE PLAN

drawing
SITE PLAN
 date JUN 2011 drawn MS scale 1:500
 drawing no. 11002 SD02 revision B





STRATA PLAN
 Scale 1:500

NOTE:
 LOT AREAS HAVE BEEN ROUNDED UP / DOWN FOR CLARITY.

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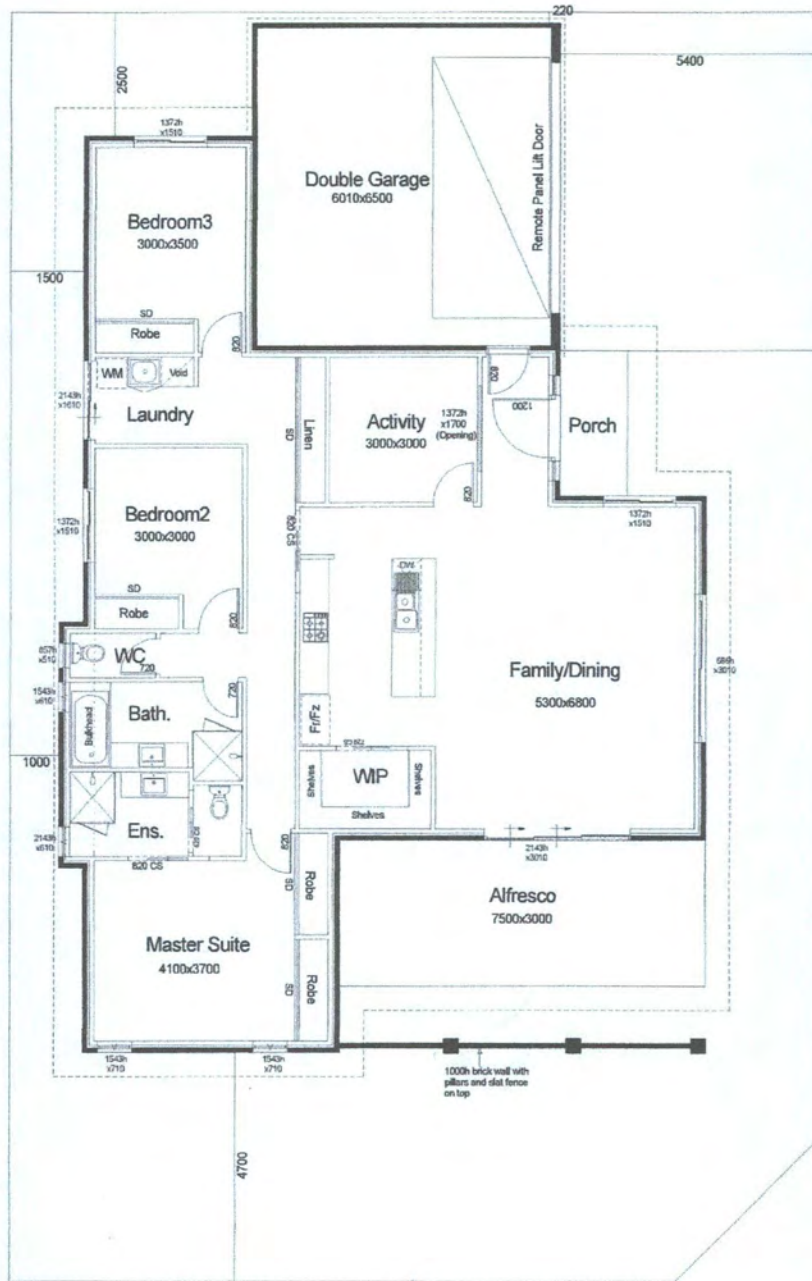
project
PROPOSED GROUPED HOUSING DEVELOPMENT
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KINGOPEN PTY LTD
 at
LOT 1005 CATALINA ROAD, LANGE WITHIN THE CATALINA CENTRAL STRUCTURE PLAN

drawing
STRATA PLAN
 date JUN 2011 drawn MS scale 1:500
 0A1
 drawing no. 11002 SD15 revision B

Copyright of this document remains the exclusive property of SPROUT ARCHITECTS PTY LTD
 ABN 23 123 917 724.
 Contractors are to verify all dimensions and levels on site prior to commencing. Report all discrepancies to the Architect. Use figured dimensions in preference to scales.



ATTACHMENT 4



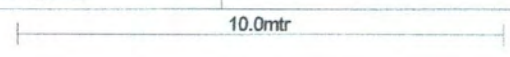
Lot 5 Stirling View Drive Development

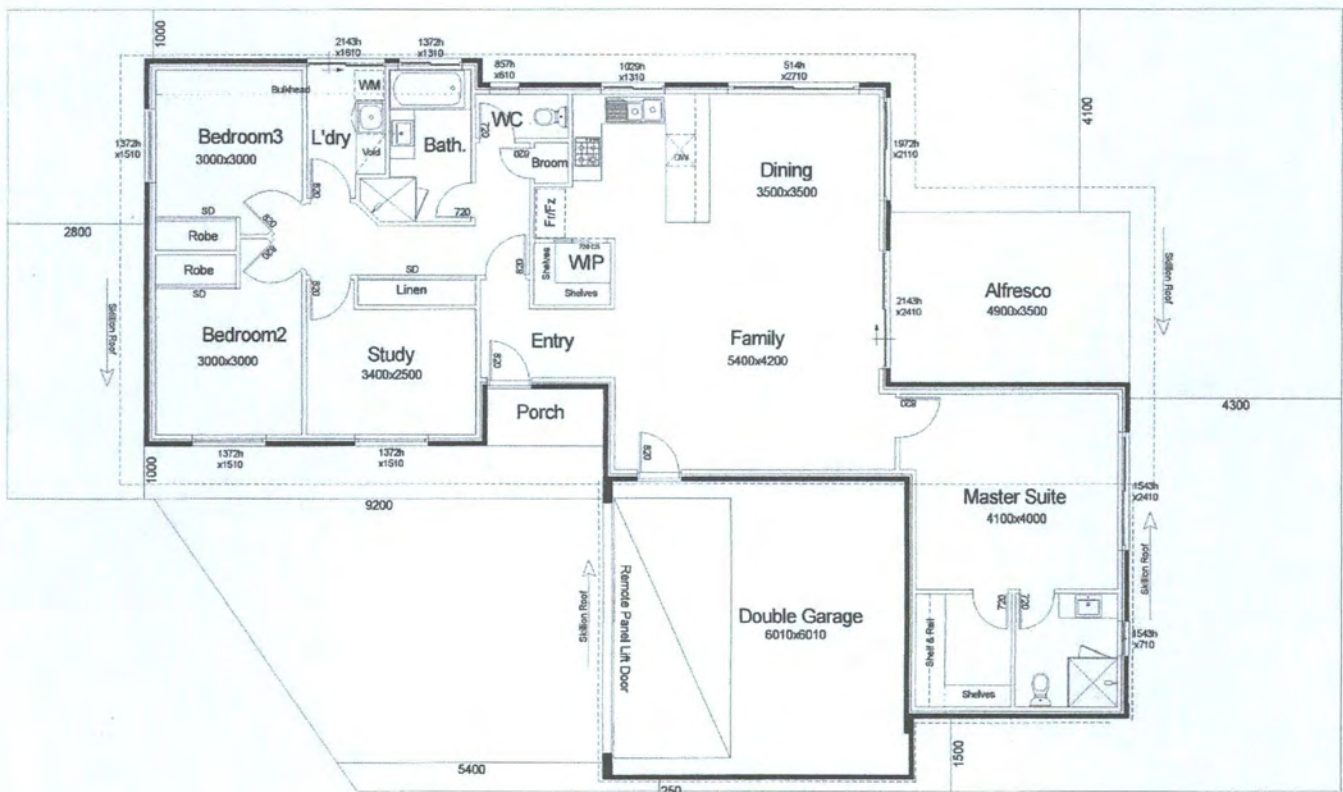
Areas:		Perimeter.....51.6m
Living.....	158.9m ²	
Garage.....	44.7m ²	
Porch.....	3.9m ²	
Alfresco.....	21.0m ²	
The sizes shown here are approximate. They may vary when plan is converted to the drafted sketch or working drawings.		

This drawing remains the sole property of the Ryde Building Company. It must not be given, lent, resold, copied or otherwise disposed of without the express permission of the Ryde Building Company.

rydebuilding.com.au

9841 2170



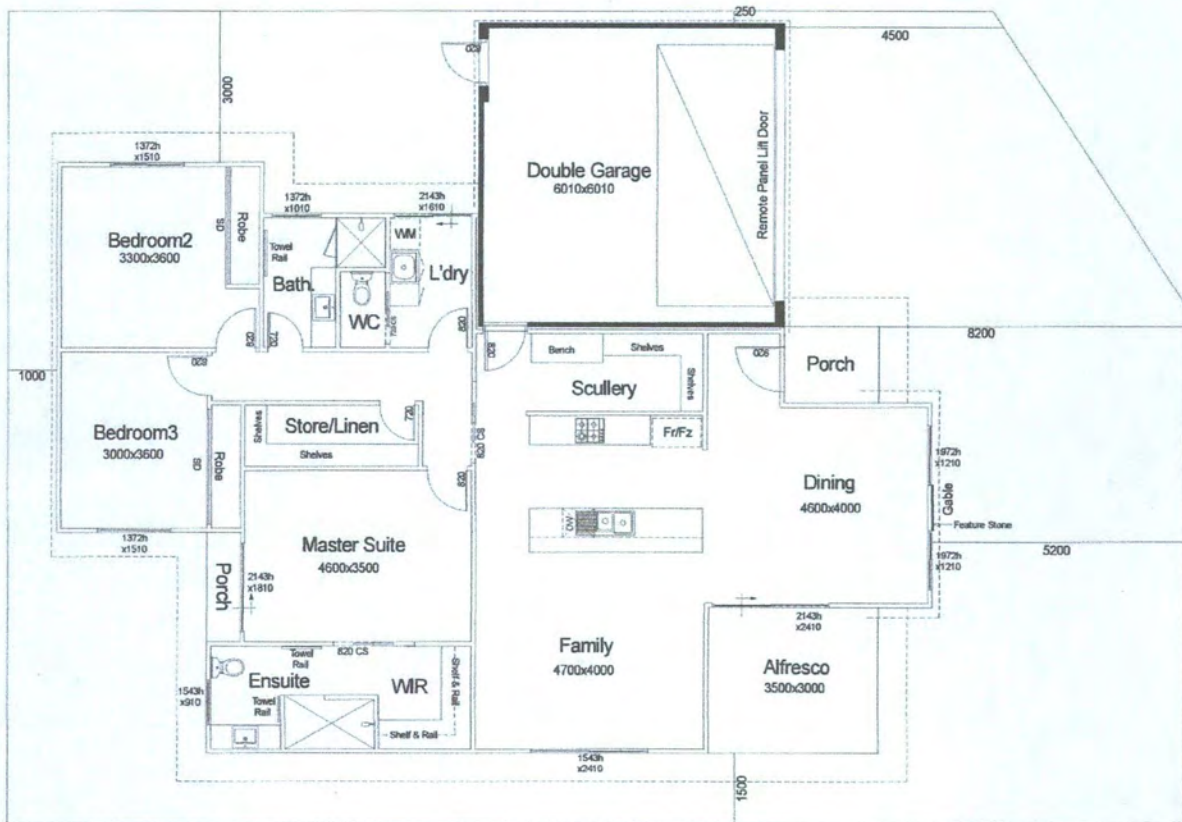


Lot 12 Stirling View Drive Development

<p>Areas:</p> <p>Living.....148.8m²</p> <p>Garage.....38.0m²</p> <p>Porch.....2.7m²</p> <p>Alfresco.....17.1m²</p>		<p>Perimeter.....69.8m</p> <p><small>The sizes shown here are approximate. They may vary when plan is converted to the drafted sketch or working drawings.</small></p>	<p>This drawing remains the sole property of the Ryde Building Company. It must not be given, lent, resold, copied or otherwise disposed of without the express permission of the Ryde Building Company.</p>	<p>rydebuilding.com.au</p> <p>9841 2170</p>
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Note: Lot 12 Building Footprint

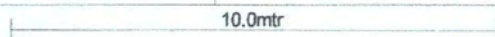


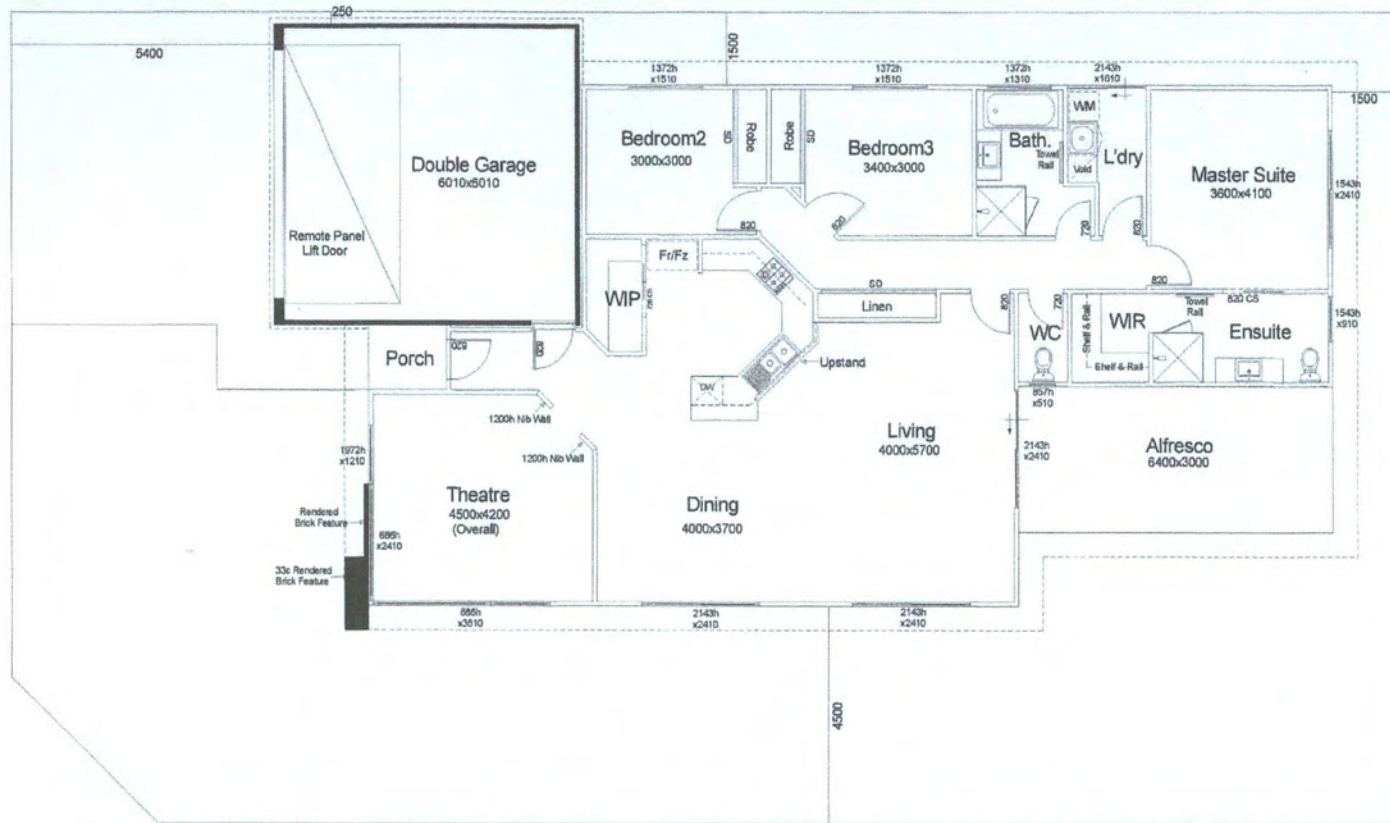


Lot 16 Stirling View Drive Development

<p>Areas:</p> <p>Living.....148.5m²</p> <p>Garage.....38.1m²</p> <p>Porchs.....4.5m²</p> <p>Alfresco.....10.5m²</p>	<p>Perimeter.....61.6m</p> <p><small>The sizes shown here are approximate. They may vary when plan is converted to the drafted sketch or working drawings.</small></p>	<p>This drawing remains the sole property of the Ryde Building Company. It must not be given, lent, resold, copied or otherwise disposed of without the express permission of the Ryde Building Company.</p>	<p>rydebuilding.com.au</p> <p>9841 2170</p>
--	--	--	---

Appl. Ltr. To Stirling View Drive



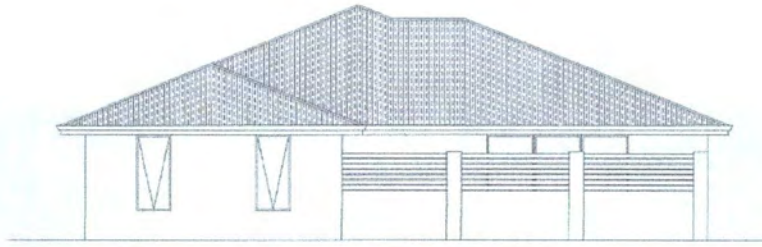


Lot 32 Stirling View Drive Development

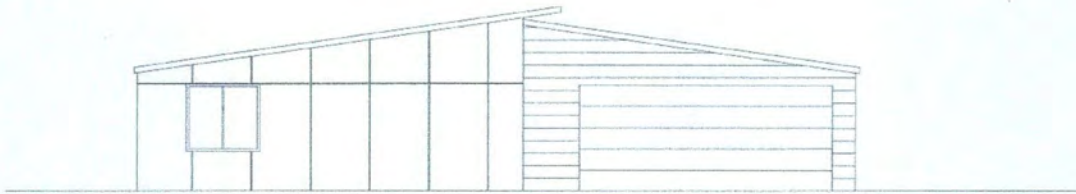
<p><u>Areas:</u></p> <p>Living.....159.0m²</p> <p>Garage.....38.3m²</p> <p>Porch.....2.1m²</p> <p>Alfresco.....19.2m²</p>		<p>Perimeter.....60.7m</p> <p><small>The sizes shown here are approximate. They may vary when plan is converted to the drafted sketch or working drawings.</small></p>	<p>This drawing remains the sole property of the Ryde Building Company. It must not be given, lent, resold, copied or otherwise disposed of without the express permission of the Ryde Building Company.</p>	<p>rydebuilding.com.au</p> <p>9841 2170</p>
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Ryde - Lot 32 Stirling View Drive

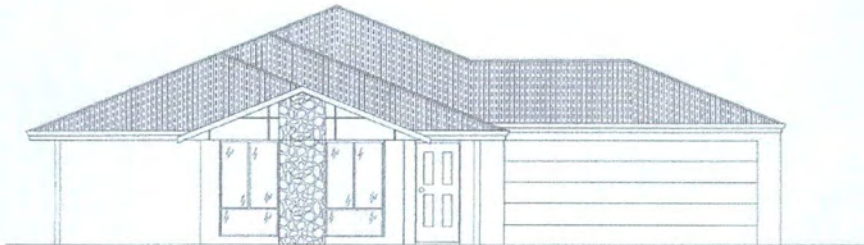
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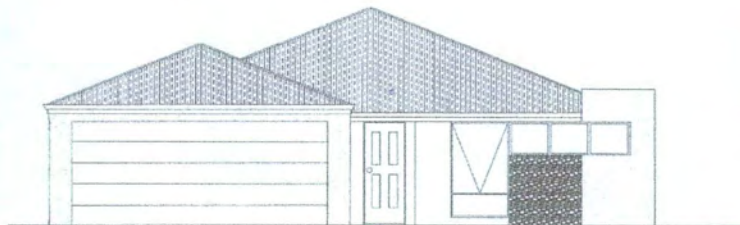
Lot 5 Stirling View Drive Development



Lot 12 Stirling View Drive Development



Lot 16 Stirling View Drive Development



Lot 32 Stirling View Drive Development

ATTACHMENT 5

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*

Subdivision of Lot 1005
Catalina Road , Lange

Geotechnical Report

Issue 1.1

16-Sep-2015



Ryde Building Company
Civil & Structural Engineer
50 Newbey St, Albany WA 6330

Telephone: (08) 9841 2170 Mobile: 0468 700 786
Email: shah@rydebuilding.com.au

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*

Subdivision on Lot 1005
Stirling View Drive , Lange
Geotechnical Report

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3.	Site investigations	<u>3</u>
	Table 1: Test pits	<u>4</u>
	Figure 1: Site plan	<u>5</u>
4.	Wastewater disposal	<u>6</u>
5.	Suitability for stormwater design	<u>6</u>
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7.	Water retention and re-use	<u>6</u>
8.	Suitability for building construction	<u>6</u>
9.	Conclusions	<u>6</u>
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	Appendix B – Test pit photographs	<u>6 – 11</u>
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	Appendix D- Proposed Layout of Subdivision	<u>13</u>

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*

Subdivision on Lot 1005
Catalina Road, Lange
Geotechnical Report

1 Summary

This Geotechnical Report addresses the following issues:

- (a) The suitability of the site for development
- (b) Requirements for management of stormwater in the development area
- (c) Site classification under the requirements of Australian Standard AS 2870 *Residential slabs and footings – Construction*.

It is concluded that land is physically capable of development and no specific requirement exists for remediation prior to development.

It is concluded that, for development of 35 lots on Lot 1005 Stirling View Drive, site stormwater can be contained on lots of the proposed approx. 360-450 sq m size.

For the purpose of house development the overall area represented by the test pits, is classified "A" to AS 2870-2011: *Residential slabs and footings*. To ensure economical and effective footing and slab design of individual slab-on-ground houses, this be certified by a suitably qualified and experienced Engineer.

2 The site

The area covered by this Report is of Lot 1005 Stirling View Drive which has Catalina Road on one side and Brooks Gardens Boulevard on the other site. The area has a mild slope overall with maximum slope in the middle.

3 Site investigations

Site investigations including test pits covering the Lot 1005 Stirling View Drive, Lange during August and September 2015 8 excavator test pits to 2000 mm or refusal were located as set out in Table 1, Figure 1 Page 5. All pits were successfully excavated up to 2000 mm and no traces of clay or gravel were encountered. The soil test was carried out around the end of winter season during which maximum rainfall is received and thus it clearly shows that the site has excellent drainage capabilities as being a sandy site and if the storm water is allowed to infiltrate on site so there will be no undermining of adjoining structures and there will be no clay issues as the site is sandy with excellent drainage capabilities.

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*

Table 1: Site Investigation Test Pits.

Bore Hole 1	0-400 400-1600	Top Soil White/Yellow Sand Moist
Bore Hole 2	0-450 450-1800	Top Soil White/Yellow Sand Moist
Bore Hole 3	0-450 450-1700	Top Soil White/Yellow Sand Moist
Bore Hole 4	0-450 450-1800	Top Soil White/Yellow Sand Moist
Bore Hole 5	0-600 600-2000	Top Soil White/Yellow Sand Moist
Bore Hole 6	0-500 500-2000	Top Soil White/Yellow Sand Moist
Bore Hole 7	0-350 350-1800	Top Soil White/Yellow Sand
Bore Hole 8	0-250 250-1600	Top Soil White/Yellow Sand

Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report

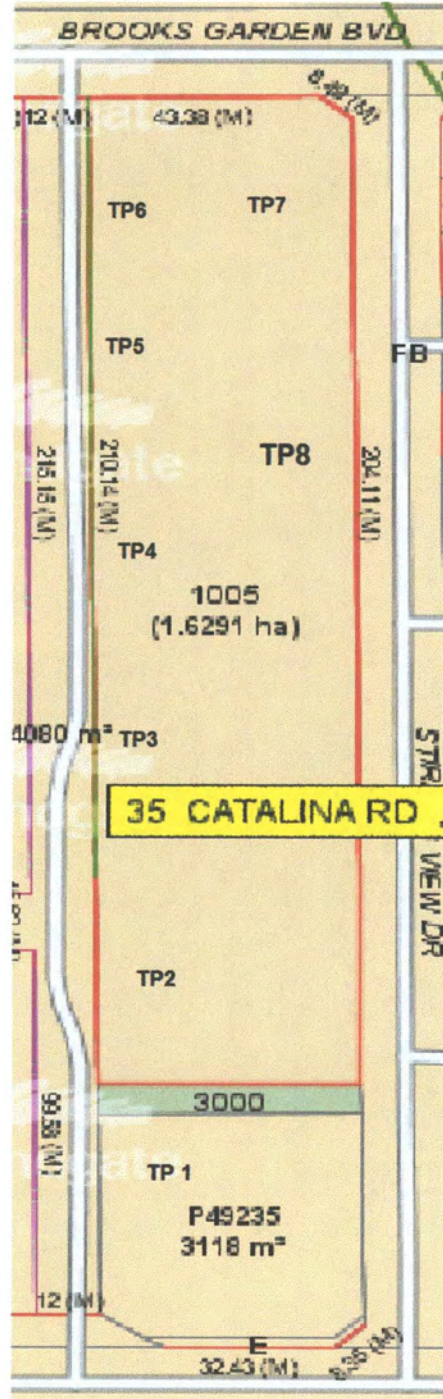


Figure 1: Sketch of report area showing location of test pit/ Boreholes

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*

4 Wastewater disposal

The site is not currently serviced by an existing gravity sewer and there will be a need to extend reticulated sewerage infrastructure. The new lots and dwellings shall be connected to a reticulated sewerage system.

5 Suitability for stormwater disposal

The dominant feature of the topography is the sandy profile which will enable the developer to retain most of the storm water on site without discharging it into the council system of stormwater drainage. The consistency of profile along the test pits clearly indicates the capability of the site to handle storm water in the event of heavy rainfall/storm when water will infiltrate through to the ground.

6 Water retention and re-use

Given the above site conditions, owners or developers should be encouraged to retain as much water as possible on site by using rain water tanks or by reusing the water in toilets and garden reticulation. Land scaping features will also help in retaining most of the water.

7 Groundwater

No ground water was encountered in any test pit despite the fact that the site has received a lot of rainfall when the soil investigation was conducted, as it was nearly end of winter season with a lot of rainfall. It will be fit for development of infrastructure and with the profile observed in test pits no issues can be foreseen at this stage.

8 Suitability for building construction

In all cases the soil profile is topsoil and sand. There is no presence of clay noticed in any pits and sand with minimum or no impurities was observed.

The subdivided Lots are considered suitable for building development subject to the requirements of AS 2870 – *Residential slabs and* to ensure economical and effective footing and slab design of individual slab-on-ground houses, these be individually certified by suitably qualified and experienced Engineers.

9 Conclusions

Suitability for development:

The site is suitable for development without further works, other than normal construction site works and removing topsoil and replacing it with pure sand which is not a requirement but would further improve the quality of site.

Suitability for on-site stormwater disposal:

Housing development on the lots is possible with surface and roof water contained on site on the lots. Due to excellent drainage properties of the existing ground profile, there will be no issue with onsite storm water disposal.

Site Classification:

Site Classification in accordance with the requirements of AS 2870 is "A".

APPENDICES

Soils laboratory report

Test Pit Photographs

Site Layout

Indicative Subdivision Layout

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*



Test Pit 1



Test Pit 2



Test Pit 3

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*



Test Pit 4



Test Pit 5



Test Pit 6

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*



Test Pit 7



Test Pit 7

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*



Test Pit 8



Test Pit 8



Test Pit 3

*Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report*



Site View to Catalina Road from Brooks Garden Boulevard.

Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report

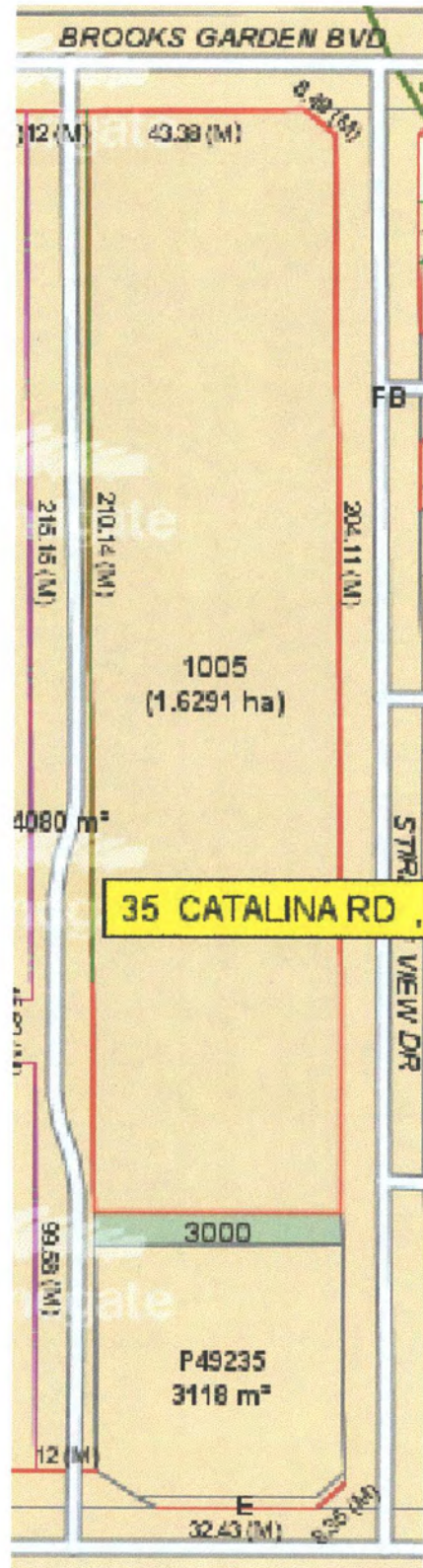


Fig 2: LOT 1005 STIRLING VIEW DRIVE, LANGE

Subdivision of Lot 1005, Catalina Road, Lange
Geotechnical Report

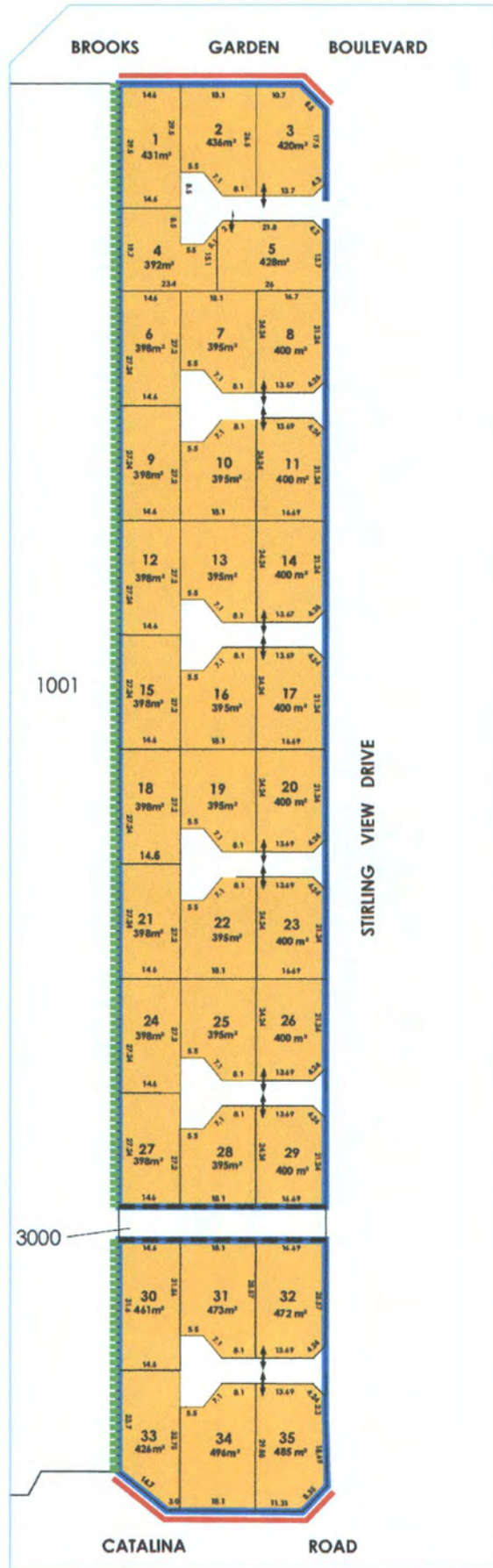


Figure 3: Indicative layout for lot development.



FIGURE 1
 SITE PLAN
 Lot 1005 Catalina Road, Lange
 City of Albany

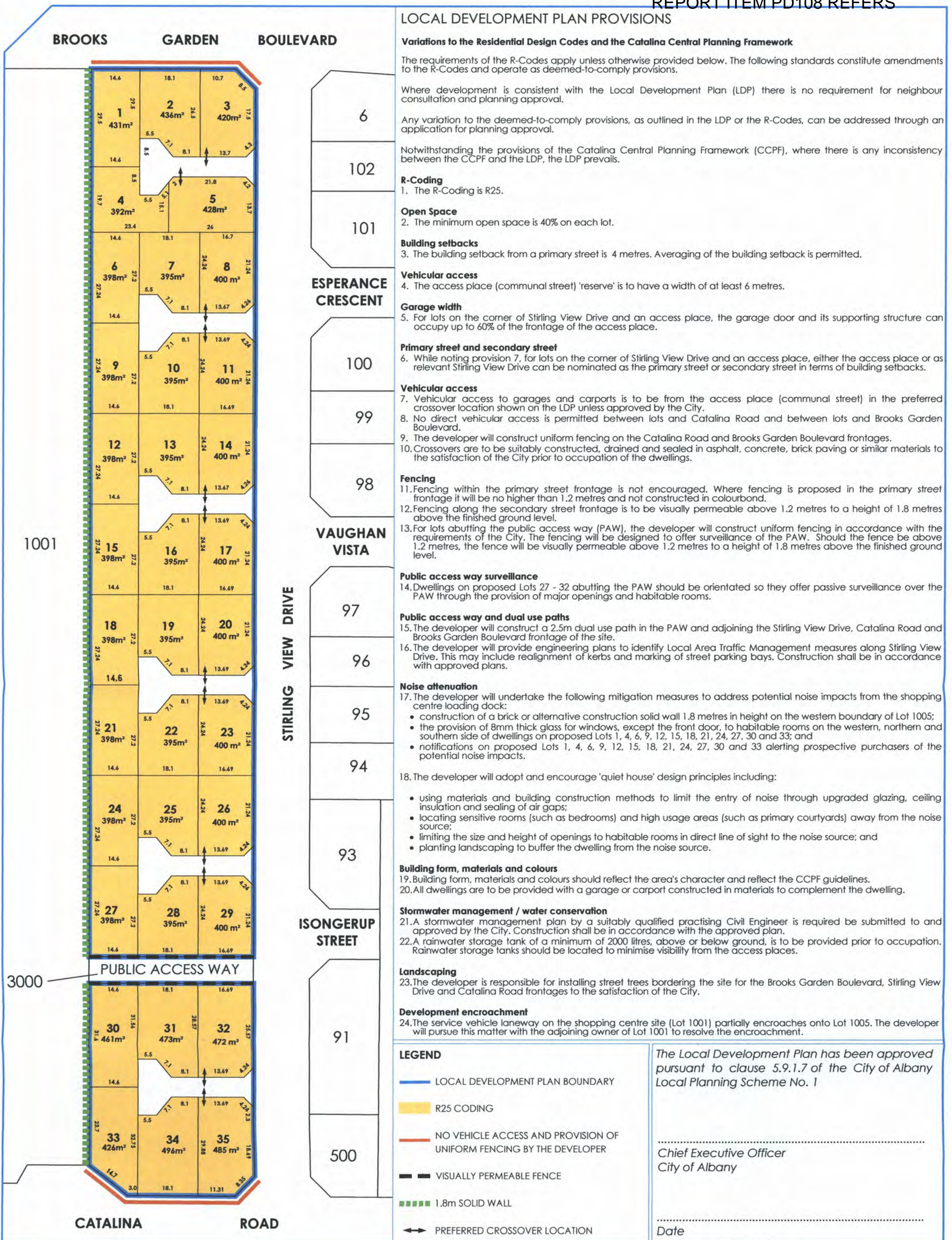


FIGURE 2
 LOCAL DEVELOPMENT PLAN
 Lot 1005 Catalina Road, Lange
 City of Albany

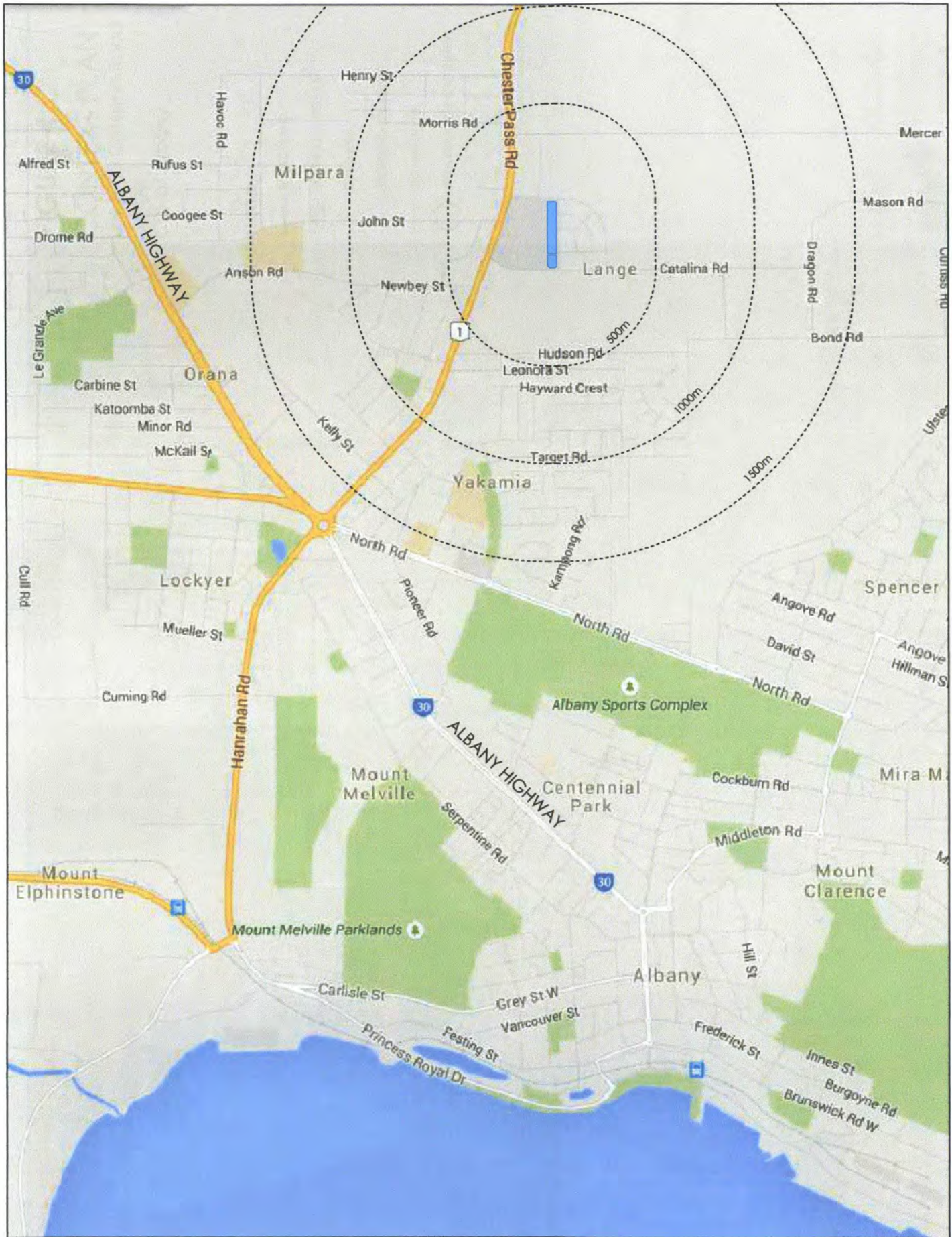


FIGURE 3
 LOCATION PLAN
 Lot 1005 Catalina Road, Lange
 City of Albany



edge
 PLANNING & PROPERTY

Edge Planning & Property
 134 Hare Street, Mount Clarence
 ALBANY WA 6330
 W www.edgeplanning.com.au
 E steve@edgeplanning.com.au
 M 0409 107 336

FIGURE 4
CONTEXT PLAN
 Lot 1005 Catalina Road
 Lange
 City of Albany



- LEGEND**
- SUBJECT LAND
 - # 1005 EXISTING LOT DETAILS
1,314.1ha
 - CONTOURS
 - U/GROUND SEWER PIPE
 - U/G WATER PIPE
 - 400m WALKABLE CATCHMENT



A	CONTEXT PLAN	150818	SJ	ST
REV	DESCRIPTION	YMMDD	DRAWN	APPRVD

edge
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 Edge Planning & Property
 124 Howe Street, Market Clarence
 ALBANY WA 6330
 W: www.edgepp.com.au
 E: info@edgepp.com.au
 M: 089 107 256

DRAWING NUMBER
 EP 150720 07
 REV
 A

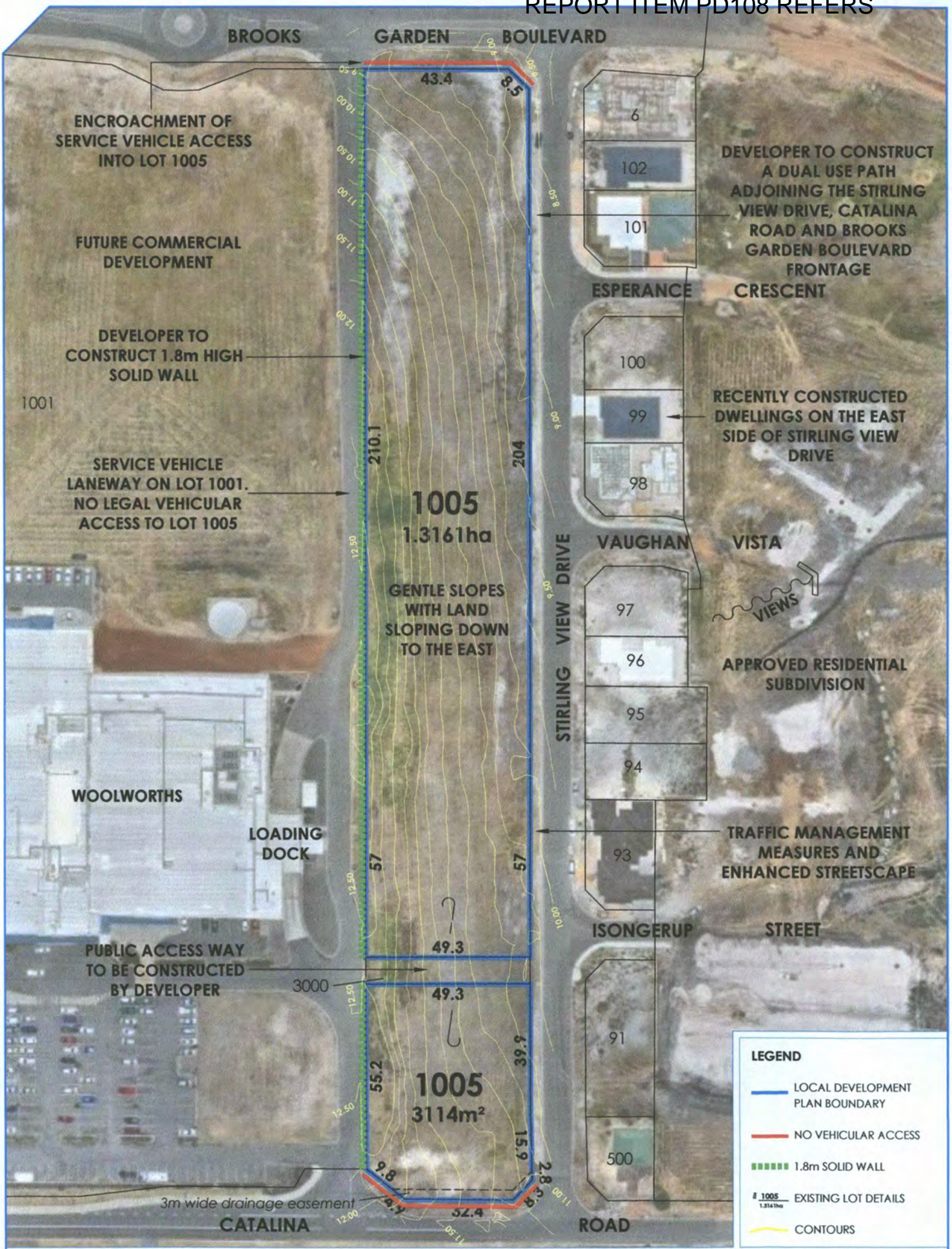
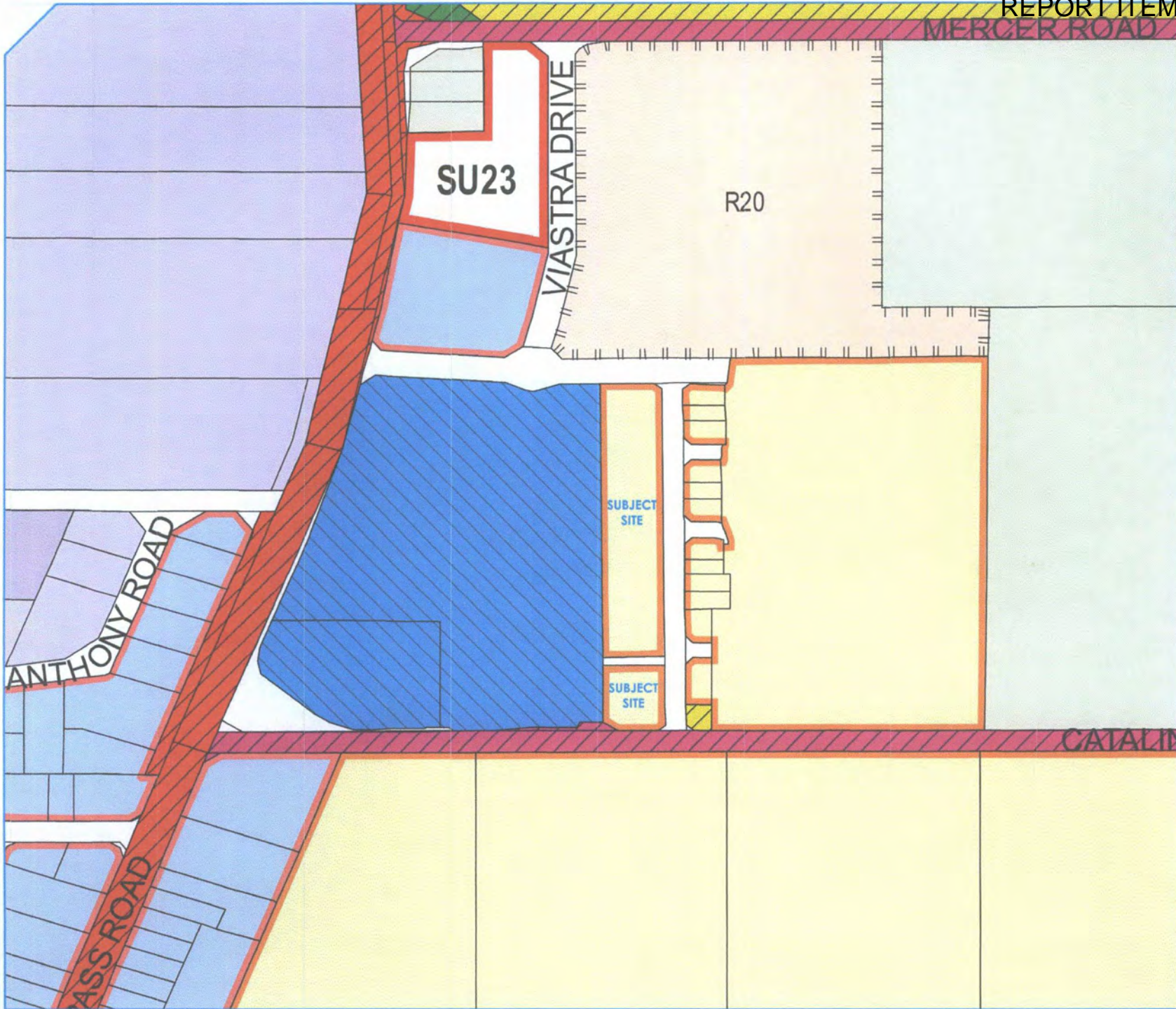


FIGURE 5
 OPPORTUNITIES AND CONSTRAINTS PLAN
 Lot 1005 Catalina Road, Lange
 City of Albany

FIGURE 6

ZONING MAP
 Lot 1005 Catalina Road
 Lange
 City of Albany



LEGEND

LOCAL SCHEME RESERVES
 (see scheme text for additional information)

- Local road
- Major road
- Parks and recreation
- Priority road
- Public use

LOCAL SCHEME ZONES

- General agriculture
- General industry
- Highway commercial
- Light industry
- Neighbourhood centre
- Residential
- Rural Residential
- Special Use
- Future urban

OTHER CATEGORIES

- R20 R Codes



A	ZONING MAP	150821	SJ	ST
REV	DESCRIPTION	YYMMDD	DRAWN	APPRVD

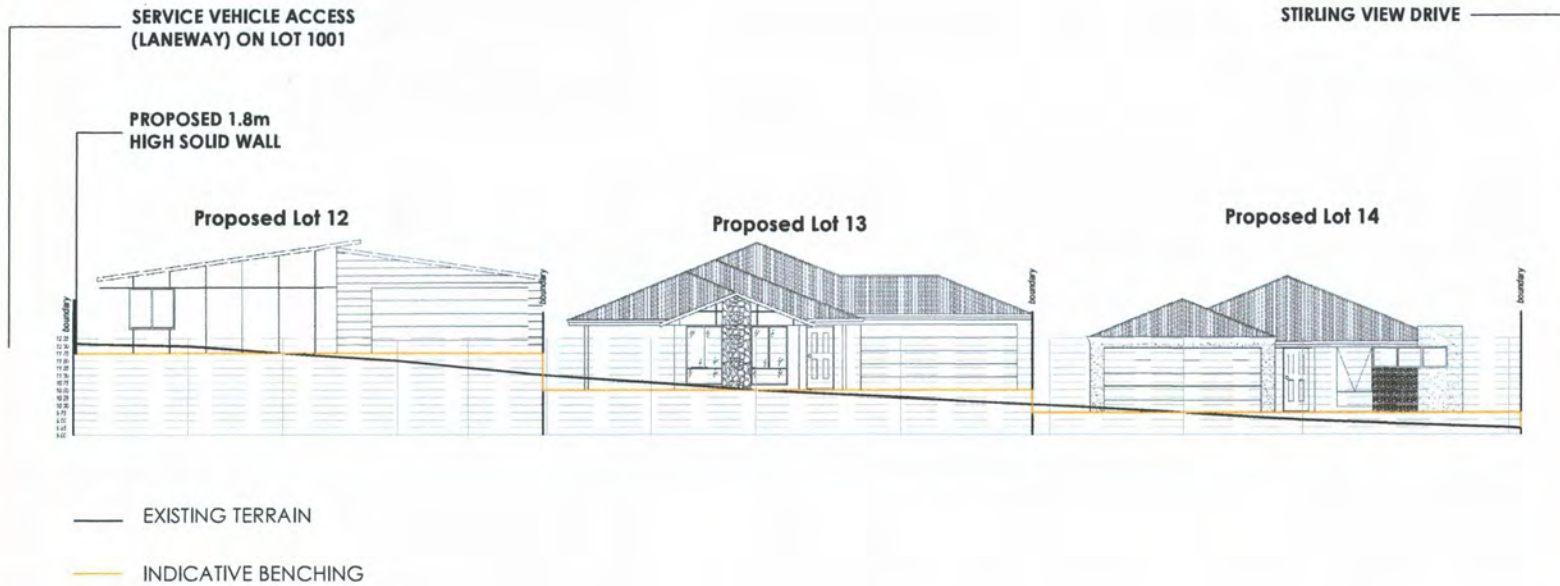
edge
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 Edge Planning & Property
 138 Ross Street, Second Floor
 ALBANY WA 6330
 W www.edgeplanning.com.au
 E info@edgeplanning.com.au
 M 0839 107 336

DRAWING NUMBER REV
 EP 150720 11 A

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 All details, costs, quantities and
 subject to design change & survey.

FIGURE 7

EAST-WEST ELEVATION
 Lot 1005 Catalina Road
 Lange
 City of Albany



INDICATIVE VIEW LOOKING NORTH FROM PROPOSED ACCESS PLACE
 TOWARDS PROPOSED LOTS 12, 13 AND 14



REV	DESCRIPTION	150821	SJ	ST
		YMMDD	DRAWN	APPRVD

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 Edge Planning & Property
 124 Hays Street, Mount Clarence
 ALBANY WA 6170
 W www.edgeplanning.com.au
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 M 0809 527 256

DRAWING NUMBER REV
 EP 150720 06 A

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 All sizes and dimensions are
 subject to final design & survey.

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1

AMENDMENT No. 7

SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
1	Environmental Protection Authority Locked Bag 33 Cloisters Square PERTH WA 6850	The Environmental Protection Authority (EPA) considers that the proposed scheme amendment should not be assessed under Part IV Division 3 of the <i>Environmental Protection Act 1986</i> (EP Act) and that it is not necessary to provide any advice or recommendations.	Nil.	The submission is noted.
2	ATCO Gas 81 Prinsep Road JANDAKOT WA 6164	ATCO Gas Australia has no objections to the proposal.	Nil.	The submission is noted.
3	Telstra Forecasting/Area Planning – South Western Access Network & Technology Locked Bag 2525 PERTH WA 6001	No objections. A network extension may be required for any development within the area concerned. The owner/developer will have to submit an application before construction is due to start to NBN Co. (for greater than 100 lots or living units in a 3 year period) or Telstra (less than 100 lots or living units). Developers are now responsible for telecommunications infrastructure, i.e. conduits and pits. At present NBN or Telstra will provide the cable.	The advice provided will be useful in guiding development in future, but has no bearing on the proposed zoning changes.	The submission is noted.
4	Water Corporation PO Box 100 LEEDERVILLE WA 6902	The Corporation has no objection to the amendment. An existing 200 millimetre and then 150 millimetre water supply main located in Nanarup Road feeds the area. The lots can	The advice provided will be useful in guiding development in future, but has little bearing on the proposed zoning changes.	The submission is noted.

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD109 REFERS

AMENDMENT No. 7


SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		be served via an extension from Nanarup Road.		
5	Western Power Customer Service 363 Wellington Street PERTH WA 6000	No objections.	Nil.	The submission is noted.
6	Department of Agriculture and Food WA	<p>The Department of Agriculture and Food, WA (DAFWA) is lodging a response so that it can be placed on record. On examination of all material supplied DAFWA does not support the proposed rezoning on the basis of the following points:</p> <p>Under the Lower Great Southern Region Strategy, a fair proportion of the land is classed as Priority Agricultural Land (Figure a), which infers good to high quality for intensive agriculture (i.e. intensive grazing, annual or perennial horticulture). The Priority Agricultural Land (PAL) mapping has been compiled from regional scale data through the interpretation of soil unit qualities – it does not include any water resource information.</p>	<p>The Department of Agriculture and Food WA's comments are acknowledged; however, the majority of the subject land has been identified within the Albany Local Planning Strategy for 'Rural Residential' development. Furthermore, the Priority Agriculture Land identified by the Department extends to two bands across the subject land, extending from 100 to 200 metres in width, which is relatively insignificant in the context of the wider area. Any intensive agricultural use would also risk nutrient export into Johnston Creek.</p>	The submission is noted.

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD109 REFERS

AMENDMENT No. 7

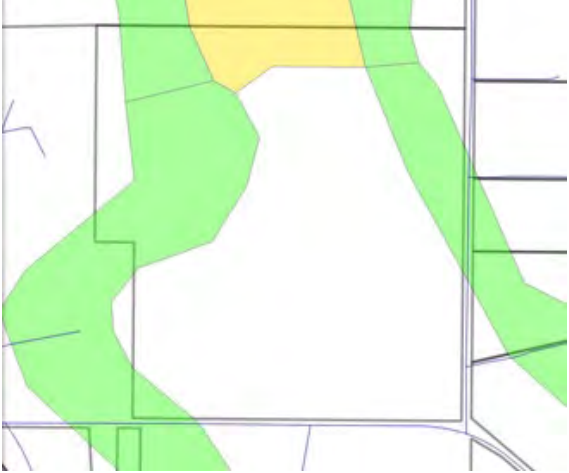
SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		 <p>Figure a: Distribution of Priority Agricultural Land across Lot 973</p> <p>Figure (b) illustrates the distribution draft (unpublished) High Quality Ag Land (HQAL). While the information is still in a draft format, the data is valid for revising and/or refining PAL mapping. The identification of HQAL reflects land which has the greatest flexibility or diversity of use for intensive agricultural pursuits (the green representing >60% of Priority 2 agricultural land and the yellow representing > 60% Priority 3 agricultural land).</p>		

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD109 REFERS

AMENDMENT No. 7

SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		 <p>Figure b: A conceptual model identifying high quality agricultural land – as referred to in SPP2.5 (and associated Rural Planning Guidelines) across Lot 973</p> <p>The proposal includes a detailed land use capability assessment prepared by a reputable land assessor, which states that the overall analysis of the agricultural capacity for Lot 1 and 973 is generally fair to poor, with risk for nutrient export from the pale sands. The semi-detailed paddock scale mapping does not contradict the regional scale PAL identification. The land at present provides good quality grazing and agistment because of a combination of good and stable soils together with access</p>		

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD109 REFERS

AMENDMENT No. 7

SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>to consistently available high quality water which presents excellent conditions for a range of agricultural pursuits including good pasture growth and production.</p> <p>It is acknowledged that the survey work compiled by Land Assessment Pty Ltd. has provided more detail of the land's capability for intensive agriculture at a paddock scale. The results from the Land Assessment survey concurs that a proportion of the land is suitable for horticulture and/ or intensive agricultural production. DAFWA does not dispute the soil mapping provided by Land Assessment Pty Ltd. DAFWA supports detailed (paddock-scale) soil and landscape assessment in lieu of the regional scale mapping and associated interpretation.</p> <p>DAFWA acknowledges that irrespective of the quality of the land, there are likely to be challenging issues for intensive agriculture on Lots 1 and 973 – linked to the risks of nutrient export and the 'sandwiched' location of the property (described as a 'discrete- cell'). Nonetheless, the subject land presents a "unique situation" for the Albany area, in that it has the combination of consistently available and good quality water in association with generally good</p>		

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD109 REFERS

AMENDMENT No. 7

SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>quality soils. This is a rare and shrinking resource in the Albany area. Properties with this combination of soil type and water availability are suitable for strawberry product and/or other forms of perennial horticulture.</p> <p>Discussion through the Albany Local Planning Strategy advises that there is already an excess of small rural land holdings currently available in Albany – rezoning this land and allowing further subdivision adds to that oversupply. It is believed that much infilling could be done within the immediate city area without claiming more good quality agricultural land.</p> <p>The Subdivision Guide Plan, illustrates a proposed riparian development exclusion zone (comprising proposed revegetation, etc) – this acknowledges that this, in part, may address excess nutrients exiting from small block owners, connecting with the permanent creek and flowing directly into Oyster Harbour. It is unclear from the documentation what the flooding frequency is for the proposed development area, and the subsequent impact on the creek, sediment loss through soil erosion and nutrient export into bay.</p>		

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD109 REFERS

AMENDMENT No. 7

SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>The comments provided by DAFWA are based on our position statement for agricultural land use planning, through which we are guided by the State Planning Policy 2.5 (2012) and the associated Rural Planning Guidelines (2014).</p>		
7	<p>Department of Health PO Box 8172 Perth Business Centre WA 6008</p>	<p>The Department of Health provides the following comment:</p> <p>The proposed development is required to connect to scheme water in accordance with the draft Country Sewerage Policy.</p> <p>The subdivision application will need to demonstrate that on-site wastewater disposal areas are not located on land units F4, F5 and D where the depth to water table is less than 500 millimetres as reported by Land Assessment Pty Ltd.</p> <p>The proponents should be advised that approval is required for any on-site waste water treatment process. In particular, the documents need to be amended to reflect this regulatory requirement and reference Department of Health publications as appropriate.</p>	<p>City Staff support the Department of Health's advice and recommend that a '10-20-10' buffer (a 10 metre cleared fire break either side of a 20 metre band of vegetation) is accommodated on each of the proposed lots bounding the 'General Agriculture' zoned land to the north of Lot 973. This will mitigate the potential impact of any spray drift resulting from agricultural activities on the adjoining land.</p> <p>It is recommended that a new provision No. 6 is added under Rural Residential zone RR11 within Schedule 14 – Rural Residential Zone of <i>Local Planning Scheme No. 1</i>, requiring that a notification, pursuant to section 165 of the <i>Planning and Development Act 2005</i> is to be placed on the certificates of title of proposed lots 1, 2, 3, 4, 5, 24 and 29 advising of the existence of existing agricultural</p>	<p>The submission is supported.</p> <p><u>Modifications required:</u></p> <ol style="list-style-type: none"> 1) The structure plan shall be updated to identify a requirement for a '10-20-10' buffer on proposed lots 1, 2, 3, 4, 5, 24 and 29. 2) A new provision No. 6 shall be added under Rural Residential zone RR11 within Schedule 14 – Rural Residential Zone of <i>Local Planning Scheme No. 1</i>, requiring that a notification, pursuant to section 165 of the <i>Planning and Development Act 2005</i> is to be placed on the certificates of title of proposed lots 1, 2, 3, 4, 5, 24 and 29 advising of the existence of existing agricultural activity.

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SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>There may be a concern about existing and potential agricultural activities on surrounding land and the possible resultant spray drift from chemical applications. The amendment should acknowledge and adhere to the necessary buffer separation distances between agricultural and sensitive land uses.</p>	<p>activity.</p>	
8	<p>Department of Mines and Petroleum Mineral House 100 Plain Street EAST PERTH WA 6004</p>	<p>The Geological Survey of Western Australia, on behalf of the Department of Mines and Petroleum, has assessed this proposal with respect to access to mineral and petroleum resources, geothermal energy, and basic raw materials.</p> <p>According to information provided to DMP by the City of Albany, there is an extractive industry licence adjacent to the northern side of the proposal area on Lot 3. The current extraction area lies about 300 metres to the north of the proposed rural residential zoning. The Department of Mines and Petroleum has concerns that the proximity of this proposal may lead to issues associated with noise, dust and road traffic. Please note that the Environmental Protection Authority guidelines recommend</p>	<p>City Staff have noted the presence of the current extractive industry on the adjoining lot to the north and are mindful of potential land use conflict. The extractive industry approval indicates that the extraction area will not extend within 300 metres of the subject lots. The 300 metre separation, combined with the '10-20-10' buffer to mitigate impact from agricultural activity will also mitigate impacts from the extractive industry.</p> <p>It is also recommended that a new provision No. 7 is added under Rural Residential zone RR11 within Schedule 14 – Rural Residential Zone of <i>Local Planning Scheme No. 1</i>, requiring that a notification, pursuant to section 165 of the <i>Planning and Development Act 2005</i> is to be placed</p>	<p>The submission is supported.</p> <p><u>Modifications required:</u></p> <p>1) A new provision No. 7 shall be added under Rural Residential zone RR11 within Schedule 14 – Rural Residential Zone of <i>Local Planning Scheme No. 1</i>, requiring that a notification, pursuant to section 165 of the <i>Planning and Development Act 2005</i> is to be placed on the certificates of title of proposed lots within 500 metres of the existing extractive industry, advising of its existence.</p>

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No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		300 to 500 metre separation distance between sand extraction and sensitive land uses, depending on size. The Department of Mines and Petroleum requests that the City takes the staging plans in the EIL proposal and the Environmental Protection Authority guidelines into account when assessing this amendment.	on the certificates of title of the proposed lots within 500 metres of the existing extractive industry, advising of its existence.	
9	Department of Parks and Wildlife South Coast Region 120 Albany Highway ALBANY WA 6330	The Department of Parks and Wildlife has no objections to the proposed amendments.	Nil.	The submission is noted.
10	Department of Water South Coast Region PO Box 525 ALBANY WA 6331	<p>The Department of Water provides the following comments:</p> <p>Johnston Creek</p> <p>The subject site contains Johnston Creek, a minor non-perennial tributary to Oyster Harbour, a regionally significant waterway with high ecological, social and economic values. Due to the significant intensification of the land that will occur as a result of the proposed development, the Department of Water recommends that further protection and restoration be provided to Johnston Creek to improve water quality and the</p>	The Department of Water's concerns are acknowledged. However, the ceding of foreshore reserves to the Crown typically results in their vesting with the City of Albany, creating a significant maintenance burden. City Staff would support the Department's recommendation that a foreshore management plan be prepared at the time of subdivision and implemented by the two landholders who will assume responsibility for the management of the foreshore.	The submission is noted.

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No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>ecological values of the waterway.</p> <p>The Department of Water recommends that a suitable foreshore reserve is determined through a biophysical assessment of the site. The Department of Water publication Operational policy No. 43 – Identifying and establishing waterway foreshore areas can assist with this. This foreshore reserve should be ceded to the Crown and managed as public open space.</p> <p>While rural residential developments are not usually required to give up public open space as a condition of development, the management of the waterway by the local government would provide better environmental outcomes for Johnston Creek and improved recreational and amenity outcomes for the local community. There is an opportunity to create a green corridor to the harbour that can be completed when the downstream property is developed.</p> <p>The foreshore reserve will require the preparation of a foreshore management plan at subdivision stage, which will identify restoration, public access and the on-going management requirements of the site.</p>		

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD109 REFERS

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No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
11	Department of Lands Level 2, 140 William Street PERTH WA 6000	The Department of Lands has no comments or objections.	Nil.	The submission is noted.
12	Mr S Lucas Lot 1, 93 Nanarup Road LOWER KING WA 6330	<p>I am the owner of Lot 1, 93 Nanarup Road and have no intention of rezoning my property from 'General Agriculture', as in two to three years, I intend to start a small aquaponics/aquaculture from this property.</p> <p>I may also build a larger shed or extend the existing shed in future, as there is currently no restriction on size.</p> <p>The neighbouring property, Lot 973, which is intended for rezoning would, I feel, be better suited for a fish hatchery or aquaculture with the abundance of water and it would be a waste to subdivide. It could also continue being farmed with livestock, as this property has a high livestock carrying capacity.</p> <p>The Tourist Accommodation could also be incorporated within this property, which could be more beneficial if it incorporated a café/tearooms with aquaculture, similar to businesses around Pemberton. This could</p>	<p>It is acknowledged that the landowner does not wish to rezone his property; however, the exclusion of Lot 1 Nanarup Road from the proposed rezoning would create an isolated 'General Agriculture' zoned lot, completely surrounded by 'Rural Residential' and 'Special Residential' zoned land, which is considered to be a poor planning outcome that could lead to land use conflict.</p> <p>It is also noted that under the provisions of the City's <i>Non-habitable Structures</i> local planning policy, the same restrictions on the size of non-habitable structures would apply to Lot 1 Nanarup Road, regardless of whether it is zoned 'General Agriculture' or 'Rural Residential'.</p> <p>In view of these factors, City Staff would recommend that the proposal is modified to include an Additional Use site 'AU32' within Schedule 2 – Additional Uses of <i>Local Planning Scheme No. 1</i>, to designate Lot 1 Nanarup Road with the additional use</p>	<p>The submission is upheld in part.</p> <p><u>Modifications required:</u></p> <p>1) A new Additional Use site 'AU32' within Schedule 2 – Additional Uses of <i>Local Planning Scheme No. 1</i> is added, to designate Lot 1 Nanarup Road with the additional use of 'aquaculture', and to include a condition requiring that development shall be generally in accordance with the structure plan endorsed by the Western Australian Planning Commission, clause 5.5.13 and Schedule 14 – Rural Residential Zone RR11 of <i>Local Planning Scheme No. 1</i>.</p>

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No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>also be beneficial to the Kalgan area for tourists as well as locals, who may wish to have lunch in a rural setting, similar to the Lake House at Denmark, as I think Nippers is the only rural café this side of Albany.</p> <p>Personally, I think only infertile, sandy/rock properties should be considered for subdivision, for example at Bon Accord Road, where there are still good views and the extra traffic from subdivision can easily travel to Albany via Chester Pass Road.</p> <p>Traffic congestion on Nanarup Road is another concern as the volume of traffic in the mornings, especially traffic travelling to the Grammar School, can make it almost impossible to get out of my driveway. If the neighbouring Lot 973 is subdivided, this will create even more traffic congestion on Nanarup Road, especially when combined with traffic from the new subdivision at Gull Rock Road.</p>	<p>of 'aquaculture' and a condition requiring that development shall be generally in accordance with the structure plan endorsed by the Western Australian Planning Commission, clause 5.5.13 and Schedule 14 – Rural Residential Zone RR11 of <i>Local Planning Scheme No. 1</i>.</p> <p>The comments regarding the rezoning and subdivision of Lot 973 are noted; however, this land has been mostly identified within the Albany Local Planning Strategy for rural residential development, while the land along Bon Accord road is identified for general agriculture. It should also be highlighted that there are identified mineral deposits along Bon Accord Road and that extractive industries in the locality have led to land use conflicts with nearby residents.</p> <p>In terms of land use on Lot 973, the provisions of Rural Residential area RR11 already list 'Restaurant' as a discretionary land use, which presents an opportunity for precisely the type of enterprise mentioned in the submission.</p> <p>It is acknowledged that subdivision</p>	

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD109 REFERS
AMENDMENT No. 7
SCHEDULE OF SUBMISSIONS AND MODIFICATIONS**

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
			does lead to increased traffic; however, the level of traffic generated by the proposal is not considered sufficient enough to warrant significant road upgrades.	
13	Hyde Court LOWER KING WA 6330	<p>We are writing to voice our very strong objection to the proposed rezoning of Lots 1 and 973 Nanarup Road, Lower King. There would already seem to be a significant number of properties that have been rezoned in the area and the rezoning only financially benefits the current landholder of those blocks and the City of Albany. There are already vacant blocks on the other side of the road and land past the Kalgan bridge all being subdivided.</p> <p>As a resident of the area all this will do is create more traffic and noise when we choose to live in the area for the lifestyle it provided. Making it more residential will change this – will there be any compensation for current residents?</p> <p>Currently the area provides significant bridleways to allow for access on foot only – I see no provision of those in the proposed subdivision.</p>	<p>While it is certainly true that the landowner will benefit financially from the subdivision of land, the City of Albany will only see a modest rates rise, while simultaneously becoming responsible for waste collection and the maintenance of additional roads and drainage infrastructure.</p> <p>The proposed development will not create any noise in excess of that normally experienced in a rural lifestyle development.</p> <p>The City will not be liable for payment of compensation to landowners unless they are detrimentally affected by a change in zoning that would deny them the opportunity to develop their land in a way that had been permitted previously.</p> <p>The bridleways referred to area a combination of a perimeter fire access track around the Sheringa Park development and pedestrian access ways that connect the cul-de-sacs of</p>	The submission is noted.

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No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>Why does there need to be an access to Sheringa Park? This will just create a thoroughfare for more cars, with Bon Accord already a popular 'hoon' track.</p> <p>What upgrades will be completed on Nanarup Road? This road is incredibly busy already with school traffic, trucks and residents all competing for road use.</p> <p>Please let me know what other steps can be taken to prevent this rezoning.</p>	<p>Viscount Heights and Milne Close to this track and Nanarup Road via unconstructed road reserves.</p> <p>The proposed road linkages to Sheringa Park are for permeability and to provide a secondary means of access/egress in the event of a bushfire emergency. It is unlikely that these road connections would lead to a significant increase in traffic passing through Sheringa Park, as they would most likely carry local traffic between Chester Pass and Bon Accord Roads and the proposed development.</p> <p>It is acknowledged that subdivision does lead to increased traffic; however, the level of traffic generated by the proposal is not considered sufficient enough to warrant significant road upgrades.</p>	
14	Great Southern Grammar PO Box 1151 ALBANY WA 6331	We support the development in principle; however, we would like to advise that the School as part of its Master Plan anticipates that a ring road facilitating the movement of traffic through the School premises would ultimately lead the School property adjacent to the Mead Road intersection of Nanarup Road. Should a development of Lots 1 and 973 Nanarup Road be undertaken, we	The submission is noted. However, in the absence of any firm proposal from the Great Southern Grammar, the City cannot impose such a requirement at this time.	The submission is noted.

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AMENDMENT No. 7
SCHEDULE OF SUBMISSIONS AND MODIFICATIONS**

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		would like consideration to be given to the inclusion of a roundabout at the Mead Road, Nanarup Road junction.		
15	Lower Kalgan Progress Association	<p>This development application should not be allowed to go ahead in any way, shape or form.</p> <p>With over 50 years' supply (at our current growth rate) of lots currently available for development, there is no demonstrated demand for permitting this development and extending the existing development front.</p> <p>The City of Albany does not have in place an endorsed Agricultural Land or Priority Agricultural Land Policy guiding the future use of existing agricultural land. Therefore, proposed changes in land use of any existing agricultural land, including Lot 973 Nanarup Road, should not be supported.</p> <p>New development fronts should not be created in the absence of an updated and community accepted <i>Albany Local Planning Strategy</i> and at a time when infill development provides best practice outcomes that support environmental management objectives at all planning levels.</p>	<p>While it is acknowledged that there is a significant supply of land available for housing within the City of Albany, the majority of the subject land has been identified for rural residential development within the <i>Albany Local Planning Strategy</i> and can be considered an infill development between the existing 'Rural Residential' zoned land at Sheringa Park and that to the east along Mead Road.</p> <p>In terms of the fragmentation of the lower lying part of the lot, it must be noted that only two lots encompass the creekline, reducing the number of landowners responsible for the management of the foreshore. The implementation of a foreshore management plan, in accordance with the recommendation of the Department of Water, should ensure effective foreshore management on an ongoing basis.</p>	The submission is noted.

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No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>Holistic locality planning for the Lower Kalgan precinct by the City of Albany and which involves active community engagement is being continually called for by the Lower Kalgan community and has been identified as a planning need by the City of Albany in the existing <i>Albany Local Planning Strategy</i>. Support for this development pre-empts and will disregard this identified need. Additionally, support for this proposal by Council will expose Council to receipt of additional, inappropriately planned development proposals not only in the Kalgan, but throughout the entire Council boundary.</p> <p>Insufficient thought has been given to the appropriate and ongoing management of the low lying and wet areas of Lot 973. It is certainly our strong view that the wet area in the eastern half of the lot will not be adequately managed either now or into the future if broken into 9+ different lots that can be managed independent of one another, in spite of the waterway that flows through the area and which is shared by all lots.</p>		
16		Too many residential lots and septic tanks.	Regarding the potential impact of	The submission is noted.

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No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
	Gordon Street LITTLE GROVE WA 6330	It's still on wet, low-lying land and could flood. A condition to use eco-friendly leach drains and tanks is needed.	<p>effluent disposal systems on the creek and its environs, <i>Local Planning Scheme No. 1</i> requires "the use of alternative treatment effluent disposal systems, in the following situations:</p> <p>(a) <i>Where the setback requirements of clause 5.3.6 cannot be achieved;</i></p> <p>(b) <i>Where soil conditions are not conducive to the retention of nutrients on site;</i></p> <p>(c) <i>In low lying areas; and</i></p> <p>(d) <i>In areas where there is a perched winter water table."</i></p> <p>It is considered that these requirements will ensure that the creek and its environs are adequately protected from the potential impact of effluent disposal systems.</p>	

Attachment 2 – Albany Local Planning Strategy Excerpts

Section 8.3.1 Strategic Settlement Direction

Section 8.3.1 *Strategic Settlement Direction* of the *Albany Local Planning Strategy 2010* (ALPS) sets the following strategic objective:

“Facilitate and manage sustainable settlement growth for the urban area in the City of Albany”

The ALPS sets out the following aims to achieve this objective:

“The ALPS aims to contain the spread of fragmented urban and rural living areas in the City by:

- *Providing for growth in urban areas, rural townsites and rural living areas as designated in ALPS.*
- *Minimising the development footprint on the landscape to help protect biodiversity and the environment.*
- *Promoting energy conservation.*
- *Providing greater housing choice.*
- *Minimising journey length from home to work/school/services and encouraging the use of public transport, cycling and walking.*
- *Reducing government expenditure on servicing current and future populations.”*

Section 8.3.5 Rural Living

Section 8.3.5 *Rural Living* of the ALPS sets the following strategic objectives:

“In the long term encourage the efficient use of existing rural living areas, based on land capability to maximise their development potential.”

“Ensure that future rural living areas are planned and developed in an efficient and co-ordinated manner by being located either adjacent to Albany as designated on the ALPS maps, or within existing rural townsites in accordance with Table 5 along with adequate services and community infrastructure.”

The ALPS expands on this by stating that *“The strategy’s objectives for Rural Living areas are to:*

- *Discourage the creation of additional rural townsites for living purposes.*
- *Avoid the development of Rural Living areas on productive agricultural land, other important natural resource areas and areas of high bushfire risk, flooding and environmental sensitivity.*
- *Avoid the development of Rural Living areas on future and potential long-term urban areas.*
- *Provide compact growth of selected existing rural townsites in accordance with Table 4, based on land capability and available services and facilities.*
- *Minimise potential for generating land-use conflicts.”*

Section 8.5.4 Tourism

Section 8.5.4 *Tourism* of the ALPS sets the following strategic objective:

“Encourage sustainable rural tourism uses and developments in location that are compatible with existing land uses, especially agriculture activities”.

The ALPS expands on the matter of tourism as follows:

“The ALPS supports tourism activities in the City’s rural areas because it broadens Albany’s economic base and provides additional jobs, particularly within or near existing townsites and settlements. Tourism developments need to be located, designed and managed in ways that protect and enhance an area’s scenic and environmental attributes”.

The ALPS also recommends the following actions to achieve the above tourism objective:

“Encourage the development of sustainable tourism uses and proposals that integrate with the City’s unique natural and man-made landscape and heritage values”.

“Put in place in the LPS1 necessary mechanisms to accommodate contemporary tourism development proposals”.

CITY OF ALBANY

LOCAL PLANNING SCHEME NO. 1

AMENDMENT No. 7

MINISTER FOR PLANNING

PROPOSAL TO AMEND A LOCAL PLANNING SCHEME

LOCAL AUTHORITY: **CITY OF ALBANY**

DESCRIPTION OF LOCAL
PLANNING SCHEME: **LOCAL PLANNING SCHEME No. 1**

TYPE OF SCHEME: **DISTRICT SCHEME**

SERIAL No. OF AMENDMENT: **AMENDMENT No. 7**

PROPOSAL:

- i) To rezone Lots 1 and 973 Nanarup Road, Lower King from the General Agriculture zone to the Rural Residential zone and incorporating them within area No. RR 11 as set out in Schedule 14 – Rural Residential zone of the Scheme text;
- ii) Designate portion of Lot 973 as an Additional Uses Site and incorporating it within Schedule 2 – Additional Uses of the Scheme Text; and
- iii) Amend the Scheme maps accordingly.

LOCAL PLANNING SCHEME No. 1

AMENDMENT No. 7

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2. REPORT
3. EXECUTION

PLANNING AND DEVELOPMENT ACT 2005

**RESOLUTION DECIDING TO AMEND A
LOCAL PLANNING SCHEME**

CITY OF ALBANY

LOCAL PLANNING SCHEME No. 1

DISTRICT SCHEME

AMENDMENT No. 7

RESOLVED that the Council, in pursuance of Section 75 of the Planning and Development Act 2005, amend the above local planning scheme by:

- i) Rezoning Lots 1 and 973 Nanarup Road, Lower King from the General Agriculture zone to the Rural Residential zone and incorporating them within area No. RR 11 as set out in Schedule 14 – Rural Residential zone of the Scheme text;
- ii) Designating portion of Lot 973 as an Additional Uses Site and incorporating it within Schedule 2 – Additional Uses of the Scheme Text; and
- iii) Amending the Scheme maps accordingly.

Dated this _____ day of _____

CHIEF EXECUTIVE OFFICER

CITY OF ALBANY

LOCAL PLANNING SCHEME NO. 1

AMENDMENT NO. 7

**PROPOSED RURAL RESIDENTIAL ZONE;
LOTS 1 & 973 NANARUP ROAD, LOWER KING.**

PLANNING REPORT

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APPENDIX B – FIRE MANAGEMENT PLAN

APPENDIX C – SCHEDULE 14 – RURAL RESIDENTIAL ZONE – CL 5.5.13

1. INTRODUCTION

Lot 973 Nanarup Road, Lower King is designated in the Albany Local Planning Strategy for both 'Rural Residential' and 'General Agriculture' purposes. The 'Rural Residential' component broadly relates to the more elevated land on the western portion of the property and the 'General Agriculture' portion covers the flatter, low lying land on either side of Johnson Creek.

Following the recent gazettal of the City of Albany's Local Planning Scheme No. 1, the landowner proposes to rezone the property for rural living purposes with a range of lot sizes which reflect the capability of the property.

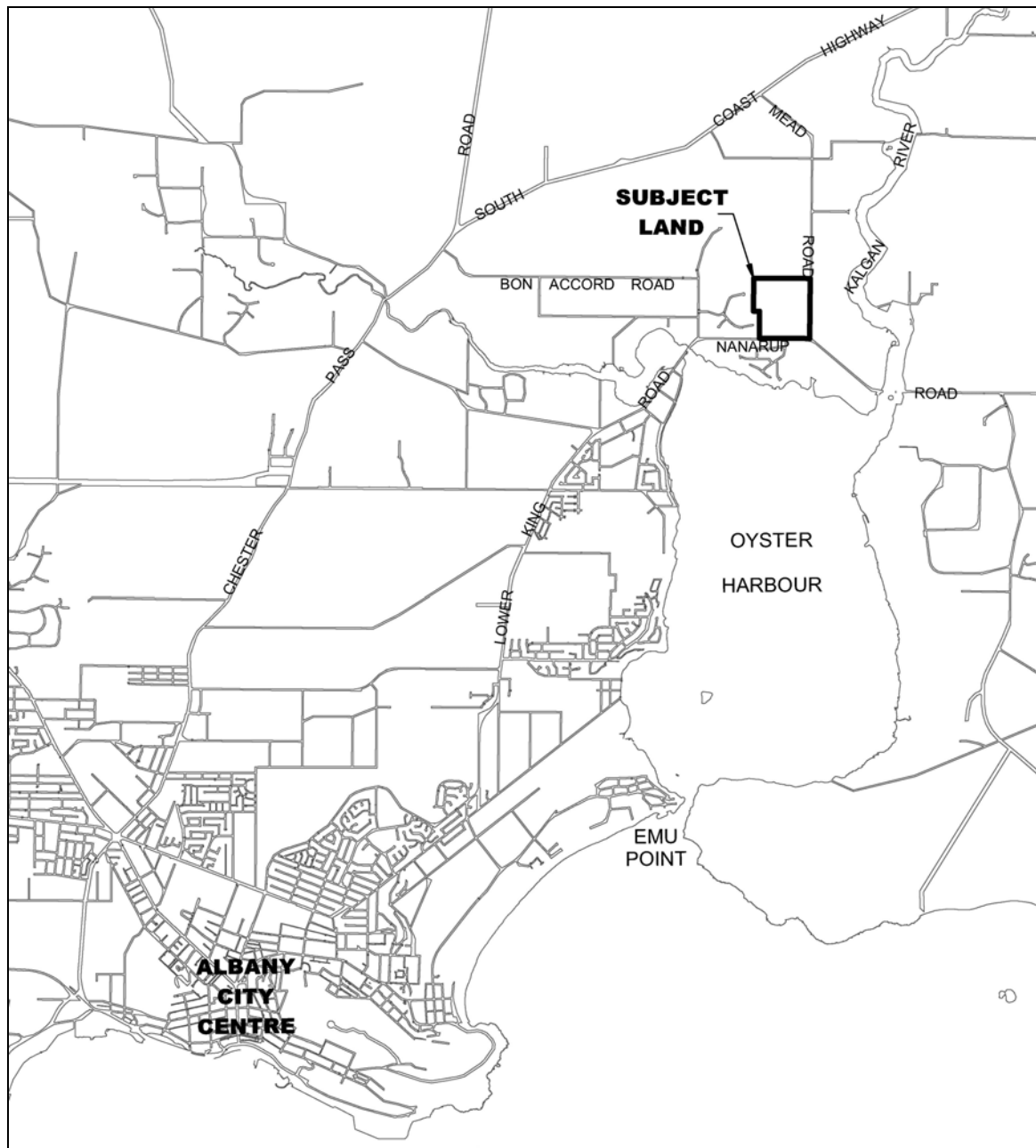
The following report provides background information and discussion in support of the proposal.

2. BACKGROUND

2.1 Location, Area & Zoning

Lot 973 is located on the north west corner of Nanarup Road and Mead Road, Lower King, approximately 12km north east of the Albany city centre. Refer location plan below.

The property is 57.81ha in area and is currently zoned 'General Agriculture'.



Location Plan

2.2 Site Description

The site consists of gravelly lateritic upland areas to the west and north east which are separated by a shallowly incised valley formed by Johnson Creek.

The sloping terrain between the valley floor and upland gravelly areas is predominantly sandy and gently inclined. Slopes are generally less than 10%, apart from some moderate to moderately steep terrain within the central west which is covered in remnant vegetation.

The lowest point is in the south east corner of the property at approximately 6 metre AHD, rising to a high point of 44 metres AHD on the western boundary.

Most of the property has been cleared for pasture and agistment of stock (sheep). Two areas of remnant vegetation are located on the central western and north eastern slopes and consist of Jarrah-Marri-Sheoak forest. Some Taxandria, Melaleuca and Agonis species are located along either side of the creek line which has been fenced.

Apart from stock yards, a shed and a dwelling which is currently unused, the property is undeveloped. Access is currently provided from Nanarup Road where access over the main water pipeline is provided.



Existing vacant residence looking south to Oyster Harbour



Remnant vegetation abutting Johnston Creek.



View from Mead Road looking north west across Johnston Creek.



View from the north east corner of the property looking south to Oyster Harbour.



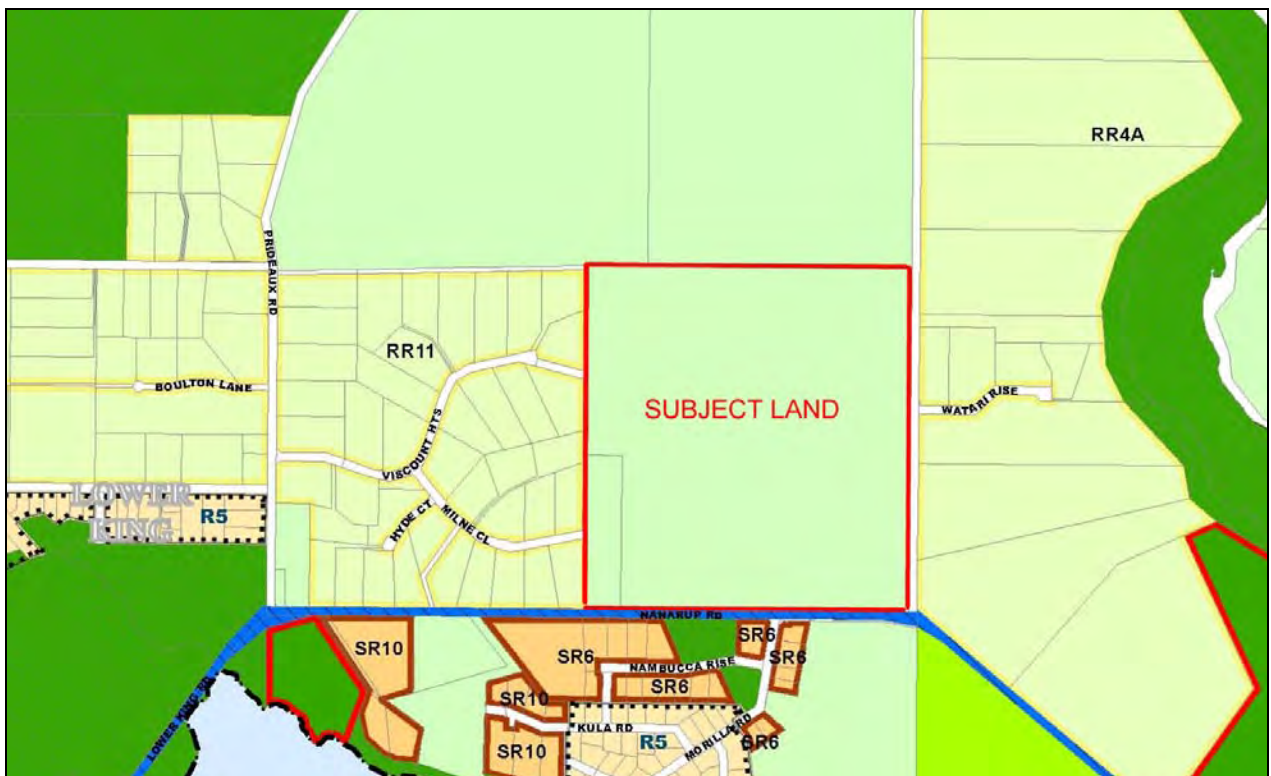
Remnant vegetation on the central western slopes.



View from the western slopes looking across Johnston Creek to remnant vegetation in the north east corner of the property.

2.3 Surrounding Land Use and Zoning

To the west of Lot 973 lies Sheringa Park which consists predominantly of one hectare rural residential lots. In the south west corner is a two hectare parcel of land which is zoned 'General Agriculture'. To the east is the Mead Road rural residential area which initially consisted of 10ha lots. More recently, a scheme amendment has provided for some of these lots to be further subdivided down to a minimum of one hectare. On the south side of Nanarup Road, land on the western side of Johnson Creek is predominantly zoned 'Special Residential' with a pocket of 'Residential' R5 land. Lot sizes range from 2000m² to 9556m². A corridor of land on either side of Johnson Creek, which runs south to Oyster Harbour, is zoned 'General Agriculture' and to the east is the Great Southern Grammar School. To the north, land is zoned General Agriculture and is used for agisting stock.

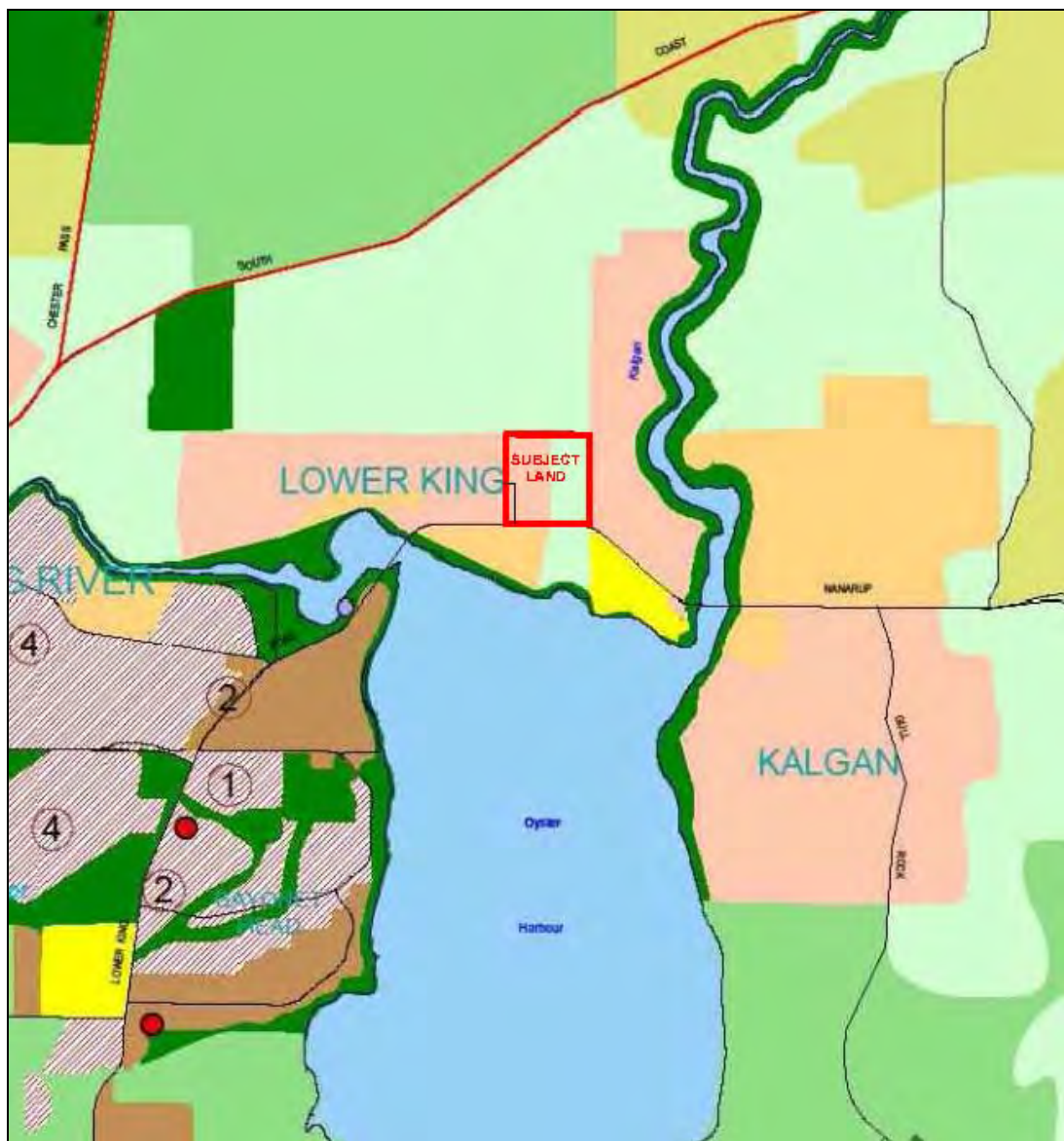


Zoning Map of Locality

3. PLANNING CONTEXT

The Albany Local Planning Strategy (ALPS), which was endorsed by the WAPC in June 2010, together with Council's Local Planning Scheme No. 1 are the key planning documents which provide guidance in terms of future use and development of land in the City.

The subject land is designated as 'Rural Residential' and 'General Agriculture' on the Strategic Plan: Urban (Map 9B). Refer extract below..



Extract of Map 9B

3.1 Albany Local Planning Strategy

Strategic objectives contained within Section 8.3.5 'Rural living' include:

“Ensure that future rural living areas are planned and developed in an efficient and coordinated manner by being located either adjacent to Albany as designated on the ALPS map or within existing rural townsites.....”

Objectives are to:

- Discourage the creation of additional rural townsites for living purposes.
- Avoid the development of Rural Living areas on productive agricultural land, other important natural resource areas and areas of high bushfire risk, flooding and environmental sensitivity.
- Avoid the development of Rural Living areas on future and potential long-term urban areas.
- Provide for compact growth of selected existing rural townsites in accordance with table 5, based on land capability and available services and facilities.
- Minimise potential for generating land-use conflicts.

Actions include:

- Give top development priority to the subdivision of land currently zoned Special Residential and Special Rural within the City's current Town Planning Schemes and as designated on the ALPS maps (CoA, WAPC). Refer to the ALPS Map which designates the site for rural residential purposes.
- In the long term, maximise opportunities for existing rural living areas that do not have potential for future urban development to achieve higher sustainable lot yields based on land capability/suitability, service provision and local constraints. These areas would be given second priority to meet future demands (CoA, WAPC).
- Include Rural Residential, Rural Small Holding and Conservation zones with appropriate provisions in the LPS1 (CoA).

3.2 Albany Local Planning Scheme No. 1

Prior to considering any additional land to be rezoned to Rural Residential, Council's Local Planning Scheme No. 1 requires the proponent to address the following matters;

- a) Compliance with the outcomes and recommendations of the Albany Local Planning Strategy;
- b) Fire hazard assessment and Fire management Plan;
- c) Land capability and suitability assessment.
- d) Protection and enhancement of natural environment;
- e) Protection and enhancement of visual amenity;
- f) Provision of infrastructure and services;
- g) Impacts on adjacent land uses;
- h) Any potential site contamination;
- i) Effluent disposal;
- j) Location of building envelopes; and
- k) Preparation of a Guide Plan for the subdivision showing proposed roads and connectivity between proposed/future and existing developments, lots, recreation areas and location of building envelopes.

The Scheme also incorporates a range of general provisions relating to rural residential zones which include:

- Building design, materials and colours.
- Fire Protection.
- Modifications to designated Building Envelopes/Setbacks.
- Fencing.
- Remnant Vegetation Protection and Clearing Controls.
- Tree Planting.

- Dams, Soaks and Bores.
- Keeping Animals.
- Effluent disposal.
- Water Supply.
- Electricity Supply.
- Stormwater Management and Drainage.
- Road and Battleaxe Access.
- Notification of Prospective Purchasers and successors in Titles.

The Scheme also provides for additional Special Provisions relating to a particular Rural Residential zone to be set out in Schedule 14 of the Scheme Text.

4. LAND CAPABILITY

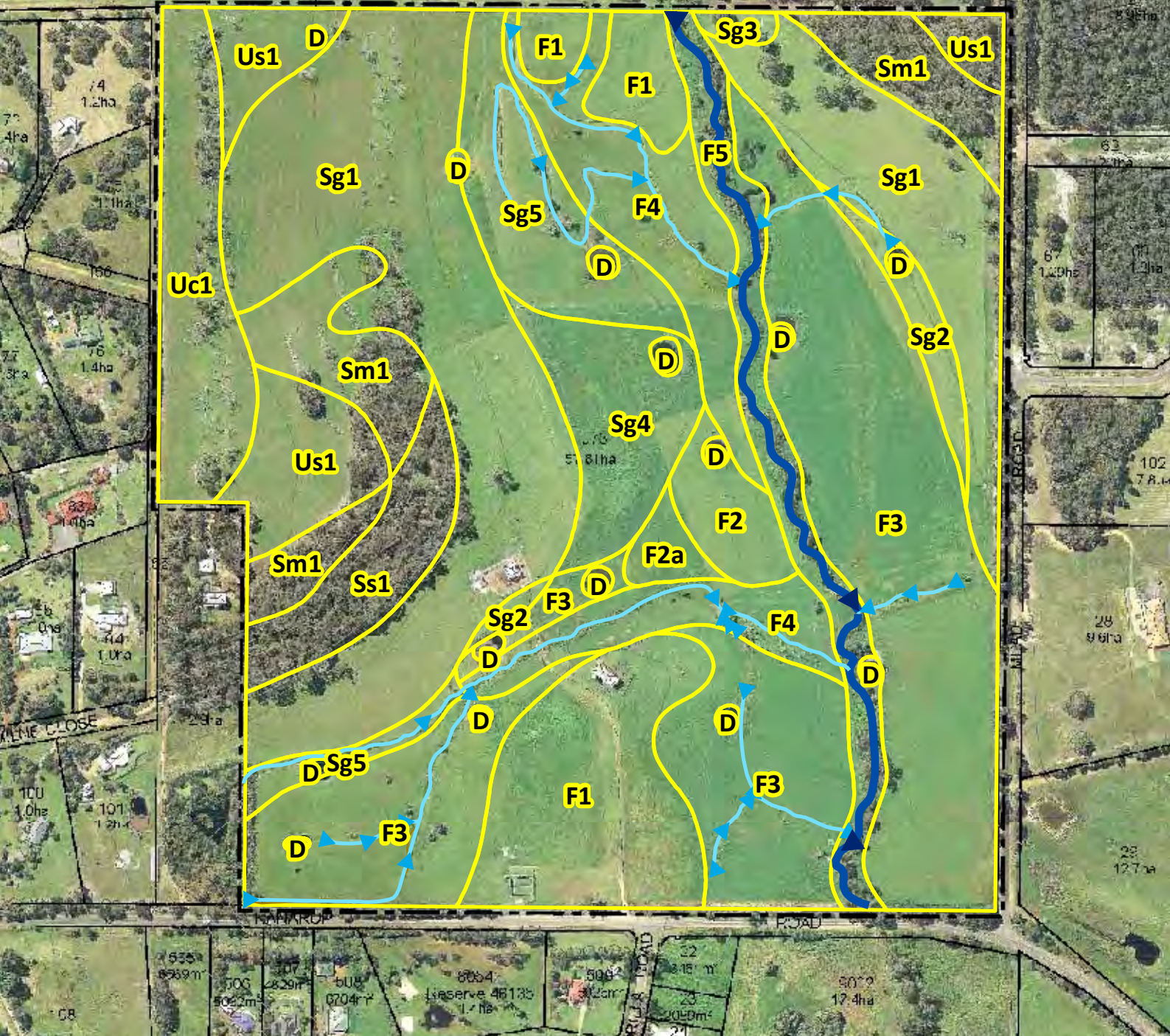
A detailed land capability assessment of the site has been carried out by Land Assessment Pty Ltd and is attached in Appendix A.

Soil and landform conditions were surveyed in general accordance with the methodology outlined in DAFWA publications (van Gool et al 2005, Wells and King 1989). Some 25 soil test pits were excavated using a hand auger and a further 12 pits using a backhoe. Holes were dug to 2 metre depth where possible. Depth to groundwater was recorded where the water table (perched or otherwise) was encountered within any of the test pits. Subsoil sampling for PRI (Phosphorous Retention Index) analysis was also undertaken at a number of sites.

A description of the identified land units and land capability assessment are shown on Figures 4 and 5 overleaf.

Key findings from the assessment include:

- Depth to groundwater will not be a limiting factor for unsewered rural residential development within most of the slopes and upland areas. Depth to groundwater within the lower foot slopes and valley floor will however affect the type of on-site effluent disposal system, the amount of required soil fill material and, in some cases, preclude unsewered development.
- Given the sandy nature of the soils, it is recommended intensive agricultural pursuits, such as piggeries and horticultural operations, not be permitted in the area. Appropriate provisions are required to minimise the export of nutrients from on-site effluent disposal systems and livestock excrement.
- The use of Health Department approved alternative effluent disposal systems that have a phosphate removing capability is recommended.





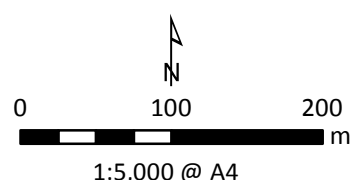
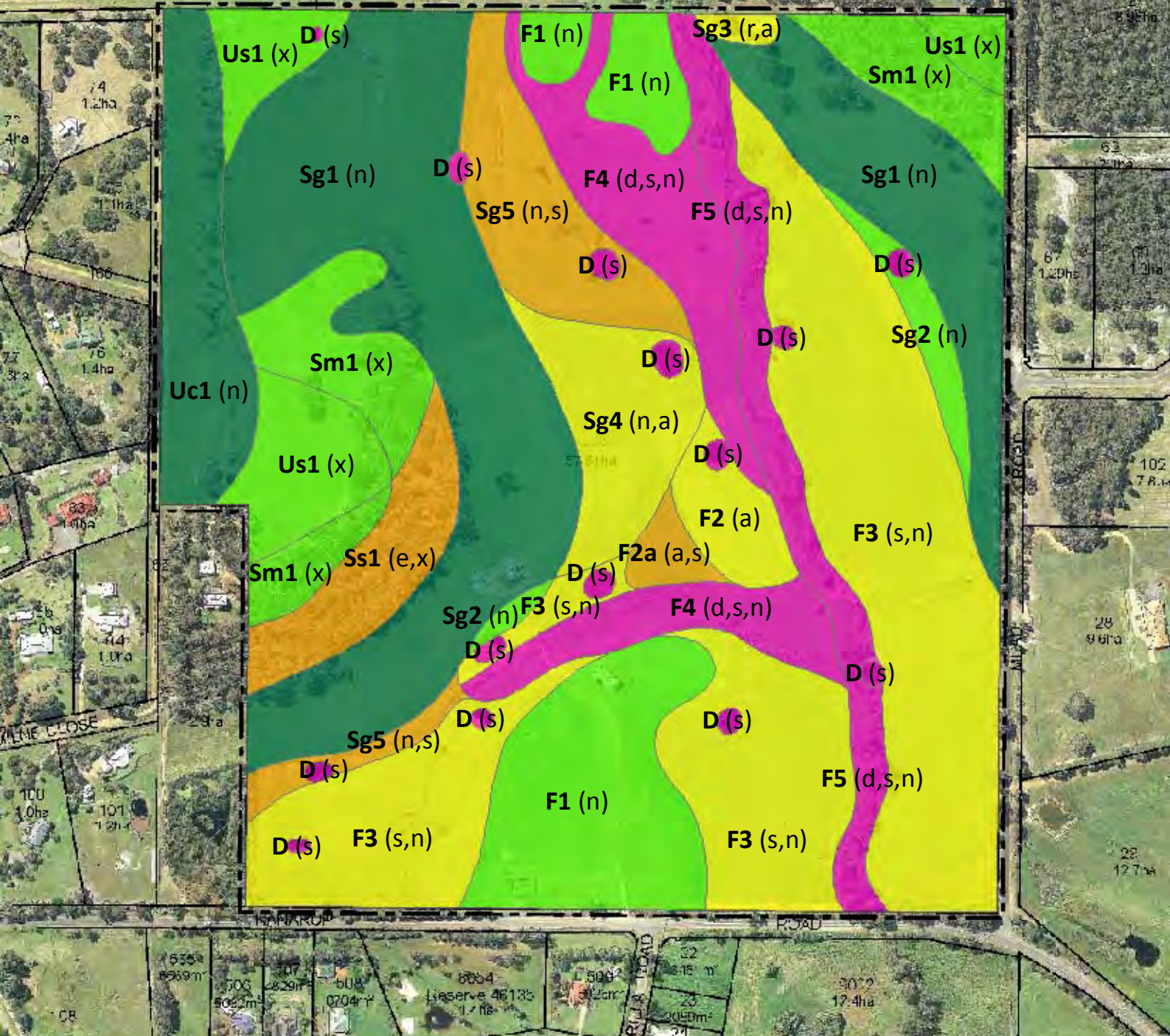
Upland terrain	Uc1 Crest; pale deep sands. Us1 Upper slopes (< 5% gradient); pale shallow sand over laterite.
Valley slopes	Ss1 Moderately steep (15 – 25%); shallow gravels or sand; surface laterite. Sm1 Moderate gradient (10-15%); shallow gravels or sand; surface laterite. Sg Gentle gradients (3 – 10%). Sg1 Pale deep sands; well drained. Sg2 Grey to yellow brown deep sands over clay; well drained. Sg3 Shallow sandy duplex soil; common granite outcrop. Sg4 Grey sandy duplex soil; humic pan over subsoil clay; imperfectly drained. Sg5 Semi wet soils (grey deep sands); imperfectly drained.
Valley floor (flats with < 3% gradient)	F1 Pale deep sands; moderately well drained F2 Grey sandy duplex soils; imperfectly drained. F2a Semi wet soils (sandy duplex); imperfect to poorly drained. F3 Semi wet soils (grey sand over humic pan or clay); imperfect to poorly drained. F4 Semi wet soils (grey sand over humic pan or clay); poorly drained. F5 Watercourse and immediate margins.
Drainage Features	D Dams or Soaks  Drainage channel (excavated)  Watercourse (seasonal)

Figure 4:
Land Units





Land Capability

- Fair to High - Minor Limitations
- Fair - Moderate Limitations
- Fair to Low - Moderate to Significant Limitations
- Low - Significant Limitations
- Very Low- Severe Limitations

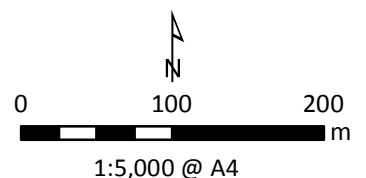
Land Units

Labels in bold
 Descriptions in Figure 4

Limitations

Labels in brackets
 a soil absorption ability (depth to clay)
 d drainage (stream pollution risk)
 e erosion risk
 n nutrient retention (poor)
 r rock outcrop (granite)
 s seepage and waterlogging
 x excavation difficulties (shallow depth to laterite)

Figure 5:
Land Capability Assessment for Rural-Residential Development



- Given the susceptibility to nutrient loss (and wind erosion) of most soils, it is recommended the keeping of live stock not be permitted without specific approval of Council. It is suggested that the keeping of livestock generally be restricted to the larger lots on the valley floor rather than the smaller 1ha sized lots on the sandy slopes and upland areas.
- Some rationalisation of the shallow open drains on the valley floor that have been formed to reduce water logging and improve the agricultural capability of the land is recommended in order to reduce their potential to act as a conduit for the movement of nutrients into the creek.
- Visual Impacts from Nanarup Road can be minimised by enhancing roadside vegetation, by protecting hill slope remnant vegetation and use of appropriate colours and materials for proposed buildings.
- Protection and enhancement of riparian vegetation along the margins of Johnson Creek is recommended in order to minimise nutrient loss and reduce potential erosion.
- Development within areas of very low capability (units F4, F5 & D) is not recommended.
- Larger lots are recommended in valley floor land units (F1, F2 and F3) and foot slopes (Sg3, Sg4 and Sg5) to accommodate future residences, their on-site effluent disposal systems (alternative, nutrient retentive systems) as well as providing for;
 - A 30m minimum setback from the creek.
 - A 6m minimum setback from the excavated drainage channels.
 - A 30m setback from any dam which is to be retained and available for livestock watering; and
 - An appropriate level of fill material to enable adequate separation from estimated highest water table levels.

5. SERVICES

5.1 Roads

Lot 973 fronts Nanarup Road and Mead Road, both of which have been developed to a bitumen standard.

Connection is also possible to the west via an extension of Viscount Heights which forms part of the Sheringa Park Estate. Subject to Lot 1 Nanarup Road being developed in the south west corner, a further connection via Milne Close may also be possible. Provision should at least be made for emergency access/egress purposes. A main access off Nanarup Road in the vicinity of the existing access is required with Viscount Heights providing the main secondary means of access and egress. Any restriction on access to and from Nanarup Road would result in all the traffic to the proposed development being drawn through the Sheringa Park Estate. While planning of the Estate has provided for connectivity through the subject land, the amenity of the Estate would be affected if the traffic was directed through the Estate without the main access being from Nanarup Road.

5.2 Scheme Water

Sheringa Park Estate, Nanarup Heights and the subject land are connected to scheme water. A reticulated water supply runs along Nanarup Road and Mead Road.

5.3 Power

The subject land is connected to the power supply in the area which can be extended to service the proposed development. The power lines will be placed underground within proposed road reserves in accordance with current policy.

5.4 Effluent Disposal

As scheme sewer is not available to service the area and cannot economically be provided, effluent disposal will be by way of on-site effluent disposal units. The type of disposal units will depend on the nature of the land which varies across the property and has been considered in the capability assessment undertaken by Land Assessment Pty Ltd.

5.5 Stormwater Management

As it is proposed that all development will generally be located within the well drained higher capability land, i.e. units Uc1, SG1, SG2 and F1, it is considered that the management of erosion and stormwater can easily be achieved with standard engineering and land practices. This includes;

- use of rainwater tanks to collect stormwater from rooves;
- use of soak wells;
- alignment of roads and driveways along contours where possible and use of open drainage swales where practical;
- kerbing and piping of stormwater on steeper sections of roads;
- use of detention and soakage basins along with drainage easements to manage stormwater from roads;
- stabilisation and revegetation of disturbed areas;
- revegetation of the drainage line.

A detailed stormwater management plan will be required at subdivision stage of development to ensure all these initiatives are brought together into an effective and sustainable plan. The large lot sizes ensure that there is ample room to accommodate the necessary drainage infrastructure.

5.6 Access to Facilities

The subject land is conveniently located in relation to a range of facilities which include;

- The Great Southern Grammar School, located one kilometre to the east.
- The Finders Park Primary School, located 6km to the south.
- The Lower King Pre-Primary School Centre, located 3.5km to the south west.
- The Lower King Liquor and General Store, located 1.5km to the west.
- The Bayonet Head Neighbourhood Shopping Centre, located 6km to the south.
- The Kalgan Progress Association Hall, located 3.5km to the east.

5.7 Fire Safety

The majority of Lot 973 (over 90%), has been cleared for pasture and is predominantly flat or has slopes of less than 10°. This area has a “Low” bushfire hazard assessment. Two areas of remnant vegetation are classed as ‘B Woodland’ and have a “Moderate” fire hazard rating.

Development down slope of the remnant vegetation in the central west area of the property will require a building setback of between 20 to 29 metres with building construction to a BAL 19 specification. Lots capable of providing building setbacks between 29 to 100 metres from the up slope vegetation require construction to a BAL 12.5 level.

Development up slope of the vegetation (Lot 8) will require construction to BAL 29 with a 30 metre setback or BAL 19 with a 40 metres setback.

In the north east corner of the property, development down slope of the vegetation will require a building setback of between 20 to 29 metres with a BAL 19 level of construction.

Development on the balance of the property, where separation distances range between 50 - 100 metres from vegetation, will be required to be constructed to BAL 12.5.

A preliminary Fire Management Plan is attached in Appendix ‘B’ and provides further detail and explanation. A detailed Fire Management Plan will be required at the subdivision stage of development.

5.8 Visual Impact

As Nanarup Road is an important tourist route leading out to Gull Rock, Nanarup Beach and Two Peoples Bay, the visual impact of more intensive development on Lot 973 requires consideration.

While vegetation within the road reserve partially screens the property, the broad river flats associated with Johnson Creek, provide a distinctive view corridor running to the north, framed by a prominent vegetated knoll along the central western boundary and to a lesser extent in the north east corner of the site.

Development of the site proposes to retain these two distinctive elements. A broad flat corridor on either side of the creek will be retained within two large lots with dwellings located further upslope. Remnant vegetation on the elevated portions of the property will be retained so that no development is visible on the skyline. Smaller lots will be predominantly clustered below the vegetation on the mid slopes. Development on the flatter elevated land along the central western and northwest corner of the property will be screened from Nanarup road by the existing remnant vegetation.

Additional planting is also proposed along Nanarup Road, together with revegetation of Johnson Creek and a distinctive avenue of street trees along the main access into the property from Nanarup Road. Landscaping associated with new dwellings on the property is also nominated on the Subdivision Guide Plan and provisions requiring appropriate materials and colours to be used are incorporated in the Scheme Provisions.

5.9 Impact on Adjacent Land Uses

Lot 973 is surrounded by rural living areas to the west, east and south. Rezoning and development for rural residential purposes will be compatible with the surrounding land use and can effectively reduce potential conflict associated with general agricultural activities in close proximity to rural living areas.

The only exception is along the northern boundary where the property to the north will remain within the General Agriculture zone. Lots have been designed so that they back onto the northern boundary in order to maximise the separation of residences from the 'General Agriculture' zone. The location of remnant vegetation along much of the boundary of the adjoining property, supplemented by revegetation on the subject land will also help to provide an effective buffer which will minimise potential conflict. Notification on titles of the lots abutting the northern boundary advising owners of the potential impact of rural pursuits is recommended.

6. AVAILABILITY OF RURAL LIVING LAND

The subject land is located centrally within a prime lifestyle area, located between the King River to the west and the Kalgan River to the east. Oyster harbour is also located immediately to the south.

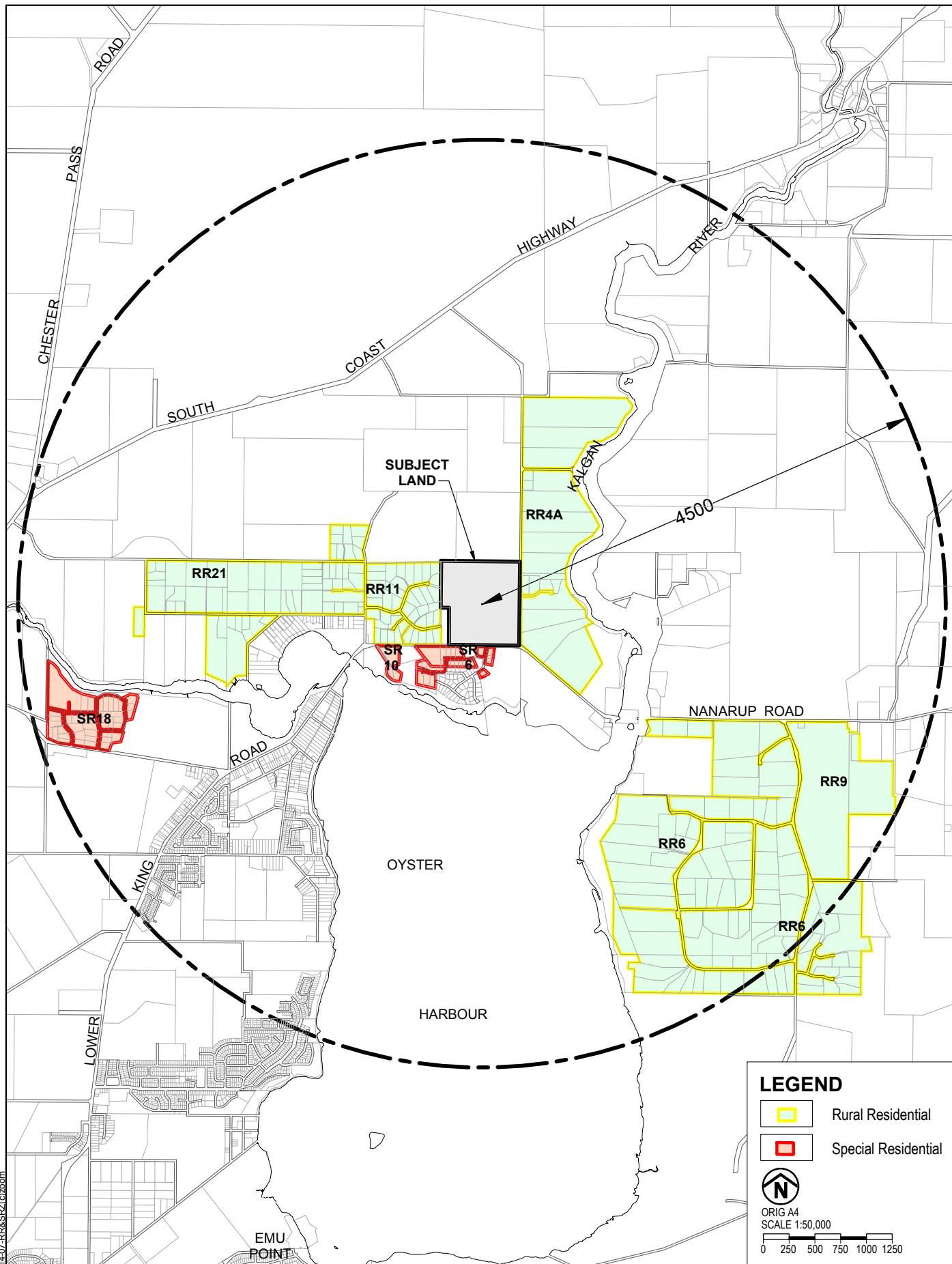
Within this north-eastern fringe of the City, there are 5 rural residential areas and 3 special rural areas within approximately 4.5km of the subject land.

Apart from RR 9 Gull Rock Road, which has yet to proceed to development, all of the areas are developed. Of the total 356 lots created, 87% of them have been developed. The 13% remaining undeveloped consists of 45 lots and only a few remain for sale. Refer table below and plan overleaf.

Table 1. Rural Living Land Availability (as at July 2014)

Area	Lots Currently Available for Development	Developed Lots	Vacant Lots	% Developed
RR 4A	18	13	5	72%
RR 6	97	90	7	93%
RR 9	Undeveloped	0	74 Lot Potential	0%
RR 11	41	41	0	100%
RR 21	63	58	5	92%
SR 6 & 10	85	76	9	89%
SR 18	52	33	19	65%
	356	311	45	87%

While RR 9 has gained subdivision approval, and has the potential to create an additional 74 lots, provision of scheme water is a constraint, requiring elevated water tanks to be provided and an extension of the main supply across the Kalgan River. Given the age of the proponent it is not clear whether the development will proceed within the immediate future.



The Sheringa Park Estate immediately to the west of the subject land has been fully developed and the Special Residential land on the opposite side of Nanarup Road is 89% developed, with only 9 vacant lots. To the east, the Mead Road rural residential area only has 5 vacant lots remaining, and while some remaining lots have further development potential, they are constrained by extensive areas of remnant vegetation and areas of low lying land subject to winter inundation.

Given the extent to which rural living areas have been developed in the north eastern fringe of the City, it is considered that there is scope for the subject land to be rezoned so that consideration can be given to subdivision and creation of additional lots to meet the demonstrated demand for the area.

As the timeline for completion of the rezoning and bringing the lots onto the market is likely to take up to 5 years, the lot supply in the area will continue to be reduced.

It should be borne in mind that there are many variables affecting the demand and supply of land. As economic conditions, servicing requirements and personal circumstances change over time, there are many reasons why land and individual lots may be withheld from development. Overall however, it is considered there is no over supply of lots in the north east fringe of the city, and even with the inclusion of RR 9, which has yet to be developed, 72% of the available lots have already been developed.

7. LAND SUITABILITY

The suitability of Lot 973 Nanarup Road for Rural Residential development has already been identified within ALPS which designates the property for that purpose. This designation is justified for a number of reasons, including;

- The land capability assessment does not identify the land as high quality or priority agricultural land.
- Intensive farming of the property is not recommended given the sandy soils over much of the property and the potential for export of nutrients into the creek and nearby Oyster harbour.
- The property has rural living lots to the east, west and south and its retention as agricultural land creates a potential conflict with the surrounding uses, particularly as the size of the property restricts the ability to incorporate appropriate buffers.
- The site is not located within an area identified for future fully serviced urban development. Its location to the east of King River suggests it will not be capable of being economically deep sewered in the foreseeable future.
- It is located in an area well suited for lifestyle lots and effectively represents a rounding off of such development.
- As noted in section 4.5 above, the property has ready access to schools, shops and community facilities.
- While the property has some low lying poorly drained land along the river flats, development can predominantly be accommodated on the more elevated land which is well drained and has a fair to high capability for rural residential development and the associated on-site effluent disposal.

8. AMENDMENT PROPOSAL

In accordance with ALPS, it is proposed to rezone Lot 973 Nanarup Road from the 'General Agriculture' zone to "Rural Residential" zone. As the adjoining lots in the south west corner, Lot 1, is a de-facto rural residential lot, it has also been included in the rezoning proposal at the request of the City of Albany.

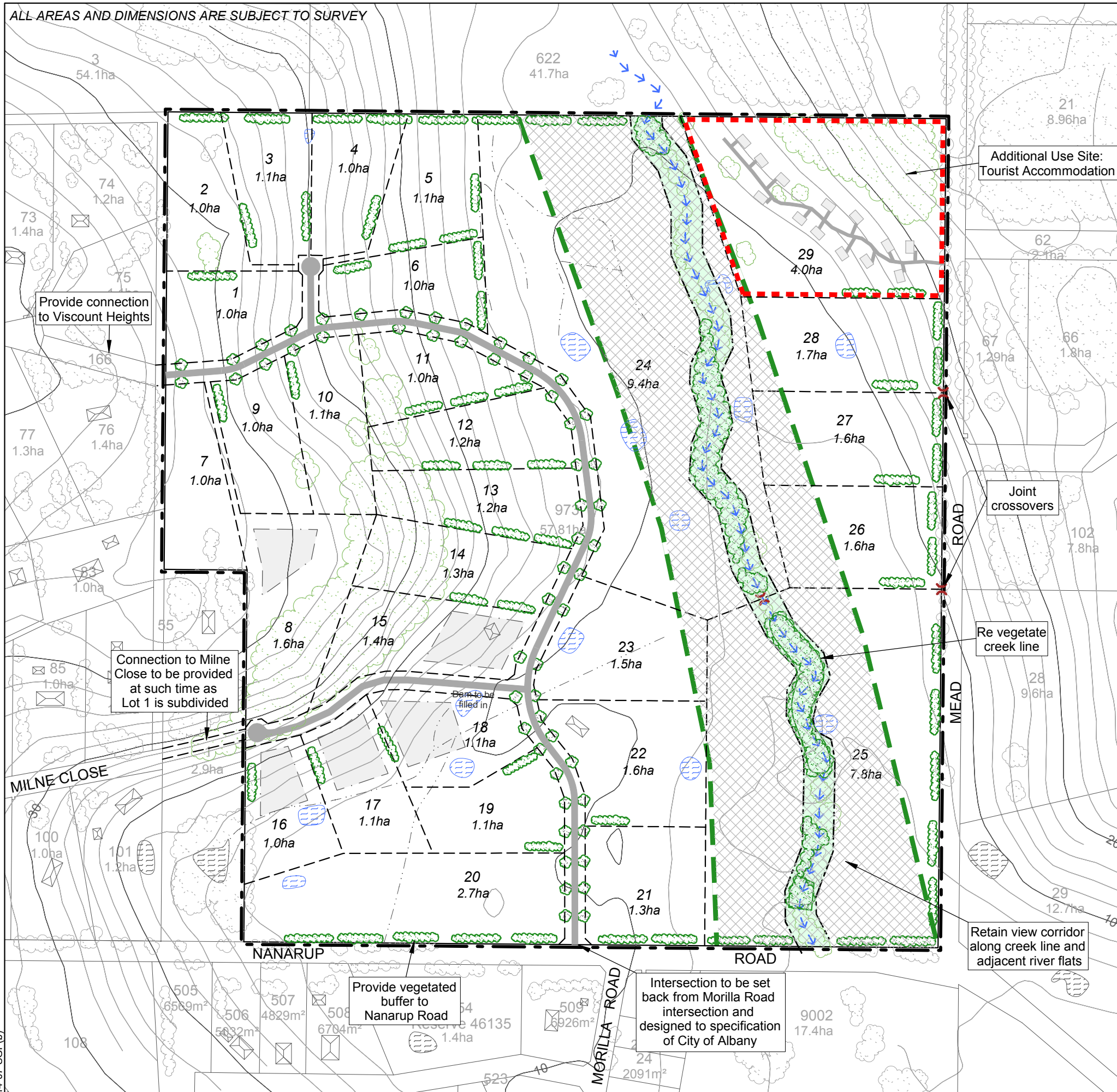
Key elements of the proposal include:

- While ALPS only incorporates the western portion of Lot 973 within the rural residential designation, no doubt due to the poorer land capability associated with Johnson Creek, which runs north and south through the property, it is proposed to incorporate the whole site within the Rural Residential zoning for the following reasons;
 - The land capability on the eastern side of the creek is capable of accommodating development, particularly towards the north east corner which also has attractive elevated views to Oyster harbour.
 - Incorporation of Johnson Creek and associated river flats will facilitate on going management of this significant feature which drains directly into Oyster harbour. This will include revegetation of the area on either side of the creek, fencing and weed management. Management of land use within the river flats also requires careful consideration given concerns regarding the export of nutrients into the harbour.
 - As rural residential development occupies the land on the eastern side of Mead Road, retention of the 'General Agriculture' zoning is questionable given the potential for conflict with rural residential development in close proximity on either side.
 - From a visual aspect, the retention of a rural corridor on either side of Johnson Creek can be retained with larger lots on the river flats and setbacks for buildings so that they are located on more elevated land.

SUBDIVISION GUIDE PLAN

Lot 973 Nanarup Road Lower King, City of Albany

ALL AREAS AND DIMENSIONS ARE SUBJECT TO SURVEY



LEGEND

- Subject Land
- Existing Lot Boundaries
- Proposed Lot Boundaries
- Existing Vegetation
- Proposed Vegetation
- Existing Buildings
- Existing Crossing
- Existing Dams
- Creek Line
- Creek Line Protection Area
- Drainage line
- View Corridor
- Development Exclusions Area
- Proposed Building Envelope
- Additional Uses Site
Tourist Accommodation

ORIG A3
SCALE 1:4000
0 20 40 60 80 100

- Access to the site is currently provided from Nanarup Road close to where Morilla Road intersects on the opposite side of the road. The water main from Two Peoples Bay runs along side the southern boundary of the property within the Nanarup Road reserve and has been lowered to facilitate access to the subject land.

Two other potential access points to the site would entail the extension of either or both of Viscount Heights and Milne Close which are located within the Sheringa Park rural residential estate to the west. Milne Close would also have to be extended through Lot 1 which is located adjacent to the south west corner of Lot 973.

It is proposed that the main access to the property be retained on Nanarup Road, subject to its relocation further to the west so that the minimum separation to the Morilla Road intersection of 40 metres can be achieved. This would enable the water main to be crossed as it is still below the level of Nanarup Road at this point.

Sight distances along Nanarup Road are also well in excess of minimum requirements with a distance of 380 metres to the east and 500 metres to the west.

A secondary access is proposed by extending Viscount Heights, utilising the ROW that has been provided for this purpose. This access way will benefit both the proposed development and Sheringa Park Estate by providing an alternative access and egress for both developments.

At such time as Lot 1 is subdivided, consideration can be given to a third point of access by linking the proposed development with Milne Close.

As only five lots are proposed with frontage to Mead Road, it is proposed that joint crossovers are used which will result in only three access points.

- Twenty nine lots are proposed ranging in size from a minimum of 1ha to 9.5ha. The smaller lots are clustered on the more elevated areas of the property where the land capability ratings are most suitable for development. In order to facilitate on-going management of the creek and retain the landscape qualities of the 'Rural' corridor, two large lots of 9.5ha and 7.8ha are proposed.

Both contain the creek so that they have access to both sides of the creek. Revegetation of the creek is proposed on both sides in order to minimise the potential for nutrients to be exported from surrounding properties into the waterway. A joint access way over the creek is proposed utilising an existing crossing point.

- In order to accommodate the additional development on the site while at the same time retaining a semi-rural aspect, strategically located revegetation is proposed. Existing vegetation along Nanarup Road needs to be consolidated together with revegetation along the main subdivisional road and individual house sites. Sheringa Park Estate is an example of how revegetation can transform a largely cleared site to create an attractively landscaped development. A vegetated buffer along the northern boundary will also help to minimise potential conflict with the rural use of land to the north.
- A 4ha lot is proposed in the north east corner of the property for short stay tourist accommodation. The elevated land, attractive views over Johnson Creek and through to Oyster Harbour, together with the remnant vegetation, provide an opportunity to provide an alternative land use to rural residential development. It is noted that Nanarup Road is a significant tourist route, providing access to attractions around King River, Oyster Harbour, the Kalgan River, Nanarup and Two Peoples Bay. It is recommended that up to twelve chalets could comfortably be accommodated on the site with appropriate setback from the remnant vegetation.
- In terms of future land use within the development, productive uses, particularly those that can contribute to the tourist industry are recommended. Uses such as bed and breakfast/farm stay, cottage industry, craft studios, public recreation and on the larger lots, rural pursuits (limited to existing cleared and pastured land only). Given the sandy soils, potential for export of nutrients and proximity to Oyster Harbour, intensive agriculture /horticulture is not recommended.

9. MANAGEMENT PROVISIONS

As the proposed development is effectively an extension of the Sheringa Park rural residential estate, it is logical to incorporate Lots 1 & 973 into Rural Residential Area RR 11 as set out in Schedule 14 – Rural Residential Zone of the City of Albany Local Planning Scheme No. 1.

A copy of the special provisions which apply to RR 11 is attached in Appendix C. It is considered these provisions are appropriate for the proposed development and provide for a range of uses such as Bed and Breakfast/Farmstay, Industry – Cottage, Public Recreation, Rural Pursuit and Restaurant.

10. CONCLUSION

Lot 973 and Lot 1 Nanarup Road are the last of the remaining lots on the northern side of Nanarup Road between the King River and Kalgan River which have not been zoned for rural residential purposes. Rezoning to the Rural Residential zone is a logical extension of the Sheringa Park Estate to the west and is considered a more compatible use than its retention in the 'General Agriculture' zone.

Detailed land capability assessment concludes that the land is not prime agricultural land and that its continued use for agricultural purposes could result in the export of nutrients into the nearby Oyster Harbour. On the other hand, nor is the land located within an area that is likely to be developed for fully serviced urban development. It is instead, ideally suited for the creation of lifestyle lots which are a significant attraction for people wishing to live in Albany, particularly in a location such as this which has views through to Oyster Harbour and access to both tourist attractions and general amenities.

Management provisions are recommended which will address key issues such as bush fire risk, visual amenity and retention of nutrients within the site. There is also an opportunity to provide for tourist orientated activity, as well as small scale productive uses which will contribute to the tourist attraction of the area.

An assessment of current availability of rural living lots in the north eastern fringe indicates that approximately 87% of currently available lots have been developed and that by the time this proposal creates additional lots, there is likely to be very little supply remaining.

In order for the proposal to proceed, Council's support to initiate the required scheme amendment is respectfully requested.

Appendix A

Land Capability Assessment

Land Assessment Pty Ltd

LAND CAPABILITY ASSESSMENT
- Rural Residential Development

Lot 973 Nanarup Road, Lower King
City of Albany

Prepared for

AYTON BAESJOU PLANNING

on behalf of

Mr G Clark

by

Land Assessment Pty Ltd



LA Report No 1402
27 April 2014

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1.0 INTRODUCTION

This report has been prepared for Ayton Baesjou Planning (on behalf of the landowner) as part of its submission to the City of Albany to initiate rezoning of Lot 973 Nanarup Road from 'Rural' to "Special Rural" and the subsequent subdivision to create lots of not less than a minimum 1 ha in size.

Lot 193 is 57.81 ha in area and is located on the northern side on Nanarup Road in the Lower King locality as shown in Figures 1a and 1b.

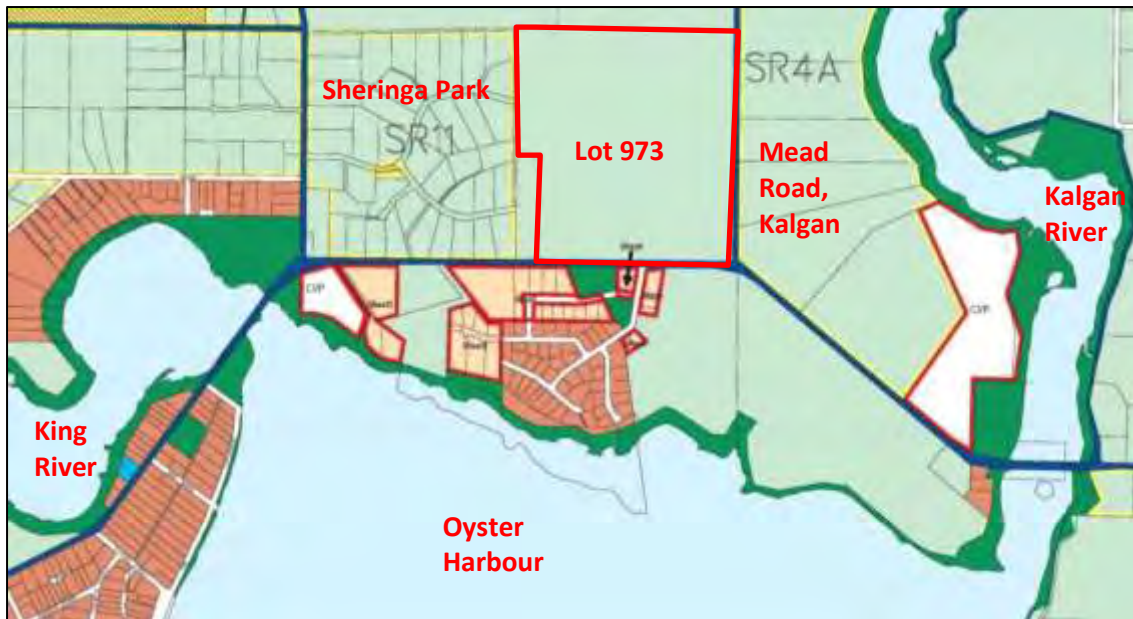
The major portion of Lot 193 has been identified within the Local Planning Strategy (City of Albany 2010) as being provisionally suitable for 'Rural-Residential' development. This is consistent with the current zoning of adjacent land to the east (Special Rural Zone 11 – Sheringa Park) and to the west (Special Rural Zone 4A – Mead Road, Kalgan). A lesser portion of Lot 193, roughly encompassing the watercourse and adjacent lower-lying terrain west of Mead Road, is shown as a 'General Agriculture' zone corridor extending southwards to Oyster Harbor.

Under Town Planning Scheme No 3 (City of Albany 1980) 'Special Rural' zones are a form of rural-residential development *to provide areas where members of the community who desire to live in a rural atmosphere may engage in a variety of activities which might include hobby farming, horse breeding, rural residential retreats and intensive agriculture if it is considered that such use is consistent with the preservation of the rural landscape and amenity.*

A proposed plan for subdivision needs to demonstrate that landform, vegetation and physical constraints have been taken into account in terms of the size and shape of proposed lots as well as road layout. This report seeks to address those requirements. It is based on a site inspection and soil survey conducted by Martin Wells of Land Assessment Pty Ltd during the period from the 17th to the 20th of March 2014, and an associated review of land resource and environmental planning and policy documents.

The capability of the land for Rural – Residential (Special Rural) development (including on-site effluent disposal) has been assessed in general accordance with the methodology outlined in Department of Agriculture and Food publications (van Gool et al 2005, Wells and King 1989) and with due consideration of the requirements of the Draft Country Sewerage Policy (Government of Western Australia 1999).

FIGURE 1a: LOCATION PLAN (over scheme zoning map)



Source: Adapted from City of Albany Town Planning Scheme No 3 Map 19 of 33.

FIGURE 1b: LOCATION PLAN (over aerial image)



Source: Ayton Baesjou Planning

2.0 NATURE AND CAPABILITY OF THE LAND

2.1 Hydrology

The subject land is part of the catchment area to Oyster Harbour. This is a regionally significant estuary threatened by eutrophication due to excessive nutrient input mainly from agricultural areas in the catchment (Water and Rivers Commission 1997).

The topography of the lower portion of the Oyster Harbour catchment area is dominated by a gently undulating plain sloping towards the coast. This area is incised by the King and Kalgan Rivers as well as by numerous smaller drainage lines. The southern and eastern portions of Lot 973 contain part of one such drainage line, Johnston Creek.

2.2 Geology

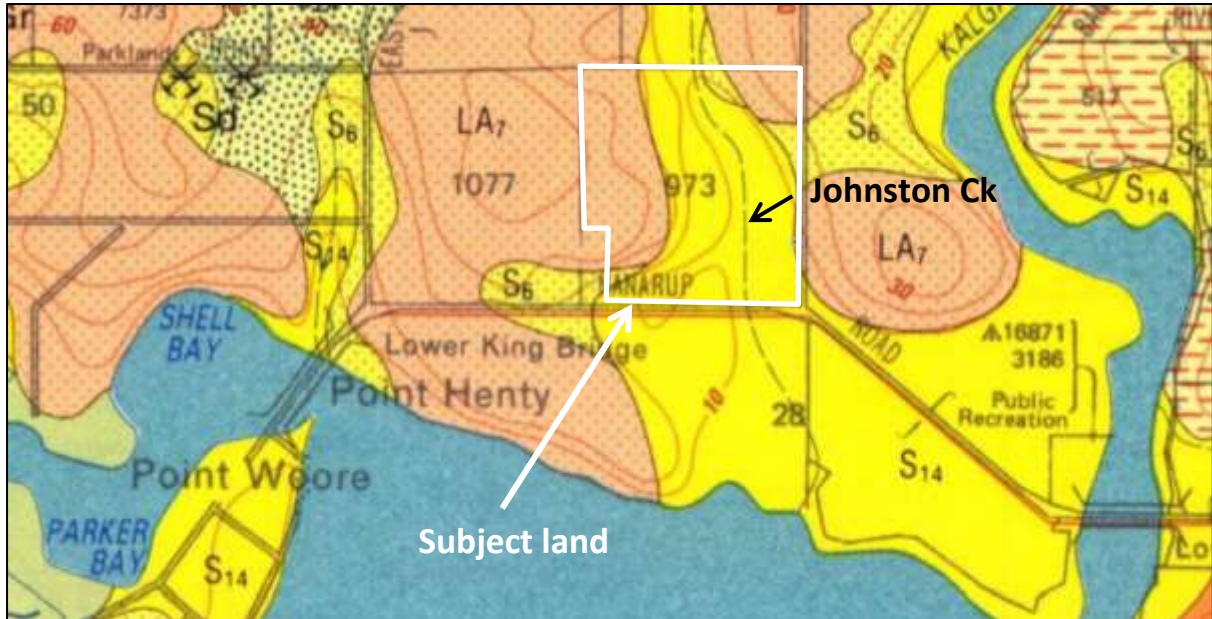
Geologically the area is underlain by Proterozoic rocks including granites and metamorphic gneiss which are exposed as hills along the coastal and near coastal fringe (Muhling and Brakel 1985). Tertiary marine sediments (Plantagenet group) lie above much of this basement rock, and a mantle of Cainozoic laterite extends over much of the gently undulating plain with Quaternary sand deposits in the valleys.

Environmental geology mapping, produced by the Geological Survey of Western Australia (Gozzard 1989), contains interpretive information for land use planning purposes. Figure 2 shows the geology of the subject area with Lot 493 encompassing areas of Cainozoic laterite (LA₇) in upland terrain to the west and north east, as well as Quaternary alluvium (S₁₄) associated with Johnston Creek in the valley floor.

Gozzard (1989) describes the Cainozoic laterite as being *massive, friable to strongly indurated, vesicular, some sand content, and being developed on siltstone of the Plantagenet Group. It provides variable foundation conditions and is usually excavated by blasting.* These factors are described as providing *possible problems associated with the use of the land for septic tanks* (i.e. excavation difficulties and limited soil material for absorption and purification of liquid effluent). The Quaternary alluvium is described as *Sand – white to pale grey, fine to medium, occasionally coarse, angular to subangular quartz, little fines, moderately sorted.* Although considered well drained, it is also described as having a *high watertable and being prone to flooding in part**.

* City of Albany Policy Manual (portion – *Development in Flood Prone Areas*) identifies areas adjacent to Oyster Harbour, but not affecting Lot 973.

FIGURE 2: GEOLOGY

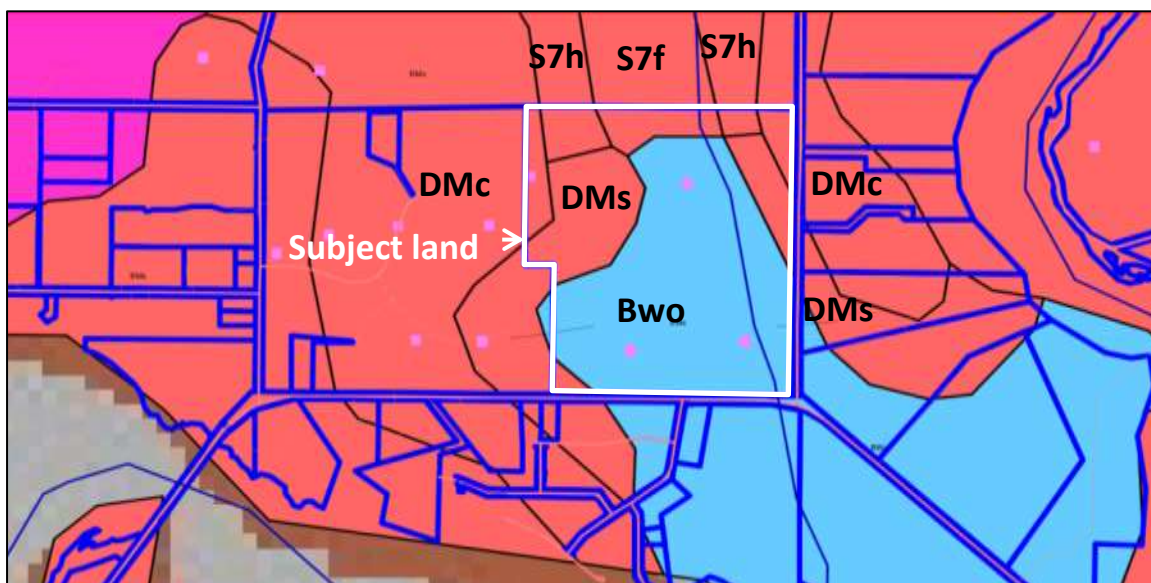


Source: Adapted from Environmental Geology Mapping Albany Sheet (Gozzard 1989).

2.3 Soil - Landscapes

A long history of weathering of the geological parent materials has resulted in a complex variety of soils and landforms as identified by CSIRO (Churchward et al 1988) and subsequently forming part of the Department of Agriculture and Food (DAFWA) soil-landscape mapping database from which broad-scale assessments of land use capability have been made. Figure 3 shows the relevant area.

FIGURE 3: SOIL LANDSCAPE MAPPING



Source: DAFWA (<http://spatial.agric.wa.gov.au/slip>) based on Churchward et al (1988).

Legend to Figure 3.

King (Kg) Soil Landscape System (Reddish brown colour) - *Dissected siltstone and sandstone terrain, on the southern edge of the Albany Sandplain Zone, with shallow gravels, sandy gravels, grey sandy duplex soils, and pale deep sands.*

DM -Dempster Subsystem - Ridges formed by dissection of lateritic plateau (upland plain)

DMc- Dempster crest phase - Sands and laterite on elongate crests.

DMs- Dempster slope phase - Sands and gravels on smooth slopes.

S7 – Minor Valley

S7h - slope phase – Deep sands and iron podzols on slopes.

S7f – floor phase – Swampy valley floor.

Torbay (Tb) Soil Landscape System (Blue colour) - *Narrow swampy coastal plain, on the southern edge of the Albany sandplain Zone. Non-saline wet soils and pale deep sands.*

Bw – Blackwater Subsystem - Plains with hummocks, linear dunes, and swamps

Bwo - Shallow gleyed duplex soils.

DAFWA have produced land capability interpretations based on this broad-scale mapping. Due to the inevitable degree of variability of landform and soil conditions within any broad-scale mapping unit, the DAFWA assessments utilise the concept of 'proportional capability classes'. Instead of assigning a single specific (high, moderate or low) capability rating to all areas of a particular map unit, a proportional assessment is used. This expresses the capability more conservatively as a range (e.g. 50-70%) of the total area of a map unit is expected to contain land of a certain capability rating. Table 1 shows the assessment results for the relevant broad-scale map units.

Essentially this broad interpretation indicates the upland (Dempster subsystem) areas are of moderate capability for un-sewered rural-residential development while the lower-lying terrain (mainly Blackwater subsystem) is of lower capability.

In relation to agricultural activity, all portions of Lot 973 are considered under the DAFWA assessment to be of low capability for cropping, however all but the lower capability Blackwater plain (unit Bwo) is of moderate capability for livestock grazing. The DAFWA assessment indicates valley slopes, DMs and S7h, could potentially be considered good horticultural land, although there is also the need to consider water supply for irrigation, and the identification of this portion of the subject land within the endorsed Local Planning Strategy (City of Albany 2010) as being provisionally suitable for non-agricultural land-use.

TABLE 1. BROAD-SCALE LAND CAPABILITY RATINGS

Map Unit	Perennial Horticulture (incl vines)	Annual Horticulture (vegetables)	Grazing	Cropping	Septic Tanks
Dempster Subsystem					
DMc	B1	B1	B2	C1	B2
Dms	A2	B1	B1	C2	B1
Minor Valley					
S7h	A2	B1	B1	C2	C2
S7f	C1	B2	B2	C2	C2
Blackwater Subsystem					
Bwo	C2	C2	C1	C2	C2

A1 = >70% has high capability; A2 = 50-70% high capability; B1 = >70% moderate to high capability; B2 = 50-70% moderate to high capability; C1= 50-70% low capability; and C2 = >70% low capability.

2.4 Topography and Land Use

Lot 973 encompasses portions of flat to gently sloping upland gravelly lateritic terrain to the west and north east, as well as the southern portion of a shallowly incised valley formed by Johnston Creek.

The sloping terrain between the valley floor and upland gravelly areas is predominantly sandy and gently inclined. The slope gradients are mostly less than 10%, apart from a patch of moderate to moderately steep terrain within the central west, most of which remains under remnant vegetation.

The valley floor is relatively narrow (< 200 m) at the northern end of the property but heading southwards it extends out into a broad alluvial plain fronting the full extent of the boundary with Nanarup Road. The valley floor is traversed in places by pen drains that have been excavated to reduce the risk of waterlogging on adjacent flats.

Lot 973 ranges in elevation from approximately 44 m AHD along the central western boundary with the adjacent Sheringa Park development, to a low point of around 5 m AHD within the valley floor near the intersection of Mead and Nanarup Roads.

The property is currently used for livestock (sheep) grazing and, apart from fencing and twelve functioning soakage dams (for stock watering), existing infrastructure is limited to some small stockyards, a machinery shed, and an unused residence.

2.5 Vegetation and Conservation Values

As shown in Figure 1b and site photographs, most of the property has been cleared to enable agricultural land use. Areas of exception include the remnant pockets of jarrah – marri - sheoak forest within the moderate to moderately steep slopes in the central western portion, and the moderate slopes in the north eastern corner, as well as some *Taxandria*, *Melaleuca* and *Agonis* species fringing the fenced creekline.

The condition of vegetation fringing the lower portion of Johnston Creek was assessed as part of the *Survey of the River Foreshores in the Oyster Harbour Catchment* (Water and Rivers Commission 1997) and determined to be predominantly grade C1 (Erosion prone and with instances of the weed *Taylorina – Psoralea pinnata*) within Lot 973 in 1997.

The Albany Regional Vegetation Survey, ARVS (Sandiford and Barrett 2010) identifies the major remnant areas as part of its vegetation unit 12 (Jarrah/Marri/Sheoak Laterite Forest). The small area of dense wetland vegetation within adjacent Lot 1 (just west of Lot 973 and contributing drainage water into the subject land) is part of ARVS vegetation unit 59 (*Taxandria juniperina* Closed Forest) and the southern portion of the fringing creekline vegetation is part of ARVS vegetation unit 38 (*Taxandria parviceps* Transitional Shrubland).

Although the ARVS results indicate that vegetation unit 12 (Jarrah/Marri/Sheoak Laterite Forest) that is present within Lot 973 has less than 10% of its ARVS extent occurring in conservation reserves, Sandiford and Barrett (2010) state that care needs to be used in interpreting this reservation status data. This is because significant areas of conservation reserve occur within the ARVS context area (a roughly 35 km radius of Albany encompassing about 209,000 ha) but outside the actual survey area (of around 125,400 ha).

Taking known vegetation occurrences in these reserves into account, none of the vegetation units within, or immediately adjacent to, the subject land can be considered poorly reserved on a local scale.

Notwithstanding the above, statements within the Local Planning Strategy (City of Albany 2010) and provisions under the Town Planning Scheme relating to adjacent developments (SRZs 4A and 11) indicate that retention of remnant vegetation is an important planning objective in all Special Rural Zones. Future clearing and location of building envelopes within vegetated portions of existing Lot 973 is therefore unlikely to be supported. Grazing associated with any hobby farming activity is also likely to be limited to areas of existing cleared land.

2.6 Land Unit Mapping

Given the broad scale of soil-landscape mapping depicted in Figure 3, some 'on-ground' variation can be expected in soil and landform conditions. More detailed survey and mapping of the site conditions was therefore undertaken as a basis for a 'property-specific' consideration of the capability of the land.

Soil and landform conditions within Lot 973 were surveyed in general accordance with the methodology outlined in Department of Agriculture and Food publications (van Gool et al 2005, Wells and King 1989). This involved examination of aerial photos followed by the field survey work during March 17 - 20. The soils were examined at twenty five preliminary soil hand auger observation sites (1 - 25) followed by a further twelve pit sites (A – L) excavated by backhoe to approximately 2 m depth where possible. Appendix A includes an aerial image with site locations and a results summary.

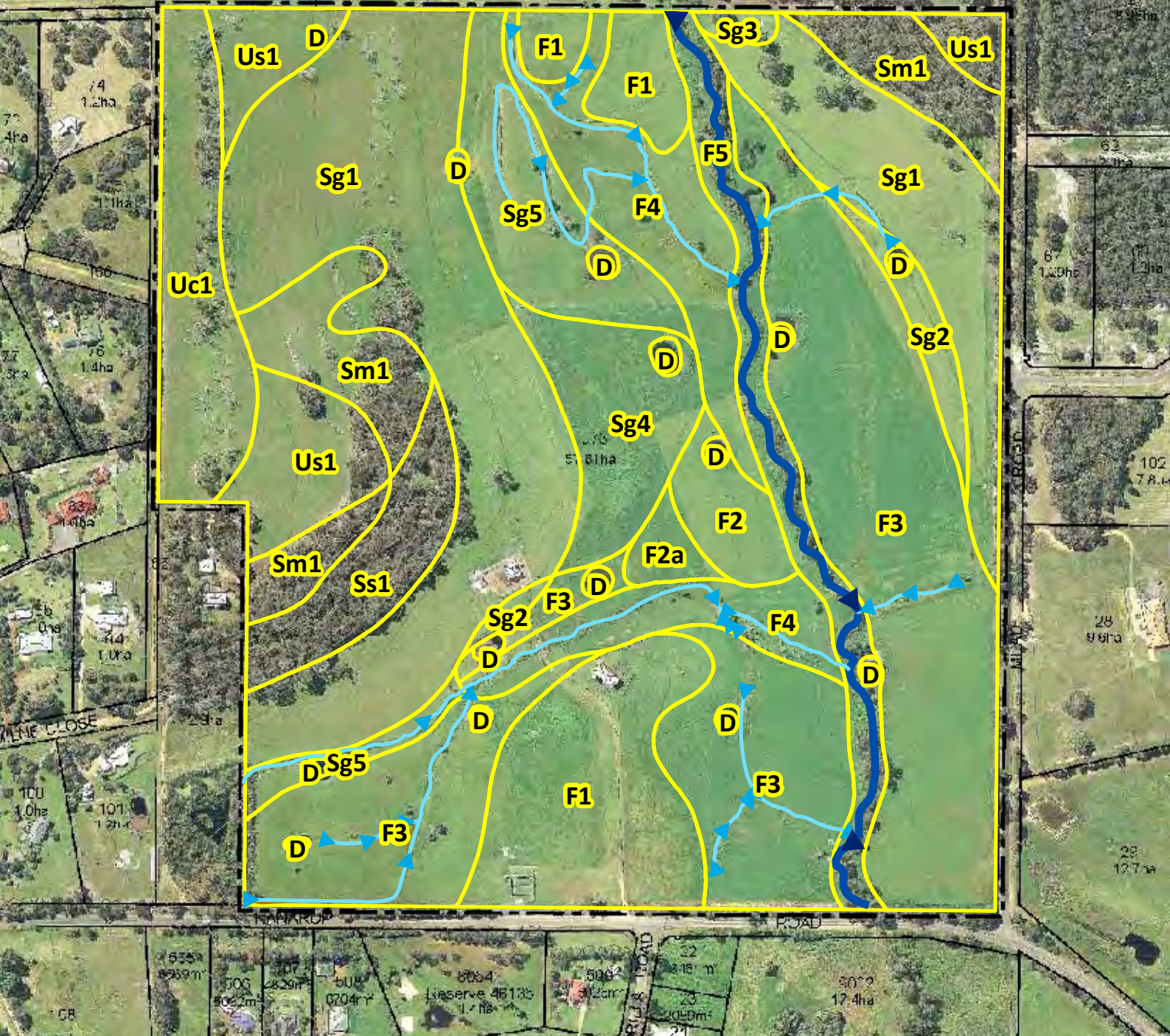
Sites, particularly for the excavated pits, were located to enable description of representative areas of each slope class and aerial photo pattern. Site positions were recorded using a hand-held GPS unit.

The soils were classified in accordance with the WA Soil Group nomenclature (Schoknecht 2002) and slope gradients were measured using a hand-held inclinometer correlated with available 2 m interval contour mapping.

Depth to groundwater was recorded where the watertable (perched or otherwise) was encountered within any of the excavated pits. There were no bores within Lot 973 from which additional depth to groundwater data might have been obtained.

The soil pit descriptions in Appendix B, as well as the geology and topography show that depth to groundwater will not be a limiting factor for un-sewered 'Special Rural' development within most of the slopes and upland areas of Lot 973. Depth to groundwater will however affect the type of on-site effluent disposal system, the amount of required soil fill material and, in some cases, preclude un-sewered development within the lower footslopes and valley floor portions of Lot 973.

The results of the more-detailed mapping of land units (soil-landform types) are shown overleaf in Figure 4. The sixteen delineated land units are described in the legend, and further appreciation of site conditions can be gained by reference to the photographs following Figure 4, as well as those accompanying the soil pit descriptions in Appendix B.





Upland terrain	Uc1 Crest; pale deep sands. Us1 Upper slopes (< 5% gradient); pale shallow sand over laterite.
Valley slopes	Ss1 Moderately steep (15 – 25%); shallow gravels or sand; surface laterite. Sm1 Moderate gradient (10-15%); shallow gravels or sand; surface laterite. Sg Gentle gradients (3 – 10%). Sg1 Pale deep sands; well drained. Sg2 Grey to yellow brown deep sands over clay; well drained. Sg3 Shallow sandy duplex soil; common granite outcrop. Sg4 Grey sandy duplex soil; humic pan over subsoil clay; imperfectly drained. Sg5 Semi wet soils (grey deep sands); imperfectly drained.
Valley floor (flats with < 3% gradient)	F1 Pale deep sands; moderately well drained F2 Grey sandy duplex soils; imperfectly drained. F2a Semi wet soils (sandy duplex); imperfect to poorly drained. F3 Semi wet soils (grey sand over humic pan or clay); imperfect to poorly drained. F4 Semi wet soils (grey sand over humic pan or clay); poorly drained. F5 Watercourse and immediate margins.
Drainage Features	D Dams or Soaks  Drainage channel (excavated)  Watercourse (seasonal)

Figure 4:
Land Units

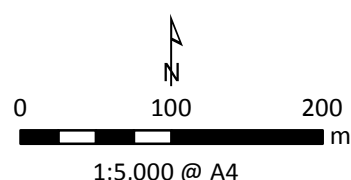




Photo 1. Property overview – looking west from Mead Rd showing broad valley floor (with network of drains) and predominantly gentle valley sideslopes.



Photo 2. Land unit Uc1 Upland crest with deep sands. View S from site 15.



Photo 3. Land unit Us1 Upland slope (site 11); shallow sand over laterite, then clay.



Photo 4. Land unit Ss1 (right). Moderately steep (vegetated) gravel slopes.



Photo 6. Land unit Sg1. Gentle slope with deep sands on eastern side of valley; site 7



Photo 5. Land unit Sm1. Moderate upper valley slope near site 13.



Photo 7. Land unit Sg1. Gentle slope with deep sands on western side of valley; site 9



Photo 8. Land unit Sg2. Gentle footslope (deep sands) adjacent valley floor.



Photo 10. Land unit Sg4. Footslope with imperfectly drained sandy duplex soil (site 21).



Photo 9. Land unit Sg3. Footslope with granite; East side of valley.



Photo 11. Land unit Sg5. Footslope; imperfectly drained deep, semi wet sands (site 20).



Photo 12. Land unit F1. Mod well drained valley floor (site 1 in background)



Photo 14. Land unit F2. Valley floor with imperfectly drained sandy duplex soil (site 22).



Photo 13 Land unit F1. Mod well drained valley floor (view S from site 18).



Photo 15. Land unit F2a. Floor; imperfectly to poorly drained sandy duplex soil (site 23).



Photo 16. Land unit F3. Floor; imperfectly to poorly drained sands (site 2-3).



Photo 18. Land unit F4. Valley floor; poorly drained semi wet sands (Pit site 1).



Photo 17. Land unit F3. Floor; imperfectly to poorly drained sands (site 5).



Photo 19. Land unit F5. Valley floor watercourse and immediate margins.



Photo 20. Drainage network within valley floor - SW part of property.



Photo 22. Land Unit D - Soakage dam – near sites 8 and B.



Photo 21. Drainage network within valley floor – central N part of property.



Photo 23. Densely vegetated wetland on adjacent Lot 1 at headwater of drains.

2.7 Key Soil Properties for Un-sewered Development

2.7.1 Permeability

The soil pit descriptions in Appendix B contain an estimated permeability (for the nominal 40 – 80 cm depth layer within the soil where, under natural conditions, a leach drain would be installed). Permeability status is based on consideration of soil texture and structure in accordance with indicative rates listed in the relevant National Standards document, AS/NZS 1547 (Standards Australia & Standards New Zealand 2000).

Permeability is rapid in all sandy soils, regardless of position in the landscape, although factors such as proximity to groundwater and nutrient retention ability then come into play when considering the potential for pollution of water resources. Duplex soils within footslope unit Sg4 and valley floor unit F2 have significantly restricted permeability which needs to be addressed through addition of soil fill, if such areas are to be used for on-site effluent disposal. Although inherently well drained and permeable, the shallow soils within units Us1, Sm1 and Ss1, also require the addition of soil fill material to achieve a satisfactory depth of permeable material.

2.7.2 Ability to retain nutrients

Subsoil sampling for PRI (Phosphorus Retention Index) analysis was undertaken at pit sites C, F, and G (see Appendix B) and auger (exposed excavation) site 11. The results are included in Appendix C and Table 2 overleaf.

Using criteria established by the Chemistry Centre of Western Australia (Allen and Jeffery 1990) the results show the deep sandy soils are very weakly adsorbing / retentive of phosphorus, regardless of being on elevated slopes or within the valley floor. By contrast the clay subsoil of the duplex soil types within lesser parts of the footslopes and valley floor, or underlying the laterite in upland areas, is very strongly adsorbing / retentive of phosphorus.

The PRI values for the pale grey sands on both the valley floors and the slopes fail to meet the recommended minimum PRI value of 5 under the *Consultation Draft of the Government Sewerage Policy* (Department of Health 2012) and hence consideration of proximity to water resources (surface and underground) is required in relation to the location and type of on-site effluent disposal systems to be used.

Although the clays significantly exceed the recommended minimum PRI value of 5, their restricted permeability needs to be addressed as discussed above.

TABLE 2: SUMMARY OF SOIL PRI TEST RESULTS

Site	Land unit (Soil Group)	Field Texture (subsoil)	PRI	Category*
C	F3 (Semi wet soil)	Sand	0.5	Very weakly adsorbing
F	Sg1 (Pale deep sand)	Sand	0.7	Very weakly adsorbing
G	F2 (Grey deep sandy duplex soil)	Medium to heavy clay	78.9	Very strongly adsorbing
11	Us1 (Pale shallow sand / over laterite then clay)	Medium clay	115.3	Very strongly adsorbing

* Allen and Jeffery (1990).

It should be noted that some Health Department approved 'alternative effluent disposal systems' offer an enhanced ability to retain nutrients in situations where the PRI of the natural soil is too low. Also, in situations where the use of conventional septic tanks and leach drains is limited by inadequate separation from an underlying water table, or inadequate depth above rock or other impermeable layer, yellow brown 'builders sand' is commonly used to raise the natural land surface to an appropriate level. This material, which would then surround the leach drains, generally has a free draining clayey sand texture and a moderate to strongly adsorbing PRI to prevent excessive leaching of nutrients (phosphorous in particular).

2.7.3 Depth to Water Table

As outlined within Australian Standards document AS/NZS 1547:2000, one of the purposes of requiring a professional evaluation of site conditions is to enable an informed assessment to be made of the potential for seasonal waterlogging to occur with the soil profile, and hence determine any effect depth to water table may have on site suitability for effluent disposal.

Assessment of waterlogging risk is outlined in capability assessment procedures (Wells and King 1989; van Gool et al 2005) and is based on standardised descriptions of morphological properties such as texture, colour and degree of mottling – properties that are observable regardless of the time of year an examination is made.

Soil profile morphology observations made from pit excavations within Lot 973, as well as consideration of topography and geology, lead to the following conclusions relating to possible seasonally high water table levels;

- greater than 2 metre depth within land units Uc1, Us1, Ss1, Sm1, and Sg1.
- approximately 1 – 1.5 metre depth within land units Sg2 and F1.
- approximately 1 – 1.5 metre depth within land units Sg3, Sg4 and F2 but with additional likelihood of soil waterlogging closer to the surface in winter due to slowly permeable clay subsoil.
- approximately 1 metre depth within land unit F3.
- approximately 0.5 - 1 metre depth within land units Sg5 and F2a, and with additional likelihood of soil waterlogging closer to the surface in winter due to seepage zones or surface depressions (inadequate surface runoff).
- less than 0.5 metre depth within land units F4, F5 and D.

In accordance with the draft Country Sewerage Policy (Government of Western Australia 1999) the depth to the highest seasonal or permanent water table from the underside of a wastewater disposal system shall be a minimum of 1.2 metres.

If leach drains associated with conventional septic tank systems are installed within the existing natural soil this effectively means a 2 metre minimum depth to the water table from the natural land surface. If Health Department approved 'alternative effluent disposal systems' (such as aerobic treatment units) are used there are variable, but lesser, depth to water table requirements, depending on system type and design.

In most situations the specified minimum depth to water can be exceeded by locating leach drains (or effluent irrigation areas for alternative systems) within soil fill material that is 'imported' onto the building envelope area to raise the natural land surface to an appropriate level. Subject to leach drain positioning relative to the original 'natural' land surface, the resulting systems are referred to as either being either fully or partially inverted. Considering the results summarized above, the use of soil fill and fully or partially inverted leach drain systems would be required for all valley floor units (F units), as well as footslope areas (units Sg2 - Sg5).

Notwithstanding the possible use of soil fill as an 'engineering solution', and irrespective of the type of on-site wastewater disposal system proposed, the draft Country Sewerage Policy specifies that the land should have a minimum depth to the seasonal or permanent water table from the natural ground surface of at least 0.5 metres. This precludes any on-site effluent disposal within just units F4, F5 and D.

2.8 Land Capability Assessment

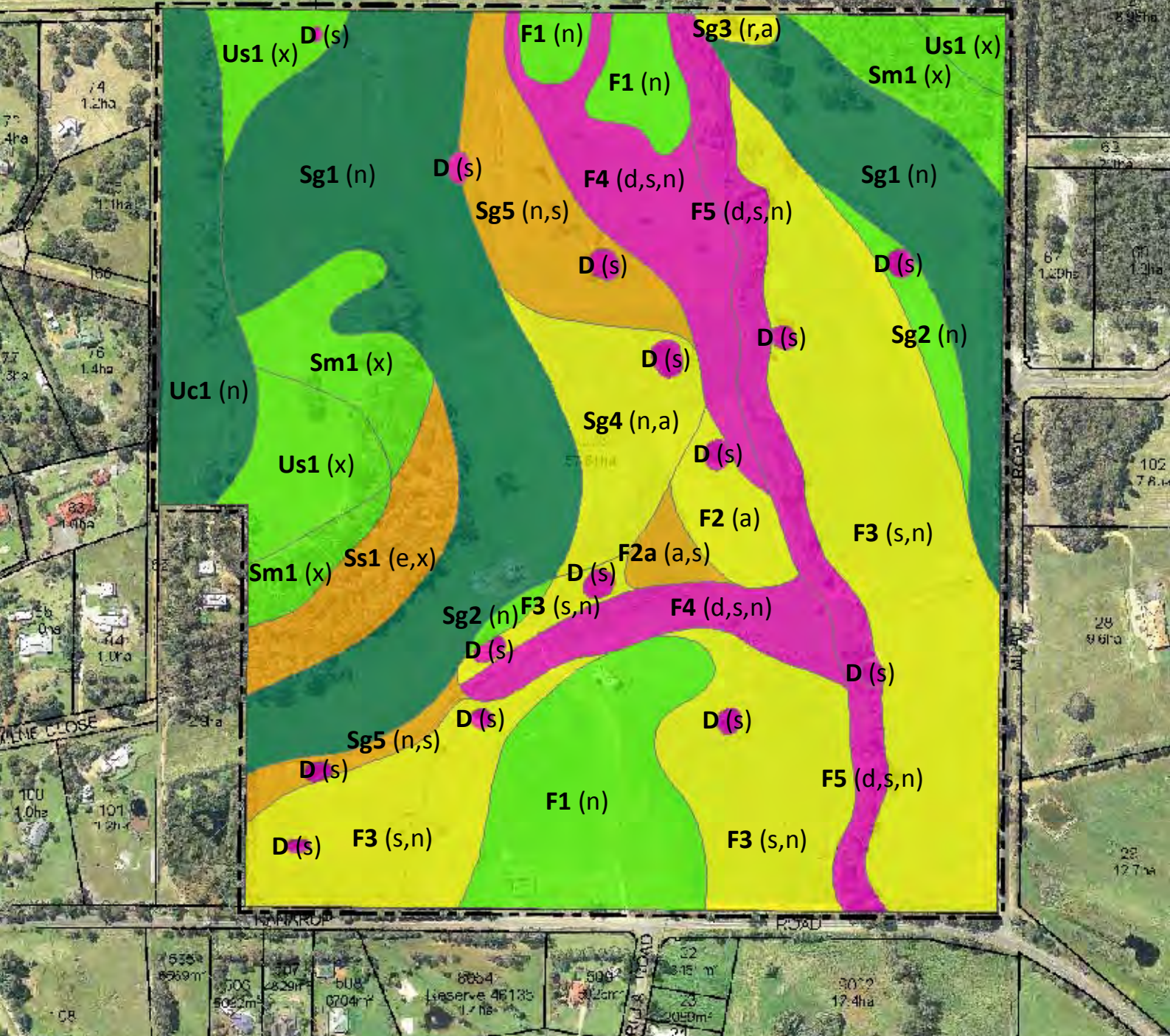
Land capability' is a term used to express the ability of land to support a proposed change in use with minimal risk of degradation to its soil and water resources.

For Lot 973, the proposed change in land use is from 'Rural' to un-sewered rural-residential ('Special Rural') development. This new zoning category dictates minimum lot sizes of 1 ha. Given the existing use of most of the land for livestock grazing, the primary 'new' land use activity with potential to affect soil and water resources is the location of additional houses and their associated systems for on-site effluent disposal.

The capability of the land for the proposed form of development has been assessed in general accordance with the methodology outlined in Department of Agriculture and Food (DAFWA) publications - van Gool et al (2005) and Wells and King (1989). Specific site requirements under the existing Draft Country Sewerage Policy (Government of Western Australia 1999) relating to soil permeability and separation from groundwater and surface waterbodies are also considered. In this regard the capability assessment expresses the results of the discussion in section 2.7 of 'Key Soil Properties for Un-sewered Development'.

A five class rating system from 'very high' capability (class one) to 'very low' capability (class five) is used here (albeit with intergrade categories). Land of 'very high' capability is considered to have few inherent physical land use limitations and minimal associated risk of land degradation. At the other end of the scale, 'very low' capability land is severely constrained by the inherent soil or landform conditions and there is an associated high risk of land or water degradation.

The capability assessment results for Lot 973 are shown in Figure 5 overleaf, and are further detailed in Table 3.



Land Capability

- Fair to High - Minor Limitations
- Fair - Moderate Limitations
- Fair to Low - Moderate to Significant Limitations
- Low - Significant Limitations
- Very Low- Severe Limitations

Land Units

Labels in bold
 Descriptions in Figure 4

Limitations

Labels in brackets
 a soil absorption ability (depth to clay)
 d drainage (stream pollution risk)
 e erosion risk
 n nutrient retention (poor)
 r rock outcrop (granite)
 s seepage and waterlogging
 x excavation difficulties (shallow depth to laterite)

Figure 5:
Land Capability Assessment for Rural-Residential Development

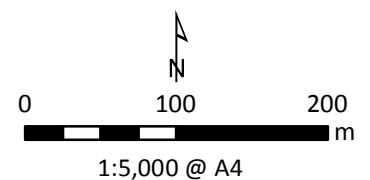


TABLE 3: LAND CAPABILITY ASSESSMENT – RURAL RESIDENTIAL DEVELOPMENT

Land Unit	Area (ha)	Description	Capability Rating	Major Limitations	Lesser Limitations	Comment / Planning Response
UPLAND TERRAIN						
Uc1	2.8	Crest; pale deep sands.	Fair to High		Limited nutrient retention or microbial purification ability of pale deep sands. Wind erosion risk if overstocked.	Conventional septic tanks and leach drains acceptable. Low nutrient retention ability but more than 100 m from any watercourse. See Attachment B Soil Pit Description Site K.
Us1	2.7	Upper slopes (< 5 % gradient); pale shallow sand over laterite	Fair		Excavation difficulties	Limited depth of natural soil and common surface lateritic stones and boulders. The underlying laterite is however relatively permeable (preferred drainage pathways), is usually underlain by nutrient retentive clay at > 1m depth (see Appendix A, Site 11). Adequate separation from groundwater given elevated landscape position. In light of the above, conventional septic tanks with leach drains located within imported sand fill (inverted leach drain system) should be acceptable. See Attachment B Soil Pit Description Site L.
MODERATE TO MODERATELY STEEP VALLEY SLOPES						
Ss1	1.7	Moderately steep slopes (15 – 25% gradient); shallow gravels or sand; surface laterite.	Low	Erosion risk (if cleared)	Excavation difficulties	All under remnant native vegetation. Council support for clearing unlikely.
Sm1	3.3	Moderate slopes (10-15%) soils as for Ss1.	Fair		Excavation difficulties	Partly vegetated. Refer to comments for unit Us1. Slightly more susceptible to erosion.

TABLE 3: LAND CAPABILITY ASSESSMENT – RURAL RESIDENTIAL DEVELOPMENT

Land Unit	Area (ha)	Description	Capability Rating	Major Limitations	Lesser Limitations	Comment / Planning Response
GENTLE VALLEY SLOPES (3 – 10% GRADIENT)						
Sg1	13.2	Pale deep sands; well drained.	Fair to High		Limited nutrient retention or microbial purification ability of pale deep sands. Wind erosion risk if overstocked.	Greater than 2 m depth to possible seasonally high water table. Conventional septic tanks and leach drains acceptable subject to appropriate setbacks* from watercourse and drains within lower terrain. * See Footnote to Table. See Attachment B Soil Pit Description Sites F and J.
Sg2	0.75	Grey to yellow brown deep sands over clay; well drained	Fair		Likely limited nutrient retention or microbial purification ability.	Limited area, with sands underlain by buried clay at greater than 1 m depth. Estimated 1 – 1.5 m depth to possible seasonally high water table. Septic tanks with partially inverted leach drains considered acceptable subject to appropriate setbacks* from watercourse and drains within lower terrain. * See Footnote to Table.
Sg3	0.18	Shallow sandy duplex soil; common granite outcrop.	Fair to Low	Rock outcrop (granitic)	Poor absorption ability of subsoil clay. Excavation difficulties, Minimal soil depth.	Very limited area. Estimated 1 – 1.5 m depth to possible seasonally high water table. If used for building envelope septic tanks with inverted leach drains considered acceptable subject to appropriate setbacks* from watercourse and drains within lower terrain. * See Footnote to Table.

TABLE 3: LAND CAPABILITY ASSESSMENT – RURAL RESIDENTIAL DEVELOPMENT

Land Unit	Area (ha)	Description	Capability Rating	Major Limitations	Lesser Limitations	Comment / Planning Response
Sg4	2.16	Grey sandy duplex soil; humic pan over subsoil clay; imperfectly drained.	Fair to Low	Poor absorption ability of subsoil clay.	Limited nutrient retention or microbial purification ability of topsoil.	<p>Estimated 1 – 1.5 metre depth to possible seasonally high water table. Relatively good surface drainage but with likelihood of soil waterlogging closer to the surface in winter due to slowly permeable clay subsoil.</p> <p>Subject to appropriate setbacks* from watercourse and drains within lower terrain, septic tanks with inverted leach drains should be acceptable. Alternative effluent disposal systems with nutrient retention ability preferable. * See Footnote to Table.</p> <p>See Attachment B Soil Pit Description Site H.</p>
Sg5	2.82	Semi wet soils (grey deep sands); imperfectly drained.	Low	Limited nutrient retention or microbial purification ability. Subject to seepage and waterlogging		<p>Estimated 0.5 - 1 metre depth to possible seasonally high water table but with additional likelihood of soil waterlogging closer to the surface in winter due to seepage zones. Drains within this unit alleviate waterlogging but provide rapid conduit for nutrients to watercourse.</p> <p>Best avoided for building envelopes, although may be considered acceptable subject to appropriate depth of fill, mandatory use of alternative effluent disposal systems, and meeting setback requirements*.</p> <p>* See Footnote to Table.</p>

TABLE 3: LAND CAPABILITY ASSESSMENT – RURAL RESIDENTIAL DEVELOPMENT

Land Unit	Area (ha)	Description	Capability Rating	Major Limitations	Lesser Limitations	Comment / Planning Response
VALLEY FLATS WITH < 3% GRADIENT						
F1	5.0	Pale deep sands; moderately well drained.	Fair		Limited nutrient retention or microbial purification ability	Estimated 1 – 1.5 m depth to possible seasonally high water table. Although alternative effluent disposal systems with enhanced nutrient retention ability are environmentally preferable, septic tanks with partially inverted leach drains likely to be acceptable subject to meeting setback requirements*. * See Footnote to Table. See Appendix B Soil Pit Description Site B.
F2	0.93	Grey sandy duplex soils; imperfectly drained.	Fair to Low	Poor absorption ability of subsoil clay.	Possible limited nutrient retention or microbial purification ability of topsoil.	Estimated 1 – 1.5 metre depth to possible seasonally high water table but with additional likelihood of soil waterlogging closer to the surface in winter due to slowly permeable clay subsoil. Relatively good surface drainage but sand fill and septic tanks with inverted leach drains needed to achieve separation from slowly permeable subsoil clay, as well as water table. Alternative effluent disposal systems preferred. Setback requirements* need to be considered. * See Footnote to Table. See Attachment B Soil Pit Description Site G.

TABLE 3: LAND CAPABILITY ASSESSMENT – RURAL RESIDENTIAL DEVELOPMENT

Land Unit	Area (ha)	Description	Capability Rating	Major Limitations	Lesser Limitations	Comment / Planning Response
F2a	0.4	Semi wet soils (sandy duplex); imperfect to poorly drained.	Low	Poor absorption ability of subsoil clay. Subject to soil waterlogging	Possible limited nutrient retention or microbial purification ability of topsoil.	<p>Estimated 0.5 - 1 metre depth to possible seasonally high water table but with additional likelihood of soil waterlogging closer to the surface in winter due to topography (depression area).</p> <p>Best avoided for building envelopes, although may be considered acceptable subject to appropriate depth of fill, mandatory use of alternative effluent disposal systems, and meeting setback requirements*.</p> <p>* See Footnote to Table.</p>
F3	14.54	Semi wet soils (grey sand over humic pan or clay); imperfect to poorly drained.	Fair to Low	Limited nutrient retention or microbial purification ability.	Subject to some soil waterlogging	<p>Drains within this unit alleviate waterlogging but provide rapid conduit for nutrients to watercourse.</p> <p>Estimated approx. 1 metre depth to possible seasonally high water table.</p> <p>Subject to appropriate setbacks* from watercourse and drains sand fill and septic tanks with inverted leach drains could be used however alternative effluent disposal systems with nutrient retention ability (and lesser required separation from groundwater) are preferred.</p> <p>* See Footnote to Table.</p> <p>See Attachment B Soil Pit Description Sites A, C, D and E.</p>

TABLE 3: LAND CAPABILITY ASSESSMENT – RURAL RESIDENTIAL DEVELOPMENT

Land Unit	Area (ha)	Description	Capability Rating	Major Limitations	Lesser Limitations	Comment / Planning Response
F4	4.2	Semi wet soils (grey sand over humic pan or clay); poorly drained.	Very Low	Stream pollution risk. Subject to soil waterlogging and seepage.	Limited nutrient retention or microbial purification ability	Avoid this area for building envelopes. Estimated less than 0.5 metre depth to possible seasonally high water table which <u>precludes</u> any on-site effluent disposal. Drains alleviate waterlogging but provide rapid conduit for nutrients to watercourse. See Attachment B Soil Pit Description Site I.
F5	2.55	Watercourse and immediate margins	Very Low	Contains watercourse; very high risk of pollution through inadequate microbial purification and nutrient loss from effluent disposal systems		Prohibitive for location of residence or on-site effluent disposal due to poor drainage and associated stream pollution risk. Depending on adjacent soil and type of on-site effluent disposal system, a 30 - 100 m setback needs to be applied *. * See Footnote to Table.
D	0.6	Dams or Soaks	Very Low	Inundated waterbody		Prohibitive for any residence or on-site effluent disposal. See footnote re setbacks.

Footnote: Setbacks - The landowner's experience and advice is that Johnston Creek is a seasonally active watercourse. Under environmental requirements contained in the draft Country Sewerage Policy, conventional effluent disposal systems located within sandy soils (with generally low nutrient retention ability) require a 100 m setback from seasonally flowing watercourses. A lesser (30 m) setback can apply to alternative effluent disposal systems with enhanced nutrient retention ability.

In relation to open agricultural drains or farm dams, the draft Country Sewerage Policy contains no specific setback requirements for effluent disposal systems. Although not yet endorsed, the consultation draft of the (new) Government Sewerage Policy (Department of Health 2011) specifies a minimum 6 m setback for all on-site effluent disposal systems from any open drainage channel.

For alternative effluent disposal systems, the Department of Health's Code of Practice document relating to Aerobic Treatment Units (Department of Health 2001) requires any surface irrigation disposal areas to be setback a minimum of 30 m from any dams used or available for human or animal consumption.

3.0 CONCLUSIONS

Provisions within Town Planning Scheme No 3 (Schedule I of City of Albany 1980) relating to the adjacent *Sheringa Park and Mead Road Kalgan* Special Rural Zones (SRZs 11 and 4A respectively) provide guidance on the key environmental planning matters in this portion of the City of Albany. They indicate the environmental objectives associated with the rezoning of Lot 973 should include;

- minimising nutrient export,
- minimising visual impact,
- retention of significant vegetation, and
- bushfire management control

These matters, and the effect of the land capability assessment on the proposed rezoning and subsequent subdivision, are addressed as follows;

3.1 Minimising nutrient export.

Given the sandy nature of the soils, and in common with the provisions applying to the adjacent *Sheringa Park* subdivision (SRZ 11), it is suggested that intensive agricultural pursuits such as piggeries and horticultural operations would not be permitted within a Special Rural zone over existing Lot 973. Given this, the remaining potential sources of nutrients associated with the proposed land use that might eventually find their way into Oyster Harbour, are on-site effluent disposal systems and livestock excrement.

3.1.1 On-site effluent disposal

Soil PRI analysis shows the in-situ soil material within most of the valley floor and the adjacent slopes is very weakly adsorbing and below the recommended minimum value of 5 under the *Consultation Draft of the Government Sewerage Policy* (Department of Health 2012).

Notwithstanding this, proximity to the water table within the valley floor will require leach drains to be either fully, or partially, inverted and hence located within free draining soil material brought onto the site. As this material is commonly 'builders sand' (part of a house pad) with a clayey sand texture, it is likely that the nutrient retention ability of the site would be somewhat enhanced by this soil fill material.

Additional protection against nutrient loss from on-site effluent disposal systems, within the valley floor should however be provided through a condition requiring the mandatory use of Health Department approved alternative effluent disposal systems

that have a phosphate removing capability. Condition 9 of the Specific Provisions relating to the adjacent *Sheringa Park* Special Rural Zone (11) provides an example (refer Schedule 1 of the Town Planning Scheme – City of Albany 1980).

Use of these alternative systems would also enable a lesser setback requirement to be applied from the seasonally active Johnston Creek (30 m compared to 100 m) and a lesser depth of fill to achieve required separation from the water table.

3.1.2 Keeping of livestock

Given the likely range in lot sizes (down to a minimum of 1 ha) and the susceptibility to nutrient loss (and wind erosion) of most of the soils, it is suggested that after rezoning and subdivision, the keeping of livestock is not permitted without specific approval from Council.

Where applications for the keeping of livestock are received by Council it is suggested that advice on stocking rates and land management requirements be sought from the Department of Agriculture and Food. In this regard it is considered likely that the keeping of livestock would generally only be permitted within larger sized lots occurring on the valley floor rather than smaller (1 ha) sized lots within the sandy slopes and upland areas.

3.1.3 Drainage

As shown in Figure 4, the valley floor contains a number of shallow open drains that have been formed to reduce the risk of waterlogging and improve the agricultural capability of the land. While fulfilling this function however, the drains also provide a conduit for the movement of nutrients leached from the soil or attached to suspended sediment, to pass into Johnston Creek and ultimately thereafter into Oyster Harbour.

Subject to the intended density of subdivision / development on the valley floor, a rationalization of the drainage network and the design and implementation of a water management system may need to be undertaken (in addition to effluent disposal setbacks and livestock controls) to further reduce the potential for nutrient export.

Condition 15 of the Specific Provisions relating to the adjacent *Mead Road, Kalgan* Special Rural Zone (4A) provides an example. In relation to Lot 973, such a condition could require stormwater to be dealt with according to aspects of the *Stormwater management manual for Western Australia* (Department of Water 2004 - 2007) that are relevant (cost effective) to Special Rural development such as establishment of vegetated buffer strips to drains .

3.2 Minimising visual impact.

The City of Albany Local Planning Strategy (2010) outlines the importance of considering visual impacts, particularly from recognised tourist routes. The southern boundary of Lot 973 is formed by Nananup Road, and the effect of topography and limited roadside vegetation means that much of the proposed development will be visible (at right angles) to traffic travelling in either direction along this road refer Photos 24 and 25).

Visual impacts can be minimized by enhancing roadside vegetation (either within road reserve or on future lots), by protecting hillslope remnant vegetation (see upper left in photo 24) and by extrapolation of the existing building design, materials and colour provisions that currently apply to both adjacent Special Rural Zones (4A and 11 – refer Schedule 1 of Town Planning Scheme – City of Albany 1980).



Photo 24: View into existing Lot 973 from western portion of Nananup Rd



Photo 25: View into existing Lot 973 from eastern portion of Nananup Rd.

3.3 Retention of significant vegetation

None of the vegetation units within Lot 973 can be considered poorly reserved on a local scale. Notwithstanding this, future clearing and location of building envelopes within vegetated portions of the land is considered unlikely to be supported and any permitted livestock grazing is likely to be limited to areas of existing cleared land.

Although logical to retain in private ownership, protection and enhancement of riparian vegetation along the margins of Johnston Creek is recommended to minimise nutrient loss from adjacent future land use activity and to reduce the susceptibility to erosion noted in the earlier foreshore survey (Water and Rivers Commission 1997).

3.4 Bushfire management

As shown in Figure 4, there is only a limited area of remnant vegetation within existing Lot 973. However this vegetation occurs predominantly within moderate to moderately steep terrain (units Sm1 and Ss1) and therefore it is suggested that strategic, rather than individual boundary, firebreaks be designed and constructed to avoid erosion impacts.

3.5 Effect of land capability on plan of subdivision

A proposed plan for subdivision needs to demonstrate that landform, vegetation and physical constraints have been taken into account in terms of the size and shape of proposed lots as well as road layout. By reference to the land unit mapping (Figure 4) and the land capability assessment (Figure 5) the following comments are made;

1. Subject to minimizing any clearing of vegetation, the location of smaller lots (1 ha minimum) within existing Lot 973 is best suited to the better capability upland terrain (units Uc1, Us1) and valley slopes (units Sm1, Sg1 and Sg2).
2. The design of the adjacent *Sheringa Park* Special Rural Zone (to the west) enables a loop road to be created within the higher portion of the subject land although this would require passage through existing Lot 1 from the south western portion of existing Lot 973. Two new lots would then be created from existing Lot 1, with the road extension from Milne Close requiring minor clearing within (extrapolated) land unit Ss1.

3. The potential new lot to the south of that extension from Milne Close contains a wetland but with mandatory use of an alternative effluent disposal system a residence could be located within that lot within suitable (extrapolated) land unit Sg2.
4. Within existing Lot 973 larger sized lots will be needed within the valley floor (F units) and footslopes (units Sg3, Sg4 and Sg5) to accommodate the location of future residences and their on-site effluent disposal systems (alternative, nutrient retentive systems) in a manner which provides the following;
 - None within any areas of very low capability land (units F4, F5 and D).
 - A 30 m minimum setback from the seasonal watercourse* (Johnston Creek – within unit F5).
 - A 6 m minimum setback from the excavated drainage channels.
 - A 30 m minimum setback from any dam which is to be retained and available for livestock watering, and
 - An appropriate level of soil fill material to enable adequate separation from estimated highest water table levels, or slow permeability clays, from the base of leach drains (for amended soil effluent disposal systems) or from irrigation surfaces (for aerobic treatment units).**

* Horizontal setback is in accordance with Draft Country Sewerage Policy although special provisions currently applying to the adjacent *Sheringa Park* SRZ (11) indicate Council might apply a 50 m minimum setback, possibly based on interpretation of Johnston Creek as a permanent watercourse.

** Vertical setbacks (separation from highest water table) vary with type and design of alternative system – refer Code of Practice for ATU's (Department of Health 2001). Estimated highest water table levels are between 0.5 and 1 m for units F2a and Sg5, around 1 m for unit F3, and between 1 and 1.5 m for units F1, F2, Sg3 and Sg4. Slow permeability subsoil clay at around 50 cm depth also needs to be taken into consideration within units F2 and Sg4.

4.0 REFERENCES

Allen D.G. and Jeffery R.C. (1990) *Methods of Analysis of Phosphorus in Western Australian Soils*. Report on Investigation No 37, Chemistry Centre Perth.

Churchward H. M., McArthur W.M., Sewell P.L., and Bartle G. A. (1988) *Landforms and Soils of the South Coast and Hinterland, Western Australia: Northcliffe to Manypeaks*. CSIRO Division of Water Resources Divisional Report 88/1. April 1988.

City of Albany (2010) *City of Albany Local Planning Strategy* – endorsed by the Western Australian Planning Commission 15 June 2010.

City of Albany (1980) *City of Albany Town Planning Scheme No 3 Town Planning Scheme* – prepared by the Department of Planning. Gazetted 15 February 1980 and updated to January 2014.

City of Albany (undated) *Council Policy - Development in Flood Prone Areas* – an extract of the Local Planning Scheme No 1A and 3 Policy Manual.

Department of Agriculture and Food (2012) *Regional Soil Landscape Mapping – NRM Info* (Online) Available: <http://www.spatial.agric.wa.gov.au/slip>

Department of Health (2001) *Code of Practice for the Design, Manufacture, Installation and Operation of Aerobic Treatment Units (ATUs) Serving Single Households*. Government of Western Australia November 2001.

Department of Health (2011) *Government Sewerage Policy – Consultation Draft* Department of Health, December 2011.

Department of Water (2004 - 2007) *Stormwater Management Manual for Western Australia*.

Government of Western Australia (1999) *Draft Country Sewerage Policy* – document endorsed by the Cabinet Committee on Waste Management and released for public comment by Environmental Health Service, Health Department of Western Australia Perth, Western Australia.

Gozzard J. R. (1989) Albany Part Sheets 2427 I, 2428 II, 2527 IV, & 2528 III, Environmental Geology Series, Geological Survey of Western Australia.

Muhling P.C. and Brakel A.T. (1985) *Mount Barker - Albany, Western Australia*. Sheet SI 50-11. 1:250 000 Geological Series - Explanatory Notes. Geological Survey of Western Australia, Perth.

Sandiford, E.M. and Barrett, S. (2010). *Albany Regional Vegetation Survey, Extent Type and Status*, A project funded by the Western Australian Planning Commission (EnviroPlanning “Integrating NRM into Land Use Planning” and State NRM Program), South Coast Natural Resource Management Inc. and City of Albany for

the Department of Environment and Conservation. Unpublished report. Department of Environment and Conservation, Western Australia.

Schoknecht, N. (2002) *Soils Groups of Western Australia - a simple guide to the main soils of Western Australia. Edition 3.* Resource Management Technical Report 246. Agriculture Western Australia, Perth. June 2002.

Standards Australia & Standards New Zealand (2000) - AS/NZS 1547 - *On-site Domestic Wastewater Management* Standards Association of Australia. Homebush, N.S.W.

van Gool, D. Tille P, and Moore, G (2005) *Land Evaluation Standards for Land Resource Mapping. Guidelines for assessing land qualities and determining land capability in south-west Western Australia.* Resource Management Technical Report 298. Agriculture WA, Perth. December 2005.

Water and Rivers Commission (1997) *Survey of the River Foreshores in the Oyster Harbour Catchment 1997.* Water and Rivers Commission Report WRT 17.

Wells, M.R. and King, P.D. (1989) *Land Capability Assessment Methodology for Rural-Residential and Associated Agricultural Land Uses.* Land Resources Series No. 1. Western Australian Department of Agriculture, Perth.

APPENDIX A:

SITE LOCATIONS & RESULTS SUMMARY

APPENDIX A: SITE LOCATIONS & RESULTS SUMMARY



Soil Site No ¹	Easting	Northing	Elevation m AHD	Soil landscape ²	Landform ³	Soil Group ⁴	Other	LMU
Site 1	50 H 587904	6132953	11 m	Bwo	Valley floor Slope 1-3%	Pale deep sand	Grey siliceous sand.	F1
Site 2	50 H 588012	6133043	8 m	Bwo	Valley floor Slope 3 - 5%	Semi wet soil	Grey siliceous sand with slightly mottled subsoil	F3
Site 3	50 H 588086	6133066	6 m	Bwo	Valley floor Slope 1-3%	Semi wet soil	Grey siliceous sand with slightly mottled subsoil and weak humic or coffee rock pan at 90 cm	F3
Site 4	50 H 588220	6133162	7 m	Bwo	Valley floor Slope 1-3%	Semi wet soil	Grey siliceous sand with watertable at approx. 1 m	F3
Site 5	50 H 588144	6133374	8 m	Bwo	Valley floor slope 1-3%	Semi wet soil	With minor subsoil ferruginous gravel and very weak humic or coffee rock pan at 45 cm and moist subsoil	F3
Site 6	50 H 588226	6133693	27 m	Dc	Upper slope 5 %	Pale shallow sand	Grey sand over yellow brown sand over laterite at 20cm	Us1
Site 7	50 H 588215	6133574	17 m	Ds	Mid slope 5 – 10%	Pale deep sand	Grey siliceous sand; rapidly drained	Sg1
Site 8	50 H 587696	6133017	10 m	Bwo	Valley floor Slope 1-3%	Semi wet soil	Grey sand over light yellow brown clay at 90 cm	F3
Site 9	50 H 587852	6133360	18 m	Bwo	Lower slope 5-10%	Pale deep sand	Grey siliceous sand; rapidly drained	Sg1
Site 10	50 H 587733	6133615	26 m	Ds	Mid slope 10-15%	Pale deep sand	Grey siliceous sand; rapidly drained	Sg1

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Soil Site No ¹	Easting	Northing	Elevation m AHD	Soil landscape ²	Landform ³	Soil Group ⁴	Other	LMU
Site 11	50 H 587657	6133705	30 m	S7h	Upper slope 3 - 5%	Pale shallow sand	Grey sand over laterite at 25cm then mottled yellow brown clay at greater than 1 m.	Us1
Site 12	50 H 587601	6133612	37 m	S7h	Upper slope 5-10%	Pale deep sand	Grey siliceous sand; rapidly drained	Sg1
Site 13	50 H 587656	6133491	31 m	Ds	Upper slope / spur 5-10%	Shallow gravel	Yellow brown sandy matrix and occasional surface laterite.	Sm1
Site 14	50 H 587635	6133524	32 m	Ds	Upper slope 5-10%	Pale deep sand	Grey siliceous sand; rapidly drained	Sg1
Site 15	50 H 587536	6133364	43 m	Dc	Upland crest Slope 1-3%	Pale deep sand	Grey siliceous sand; rapidly drained	Uc1
Site 16	50 H 587670	6133309	38 m	Ds	Upper slope 3 -5%	Pale shallow sand	Grey sand over laterite at 20 cm. Few surface laterite boulders	Us1
Site 17	50 H 587753	6133323	30 m	Ds	Mid slope 21%	Pale shallow sand	Grey sand over laterite. Few to common surface laterite boulders	Ss1
Site 18	50 H 587959	6133662	10 m	S7f	Valley floor slope 1 – 3%	Pale deep sand	Grey siliceous sand.	F1
Site 19	50 H 587934	6133558	9 m	Bwo	Valley floor slope 1 – 3%	Wet soil	Grey siliceous sand with humic surface and watertable at approx. 0.5 m	F4
Site 20	50 H 587814	6133633	15 m	Bwo	Lower slope 5 – 10%	Semi wet soil	Grey siliceous sand with humic surface ; watertable at > 0.5 m	Sg5
Site 21	50 H 587926	6133344	12 m	Bwo	Lower slope 3 - 5%	Pale shallow sand / Grey deep sandy duplex	Grey siliceous sand over gritty humic pan at > 70 cm depth, and then mottled clay	Sg4

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Soil Site No ¹	Easting	Northing	Elevation m AHD	Soil landscape ²	Landform ³	Soil Group ⁴	Other	LMU
Site 22	50 H 588028	6133257	9 m	Bwo	Valley floor slope 1 – 3%	Grey shallow sandy duplex	Gritty coarse loamy sand to sandy loam over mottled medium clay at 20 cm	F2
Site 23	50 H 587982	6133241	8 m	Bwo	Valley floor slope 1 – 3%	Semi wet soil / Grey deep sandy duplex	Grey sand over mottled light grey clay at 50 cm	F2a
Site 24	50 H 587942	6133392	11 m	Bwo	Lower slope 3 - 5%	Pale shallow sand / Grey deep sandy duplex	Grey siliceous sand over gritty humic pan at > 30 cm depth, and then mottled clay	Sg4
Site 25	50 H 588202	6133482	10 m	Ds	Lower slope 3 - 5%	Pale deep sand?	Grey shallow sand over buried yellow brown deep sandy duplex. Clay at 105 cm. Effective grey deep sand	Sg2
Pit A	50 H 587681	6133010	10 m	Bwo	Valley floor Slope 1-3%	Semi wet soil	Grey sand with mottled subsoil, weak iron organic pan and over light yellow brown clay at 105 cm	F3
Pit B	50 H 587892	6132993	11 m	Bwo	Very low rise within valley floor Slope 1-3%	Pale deep sand	Grey siliceous sand with watertable at > 150 cm.	F1
Pit C	50 H 588095	6133104	6 m	Bwo	Valley floor Slope 1-3%	Semi wet soil	Grey siliceous sand with slightly mottled subsoil and humic or coffee rock pan at 140 cm. Watertable at > 1.5m	F3
Pit D	50 H 588210	6133123	6 m	Bwo	Valley floor Slope 1-3%	Semi wet soil	Grey siliceous sand with slightly mottled subsoil and watertable at 1 – 1.5 m	F3

Soil Site No ¹	Easting	Northing	Elevation m AHD	Soil landscape ²	Landform ³	Soil Group ⁴	Other	LMU
Pit E	50 H 588134	6133458	8 m	Bwo	Valley floor Slope 1-3%	Semi wet soil	Grey siliceous sand with mottled subsoil and watertable at 1 – 1.5 m	F3
Pit F	50 H 588222	6133556	17 m	Ds	Mid Slope 5 – 10%	Pale deep sand	Grey siliceous sand; rapidly drained	Sg1
Pit G	50 H 588019	6133278	9 m	Bwo	Valley floor Slope 1-3%	Grey deep sandy duplex	Gritty coarse loamy sand over mottled medium to heavy clay at 35 cm. (highly weathered granite remnant)	F2
Pit H	50 H 587938	6133387	12 m	Bwo	Lower slope 3 - 5%	Grey deep sandy duplex	Grey siliceous sand over gritty humic pan at 40 cm depth, and then mottled clay	Sg4
Pit I	50 H 588024	6133424	8 m	Bwo	Valley floor Slope 1-3%	Semi wet soil	Grey siliceous sand with mottled subsoil and watertable at 0.5 - 1 m	F4
Pit J	50 H 587753	6133519	24 m	Ds	Mid slope 8 - 10%	Pale deep sand	Grey siliceous sand; rapidly drained	Sg1
Pit K	50 H 587536	6133598	41 m	Dc	Upland crest Slope 1-3%	Pale deep sand	Grey siliceous sand; rapidly drained	Uc1
Pit L	50 H 587667	6133323	38 m	Ds	Upper slope 3-5%	Pale shallow sand	Grey sand over pale yellow gravelly sand over laterite at 50 cm. Few surface boulders	Us1

FOOTNOTES 1. Sites 1 – 25 are hand auger observations. Pits A – L are excavated soil pit observations. 2. **Soil-landscape** units are from 1: 100 000 scale DAFWA mapping. 3. **Landform** descriptors as described by van Gool et al (2005). 4. **Soils** classified to WA Soil Groups (Schoknecht (2002)).

APPENDIX B

SOIL PIT DESCRIPTIONS

APPENDIX B

SOIL PIT DESCRIPTIONS



REPORT ITEM PD109 REFERS

Site Number: A 50 H 587681 6133010	Soil landscape mapping: Torbay System - Blackwater gleyed duplex phase (Bwo)	Land unit: F3													
															
Landform: Valley floor (slope 1-3%)															
	<p>WA Soil Group: <i>Semi wet soil (poor sand over clay – effective duplex)</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Depth</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0 – 8 cm</td> <td>Very dark grey (10YR 3/1) organic loamy sand, apedal, single grain with sandy fabric; clear boundary to;</td> </tr> <tr> <td>8 – 32</td> <td>Dark grey (10YR 4/1) fine sand; apedal, single grain with sandy fabric; gradual to;</td> </tr> <tr> <td>32 - 65</td> <td>Grey (10YR 5/1) fine sand; with few faint brown mottles; apedal, single grain with sandy fabric; gradual boundary to;</td> </tr> <tr> <td>65 – 95</td> <td>Greyish brown (10YR 5/2) sand; with few distinct dark brown mottles; apedal, single grain with sandy fabric; gradual boundary to;</td> </tr> <tr> <td>95–105</td> <td>Humic pan – very weakly cemented; Dark greyish brown (10YR 4/2) loamy sand texture; massive with earthy fabric; gradual b'ndry to;</td> </tr> <tr> <td>105-150 +</td> <td>Light yellowish brown (2.5Y 6/4) light to medium clay; with common large distinct red mottles and weak polyhedral structure with rough ped fabric and very few medium ferruginous gravels.</td> </tr> </tbody> </table>	Depth	Description	0 – 8 cm	Very dark grey (10YR 3/1) organic loamy sand , apedal, single grain with sandy fabric; clear boundary to;	8 – 32	Dark grey (10YR 4/1) fine sand ; apedal, single grain with sandy fabric; gradual to;	32 - 65	Grey (10YR 5/1) fine sand ; with few faint brown mottles; apedal, single grain with sandy fabric; gradual boundary to;	65 – 95	Greyish brown (10YR 5/2) sand ; with few distinct dark brown mottles; apedal, single grain with sandy fabric; gradual boundary to;	95–105	Humic pan – very weakly cemented; Dark greyish brown (10YR 4/2) loamy sand texture; massive with earthy fabric; gradual b'ndry to;	105-150 +	Light yellowish brown (2.5Y 6/4) light to medium clay ; with common large distinct red mottles and weak polyhedral structure with rough ped fabric and very few medium ferruginous gravels.
Depth	Description														
0 – 8 cm	Very dark grey (10YR 3/1) organic loamy sand , apedal, single grain with sandy fabric; clear boundary to;														
8 – 32	Dark grey (10YR 4/1) fine sand ; apedal, single grain with sandy fabric; gradual to;														
32 - 65	Grey (10YR 5/1) fine sand ; with few faint brown mottles; apedal, single grain with sandy fabric; gradual boundary to;														
65 – 95	Greyish brown (10YR 5/2) sand ; with few distinct dark brown mottles; apedal, single grain with sandy fabric; gradual boundary to;														
95–105	Humic pan – very weakly cemented; Dark greyish brown (10YR 4/2) loamy sand texture; massive with earthy fabric; gradual b'ndry to;														
105-150 +	Light yellowish brown (2.5Y 6/4) light to medium clay ; with common large distinct red mottles and weak polyhedral structure with rough ped fabric and very few medium ferruginous gravels.														
<p>Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3 m/day (Rapidly drained) but less permeable clay within a further 50 cm depth. Comment: Sand fill and septic tanks with inverted leach drains needed. Alternative effluent disposal systems with nutrient retention ability (and lesser required separation from groundwater) preferred.</p>															

Site Number: B 50 H 587892 6132993	Soil landscape mapping: Torbay System - Blackwater gleyed duplex phase (Bwo)	Land unit: F1
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Landform: Very low rise within valley floor (slope 1-3%)

	WA Soil Group: <i>Pale deep sand.</i>	
	Depth	Description
	0 – 3 cm	Very dark grey (10YR 3/1) loamy sand , massive with earthy fabric; clear boundary to;
	3 – 35	Dark grey (10YR 4/1) sand ; apedal, single grain with sandy fabric; gradual boundary to;
	35 – 65	Light grey (10YR 7/1) sand ; apedal, single grain with sandy fabric; gradual boundary to;
	65 – 120	Light brownish grey (10YR 6/2) sand with few distinct dark grey mottles; apedal, single grain with sandy fabric; gradual boundary to;
	120 -180+	Greyish brown (10YR 5/2) sand with common dark grey mottles; apedal, single grain with sandy fabric.

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3 m/day (Rapidly drained). **Comment:** Standing water at 180 cm; later rising to 165 cm. Minor sand fill and septic tanks with partially inverted leach drains recommended.

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Site Number: C 50 H 588095 6133104	Soil landscape mapping: Torbay System - Blackwater gleyed duplex phase (Bwo)	Land unit: F3
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Landform: Valley floor (slope 1-3%)

	WA Soil Group: <i>Semi wet soil (deep grey sand with underlying humic pan or coffee rock)</i>			
	<table border="1"> <thead> <tr> <th>Depth</th> <th>Description</th> </tr> </thead> </table>	Depth	Description	
	Depth	Description		
	<table border="1"> <tbody> <tr> <td>0 – 15 cm</td> <td>Black (10YR 2/1) organic loamy sand; massive with earthy fabric; clear boundary to;</td> </tr> </tbody> </table>	0 – 15 cm	Black (10YR 2/1) organic loamy sand ; massive with earthy fabric; clear boundary to;	
	0 – 15 cm	Black (10YR 2/1) organic loamy sand ; massive with earthy fabric; clear boundary to;		
	<table border="1"> <tbody> <tr> <td>15 – 35</td> <td>Very dark grey (10YR 3/1) sand; apedal, single grain with sandy fabric; clear boundary to;</td> </tr> </tbody> </table>	15 – 35	Very dark grey (10YR 3/1) sand ; apedal, single grain with sandy fabric; clear boundary to;	
	15 – 35	Very dark grey (10YR 3/1) sand ; apedal, single grain with sandy fabric; clear boundary to;		
<table border="1"> <tbody> <tr> <td>35 – 65</td> <td>Greyish brown (10YR 5/2) sand; apedal, single grain with sandy fabric; common dark brown mottles; gradual boundary to;</td> </tr> </tbody> </table>	35 – 65	Greyish brown (10YR 5/2) sand ; apedal, single grain with sandy fabric; common dark brown mottles; gradual boundary to;		
35 – 65	Greyish brown (10YR 5/2) sand ; apedal, single grain with sandy fabric; common dark brown mottles; gradual boundary to;			
<table border="1"> <tbody> <tr> <td>65 – 140</td> <td>Light grey (10YR 7/1) sand; apedal, single grain with sandy fabric; few dark brown mottles; gradual boundary to;</td> </tr> </tbody> </table>	65 – 140	Light grey (10YR 7/1) sand ; apedal, single grain with sandy fabric; few dark brown mottles; gradual boundary to;		
65 – 140	Light grey (10YR 7/1) sand ; apedal, single grain with sandy fabric; few dark brown mottles; gradual boundary to;			
<table border="1"> <tbody> <tr> <td>140- 170</td> <td>Humic pan (coffee rock) – moderately cemented; very dark brown (10YR 2/2) loamy sand texture; gradual boundary to,</td> </tr> <tr> <td>170 –180 +</td> <td>Humic pan (coffee rock) – moderately cemented; very dark brown (10YR 2/2) gritty loamy sand texture; with quartz fragments and seepage</td> </tr> </tbody> </table>	140- 170	Humic pan (coffee rock) – moderately cemented; very dark brown (10YR 2/2) loamy sand texture; gradual boundary to,	170 –180 +	Humic pan (coffee rock) – moderately cemented; very dark brown (10YR 2/2) gritty loamy sand texture; with quartz fragments and seepage
140- 170	Humic pan (coffee rock) – moderately cemented; very dark brown (10YR 2/2) loamy sand texture; gradual boundary to,			
170 –180 +	Humic pan (coffee rock) – moderately cemented; very dark brown (10YR 2/2) gritty loamy sand texture; with quartz fragments and seepage			

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3.0 m/day (Rapidly drained) but less permeable clay likely below humic pan. **Comment:** Standing water at 180 cm; later rising to 160 cm. Sand fill and septic tanks with inverted leach drains needed. Alternative effluent disposal systems with nutrient retention ability (and lesser required separation from groundwater) preferred.

Site Number: D 50 H 588210 6133123	Soil landscape mapping: Torbay System - Blackwater gleyed duplex phase (Bwo)	Land unit: F3
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Landform: Valley floor (slope 1-3%)

	WA Soil Group: <i>Semi wet soil (deep grey sand)</i>	
	Depth	Description
	0 – 25cm	Very dark greyish brown (10YR 3/2) sand to loamy sand , massive with earthy fabric; clear boundary to;
	25 – 60	Dark grey (10YR 4/1) sand ; apedal, single grain with sandy fabric; gradual boundary to;
	60 – 125	Light grey (10YR 7/1) sand with common dark grey brown mottles; apedal, single grain with sandy fabric; clear boundary to;
125-130 +	Light grey (10YR 7/1) sand with common dark grey brown mottles with seepage input.	

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3.0 m/day (Rapidly drained) but watertable at just over 1 m depth. **Comment:** Standing water at 130 cm; later rising to 115 cm. Sand fill and septic tanks with inverted leach drains needed. Alternative effluent disposal systems with nutrient retention ability (and lesser required separation from groundwater) preferred.

Site Number: E 50 H 588134 6133458	Soil landscape mapping: Torbay System - Blackwater gleyed duplex phase (Bwo)	Land unit: F3
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Landform: Valley floor (slope 1-3%)

	WA Soil Group: <i>Semi wet soil (deep grey sand)</i>	
	Depth	Description
	0 – 5 cm	Very dark grey (10 YR 3/1) organic loamy sand , massive with earthy fabric; clear boundary to;
	5 – 25	Grey (10YR 5/1) sand ; apedal, single grain with sandy fabric; gradual boundary to:
	25 – 90	Light grey (10YR 7/1) sand ; apedal, single grain with sandy fabric; few fine (root channel) mottles; gradual boundary to;
	90 – 155	Light grey (10YR 7/1) sand ; moist with common grey brown mottles, apedal, single grain with sandy fabric; clear boundary to;
155–180 +	As above with seepage input	

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3.0 m/day (Rapidly drained) but watertable at over 1 m depth. **Comment:** Standing water at 170 cm; later rising to 150 cm. Sand fill and septic tanks with inverted leach drains needed. Alternative effluent disposal systems with nutrient retention ability (and lesser required separation from groundwater) preferred.

REPORT ITEM PD109 REFERS

Site Number: F 50 H 588222 6133556	Soil landscape mapping: King System - Dempster slope Phase (Ds)	Land unit: Sg1
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Landform: Mid slope (5 - 10 % gradient)

	WA Soil Group: <i>Pale deep sand. (deep grey sand)</i>	
	Depth	Description
	0 – 5 cm	Very dark grey (10YR 3/1) sand ; apedal, single grain with sandy fabric; clear boundary to;
	5 – 30	Grey (10YR 5/1) sand ; apedal, single grain with sandy fabric;; gradual boundary to;
30 – 180+	White (10YR 8/1) sand; apedal, single grain with sandy fabric;	

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3.0 m/day (Rapidly drained). **Comment:** Conventional septic tanks and leach drains acceptable subject to appropriate setbacks from watercourse and drains within lower terrain. Lesser setbacks can apply to Alternative effluent disposal systems with nutrient retention ability.

REPORT ITEM PD109 REFERS

Site Number: G 50 H 588019 6133278	Soil landscape mapping: Torbay System - Blackwater gleyed duplex phase (Bwo)	Land unit: F2
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Landform: Valley floor (slope 1-3%)

	WA Soil Group: Grey deep sandy duplex.	
	Depth (cm)	Description
	0 – 15	Very dark greyish brown (10YR 3/2) coarse gritty loamy sand , massive with earthy fabric; clear boundary to;
	15 – 40	Dark yellowish brown (10YR 4/4) coarse gritty sand ; apedal, single grain with sandy fabric; clear boundary to;
40–110+	Light grey (2.5Y 7/1) medium to heavy clay ; gritty with few distinct grey mottles; strong polyhedral structure with smooth ped fabric.	

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) 0.06 – 0.5 m/day (Very poorly drained). **Comment:** Highly weathered granite remnant. Sand fill and septic tanks with inverted leach drains needed. Alternative effluent disposal systems with nutrient retention ability and lesser required separation from groundwater or underlying low permeability clay preferred.

REPORT ITEM PD109 REFERS

Site Number: H 50 H 587938 6133387	Soil landscape mapping: Torbay System - Blackwater gleyed duplex phase (Bwo)	Land unit: Sg4
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Landform: Lower slope (3 - 5% gradient)

	WA Soil Group: <i>Grey deep sandy duplex. (poor grey sand over humic pan then clay).</i>	
	Depth	Description
	0– 10cm	Very dark grey (10YR 3/1) organic loamy sand ; massive with earthy fabric; clear boundary to;
	10– 40	Dark grey (10YR 4/1) sand ; apedal, sandy fabric; gradual boundary to;
	40 - 50	Humic pan – strongly cemented with gritty pockets; Very dark brown (10YR 2/2) abrupt boundary to;
	50 - 85	Light grey (10YR 7/1) medium clay with common large grey and orange mottles; weak polyhedral structure; gradual boundary to;
85 - 120+	Light bluish grey (5B 7/1) medium to heavy clay with common fine orange and yellowish brown mottles; weak polyhedral structure.	

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) 0.06 – 0.5 m /day (Very poorly drained). **Comment:** Possibly shallow humic sand over clay (buried weathered granite?). Sand fill and septic tanks with inverted leach drains needed. Alternative effluent disposal systems with nutrient retention ability and lesser required separation from groundwater or underlying low permeability clay preferred.

REPORT ITEM PD109 REFERS

Site Number: I 50 H 588024 6133424	Soil landscape mapping: Torbay System - Blackwater gleyed duplex phase (Bwo)	Land unit: F4														
																
Landform: Lower terrace with valley floor (slope 1-3%)																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left; padding: 5px;">WA Soil Group: <i>Semi wet soil</i></th> </tr> <tr> <th style="width: 15%; padding: 5px;">Depth</th> <th style="padding: 5px;">Description</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">0– 5cm</td> <td style="padding: 5px;">Very dark grey (10YR 3/1) organic sandy loam; massive with earthy fabric; clear boundary to;</td> </tr> <tr> <td style="padding: 5px;">5– 20</td> <td style="padding: 5px;">Dark grey (10YR 4/1) loam fine sandy; massive with earthy fabric; clear boundary to;</td> </tr> <tr> <td style="padding: 5px;">20 – 35</td> <td style="padding: 5px;">Light brownish grey (10YR 6/2) sand, few faint brown mottles; apedal, sandy fabric; gradual boundary to;</td> </tr> <tr> <td style="padding: 5px;">35 - 45</td> <td style="padding: 5px;">Greyish brown (10YR 5/2) sand, apedal, sandy fabric; few to common weathered ferruginous gravels;</td> </tr> <tr> <td style="padding: 5px;">45- 80+</td> <td style="padding: 5px;">Grey (10YR 6/1) sand, apedal, sandy fabric; common distinct brown mottles.</td> </tr> </tbody> </table>		WA Soil Group: <i>Semi wet soil</i>		Depth	Description	0– 5cm	Very dark grey (10YR 3/1) organic sandy loam ; massive with earthy fabric; clear boundary to;	5– 20	Dark grey (10YR 4/1) loam fine sandy ; massive with earthy fabric; clear boundary to;	20 – 35	Light brownish grey (10YR 6/2) sand , few faint brown mottles; apedal, sandy fabric; gradual boundary to;	35 - 45	Greyish brown (10YR 5/2) sand , apedal, sandy fabric; few to common weathered ferruginous gravels;	45- 80+	Grey (10YR 6/1) sand , apedal, sandy fabric; common distinct brown mottles.
WA Soil Group: <i>Semi wet soil</i>																
Depth	Description															
0– 5cm	Very dark grey (10YR 3/1) organic sandy loam ; massive with earthy fabric; clear boundary to;															
5– 20	Dark grey (10YR 4/1) loam fine sandy ; massive with earthy fabric; clear boundary to;															
20 – 35	Light brownish grey (10YR 6/2) sand , few faint brown mottles; apedal, sandy fabric; gradual boundary to;															
35 - 45	Greyish brown (10YR 5/2) sand , apedal, sandy fabric; few to common weathered ferruginous gravels;															
45- 80+	Grey (10YR 6/1) sand , apedal, sandy fabric; common distinct brown mottles.															
Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3.0 m/day (Rapidly drained) but watertable at less than 1 m depth. Comment: Standing water at 80 cm; Likely to be at less than 50 cm depth from natural land surface in winter and therefore unsuitable for any form of on-site effluent disposal under the current Draft Country Sewerage Policy.																

Site Number: J 50 H 587753 6133519	Soil landscape mapping: King System - Dempster slope Phase (Ds)	Land unit: Sg1
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Landform: Mid slope (8 – 10 % gradient)

	WA Soil Group: <i>Pale deep sand.</i> (deep loose grey sand)	
	Depth	Description
	0– 15cm	Grey (10YR 5/1) sand ; apedal, single grain with sandy fabric; gradual boundary to;
	15– 200+	White (10YR 8/1) sand ; apedal, single grain with sandy fabric;

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3.0 m/day (Rapidly drained). **Comment:** Conventional septic tanks and leach drains acceptable subject to appropriate setbacks from watercourse and drains within lower terrain. Lesser setbacks can apply to Alternative effluent disposal systems with nutrient retention ability.

Site Number: K 50 H 587536 6133598	Soil landscape mapping: King System - Dempster crest Phase (Ds)	Land unit: Uc1
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Landform: Crest (1- 3% gradient)



WA Soil Group: <i>Pale deep sand. (deep loose grey sand over laterite)</i>	
Depth	Description
0– 12cm	Grey (10YR 5/1) sand ; apedal, single grain with sandy fabric; gradual boundary to;
12– 150	White (10YR 8/1) sand ; apedal, single grain with sandy fabric;
150+	Laterite. (Backhoe refusal)

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) > 3.0 m/day (Rapidly drained) but over much less permeable rock (laterite) at 1.5m depth.
Comment: Conventional septic tanks and leach drains acceptable. Low nutrient retention ability but well away from any watercourse.

Site Number: L 50 H 587667 6133323	Soil landscape mapping: King System - Dempster slope Phase (Ds)	Land unit: Us1
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Landform: Upper slope (3-5% gradient)

	WA Soil Group: <i>Pale shallow sand (over gravel or laterite /ironstone).</i>	
	Depth	Description
	0– 10 cm	Dark grey (10YR 4/1) sand ; apedal, sandy fabric; clear boundary to;
	10– 30	Grey (10YR 6/1) sand ; apedal, sandy fabric; many fine to medium sized ferruginous gravels; clear boundary to;
	30 – 50	Very pale brown (10YR 7/3) sand ; apedal, sandy fabric; common lateritic coarse gravel and stones; abrupt boundary to;
50+	Laterite. (Backhoe refusal)	

Indicative subsoil permeability and AS 1547:2000 drainage class: (at 40 – 80 cm leach drain depth) Not applicable – below soil material. **Comment:** Sand fill and septic tanks with inverted leach drains needed due to inadequate depth of natural soil. However, the underlying laterite is relatively permeable (preferred drainage pathways), is usually underlain by clay at > 2m depth, and there is adequate separation from groundwater given elevated position in landscape.

APPENDIX C

SOIL PRI TEST RESULTS

ANALYSIS REPORT

Lab No	WPSI4166	WPSI4167	WPSI4168	WPSI4169	WPSI4170	WPSI4171	WPSI4172
Name	C4	FB	GB	MB	OB2	RB	I1B
Code	31/3/14	31/3/14	31/3/14	31/3/14	31/3/14	31/3/14	31/3/14
Customer	MARIN WELLS	MARIN WELLS	MARIN WELLS	MARIN WELLS	MARIN WELLS	MARIN WELLS	MARIN WELLS
Depth	0-10	0-10	0-10	0-10	0-10	0-10	0-10
Phosphorus Retention Index	0.5	0.7	78.9	12.5	9.5	5.5	115.3

Appendix B

Fire Management Plan

FIRE MANAGEMENT PLAN

LOT 973 NANARUP ROAD, LOWER KING

1. INTRODUCTION

This Fire management Plan sets out the key requirements for bush fire management for lot 973 Nanarup Road, Lower King. Following final approval of the rezoning, it will be possible to prepare a detailed plan of subdivision. As a condition of approval, a detailed Fire Management Plan will need to be prepared.

2. FIRE HAZARD ASSESSMENT

The majority of Lot 973 is cleared pasture and has a 'low' bush fire hazard assessment. Two areas of remnant vegetation on the property have a 'moderate' bushfire assessment. Properties to the west, south and east have been developed for rural living purposes and are required to be maintained in a low fuel state. There are some pockets of remnant vegetation to the east which have a moderate fire hazard assessment. Rural land to the north has a mix of 'low' and 'moderate' hazard rating. Refer Bushfire Hazard assessment plan.

3. FIRE MANAGEMENT PLAN

3.1 Access

The main access to the property is currently from Nanarup Road with another access available from Mead Road. It is proposed to provide for a connection to Sheringa Park to the west via a ROW which will enable the proposed subdivisional road to connect through to Viscount Heights. This will benefit both the current proposal and Sheringa Park by providing another means of access/egress in addition to Mead Road. Connection through to Milne Close to the west can also be required at such time as Lot 1 is subdivided.

3.2 Gates

Gates will be required where Fire Service Access ways cross properties.

BUSH FIRE HAZARD ASSESSMENT PLAN

Lot 973 Nanarup Road
Lower King, City of Albany



LEGEND

- Subject Land
- Low Bush Fire Hazard
- Medium Bush Fire Hazard

N
ORIG A3
SCALE 1:4000
0 20 40 60 80 100

NOTE

L/M denotes areas that are subject to bush fire management plans which require the properties to be maintained in a Low Fuel State.

14-07-FHA(e)

3.3 Water

Reticulated water will be provided to each lot and fire hydrants will be provided every 200 metres along proposed subdivisional roads.

3.4 Building Protection Zones

All dwellings are to have a 20 metre wide Building Protection Zone (BPZ) maintained in accordance with the performance criteria listed in A4.3 of Planning for Bush Fire Protection Guidelines.

3.5 Building Separation Zones

Buildings upslope from remnant vegetation to have a 10 metre wide Hazard Separation Zone (HSZ) in addition to the 20 metre Building Protection Zone (BPZ).

Buildings down slope from the remnant vegetation to have a minimum HSZ/BPZ setback of 20 metres.

The HSZ to be maintained in accordance with the performance criteria listed in A4.4 of the Planning for Bush Fire Protection Guidelines.

3.6 Building Construction

Bushfire attack levels (BALs) are designated for each lot in the Indicative Fire Management Plan. The majority of the lots are located on relatively flat to gently sloping land which has been cleared for pasture and has a low Bushfire Hazard rating. A BAL of 12.5 is required for these lots. All existing cleared, pastured and parkland cleared areas are to be maintained in a low fuel condition.

For lots down slope of the two pockets of remnant vegetation on the property, a BAL of between 19 and 12.5 is recommended depending on the setback distance from the vegetation. Where a building is up slope from the vegetation, a 30 metre setback will require a BAL 29, e.g. Lot 8.

3.7 Purchaser/Landowner Notification

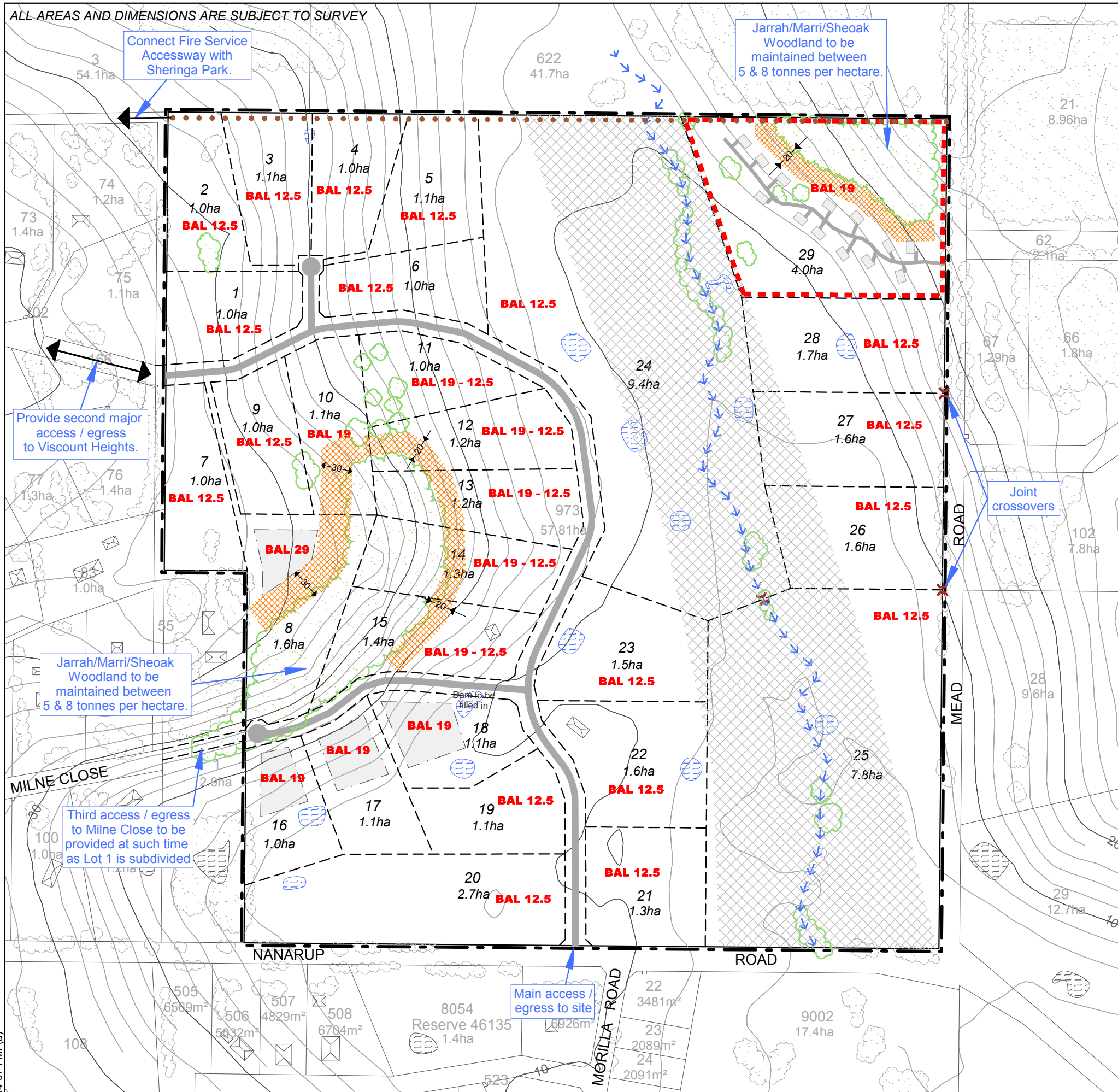
Section 70a Title Notifications to be applied which outline the landowner responsibilities to:

- maintain BPZs, HSZs and Hazard Reduction Areas in a low fuel state.
- construct dwellings to AS 3859-2009 requirements.
- maintain Fire Service Accessways where it crosses individual lots and provide appropriate gates where fenced.

Arrangements are to be made to the satisfaction of council to ensure prospective purchasers, in transfer of lots are aware of the Home Owners Bushfire Survival Manual, the scheme provisions and the Fire Management Plan.

INDICATIVE FIRE MANAGEMENT PLAN

Lot 973 Nanarup Road Lower King, City of Albany



LEGEND

	Subject Land		Existing Vegetation
	Existing Lot Boundaries		Existing Buildings
	Proposed Lot Boundaries		Existing Crossing
	Development Exclusion Area		Existing Dams
	Low Fuel Area		Creek Line
	Proposed Building Envelope		
	Additional Uses Site		
	Tourist Accommodation		
	BAL 19 Building Attack Level		
	Fire Service Accessway		

ORIG A3
SCALE 1:4000

0 20 40 60 80 100

NOTES

- Reticulated water supply to be provided to all lots and fire hydrants to be provided every 200 meters along subdivisional roads.
- Ensure each dwelling has a Building Protection Zone, Hazard Separation Zone, Hazard Reduction and are constructed to AS 3959 - 2009.
- Provide for alternative access/egress to the subdivision by connecting through to Viscount Heights and Lot 1 to the west.
- Construct a Fire Service Accessway along the northern boundary of Lot 973, connecting Sheringa Park & the subject land through to Mead Road.
- Where the fire service accessway crosses boundary fences, provide appropriate gates.

Appendix C

Schedule 14 – Rural Residential Zone cl 5.5.13

REPORT ITEM PD109 REFERS

Schedule 14 – Rural Residential Zone [cl.5.5.13]		
No.	Specified Rural Residential Zone	Special Provisions Applying to Specified Rural Residential Zone
		<p>6. No Single House shall be permitted to be constructed within the 200 metre sand extraction area buffer as shown on the Subdivision Guide Plan until the sand extraction activities have ceased.</p> <p>7. At the time of subdivision the developer may be required to relocate/rationalise the High Voltage Power Lines to the road reserves.</p>
RR11	Sheringa Park, Lower King Rural Residential zone	<ol style="list-style-type: none"> 1. Subdivision of RR11 shall generally be in accordance with the Subdivision Guide Plan <i>RR11</i> endorsed by the CEO, with any minor variations approved by the Western Australian Planning Commission. 2. The minimum lot size shall be one hectare. 3. The following land uses are 'P' permitted uses: <ul style="list-style-type: none"> • Single House 4. The following land uses are 'D' discretionary uses: <ul style="list-style-type: none"> • Ancillary Accommodation; • Bed and Breakfast/Farmstay; • Home Occupation; • Industry – Cottage; • Recreation – Public; • Rural Pursuit (which shall be limited to existing cleared and pastured land only); and • Restaurant. 5. All development (including dwelling and outbuildings) and any low fuel zones shall be located outside of any development exclusion area and/or revegetation area as shown on the Subdivision Guide Plan and shall achieve the following minimum setbacks: <ol style="list-style-type: none"> (a) 40 metres from Nanarup Road; and (b) 15 metres from all other lot boundaries.
RR12	Neilson/Pineaster Roads, Willyung Rural Residential zone	<ol style="list-style-type: none"> 1. Subdivision of RR12 shall generally be in accordance with the Subdivision Guide Plan <i>RR12</i> endorsed by the CEO, with any minor variations approved by the Western Australian Planning Commission. 2. The minimum lot size shall be one hectare unless a larger size is shown on the Subdivision Guide Plan. 3. The following land uses are 'P' permitted uses: <ul style="list-style-type: none"> • Single House 4. The following land uses are 'D' discretionary uses: <ul style="list-style-type: none"> • Ancillary Accommodation; • Home Occupation; • Industry – Cottage;

REPORT ITEM PD109 REFERS

PLANNING AND DEVELOPMENT ACT 2005

CITY OF ALBANY

LOCAL PLANNING SCHEME No. 1

AMENDMENT No. 7

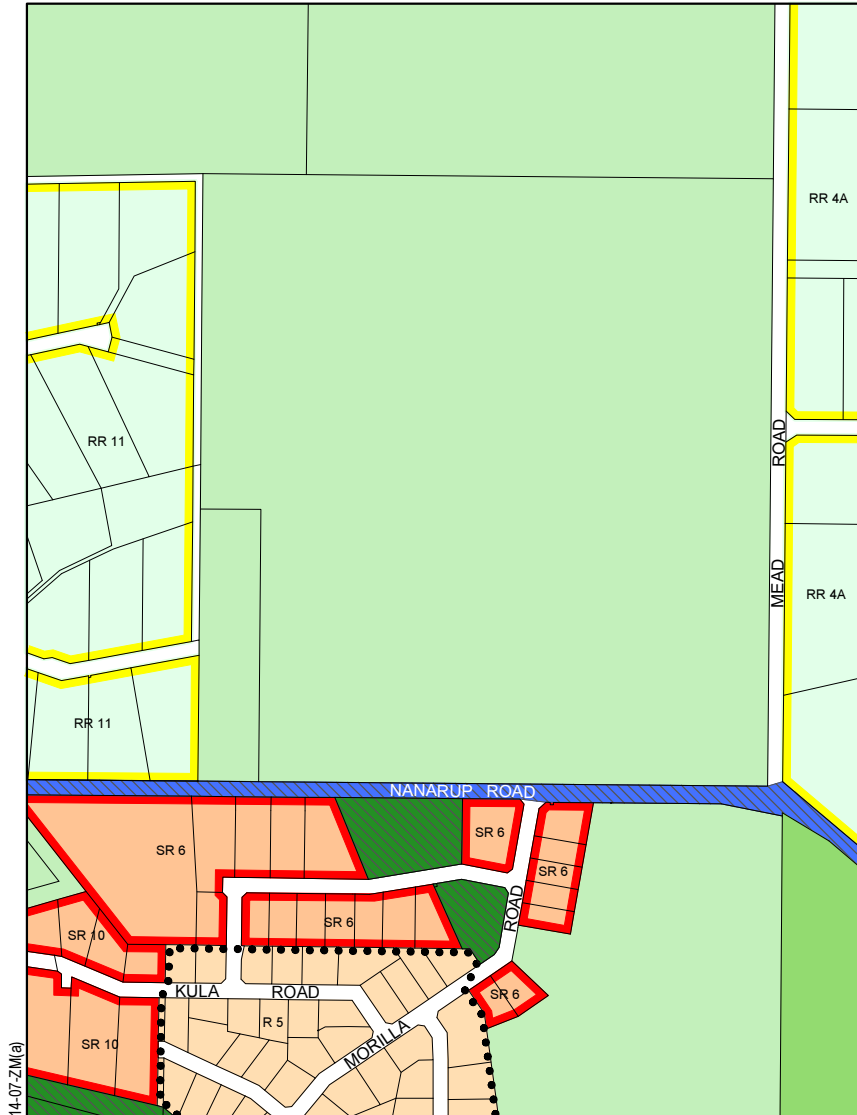
The City of Albany under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005 hereby amends the above local planning scheme by:

- i) To rezone Lots 1 and 973 Nanarup Road, Lower King from the General Agriculture zone to the Rural Residential zone and incorporating them within area No. RR 11 as set out in Schedule 14 – Rural Residential zone of the Scheme text;
- ii) Designate portion of Lot 973 as an Additional Uses Site and incorporate it within Schedule 2 – Additional Uses of the Scheme Text in the following manner.

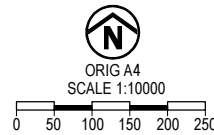
Schedule 2 ADDITIONAL USES			
No.	Description of Land	Additional Use	Conditions
AU31	Part Lot 973 Mead Road, Lower King	Holiday Accommodation/Holiday Chalets.	<ol style="list-style-type: none"> 1. A maximum of 12 holiday chalets and a manager's accommodation are permitted on the site. 2. Development to be generally in accordance with a Development Plan approved by the CEO. 3. All stormwater drainage shall be accommodated on-site and no direct discharge shall be permitted to Johnston Creek. 4. All buildings shall be set back a minimum of 30 metres from Mead Road. 5. The maximum height of all buildings shall not exceed 7.5 metres to minimise the visual impacts of such buildings from Mead Road. 6. The use of pale white, off-white or reflective materials and finishes such as zincalume will not be permitted. 7. Implementation of appropriate fire control measures as determined by the Local Government. 8. Minor variations may be permitted by Local Government after following the procedures in Clause 9.4 of the Scheme.

- iii) And amend the Scheme maps accordingly.

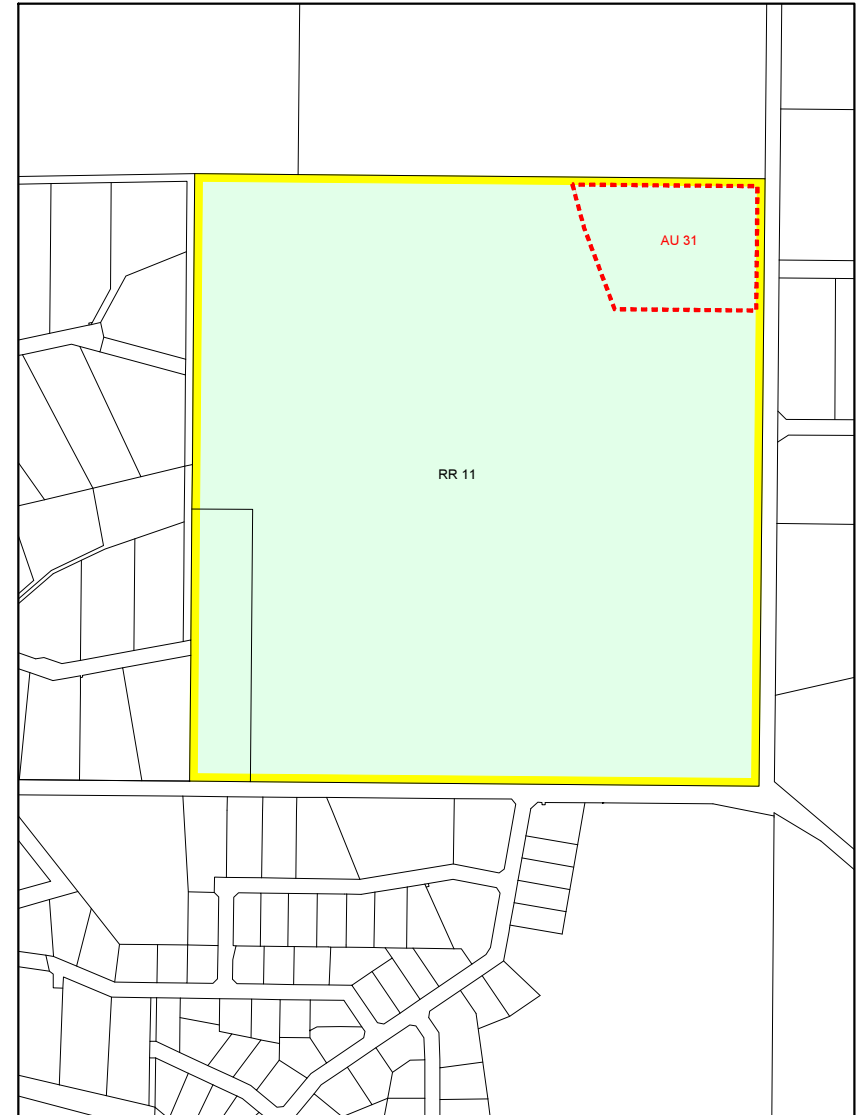
Existing Zoning



- LEGEND**
- R Code Boundary
 - LOCAL SCHEME RESERVES**
 - Parks & Recreation
 - Priority Road
 - ZONES**
 - Clubs & Institutions
 - Residential
 - Special Residential
 - Rural Residential
 - General Agriculture
 - Additional Uses



Proposed Zoning



14-07-ZM(a)

REPORT ITEM PD109 REFERS

ADOPTION

Adopted by resolution of the Council of the City of Albany at the Meeting of the Council held on the _____ day of _____ 20_____.

Mayor

Chief Executive Officer

FINAL APPROVAL

Adopted for final approval by resolution of the City of Albany at the Meeting of the Council held on the _____ day of _____ 20_____ and the Common Seal of the City of Albany was hereunto affixed by the authority of a resolution of the Council in the presence of:

Mayor

Chief Executive Officer

Recommended/Submitted for Final Approval

Delegated Under S.16
of the PD Act 2005

Date

Final Approval Granted

Minister for Planning

Date

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1

AMENDMENT No. 4

SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
1	Environmental Protection Authority Locked Bag 33 Cloisters Square PERTH WA 6850	The Environmental Protection Authority (EPA) considers that the proposed scheme amendment should not be assessed under Part IV Division 3 of the <i>Environmental Protection Act 1986</i> (EP Act) and that it is not necessary to provide any advice or recommendations.	Nil.	The submission is noted.
2	ATCO Gas 81 Prinsep Road JANDAKOT WA 6164	ATCO Gas Australia has no comments to make in regard to the proposal.	Nil.	The submission is noted.
3	Water Corporation PO Box 100 LEEDERVILLE WA 6902	The Corporation has no objection to the amendment. There is no request for a Corporation water or wastewater service. The amendment area is also outside the planned water and wastewater servicing areas.	Nil.	The submission is noted.
4	Western Power Locked Bag 2520 PERTH WA 6001	Western Power has considered the proposal to designate an 'Additional Use Site' over Lot 104 Rocky Crossing Road, Willyung and provides the following advice in order to make certain that there will be sufficient capacity in the network and that Western Power's overhead assets are protected. Our Network Capacity Mapping Tool indicates there is currently sufficient capacity for the area. However, in view of	The information provided by Western Power will be relevant at the subsequent development stage, should the proposed Local Planning Scheme amendment be adopted by Council and the Minister for Planning.	The submission is noted and the supplied advice is passed on to the applicant.

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		<p>the proposed additional uses the following is recommended to ensure our network takes into account the specific load and the overall scale of demand. Also, in view of the overhead power line currently servicing the property, I have included a point on clearance requirements for distribution lines to reinforce the importance of maintaining safe clearances from buildings and other land uses within the vicinity of power lines.</p> <p>Recommendations</p> <ul style="list-style-type: none"> • A feasibility study be undertaken to confirm load demand forecasts. • The proponent is advised that should the additional uses require modifying or upgrading the local distribution network then this would be at the developers cost. • That Council note the clearance requirement of 3.0 metres either side of the centre line for 33kV distribution lines to ensure safe movement and storage of equipment within the site. 		
5	Department of Agriculture and Food 444 Albany Highway ALBANY WA 6330	The Department of Agriculture and Food is not in a position to object or support this proposal.	Nil.	The submission is noted.

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6	Main Roads WA Great Southern Region PO Box 503 ALBANY WA 6330	Main Roads raises no objection to the proposal.	Nil.	The submission is noted.
7	Department of Environment Regulation Locked Bag 33 CLOISTERS SQUARE WA 6850	<p>I note that the Amendment will allow specific additional uses, including activities categorised as Prescribed Premises as per Schedule 1 of the <i>Environment Protection Regulations 1987</i>. The <i>Environmental Protection Act 1986</i> (EP Act) requires a works approval be obtained before constructing a prescribed premises and makes it an offence to cause an emission or discharge, unless a licence or registration (for operation) is held for the premises.</p> <p>The purpose of a works approval is to allow DER to assess the environmental acceptability of a proposal against standards and policies. Works approvals also contain conditions to ensure the premises can operate in an environmentally acceptable manner and that the works themselves do not cause unacceptable environmental impacts. DER will not grant a works approval and subsequently issue a licence under Part V of the EP Act where emissions and discharges to the</p>	Nil.	The submission is noted.

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		<p>environment cannot be regulated.</p> <p>As part of the assessment of works approval applications, DER has regard to environmental impacts of proposed emissions and discharges to the receiving environment, including amenity for residential areas and other sensitive land uses. This is done in reference to separation distances which may be drawn from the Environmental Protection Authority's (EPA) <i>Guidance Statement No. 3 – Separation distances between Industrial and Sensitive Land Uses</i> (EPA 2005).</p> <p>For your information, DER is currently developing a Guidance Statement: Separation Distances to apply to assessments of prescribed premises under Part V of the EP Act and this is scheduled for release in the coming weeks.</p>		
8	Department of Parks and Wildlife South Coast Region 120 Albany Highway ALBANY WA 6330	The Department of Parks and Wildlife has no objection.	Nil.	The submission is noted.

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9	Department of Lands Level 2, 140 William Street PERTH WA 6000	The Department of Lands has no comments or objections.	Nil.	The submission is noted.
10	Department of Water South Coast Region PO Box 525 ALBANY WA 6331	<p>The Department of Water has no objection to the proposal.</p> <p>The site has no surface water features that will be impacted by the proposed land use changes, nor is it likely that groundwater will be impacted.</p> <p>The DoW supports the requirement for the preparation of a drainage/stormwater management plan that will manage runoff on the site and minimise off-site impacts.</p>	Nil.	The submission is noted.
11	<p>___ Copal Road WILLYUNG WA 6330</p> <p>and</p> <p>___ Negri Road WILLYUNG WA 6330</p>	<p>We object to Local Planning Scheme Amendment No. 4.</p> <p>As the developers of the Pendeen industrial area, we have, at great expense, provided power, water, roads and a water management plan in order to have the land rezoned. We need the support of the City of Albany to direct industries to this area for the industrial area to continue into the future, as costs, economic conditions and a lack of interest are leading us, as the developers, to question the viability of</p>	<p>The proponent is at liberty to apply to rezone the lot and have that proposal assessed against the relevant planning strategies and policies. In this instance, the proposal is considered to be broadly consistent with the strategic direction set by the <i>Albany Local Planning Strategy</i> and the objectives of State Planning Policies 2.5 and 4.1. Matters relating to commercial competition are not valid planning considerations and cannot be taken into account.</p>	<p>The submission is noted and is upheld in part.</p> <p>It is recommended that a noise assessment and odour modelling are undertaken and that noise, odour and dust management plans must be prepared, including mitigation measures to be implemented on-site. Suitable conditions dealing with these recommendations must be added to the proposed set of conditions to be</p>

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		<p>further development. The effect of industry on Lot 104 Rocky Crossing Road would have on surrounding residences is very concerning to us.</p> <p>The proposal states that the land is currently approved for an extractive industry. Is this licence still applicable? Is the gravel and sand extraction still being done? Has the decommissioned sand pit been reinstated and returned to primary production? In the proposal it states “<i>at this time</i>” the only building proposed is a workshop/office. What buildings could be added in the future? It concerns us that this could become another small industrial area such as the area behind Bakers Junction.</p> <p>The mobile asphalt plant being a noxious industry should be relocated to Mirambeena Industrial Area. The production of bitumen produces a waste noxious sludge and there is potential for pollutants to escape to the air and from settling dams, when the industrial area at Mirambeena has been designed to Environmental Protection Authority standards. Asphalt fumes are reported to contain strongly carcinogenic material; this will add to the pollutants already being released by the Holcim Quarry. In the proposal Rocky Crossing Quarry (Holcim) is compared to Great Southern Sounds industry. Holcim Quarry has been located</p>	<p>There is still a current extractive industry licence applicable to the site. The gravel extraction is still being undertaken. The decommissioned sand pit has not yet been rehabilitated. The City will ensure that this area is rehabilitated in future.</p> <p>Should the proponent seek to construct additional buildings on the site, they would be required to apply to the City for development approval. The proposed Additional Use site would restrict the use of the land to those stated in the amendment document. Furthermore, the proposal seeks to restrict the use of the land so that it may only be used by the Great Southern Sands group of companies.</p> <p>The proponent has clarified that the proposed asphalt plant utilises the latest technology to minimise emission of dust and odour, especially when compared with the asphalt plant currently operating within the nearby Willyung Hill hard rock quarry. The landowner has advised that the operation of the proposed plant is a fully sealed process, which is computer controlled from a central control cabin, while the baghouse filter system significantly</p>	<p>inserted into Schedule 2 – Additional Uses, AU31 of <i>Local Planning Scheme No. 1</i>.</p> <p>It is further recommended that due to recent regulatory changes, references to the ‘Development Guide Plan’ are removed from the proposed set of conditions to be inserted into Schedule 2 – Additional Uses, AU31 of <i>Local Planning Scheme No. 1</i>.</p> <p><u>Modifications required:</u></p> <ol style="list-style-type: none"> 1. Replace condition 1 with the following: <i>“Prior to development, an acoustic assessment must be prepared and a noise management plan developed, incorporating mitigation measures where necessary, to address the noise emissions arising from the crushing, mobile asphalt plant and plant and equipment maintenance uses”.</i> 2. Insert new condition 2 as follows:

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		<p>on its present site for approximately 40 years; long before land use classes and development standards were implemented.</p> <p>The crushing plant would be the second plant adjacent to Holcim quarry contributing to dust and causing safety concerns. Why can't the crusher travel to the site of the rock and crush on site? Has a noise impact assessment been performed to determine effects on nearby residents? The proposed crushing site is only 420 metres from rural residents. The proposal states that <i>"crushing is likely to be conducted 3-4 days per year"</i>. What happens if demand increases for crushed material? And how can this be policed?</p> <p>With the machine wash down bay, we are concerned that the facilities will not be adequate and that there could be runoff entering drainage areas. We have some industries in Pendeen with inadequate facilities – we don't want another area with this problem. The proposed workshop for maintenance and servicing of the Great Southern Sands vehicle fleet would be a development opportunity for a valued business to utilise an established industrial area.</p> <p>Environment Protection Authority Guidance Statement No. 3 – <i>Separation Distance</i></p>	<p>reduces the emission of dust and particulate, which causes odour.</p> <p>The landowner has also advised that an identical plant is currently in operation within the Narngulu general industrial area near Geraldton. The Department of Environment Regulation issued a works approval for this operation in 2013 and has subsequently granted licence renewals, the most recent of which was issued on 5 February 2015. The licence contains various conditions governing the operation and monitoring of the plant, including the following condition relating to odour:</p> <p><i>"The Licensee shall ensure that odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the Premises."</i></p> <p>While it is acknowledged that the surrounding land uses at Narngulu are also of an industrial nature and are not classified as 'sensitive' under the provisions of the Environmental Protection Authority's <i>Guidance for the Assessment of Environmental Factors – Separation Distances</i></p>	<p><i>"Prior to development, odour modelling must be undertaken and an odour management plan developed, incorporating mitigation measures where necessary, to address the odour emissions arising from the mobile asphalt plant use"</i>.</p> <p>3. Insert new condition 3 as follows:</p> <p><i>"Prior to development, a dust management plan must be developed, incorporating mitigation measures where necessary, to address the potential for dust emissions from all uses on-site"</i>.</p> <p>4. Renumber condition 2 as condition 4 and reword as follows:</p> <p><i>"The crushing and mobile asphalt plant uses shall be limited to the former gravel extraction area to the north-west of the lot"</i>.</p> <p>5. Renumber conditions 3 and 4 as conditions 5 and 6 respectively.</p>

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		<p><i>between Industrial and Sensitive Land Uses</i></p> <p>Appendix 1 states that the recommended generic buffer distance is 1000 metres. Why consider breaking these recommendations on land not currently approved for this purpose? When there is land already available for this use.</p> <p>The proposed use of land on Lot 14 Rocky Crossing Road is being changed from rural to industrial; this is what Pendeen and Mirambeena were rezoned and designed for.</p> <p>The proposal states the amendment is justified by the comment that the land area in Pendeen is too small. This is incorrect and is not an issue, with approximately 20 hectares available. The proposal states the Great Southern Sands group of companies does not meet criteria for using land at Mirambeena – how is that so, when Mirambeena is a noxious industry site.</p> <p>We feel that the mobile asphalt plant should relocate to the designated noxious industry area situated at Down Road (Mirambeena) which has a 1000 metre buffer zone. The light expansive industry to be relocated to Pendeen which is adjacent to Chester Pass Road and Menang Drive, where it has been established with an approved bio-filter and approval from the Environmental Protection</p>	<p><i>between Industrial and Sensitive Land Uses</i>, the plant is located on a relatively small lot of 3373m². The application of this condition by the Department of Environment Regulation indicates that it is possible to manage the emission of odour at this level.</p> <p>To ensure that there will be no impact on nearby homes from odour emissions, it is recommended that the conditions of the Additional Use site are expanded to include the preparation of odour modelling and a requirement to provide an odour management plan with any future development application for the site. It will be required that the odour management plan contains recommendations on odour mitigation measures to be implemented on-site, in order to minimise the potential for odour nuisance.</p> <p>City Staff have undertaken preliminary research into noise from crushing plant and have found that a typical crushing plant is likely to operate at approximately 110 dB (A) at the source. dB (A) refers to a measure of loudness in decibels with an ‘A-weighting’, which is applied</p>	<p>6. Renumber condition 5 as condition 7 and reword as follows:</p> <p><i>“The washdown bay shall be limited to those vehicles, plant and equipment operated/owned by Great Southern Sands Group of Companies”.</i></p> <p>7. Renumber conditions 6 and 7 as conditions 8 and 9 respectively.</p> <p>8. Renumber condition 8 as condition 10.</p> <p>9. Renumber condition 9 as condition 11 and reword as follows:</p> <p><i>“Vegetation screening shall be implemented to the satisfaction of the Local Government and shall not unduly impact the aspect of surrounding landowners”.</i></p> <p>10. Renumber condition 10 as condition 12.</p>

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		<p>Authority. We feel that it is not necessary to have the risk of another splinter industrial area in between the two already established industrial areas.</p> <p>We would like a response to our questions followed up prior to the submission being considered and are willing to meet with the City of Albany to discuss our concerns.</p>	<p>arithmetically to instrument-measured sound levels in an effort to account for the relative loudness perceived by the human ear, as the ear is less sensitive to low audio frequencies.</p> <p>For comparative purposes, 40 dB (A) would be considered a quiet environment, such as a living room, while 60 dB (A) would be typical of a busy office environment. A rock concert would generate approximately 110 dB (A), while a jet aircraft taking off would generate around 120 dB (A). However, these are volumes measured close to the source, which will diminish over distance to varying degrees, dependant on tonality and frequency.</p> <p>The Environmental Protection Authority's <i>Guidance for the Assessment of Environmental Factors – Separation Distances between Industrial and Sensitive Land Uses</i> prescribes a generic 1000 metre buffer to sensitive land uses for crushing and screening and the production of asphalt. This distance is based on scientific evidence, but anticipates a 'worst case scenario'. There are two dwellings located close to the proposed crushing area, one at</p>	<p>11. Rename the 'Development Guide Plan' as 'Indicative Development Plan'.</p>

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			<p>360 metres from the site and another at 450 metres. The remaining houses in the vicinity are located at between 800 and 860 metres from the crushing area. Although these houses are located within the 1000 metre buffer recommended by <i>Separation Distances between Industrial and Sensitive Land Uses</i>, it is unlikely that the noise levels at these locations would be considered high enough to detrimentally affect their amenity. However, the development of these uses will be subject to development approval from the City of Albany and a Works Approval from the Department of Environment Regulation, which would only be granted where emissions and discharges from the site can be regulated.</p> <p>To further ensure that there will be no impact on nearby homes from noise emissions, it is recommended that the conditions of the Additional Use site are expanded to include the preparation of a noise assessment and a requirement to provide a noise management plan with any future development application for the site. It will be required that the noise management plan contains recommendations on noise mitigation</p>	

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			<p>measures to be implemented on-site, in order to minimise the potential for noise nuisance.</p> <p>The Mirambeena Industrial Area is not specifically designated for 'noxious industries'. A portion of this area is designated for uses associated with the timber processing industry and incorporates appropriate environmental buffers.</p>	
12	<p>Rocky Crossing Road WILLYUNG WA 6330</p>	<p>I am the owner of two properties adjoining Lot 104 Rocky Crossing Road, both of which share common boundaries of approximately 577 and 540 metres. I am concerned that no fencing and no definitive marking exists along these common boundaries.</p> <p>Several approaches have been made by me to representatives of the owners of Lot 104 during the past year with the purpose of having a fence erected on common boundaries.</p> <p>The representative in 2014, Mr Bill Noble then promised to arrange for the pricing and erection of this fence.</p> <p>This promise was not fulfilled and earlier this year I was informed that Mr Noble had sold his interests in the property and I would</p>	<p>The proponent has committed to contributing to the erection of a new boundary fence to clearly delineate the boundary.</p>	<p>Boundary fencing is a civil matter between adjoining landowners. The submission is noted.</p>

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		<p>have to then contact the new owner Mr. Martin Shuttleworth.</p> <p>I made telephone contact with Mr. Shuttleworth, who agreed to meet with me and discuss the issue.</p> <p>The meeting did not eventuate and since then I have made several phone calls to Mr. Shuttleworth's office and the office of Great Southern Sands, but he was not available.</p> <p>Lastly I made a personal visit to the office of Great Southern Sands in Milpara, but was again unable to advance the matter of boundary fencing.</p> <p>I am still awaiting some reply to my requests.</p> <p>Because I had no reason to doubt Mr Noble would honour our agreement, my only concern was the lengthy period of time being taken, hence my last call to him earlier this year when I was shocked to be told that he no longer owned the property.</p> <p>Now that increased activities are proposed and the proximity of the crushing area to the common boundary, I am concerned at the lack of fencing.</p> <p>The laxity shown to date by Great Southern</p>		

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		<p>Sands indicates a lack of sincerity and I request the Council consider it a prerequisite that a complete boundary fence is erected, prior to approval of their application for the amendment.</p> <p>I do not wish to be obstructive and I realise that the fence is normally a matter between landholders and hope the matter can be resolved that way; however, if this does not occur, perhaps Council could consider the implications of a fenceless boundary.</p> <p>I would also request some form of low screening of the crushing area and hardstand along the eastern boundary, as these areas are very unsightly from Lot 7 and have detracted greatly from the previously unspoilt rural views and will no doubt impact on the value of that property.</p> <p>As a neighbour I am prepared to co-operate where possible with Great Southern Sands, but this is not possible if they are unable to meet and discuss matters with me.</p>		
13	<p align="center">Rocky Crossing Road WARRENUP WA 6330</p>	<p>We are writing to show our extreme concern about the proposed planning scheme amendment on Lot 104 Rocky Crossing Road.</p> <p>We are utterly against this going ahead and wish to voice this opinion. We live in a</p>	<p>Menang Drive is designated as a priority heavy freight route within the Main Roads WA road hierarchy and was constructed as stage one of the proposed Albany Ring Road. While it is acknowledged that the proposal will lead to an increase in heavy vehicle</p>	<p>The submission is noted and is upheld in part.</p> <p>See recommendations above.</p>

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		<p>'Rural' zone due to wishing for a quiet, clean environment for our family.</p> <p>We appreciate this is someone's business but having approximately 80 vehicles driving and out of the site, increased crushing, 20 large trucks based on site and an asphalt plant is significant. Fumes from the asphalt (active petrochemical fumes) would certainly affect our quality of life.</p> <p>I believe the advised distance of such a scheme is one kilometre, although more study needs to go into this. Most of the residences surrounding the plant are well under this distance.</p> <p>Our main concerns are the heavy amount of traffic in and out of the site, the dust, the noise and air quality. The dirt which will blow across into our house/porch/seating areas.</p> <p>What are the hours proposed?</p> <p>Will landscaping supplies be sold?</p> <p>Will it be open weekends?</p> <p>We love our home/land and lifestyle and not want to feel forced to leave.</p> <p>Please consider our thoughts.</p>	<p>numbers, this is consistent with the intended purpose of Menang Drive.</p> <p>The City of Albany will consider the condition of Rocky Crossing Road and, if it is deemed necessary, seek the upgrade of this section of road as a condition of any future development approval on the site.</p> <p>Since the time of public advertising, the proponent has confirmed the landowner's intention to seal the internal access road to minimise any dust generated by vehicle movements within the site. This can be further mitigated by wetting down access tracks and laydown areas with a water cart to suppress dust. City Staff recommend that the conditions of the Additional Use site are expanded to include the preparation of a dust management plan to accompany any future development application for the site.</p> <p>As outlined above, the City recommends that odour modelling is undertaken and that an odour management plan must be prepared, including mitigation measures to be implemented on-site.</p>	

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			<p>Dust emissions from the crushing plant can be managed using spray bars, while the proposed asphalt plant utilises a 'baghouse' filter with a self-cleaning function, which returns captured fines back into the process. The specification for the proposed plant states that the dust concentration in the filtered air emitted will be no more than 20 milligrams per cubic metres. As outlined above, the development of these uses will be subject to development approval from the City of Albany and a Works Approval from the Department of Environment Regulation, which would only be granted where emissions and discharges from the site can be regulated.</p> <p>To further ensure that there will be no impact on nearby homes from dust emissions, it is recommended that the conditions of the Additional Use site are expanded to include a requirement to provide a dust management plan with any future development application for the site. It will be required that the dust management plan contains recommendations on dust mitigation measures to be implemented on-site,</p>	

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			<p>in order to minimise the potential for dust nuisance.</p> <p>Operating hours have not yet been finalised and will be considered at the time of a development application. However, it is likely that daytime business hours will apply.</p> <p>Landscaping supplies do not form a component of the proposal.</p> <p>Operating hours will not be confirmed until the time of a development application. However, it is unlikely that the premises will operate on weekends.</p>	
14	<p align="center">Rocky Crossing Road WILLYUNG WA 6330</p>	<p>We live 780 metres from the proposed amendment. We are concerned about a number of proposed uses on this site.</p> <p>What happens if the chemical and oils from the wash down site and maintenance areas are not properly contained on site? This could have a detrimental effect on our livestock and our livelihood as all the water runoff flows directly through our farm and into dams used for stock water and then flows into parker Brook Creek to the King River.</p> <p>As we are inside the usual 1000 metre</p>	<p>The amendment document details the provision of a sealed machinery washdown bay, fitted with appropriate oil separators to capture contaminants.</p> <p>As outlined above, the City recommends that a noise assessment and odour modelling are undertaken and that noise, odour and dust management plans must be prepared, including mitigation measures to be implemented on-site.</p> <p>The landowner has advised that</p>	<p>The submission is noted and is upheld in part.</p> <p>See recommendations above.</p>

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		<p>buffer zone what controls will be put in place to control dust and noise from this site? Why must there be a crushing plant for the minimal usage stated and who is going to control the amount of crushing into the future?</p> <p>The asphalt plant at Holcim Quarry gives off an acidic smell no, why do we need another asphalt plant in this area for such minimal use? Why wouldn't this second asphalt plant be made to locate to one of the more suitable industrial areas? When they already have the appropriate environmental facilities in place.</p> <p>Is there going to be security in place for all the plant? Such as lighting and is this going to affect people in all this area? How are break ins in this area going to be controlled? Is security going to be adequate or is the crime rate in the area about to increase?</p> <p>What will happen with the damage caused to Rocky Crossing Road by the increase in numbers of road trains and trucks turning into and out of this entrance? We already now have a dangerous situation as Rocky Crossing Road is very narrow and in a state of disrepair and yet you intend to let this development exit out of the same driveway and to Rocky Crossing Road, in addition to the trucks from Holcim Quarry. This is not</p>	<p>permanent floodlighting will not be used when the premises is closed, only sensor-operated security lights around the workshop and office buildings. It is also standard practice for the City to implement the following planning condition on development approvals where external floodlighting may be used:</p> <p>Lighting devices are to be positioned and shielded so as not to cause any direct, reflected or incidental light to encroach beyond the property boundaries, in accordance with Australian Standard AS4282/1997.</p> <p>The City is aware of the current condition of Rocky Crossing Road and upgrading will be sought at the time of development, should it be considered necessary.</p> <p>The proposal limits the land uses permissible on site and restricts the use of the land to the Great Southern Sands group of companies. This will limit the growth potential of the businesses on-site. However, the landowner is at liberty to apply for further rezoning or development in the future. Any such application will be considered on its own merits.</p>	

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		<p>satisfactory. Who is going to upgrade Rocky Crossing Road so it is suitable for this purpose?</p> <p>What guarantee will we have that this proposal will not grow into a more substantial business in the future?</p> <p>How is this proposal not classified as industrial and how can we be assured that this won't turn into a trucking and landscaping business, as they will be using this site to store materials and products required for this purpose. Who is going to control the dust and water runoff from this side of the proposed site as well?</p> <p>Is this site going to be fully bituminised to stop dust from the gravel road already in place as the traffic increases and creates more issues for us?</p> <p>This proposal certainly sounds like an industrial project to us. Does that mean that because we live directly across from this site that we can do as we like and not have to go to industrial areas anymore!?</p>	<p>As outlined above, dust and stormwater management plans will be required at the time of development.</p> <p>The Great Southern Sands group of companies do not operate a general haulage business and landscaping supplies do not form a component of the proposal.</p> <p>The landowner has committed to sealing the internal access roads, since the time of public advertising of the proposal. Dust generated by vehicles moving around the site can be controlled by wetting down any gravel surfaces using a water cart.</p>	
15	<p align="center">Rocky Crossing Road WILLYUNG WA 6330</p>	<p>Please formally note my objection to the proposed development for the following reasons;</p>	<p>The City of Albany Local Planning Scheme will be modified by the proposal to permit additional activities. Although the proposal is industrial in</p>	<p>The submission is noted and is upheld in part.</p> <p>See recommendations above.</p>

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		<p>Current zoning of agricultural land not in keeping with the proposed commercial activities.</p> <p>Rezoning of this lot is contradictory to the current City of Albany Planning Scheme.</p> <p>Close proximity of current residential properties and potential future residential developments.</p> <p>Elevated site in relation to neighbouring residential properties aiding potential visual, sound, dust and other pollution.</p> <p>Mobile asphalt plant potential to cause significant odorous pollution.</p> <p>Existing plant and vehicles are already easily audible and often operate outside normal business hours.</p> <p>Significant amount of dust is created from current vehicle movements, with proposed 'hard stand' areas and unsealed roads likely to increase the dust pollution.</p> <p>Existing industrial zones at Mirambeena or Pendeen should be utilised for the proposed development.</p> <p>I would also like to note that existing vehicles travelling along Menang Drive are</p>	<p>nature, it will not create significant land use conflict with adjoining agricultural uses. Areas of the lot can also be fenced off and continue to be used for grazing.</p> <p>As outlined above, the City recommends that a noise assessment and odour modelling are undertaken and that noise, odour and dust management plans must be prepared, including mitigation measures to be implemented on-site.</p> <p>The subject land is largely hidden from view from the surrounding dwellings, with one or two exceptions, owing to topography and existing vegetation cover. However, much of the lot is clearly visible from Menang Drive. The conditions that will apply to the Additional Use site include the planting of screening vegetation to minimise the visual impact of any future development.</p> <p>The operating hours of the site will be addressed through the development application process.</p> <p>The matter of the site location and the availability of 'General Industry' zoned land is addressed above.</p>	

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		<p>less of a sound (and vibration) nuisance than vehicles that are turning into Rocky Crossing Road and exiting the site. In particular heavy vehicles travelling to and from the existing sand extraction pit driving over Lot 104.</p> <p>I believe the existing John Street site that is due to relocate to 104 Rocky Crossing Road is moving due to complaints from neighbouring residents. These complaints need to be expected as likely problems for the new site. I am also not convinced that the areas shown on the proposed plans are sufficient to take the current operations from the existing site, which appears to be full to capacity, leading me to believe that expansion is likely in the future.</p>	<p>Menang Drive is designated as a priority heavy freight route within the Main Roads WA road hierarchy and was constructed as stage one of the proposed Albany Ring Road. While it is acknowledged that the proposal will lead to an increase in heavy vehicle numbers, this is consistent with the intended purpose of Menang Drive.</p>	
16	<p>Pinaster Road WILLYUNG WA 6330</p>	<p>We wish to make you aware of our objection to the proposed amendment.</p> <p>Our property boundary is located approximately 170 metres from the boundary of the proposed Additional Use Site, and we are of the view that the proposed development will have a significant impact on the environmental aspect and lifestyle associated with our Residential Rural property. Our specific objections are as follows:</p> <p>1. Non-compliance with guidance of</p>	<p>As outlined above, the City recommends that a noise assessment and odour modelling are undertaken and that noise, odour and dust management plans must be prepared, including mitigation measures to be implemented on-site.</p> <p>The proponent is at liberty to apply to rezone the lot and have that proposal assessed against the relevant planning strategies and policies. In this instance, the proposal is considered to be broadly consistent</p>	<p>The submission is noted and is upheld in part.</p> <p>See recommendations above.</p>

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		<p>Separation Distances between Industrial and Sensitive Land Uses in accordance with the Environmental Protection Act 1986.</p> <p>In accordance with the Guidance for the Assessment of Environmental Factors by the Environmental Protection Authority:</p> <p>The buffer distance required for the activity of Crushing of Building Material is 1000 metres due to noise and dust pollutions.</p> <p>The buffer distance required for the activity of Asphalt Works is 1000 metres due to noise, dust and odour pollution.</p> <p>According to the development guide plan provided by the applicant, the closest residence to the crushing are, Lot 359 Rocky Crossing Road is only 350 metres from the crushing area. The closest residence within the Rural Residential area is 780 metres. Our property would be approximately 800 metres from the crushing area. These distances clearly do not meet the minimum standard requirement of 1000 metres.</p> <p>The quarry currently operating</p>	<p>with the strategic direction set by the <i>Albany Local Planning Strategy</i> and the objectives of State Planning Policies 2.5 and 4.1.</p> <p>The City of Albany Local Planning Scheme will be modified by the proposal to permit additional activities. Although the proposal is industrial in nature, it will not create significant land use conflict with adjoining agricultural uses. Areas of the lot can also be fenced off and continue to be used for grazing.</p> <p>It should be noted that in considering the proposed local planning scheme amendment, the principal legislation is the <i>Planning and Development Act 2005</i>.</p> <p>Crushing activity is likely to be infrequent, as material is stockpiled and then crushed once there is sufficient quantity.</p>	

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		<p>(Holcim), in the area has been in operation for many years, with there being no EPA at the commencement of the extractions, therefore there was no requirement for that operation to be 1000 metres from residences.</p> <p>With the introduction of the <i>Environmental Protection Act 1986</i>, there is now that requirement and this operation should have no bearing on the granting of this current application.</p> <p>The allowing of the Amendment and Additional Use Site, under the <i>Environmental Protection Act 1986</i>, at this time would set a precedent for allowing GSS to apply again at any time in the future for further development within the location, and again the 1000 metre buffer zone would ignored.</p> <p>2. Noise</p> <p>The topographic location of the proposed crushing/asphalt plant (being on the side of hill) offers no 'natural' noise buffering. Sparse remnant vegetation or planted vegetation offers no noise buffering at all, as proven with the planting and growth of vegetation on the side of Menang Drive. As</p>		

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		<p>residents in the area, we believe there has been no reduction in the noise from the heavy haulage vehicles as the vegetation has increased over the seven years since completion.</p> <p>The proposed Additional Use will significantly increase the noise and volume of traffic, as similar heavy haulage vehicles are owned and operated by the proponent. We believe the noise coming from Menang Drive is excessive already. The development of Menang Drive was as a heavy haulage bypass road, not an access road to new developments. The development could not happen without access from Menang Drive.</p> <p>3. Use of Land</p> <p>The proponent must think the City of Albany and neighbouring property owners are naive with regards to the proposed crushing plant, to believe the statement within part 2.4 Land Use:</p> <p><i>“The purpose of highlighting the residences is to demonstrate that there is sufficient separation from residences to the proposed crushing area, particularly given the low number of uses per year it is likely to have (3-4</i></p>		

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		<p><i>days)</i>". This statement is purely an attempt to mislead both Council and impact neighbours with regards to the amount of noise and pollution that will be omitted from the proposed crushing plant. In reality, a successful business of this size will require considerably more time spent running the plant, as the estimated growth of concrete received grows from 1000 tons to 5000 tons, as detailed in the proposal, No. 3, page 7.</p> <p>The fact remains that the closest residence is only 350 metres away, with other residences being within the 1000 metre buffer zone.</p> <p>4. Industrial Zoned Areas – Pendeen Estate and Down Road Industrial Estate</p> <p>There is an existing Industrial Area within 3.5 kilometres of the property, which we believe is where this business should be located. Pendeen Estate has been developed within all the requirements/regulations for light industry and is sufficiently close to the Albany area, but sufficiently distanced to ensure that incompatible land uses are not impacted upon by the requirement of 1000 metre buffer</p>		

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		<p>zones for crushing and asphalt plants. If, as stated by the proponent, the GSS group of companies does not meet the criteria for using the land, maybe they should propose to amend the Local Planning Scheme to include an Additional Use site within the Industrial Area.</p> <p>There is also the option of Down Road Industrial Estate being a suitable area for the proponent to relocate the group of Great Southern Sands associated businesses and, if Great Southern Sands does not meet the criteria for this estate, they should submit a proposal to amend the Local Planning Scheme to include an Additional Use site within this industrial estate, which has been developed for the future growth and needs of industrial businesses within the Albany Region.</p> <p>5. Precedent for similar future developments in the area</p> <p>Although the proponent is not applying for the rezoning of the area, if the Addition Use site is approved, this will set a precedent for possible similar applications for amendments and Additional Use sites on other 'General Agriculture' zoned properties in the</p>		

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		<p>area in the future.</p> <p>6. Use of land not in conjunction with agriculture</p> <p>Although the proponent does not seek to change the zoning, but amend the land as an Additional Use site, the combined activities of movement of heavy haulage vehicles, asphalt production and the crushing of building materials are not conducive to agriculture, being mainly the grazing of and breeding of cattle.</p> <p>The owner of the stock would be impeded significantly with the above activities with regards to the impact on the safety, security and containment of the stock.</p> <p>As the access road to all the proposed areas is located centrally within the boundaries of the property, stock would be disturbed and impacted upon, regardless of the proponent claiming the Additional Use Site does not intend to compromise the agricultural purpose of the zone.</p> <p>Conclusion</p> <p>Our property views the south west section</p>		

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		<p>of Lot 104 Rocky Crossing Road which is not subjected to development in the proposed plan, but we are concerned that in the future the company will seek to expand the use of the land with even the possibility of applying to rezone the area to light industrial.</p> <p>We purchased our 'lifestyle' property zoned 'Rural Residential' in 2007 to live and raise our family with the knowledge that there were no industrial estates proposed, in this area, in the future.</p>		
17	<p>Pinaster Road WILLYUNG WA 6330 (Petition attached)</p>	<p>We would like to raise our concerns with the proposed planning amendment.</p> <p>It is our observation that rezoning Lot 104 would contradict the City of Albany's current Town Planning Scheme. Referring in particular to section 4.2.20 regarding zoning objectives of 'General Agriculture':</p> <p>"4.2.20 General Agriculture Zone</p> <p>a) <i>Provide for the sustainable use of land for agricultural and rural activities;</i></p> <p>b) <i>Support complementary land uses where those land uses do not detract from adjoining agricultural and rural</i></p>	<p>As outlined above, the City recommends that a noise assessment and odour modelling are undertaken and that noise, odour and dust management plans must be prepared, including mitigation measures to be implemented on-site.</p> <p>The proponent is at liberty to apply to rezone the lot and have that proposal assessed against the relevant planning strategies and policies. In this instance, the proposal is considered to be broadly consistent with the strategic direction set by the Albany Local Planning Strategy and the objectives of State Planning Policies 2.5 and 4.1.</p>	<p>The submission is noted and is upheld in part.</p> <p>See recommendations above.</p>

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		<p><i>activities and are compatible with the character and amenity of the area;</i></p> <p>c) <i>Prevent land uses and development within the zone that may adversely impact on the continued use of the zone for agricultural and rural purposes;</i></p> <p>d) <i>Provide for value-adding opportunities to agricultural and rural products on-site; and</i></p> <p>e) <i>Provide for tourism experiences where those developments do not impact upon adjoining agricultural and rural land uses.”</i></p> <p>Re: 4.4.20 (a): Rezoning land currently zoned ‘General Agriculture’ would obviously compromise the sustainability of its use for “<i>agricultural and rural activities</i>”.</p> <p>Re: 4.4.20 (b): In their report, Harley Dykstra describes the proposed use of the site as “<i>complimentary to the extractive industry use of the site</i>”. However, while there may be some ‘extractive industry’ on the site (we understand this to be an old sand pit), the site is currently zoned ‘General Agriculture’ not ‘extractive’. The proposed activity on the site may complement the sandpit and the quarry on</p>	<p>The City of Albany Local Planning Scheme will be modified by the proposal to permit additional activities. Although the proposal is industrial in nature, it will not create significant land use conflict with adjoining agricultural uses. Areas of the lot can also be fenced off and continue to be used for grazing.</p>	

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		<p>rocky Rocky Crossing Road, but it does not complement the existing zoning of 'General Agriculture' or the neighbouring zone of 'Rural Residential'.</p> <p>Re: 4.4.20 (c): The 'character and amenity' of the area would be compromised should this development go ahead. According to the Environmental Protection Authority's <i>Guidance Statement on Separation Distances between Industrial and Sensitive Land Uses</i>, amenity can be described as "factors which combine to form the character of an area and include the present and likely future amenity" and loss of amenity is considered as "unreasonable impact on a person from gaseous, dust, noise and odorous emissions and risk". With this in mind we raise the following points regarding amenity:</p> <p>Noise:</p> <p>The increased noise from the expected extra 80 vehicle movements a day in and out of the site, heavy vehicle movements in and around the site and rock crushing and screening activities have the potential to significantly increase noise levels in the</p>		

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		<p>area. Residents of Willyung are already expecting an increase in road traffic noise from Menang Drive due to its use as a bypass road between the developing Mirambeena Industrial Area and the port. Industrial activities such as the one proposed on the northern side of Menang Drive would combine with noise on Menang Drive to potentially have a significant cumulative effect on the residents on the south side of the road.</p> <p>Odour:</p> <p>Odour from the asphalt plant is of great concern. There is no mention of odour in the Harley Dykstra report; however, some odour would have to be expected when a mobile asphalt plant is in use and any odour related to the production of asphalt would have a negative impact on amenity. It may also be expected that the visual amenity of the rural area would be compromised. The planned 2400m² shed and 2400m² concrete apron is a substantially larger structure than would be found on any average rural property and therefore would not be <i>“compatible with the character and amenity of the area”</i>.</p>		

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		<p>As mentioned in the report by Harley Dykstra, due to proposed rock crushing activities and asphalt works, the site would be a Prescribed Premises under the Environmental Protection Act (1986) and would require an environmental licence to operate. Further to this, these two activities are listed in the Environmental Protection Authority's guidance note on <i>Separation Distances Between Industrial and Sensitive Land Uses</i>. These guidelines are referred to in the Harley Dykstra report and are also cited in the City of Albany's planning scheme. The separation distances between the proposed prescribed premises and the sensitive land use (the residential areas) are far below the Environmental Protection Authority recommended separation of 1000 metres. While it is understood that these recommendations are guidelines and not regulation, the separation distances have been formulated by the Environmental Protection Authority due to their experience with these industries historically being <i>"associated with amenity impacts from gaseous, dust, noise and odorous emissions, as well as with elevated levels of off-site risk to the public"</i>.</p>		

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		<p>In consideration of the information to hand, the proposed planning amendment to change Lot 104 Rocky Crossing Road to an 'Additional Use Site' does not appear to be adequate or appropriate. For all intents and purposes, the use of the site is Industrial and should therefore be operating in an area specifically zoned for industrial use, such as Mirambeena or a similar industrial site. The City of Albany's zoning of the area is, in our view, appropriate for current and future purposes, with 'Rural Residential' zones being complimentary to the neighbouring 'General Agriculture' zone. While the significant difficulties in trying to develop and expand a local business such as this are appreciated, it is in all stakeholders' best interests to do so in an area that will be appropriate now and into the future.</p> <p>We strongly encourage the City of Albany to oppose the amendment.</p>		
18	<p>11 Willow Court WILLYUNG WA 6330</p>	<p>I wish to make you aware of my objection regarding the proposed amendment to designate an Additional Use site at Lot 104 Rocky Crossing Road, Willyung.</p>	<p>As outlined above, the City recommends that a noise assessment and odour modelling are undertaken and that noise, odour and dust management plans must be prepared, including mitigation measures to be</p>	<p>The submission is noted and is upheld in part.</p> <p>See recommendations above.</p>

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		<p>My property is a neighbouring property to the proposed Addition Use site and I am of the view that the proposed development will have a significant impact on the environmental aspect and lifestyle associated with my residential rural property. My specific objections are as follows:</p> <p>1. Non-compliance with guidance on Separation Distances between Industrial and Sensitive Land Uses in accordance with the Environmental Protection Act 1986.</p> <p>In accordance with the <i>Guidance for the Assessment of Environmental Factors</i> by the Environmental Protection Authority: The buffer distance required for the activity of Crushing of Building Material is 1000 metres due to noise and dust pollution.</p> <p>The buffer distance required for the activity of Asphalt Works is 1000 metres due to noise, dust and odour pollution.</p> <p>According to the Development Guide Plan provided by the applicant, the closest residence to the crushing area, Lot 359 Rocky Crossing Road is only 350 metres</p>	<p>implemented on-site.</p> <p>The proponent is at liberty to apply to rezone the lot and have that proposal assessed against the relevant planning strategies and policies. In this instance, the proposal is considered to be broadly consistent with the strategic direction set by the <i>Albany Local Planning Strategy</i> and the objectives of State Planning Policies 2.5 and 4.1.</p> <p>The City of Albany Local Planning Scheme will be modified by the proposal to permit additional activities. Although the proposal is industrial in nature, it will not create significant land use conflict with adjoining agricultural uses. Areas of the lot can also be fenced off and continue to be used for grazing.</p> <p>Menang Drive is designated as a priority heavy freight route within the Main Roads WA road hierarchy and was constructed as stage one of the proposed Albany Ring Road. While it is acknowledged that the proposal will lead to an increase in heavy vehicle numbers, this is consistent with the intended purpose of Menang Drive.</p>	

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		<p>from the crushing area. The closest residence within the 'Rural Residential' area is 780 metres.</p> <p>The quarry currently operating (Holcim) in the area has been in operation for many years, with their being no Environmental Protection Authority at the commencement of the extractions. Therefore, there was no requirement for that operation to be 1000 metres from residences.</p> <p>With the introduction of the <i>Environmental Protection Act 1986</i>, there is now that requirement and this operation should have no bearing on the granting of this current application.</p> <p>Allowing the amendment to create an Additional Use site, under the <i>Environmental Protection Act 1986</i>, at this time would set a precedent for allowing Great Southern Sands to apply again, at any time in the future, for further development within the location and again the 1000 metre buffer zone would be ignored.</p>	<p>Crushing activity is likely to be infrequent, as material is stockpiled and then crushed once there is sufficient quantity.</p>	

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		<p>2. Noise</p> <p>The topographic location of the proposed crushing and asphalt plants (being on the side of a hill) offers no natural noise buffering. Sparse remnant vegetation or planted vegetation offers no noise buffering at all, as proven with the planting and growth of vegetation on the side of Menang Drive. As a resident in the area, I believe there has been no reduction in the noise from the heavy haulage vehicles as the vegetation has increased over the seven years since completion of the road.</p> <p>The proposed Additional Use will significantly increase the noise and volume of traffic, as similar heavy haulage vehicles are owned and operated by the proponent. We believe the noise coming from Menang Drive is excessive already. The development of Menang Drive was as a heavy haulage <i>bypass</i> road, not an access road to new developments. The development could not happen without access from Menang Drive.</p> <p>3. Use of land</p> <p>The proponent must think the City of Albany and neighbouring property owners are</p>		

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		<p>naïve, with regard to the proposed crushing plant, to believe the statement within part 2.4 Land Use of the planning report:</p> <p><i>“The purpose of highlighting the residences is to demonstrate that there is sufficient separation from residences to the proposed crushing area, particularly given the low number of uses per year it is likely to have (3-4 days)”.</i> The fact remains that the closest residence is only 350 metres away, with other residences being within the 1000 metre buffer zone.</p> <p>4. Industrial zoned areas – Pendeen Estate and Down Road (Mirambeena) Industrial Estate</p> <p>There is an existing Industrial Area within 3.5 kilometres of the property, which I believe is where this business should be located. Pendeen Estate has been developed with all the requirements/regulations for light industry and is sufficiently close to the Albany area, but sufficiently distanced to ensure that incompatible land uses are not impacted by the requirement of 1000 metre buffer zones for crushing and asphalt plants. If as stated by the proponent, the Great Southern Sands group of companies does not meet the criteria for using the land, maybe they</p>		

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		<p>should propose to amend the Local Planning Scheme to add an Additional Use site within the industrial estate.</p> <p>There is also the option of Down Road (Mirambeena) Industrial Estate as a suitable area for the proponent to relocate the Great Southern Sands group of businesses. If Great Southern Sands do not meet the criteria within this estate, they should submit a proposal to amend the Local Planning Scheme to add an Addition Use site within this industrial estate, which has been developed for the future growth and needs of industrial businesses within the Albany Region.</p> <p>5. Precedent for similar developments in the area in future</p> <p>Although the proponent is not applying for the rezoning of the area, if the Additional Use site is approved, this will set a precedent for similar applications to for amendments to designate Addition Use sites on other 'General Agriculture' zoned properties in the area in the future.</p>		

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		<p>6. Use of land not in conjunction with agriculture</p> <p>Although the proponent does not seek to change the zoning, but designate an Additional Use site, the combined movement of heavy haulage vehicles, asphalt production and the crushing of building materials are not conducive to agriculture, being mainly the grazing of and breeding of cattle.</p> <p>The owner of the stock would be impeded significantly by the above activities, with regard to the impact on the safety, security and containment of the stock.</p> <p>As the access road to all the proposed development areas is located centrally within the boundaries of the property, stock would be disturbed and impacted upon, regardless of the proponent claiming that the Additional Use site does not compromise the agriculture purpose of the zoning.</p> <p>I am concerned that in the future, the company will seek to expand the use of the land, with even the possibility of applying to</p>		

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		<p>rezone the area to light industrial.</p> <p>I purchased my 'lifestyle property', zoned 'Rural Residential', in the early 2000s to live and raise my family with the knowledge that there were no industrial estates proposed in this area in the future.</p>		
19	<p>Rocky Crossing Road WILLYUNG WA 6330</p>	<p>We wish to voice an objection to the proposed amendment of Lot 104 Rocky Crossing Road to include additional uses.</p> <p>We base the objection on the development of an office and workshop. The topography of the area lends itself to us being in direct view of both constructions along with exposure to ambient lights, traffic movements and noise from the heavy machinery workshop. Vegetation to be used as a barrier is not going to successfully shield our home.</p> <p>Without doubt, this construction will only lead to the rezoning of the area to properly accommodate a business operating trucks and earthmoving equipment, service facilities and offices. We do not wish to have an industrial area directly across from us when there are currently two industrial zones available for this type of operation.</p>	<p>As outlined above, the City recommends that a noise assessment is undertaken and that a noise management plan must be prepared, including mitigation measures to be implemented on-site.</p> <p>It is extremely unlikely that noise from the workshop will carry far enough to affect nearby landowners. However, this can be taken into account in the recommended noise management plan.</p> <p>The City of Albany Local Planning Scheme will be modified by the proposal to permit additional activities. Although the proposal is industrial in nature, it will not create significant land use conflict with adjoining agricultural uses. Areas of the lot can also be fenced off and continue to be used for grazing.</p>	<p>The submission is noted and is upheld in part.</p> <p>See recommendations above.</p>

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		<p>Having lived here for 40 years, I am impressed by how the Holcim quarry and asphalt plant have managed to mask their operations. Even the extraction being carried out on Lot 104 has been done well so far. The use of a crusher and asphalt plant could, I believe, be feasible with strict regulation of meet environmental requirements and hours of operation. The Harley Dykstra planning report relates the maintenance shed as making no more noise than an average farm shed. An average farm shed does not service machinery in the quantity (20 trucks) as stated.</p> <p>The construction of an office and shed exceeds any intent to maintain the land classification and zoning of 'General Agriculture'.</p> <p>It is our opinion that any further additional uses as listed will impact on our property and the quality of the lifestyle we have built as our family home.</p>		
20	Rocky Crossing Road	We are concerned that the amendment proposal will affect the existing land use in the following ways:	As outlined above, the City recommends that a noise assessment and odour modelling are undertaken	The submission is noted and is upheld in part.

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No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
	WILLYUNG WA 6330	<ul style="list-style-type: none"> • Additional noise and dust will be created by a significant increase in traffic movements. • Dust created by heavy vehicle movements and the proposed activities at the site. • Noise from the proposed activities at the site, including heavy machinery use. Regarding proposed noise abatement, vegetation screening does not seem adequate for the increased heavy vehicles movements and activities. • Environmental effects of the mobile asphalt plant. We note in particular that it is mobile; the possibility of moving the plant to another location on-site would likely move it closer to existing housing. • Will the Environmental Protection Authority recommendations be observed? The plans indicate that there is less than one kilometre between the asphalt plant and several existing houses. This is disturbing for the existing residents and raises concerns for ongoing health, in particular due to the fumes emitted by the activity, vehicles, machinery and equipment. 	<p>and that noise, odour and dust management plans must be prepared, including mitigation measures to be implemented on-site.</p> <p>The proponent is at liberty to apply to rezone the lot and have that proposal assessed against the relevant planning strategies and policies. In this instance, the proposal is considered to be broadly consistent with the strategic direction set by the <i>Albany Local Planning Strategy</i> and the objectives of State Planning Policies 2.5 and 4.1.</p> <p>The City of Albany Local Planning Scheme will be modified by the proposal to permit additional activities. Although the proposal is industrial in nature, it will not create significant land use conflict with adjoining agricultural uses. Areas of the lot can also be fenced off and continue to be used for grazing.</p> <p>The amendment document details the provision of a sealed machinery washdown bay, fitted with appropriate oil separators to capture contaminants.</p>	See recommendations above.

CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD110 REFERS

AMENDMENT No. 4

SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<ul style="list-style-type: none"> • The current zone is 'General Agriculture'. The proposed use does not appear to add value to agricultural use or add to the sustainability of the general area. The next nearest zone is 'Rural Residential'; the proposed use would not appear to contribute to this use either. • Water run-off from these activities is a significant concern, as water is fed from here into the King River system. <p>It would seem that the proposed activity is not appropriate for the current uses of this area. There are more suitable areas already zoned for industrial uses similar to the proposed activities.</p> <p>We request that the City of Albany oppose the proposed amendment.</p>		

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1
AMENDMENT No. 4
SCHEDULE OF SUBMISSIONS**

No.	Name/Address of Submitter	Summary of Submission	Proponent's Response
1	Environmental Protection Authority Locked Bag 33 Cloisters Square PERTH WA 6850	The Environmental Protection Authority (EPA) considers that the proposed scheme amendment should not be assessed under Part IV Division 3 of the <i>Environmental Protection Act 1986</i> (EP Act) and that it is not necessary to provide any advice or recommendations.	Comments noted.
2	ATCO Gas 81 Prinsep Road JANDAKOT WA 6164	ATCO Gas Australia has no comments to make in regard to the proposal.	Comments noted.
3	Water Corporation PO Box 100 LEEDERVILLE WA 6902	The Corporation has no objection to the amendment. There is no request for a Corporation water or wastewater service. The amendment area is also outside the planned water and wastewater servicing areas.	Comments noted.
4	Western Power Locked Bag 2520 PERTH WA 6001	Western Power has considered the proposal to designate an 'Additional Use Site' over Lot 104 Rocky Crossing Road, Willyung and provides the following advice in order to make certain that there will be sufficient capacity in the network and that Western Power's overhead assets are protected. Our Network Capacity Mapping Tool indicates there is currently sufficient capacity for the area. However, in view of the proposed additional uses the following is recommended to ensure our network takes into account the specific load and the overall scale of demand. Also, in view of the overhead power line currently servicing the property, I have included a point on clearance requirements for distribution lines to reinforce the importance of maintaining safe clearances from buildings and other land uses within the vicinity of power lines. Recommendations <ul style="list-style-type: none"> • A feasibility study be undertaken to confirm load demand forecasts. 	Comments noted. Development Approval to be subject to condition(s) requiring applicant to undertake feasibility to confirm load demand forecasts prior to development. Should the additional uses require modifying or upgrading the local distribution network then this would be at the developers cost. Development Approval to note the clearance requirement of 3.0 metres either side of the centre line for 33kV distribution lines to ensure safe movement and storage of equipment within the site.

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD110 REFERS
AMENDMENT No. 4
SCHEDULE OF SUBMISSIONS**

No.	Name/Address of Submitter	Summary of Submission	Proponent's Response
		<ul style="list-style-type: none"> • The proponent is advised that should the additional uses require modifying or upgrading the local distribution network then this would be at the developers cost. • That Council note the clearance requirement of 3.0 metres either side of the centre line for 33kV distribution lines to ensure safe movement and storage of equipment within the site. 	
5	Department of Agriculture and Food 444 Albany Highway ALBANY WA 6330	The Department of Agriculture and Food is not in a position to object or support this proposal.	Comments noted.
6	Main Roads WA Great Southern Region PO Box 503 ALBANY WA 6330	Main Roads raises no objection to the proposal.	Comments noted.
7	Department of Environment Regulation Locked Bag 33 CLOISTERS SQUARE WA 6850	<p>I note that the Amendment will allow specific additional uses, including activities categorised as Prescribed Premises as per Schedule 1 of the <i>Environment Protection Regulations 1987</i>. The <i>Environmental Protection Act 1986</i> (EP Act) requires a works approval be obtained before constructing a prescribed premises and makes it an offence to cause an emission or discharge, unless a licence or registration (for operation) is held for the premises.</p> <p>The purpose of a works approval is to allow DER to assess the environmental acceptability of a proposal against standards and policies. Works approvals also contain conditions to ensure the premises can operate in an environmentally acceptable manner and that the works themselves do not cause unacceptable environmental impacts. DER will not grant a works approval and subsequently issue a licence under Part V of the EP Act where emissions and discharges to the environment cannot be regulated.</p> <p>As part of the assessment of works approval applications,</p>	<p>Comments noted.</p> <p>Development Approval to be subject to DER condition(s).</p> <p>It is noteworthy that the DER requirement for a Works Approval and licensing provide further assurance that the Scheme Amendment will not result in unacceptable or unmanageable environmental impacts or emissions.</p>

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD110 REFERS
AMENDMENT No. 4
SCHEDULE OF SUBMISSIONS**

No.	Name/Address of Submitter	Summary of Submission	Proponent's Response
		<p>DER has regard to environmental impacts of proposed emissions and discharges to the receiving environment, including amenity for residential areas and other sensitive land uses. This is done in reference to separation distances which may be drawn from the Environmental Protection Authority's (EPA) <i>Guidance Statement No. 3 - Separation distances between Industrial and Sensitive Land Uses</i> (EPA 2005).</p> <p>For you information, DER is currently developing a Guidance Statement: Separation Distances to apply to assessments of prescribed premises under Part V of the EP Act and this is scheduled for release in the coming weeks.</p>	
8	Department of Parks and Wildlife South Coast Region 120 Albany Highway ALBANY WA 6330	The Department of Parks and Wildlife has no objection.	Comments noted.
9	Department of Lands Level 2, 140 William Street PERTH WA 6000	The Department of Lands has no comments or objections.	Comments noted.
10	Department of Water South Coast Region PO Box 525 ALBANY WA 6331	<p>The Department of Water has no objection to the proposal.</p> <p>The site has no surface water features that will be impacted by the proposed land use changes, nor is it likely that groundwater will be impacted.</p> <p>The DoW supports the requirement for the preparation of a drainage/stormwater management plan that will manage runoff on the site and minimise off-site impacts.</p>	<p>Comments noted.</p> <p>This Scheme Amendment will enable the lodgement of a formal Development Application. Any development approval to be conditioned requiring the preparation of a drainage/stormwater management plan that will manage runoff on the site and minimise off-site impacts.</p> <p>Approval of the above required prior to commencing development.</p>
11	Public Submissions (No. 11 - 19) - Content of submissions grouped by theme.	Eight (8) submissions were received from the public during the advertising period (25 June 15). One (1) additional submission was received subsequent to the close of advertising.	Further to submission of the proposed Development guide plan, the site operator has advised internal roads accessing the crushing plant, asphalt plant, workshop and office are to be sealed roads constructed of asphalt.

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD110 REFERS
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SCHEDULE OF SUBMISSIONS**

No.	Name/Address Submitter	of	Summary of Submission	Proponent's Response
			<p>These submissions are summarised in the following points:</p> <p>TRAFFIC - concerns were raised that there would be an increase in noise, dust and reduced air quality resulting from more heavy vehicles entering and exiting the site.</p>	<p>The asphalt plant will be able to produce up to 40 tons of asphalt per hour at maximum capacity. The plant is however expected to operate at 50% capacity due to actual demand for the product. At maximum capacity, less than two truckloads of asphalt can be produced per hour by the plant. Accordingly, this will NOT cause a significant increase in noise, traffic or dust emissions from the site.</p> <p>Given this, dust, traffic and noise generated from vehicle movement within the site will be minimal and will NOT have any significant impact on surrounding properties.</p>
12			<p>LOCATION - crushing and asphalt plant to be located within 1000m buffer recommended by EPA & associated noise, dust and odours on residents within 1000m of the plant.</p>	<p>EPA's Separation distances between Industrial and sensitive land uses No. 3 is a guidance statement providing generic separation distances (buffers) between industrial and sensitive land uses.</p> <p>Note - these distances are only a proposed guideline, and not a fixed requirement. The guideline nominates the following buffers:</p> <p>Asphalt works - 1000m Crushing plant - 1000m</p> <p>These setback distances are based upon worse case scenarios of a large plant and its setback to a full urban environment. Obviously a small operation with new improved technology located in a rural context would not be subject to worst case scenario setback.</p> <p>Downer currently operate an asphalt plant at the Holcim quarry approximately 500m from the proposed plant location. The technology used by Downers plant is antiquated, requiring the whole plant to heat up to prepare a hotmix. To do so this requires the plant to be started at around 3am to make asphalt by 6-6.30am, and produces a significant odour similar to that of recently laid asphalt on a road.</p> <p>The proposed asphalt plant implements the latest technology available, and is 'light years' ahead of the old technology that operates at the Holcim quarry. There are only six other asphalt plants</p>

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No.	Name/Address Submitter	of	Summary of Submission	Proponent's Response
				<p>of this standard operating in Western Australia.</p> <p>The proposed plant produces hotmix in 100L batches, and only requires a short time (approx. 20 minutes) to prepare.</p> <p>There are three key benefits to using the new technology.</p> <p>Firstly, the proposed plant requires a much shorter heating time and thus enabling operations to commence around 6am - much later than the Holcim quarry.</p> <p>Secondly, as much smaller quantities of hotmix are being produced, using advanced technology, there is no (major) noise and the odours produced are significantly less than that of an older asphalt plant. The odour produced with the proposed plant is more akin to that produced by a petrol station than freshly laid asphalt.</p> <p>Finally, the plant uses bag and cyclone technology to capture and process dust from materials and prevent dust emissions to the surrounding area.</p> <p>Given the proposed asphalt plant utilises advanced technology to overcome odour, noise and other operational issues - the impact of noise, dust and odour emissions to neighbouring properties is likely to be negligible.</p> <p>A crushing plant was operational at Great Southern Sands previous site on John Street. Here the neighbours were located much closer and no complaints were received.</p> <p>Although some noise may occur as a result of the nature of the crushing plant, this can be mitigated through vegetation buffers, physical topography of the land, set back and location of plant, hours of operation and limiting operation to 3 - 5 days per year.</p> <p>Furthermore, winds in the local area are from the south west, which will result in any noise or dust being directed towards the Holcim Quarry and not the Rural Residential neighbours fronting Menang Rd.</p>

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD110 REFERS
AMENDMENT No. 4
SCHEDULE OF SUBMISSIONS**

No.	Name/Address of Submitter	Summary of Submission	Proponent's Response
			<p>It is envisaged the crushing plant will cause minimal noise, emissions and no dust to the surrounding neighbours.</p> <p>DER's comments above note a requirement for a Works Approval and licensing provide further assurance that the Scheme Amendment will not result in unacceptable or unmanageable environmental impacts or emissions.</p> <p>In light of the above, DER's comments and the requirement to obtain DER approval and licence prior to operating the asphalt and crushing plant - any noise, dust or odours emitted from the plant can be addressed in this process.</p> <p>It is recommended Planning Approval be granted by CoA, and conditioned subject to DER approval to licence and operate the crushing and asphalt plants be obtained prior to development.</p>
13		ENVIRONMENT - concerns were raised about containment of and adequacy of water run off being retained on site.	Development Approval to be conditioned requiring the preparation of a drainage/stormwater management plan that will manage runoff on the site and minimise off-site impacts. Approval of the above required prior to commencing development.
14		VISUAL AMENITY - request was received to screen the eastern boundary of the crushing and hard stand area with low level vegetation to maintain visual amenity of the area.	<p>The development guide plan submitted with this application proposes vegetation screening to part of western and north western boundary of the property to screen the hardstand and proposed crushing area / asphalt plant.</p> <p>Further vegetation screening is proposed along a portion of the southern boundary abutting Menang Drive, the western boundary abutting Rocky Crossing Road, and along a portion of the internal access track.</p> <p>As a vegetation buffer already exists between Lot 104 and Lot 3, further vegetation screening along this boundary is not deemed necessary.</p> <p>The physical topography of the site in combination with the existing</p>

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD110 REFERS
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SCHEDULE OF SUBMISSIONS**

No.	Name/Address Submitter	of Summary of Submission	Proponent's Response
			<p>and proposed vegetation screening is believed adequate to reduce any impact on visual amenity.</p> <p>An onsite inspection confirms physical topography of the land will mitigate visual and noise concerns, with the hillock providing a physical barrier between the plants location and surrounding properties.</p>
		<p>FENCING - adjoining neighbour raised concerns about boundary fence that was agreed with the previous landowner, but not installed</p>	<p>Fencing of a common boundary is the responsibility of the individual land owner(s) who adjoin the subject boundary.</p> <p>The current landowner is aware of a request by a neighbour to install fencing to the adjoining boundary, and it is their intention to resolve this matter outside of the planning approval process.</p> <p>Accordingly, fencing should not be a condition of development approval.</p>
15		<p>OPERATIONS - concerns raised about operations expanding into landscape supplies and changes to operating hours.</p>	<p>The proposed development aligns with GSS's medium - long term vision. Whilst the option of further site development may occur in the future (subject to Council approval), GSS has no intentions of expanding its operations to include landscape supplies, or changes to its operating hours for this site.</p> <p>Furthermore, there is no intention for materials being stored or extracted on/from the site to be sold direct to the public from the site.</p>
16		<p>SECURITY - concern raised about impact of security lighting on surrounding properties.</p>	<p>No security or flood lighting is proposed to areas near boundaries. Accordingly, this will NOT impact on surrounding properties</p>
17		<p>SITE SUITABILITY - concerns were raised that other locations (Mirambeena and Pendeen) would be better suited to the proposed development as these industrial estates can achieve the 1000m buffer distance.</p>	<p>To remain competitive, Great Southern Sands needs to be able to consolidate its operations and to do this in close proximity to its raw material source. This results in a relatively large land area requirement and combined with the extractive industry, such a land requirement cannot be satisfied within the existing industrial zoned areas of the City.</p>



Harley Dykstra

PLANNING & SURVEY SOLUTIONS

Amendment No.4

Lot 104 Rocky Crossing Road, Willyung

City of Albany Local Planning Scheme No.1

Prepared by Harley Dykstra Pty Ltd for Great Southern Sands

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FS 536019

REPORT ITEM PD110 REFERS

PLANNING AND DEVELOPMENT ACT 2005

RESOLUTION DECIDING TO AMEND A LOCAL PLANNING SCHEME

CITY OF ALBANY

LOCAL PLANNING SCHEME NO.1

AMENDMENT NO.4

RESOLVED that the Council, in pursuance of Section 75 of the Planning and Development Act 2005, amend the above local planning scheme by:

1. Designating an Additional Use Site over Lot 104 Rocky Crossing Road, Willyung including Additional Uses of Plant and Equipment Storage and Maintenance, Office (Incidental), Crushing, Mobile Asphalt Plant, and Storage of Building/Construction Materials/Products on Lot 104 Rocky Crossing Road, Willyung and amending the Scheme Maps accordingly; and
2. Amending Schedule 2 - Additional Uses to incorporate provisions relating to Lot 104 Rocky Crossing Road, Willyung (AU31).

Dated this _____ day of _____ 20____ .

CHIEF EXECUTIVE OFFICER

DOCUMENT CONTROL

Control Version	DATE	Status	Distribution	Comment
A	05.06.2014	Draft	Internal	Draft for Comment and Review
B	30.06.2014	Draft	Client	Draft for Comment and Approval
C	05.08.2014	Draft	Client and City of Albany	Final for Client Approval and Draft for City of Albany Comment
D	16.10.2014	Final	Client and City of Albany	Final for Lodgement with City of Albany
E	16.01.2015	Final	Client and City of Albany	Amendments to Resolution requested by City of Albany

Prepared for: Great Southern Sands

Prepared by: SDP

Reviewed by: HD, LB and SD

Date: 16.01.2015

Job No & Name: 20112 Great Southern Sands

Version: E

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MINISTER FOR PLANNING

PROPOSAL TO AMEND A LOCAL PLANNING SCHEME

LOCAL AUTHORITY: CITY OF ALBANY

DESCRIPTION OF TOWN

PLANNING SCHEME: LOCAL PLANNING SCHEME NO.1

TYPE OF SCHEME: DISTRICT PLANNING SCHEME

NO. OF AMENDMENT: AMENDMENT NO.4

INCLUDING ADDITIONAL USES OF PLANT AND EQUIPMENT STORAGE AND MAINTENANCE, OFFICE (INCIDENTAL), CRUSHING, MOBILE ASPHALT PLANT AND STORAGE OF BUILDING/CONSTRUCTION MATERIAL/PRODUCTS AND INCLUDING PROVISIONS RELATING TO ADDITIONAL USE SITE NO.31 IN SCHEDULE 2 OF THE SCHEME TEXT.

1 INTRODUCTION

The purpose of this Amendment to the City of Albany Local Planning Scheme No.1 (LPS 1) is to include Lot 104 Rocky Crossing Road, Willyung within Schedule 2 of the City of Albany LPS 1 as Additional Use Site No.31. It is proposed to include the following Additional Uses as discretionary land uses:

- Plant and equipment storage and maintenance;
- Office (Incidental);
- Crushing;
- Mobile Asphalt Plant; and
- Storage of building/construction material/products.

The proposed additional uses will enable Great Southern Sands (landowner) to expand its activities on the site to include the storage and maintenance of all its own plant and equipment, and the crushing and recycling construction materials to create useable road/building products. The site is currently used for an approved extractive industry, of which the proposed development is complementary. It is proposed that the Additional Use special scheme provisions will reference a Development Guide Plan for the site incorporating the following:

- Construction of workshop approximately 2,400m² in area with concrete apron of same area adjoining the workshop;
- Construction of a site office approximately 200m² in area;

- Establishment of laydown areas, which will be used for the parking of commercial vehicles and associated attachments, as well as the storage of materials associated with the GSS group of companies (i.e. sand, road base, etc); and
- A receipt point and crushing area for Waste Building Materials (non-Abestos)(concrete, bricks, etc);

It is intended for the proposed development to complement the existing services offered by GSS and the approved extractive industry currently occurring on the Amendment Site.

This proposal has sound planning grounds, as justified by the following:

- The subject site is already used for extractive industry, the subsequent additional uses will complement and add to the services available on the site;
- The site is well screened and separated from surrounding residential dwellings. Additional screening will be planted to reduce the visual impact of development on the rural landscape;
- The site and its proposed land uses complement the existing uses of the Rocky Crossing Road quarry (Holcim);
- The site is readily accessible to Rocky Crossing Road, which has access to Menang Drive, a heavy haulage route. This will allow the easy distribution of materials to and from the subject site with little hindrance; and
- The location of the site is sufficiently close to the Albany urban area, whilst being sufficiently distanced to ensure incompatible land uses are not impacted by the proposed land uses.

The proposed additional uses for Lot 104 Rocky Crossing Road, Willyung are logical, given the context of the existing use of the subject site for extractive industry, the surrounding development and location of the site adjacent to Menang Drive. It is respectfully requested that Amendment No.4 to the City of Albany Local Planning Scheme No.1 to include Additional Use Site No.31 is approved.

2 SUBJECT SITE DETAILS

2.1 Location

The subject site comprises Lot 104 Rocky Crossing Road, Willyung. The total area of the subject site is 46.8ha. The subject site is 11.3km from the Albany CBD via Chester Pass Road or 12km via Albany Highway.

For a location plan, refer to **Figure 1**.

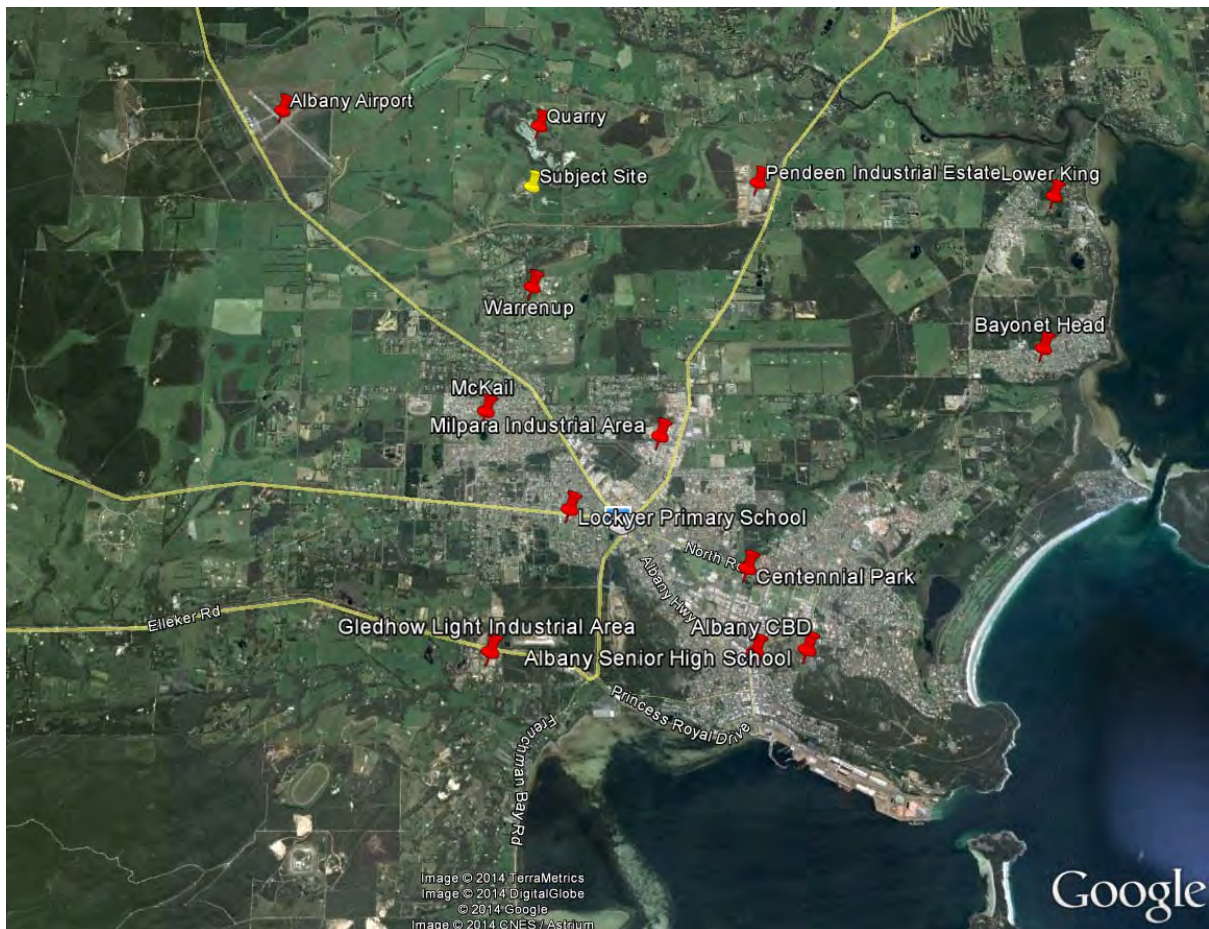


Figure 1: Location Plan

[Source: Google Earth]

2.2 Land Ownership

The registered proprietor of the subject site is Achilles Pty Ltd, with the legal description of the land being Lot 104 on Deposited Plan 49239. **Appendix A** provides the Certificate of Title applicable to the Amendment. The landowner is associated with the GSS group of companies.

2.3 Planning Classification of the Subject Site

The subject site is zoned *General Agriculture* by the City of Albany Local Planning Scheme No.1, as shown on an excerpt of Scheme Maps included in **Figure 2** below.

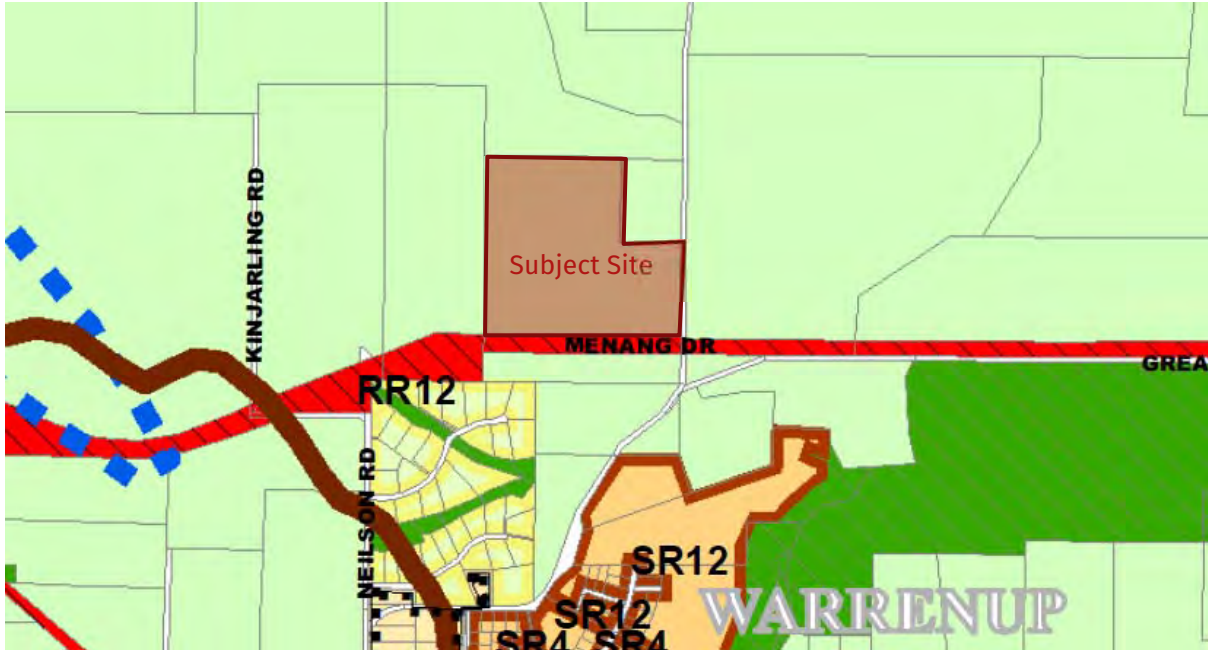


Figure 2: Excerpt from City of Albany Local Planning Scheme No.1 maps, showing the subject site.

The subject site is currently classified as *General Agriculture* by the Albany Local Planning Strategy (ALPS), as shown on an excerpt of Map 9B in **Figure 3** below. **Figure 3** below shows the Rocky Crossing Road quarry and its associated buffer being located directly to the north of the subject site.

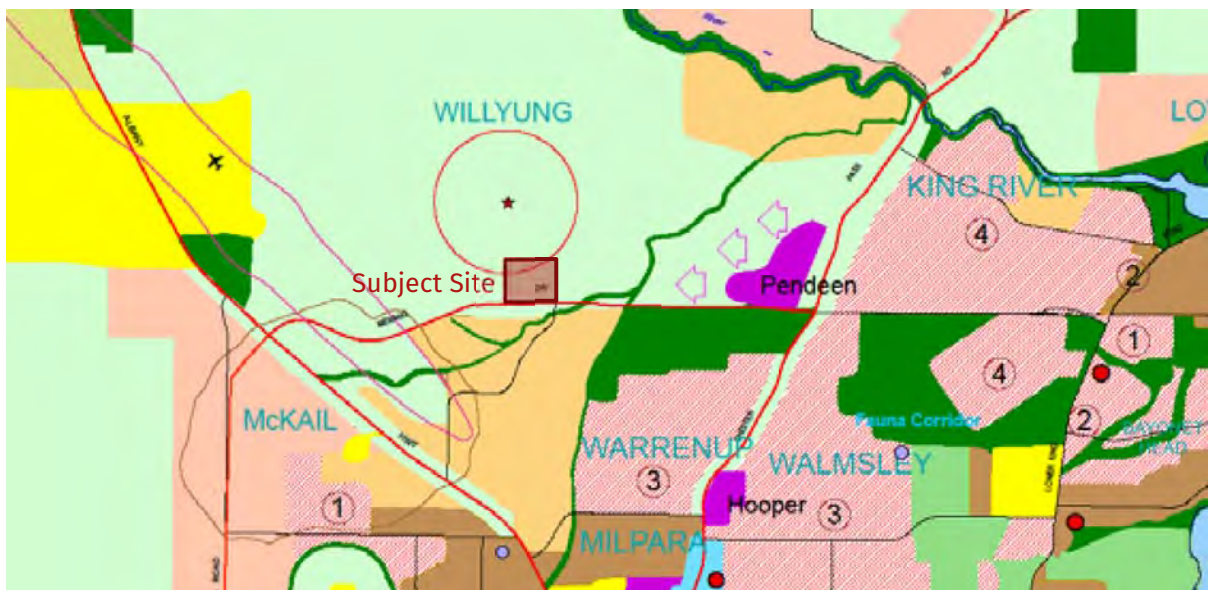


Figure 3: Excerpt from Map 9B of ALPS, showing the location of the subject site.

2.4 Land Use

The subject site and surrounds are zoned *General Agriculture* by the City of Albany Local Planning Scheme No.1. The subject site is currently majority cleared and used for approved extractive industry uses. Furthermore, limited grazing of stock is undertaken to keep pastures maintained across the subject site. The Site Plan at **Appendix B** provides an aerial photograph of the subject site, as well as surrounding residences and their separation to the proposed crushing area.

Located in the area to the north of Menang Drive are agricultural land uses, as well as the nearby Holcim Quarry on Mount Willyung. The predominant agricultural uses in the area are grazing of cattle.

Located to the south of Menang Drive are a mix of agricultural and rural residential land uses. As shown on the Albany Local Planning Strategy Map 9B Urban, it is likely that the rural residential uses will continue to develop in the area, with a buffer of agricultural land located directly adjacent to Menang Drive. The purpose of this buffer is to accommodate vehicle noise from the heavy haulage route. Earth bunds have also been incorporated on the southern side of the road to provide a buffer to vehicle noise.

As shown on the Development Guide Plan, although the majority of surrounding land uses are agricultural by nature, distances to the nearest residences have been highlighted from the proposed crushing area. The purpose of highlighting the residences is to demonstrate that there is sufficient separation from residences to the proposed crushing area, particularly given the low number of uses per year it is likely to have (3-4 days).

2.5 Physical Attributes

2.5.1 Topography

The subject site consists of undulating farmland comprising extractive industry. The dominant features of the subject site are:

- A ridgeline with a small hillock in the central western portion of the subject site, with the northern portions of the ridgeline forming the lower slopes of Mount Willyung;
- Mostly eastern facing slopes sloping down to Rocky Crossing Road, with a small portion of the site sloping south (south west corner) and west (north west corner);

Although not depicted by the contours shown on the plans provided by this Amendment, Menang Drive has a significant cut adjacent to the southwest corner of the subject site. Screening vegetation within Menang Drive also provides some visual screening of the site when travelling from west to east on Menang Drive.

The topography of the subject site is well suited to the proposal, ensuring it can be well screened from surrounding land uses and there is minimal impact on the perceived agricultural landscape in the locality. A major feature in the landscape will still be Mount Willyung and the Holcim Quarry.

2.5.2 Flora and Fauna

The majority of the subject site is under pasture, or forms extractive industry, hence being cleared of remnant vegetation. There is a stand of remnant vegetation located in the southwestern corner of the subject site. Further vegetation clearing on the subject site is not proposed as a result of the proposal and would be subject to appropriate approvals being sought.

2.6 Hydrology and Drainage

The subject site does not contain any permanent surface water flows. During winter, the west-east valley does have some surface water flows. Shallow groundwater of the subject site is located in two areas, being the northwestern corner (with associated soak/small wet area) and in the west-east valley. The proponent has advised the following in relation to the subject site:

- The northwestern soak has a finite source and is not part of the larger aquifer system (which reduce water flows in summer months); and
- There are some perched groundwater tables throughout the subject site.

3 Details of the Proposal

The primary purpose of the proposed amendment is to allow the GSS group of companies to expand the activities on the site to include the storage and maintenance of all its own plant and equipment. Secondly, it will allow the occasional crushing and recycling of construction materials to create useable road/building products (subject to approval from the Department of Environmental Regulation). The operations proposed to be undertaken on the subject site include:

- **Workshop** – The workshop is proposed to be used for the servicing and maintenance of the GSS group of companies vehicle fleet. This use falls within the definition of *Motor Vehicle/Boat Repair* of LPS 1, but the use will be limited to the repair of motor vehicles associated with the GSS group of companies.
- **Office** – The incidental office will be the logistical base of the operation of the GSS group of companies, as well as any other administration tasks associated with the operation of the business. This falls within the definition of *Office* of LPS 1.
- **Machine Washdown Bay** – This area will be used for the cleaning of vehicles used by the GSS group of companies. All run-off from the area will be treated and disposed of appropriately as detailed in this document. This use falls within the definition of *Motor Vehicle Wash* of LPS 1.
- **Receipt Point for Non-Asbestos Containing Materials (Non-ACM)** – A small area will be constructed as a receipt point for Non-ACM materials. This area is likely to be in close proximity to the proposed crushing area, with the location to be finalised. These materials typically include concrete, bricks and other inert wastes (soil, clay, etc). These will be crushed in the proposed crushing area and recycled into useable products such as road base, which has a significant benefit in reducing the volume of these products being disposed of in landfill. A definition for this use is not contained within LPS 1, however, the use is appropriately limited by the provisions relating to Additional Use Site No.31.
- **Proposed Crushing Area and Mobile Asphalt Plant** – As depicted on the Development Guide Plan, it is proposed to have a crushing area and mobile asphalt plant located in the northwestern corner of the subject site. The crushing use will be used for the crushing of Non-ACM materials. The below table specifies the current volume of materials received at the GSS group of companies John Street premises as well as the maximum capacity that could be accommodated.

Current and Maximum Capacity of Receipts	<i>Tonnes/Annum Received</i>	<i>Current</i>	<i>Maximum Capacity/Annum</i>
<i>Concrete Receipts</i>	1,000 tonnes		5,000 tonnes
<i>Inert Waste (Soil, Clay, etc)</i>	1,000 tonnes		5,000 tonnes
<i>Steel Products</i>	10 tonnes		100 tonnes
Note: Steel receipts consist only of re-inforcing bars in recycled concrete and occasional steel			

products recovered during green waste collection.

A definition for the above use is not contained within LPS 1, however, this use will be limited by the provisions applicable to Additional Use Site No.31. In this area, it is also proposed to install a mobile asphalt plant to supply the GSS group of companies. The footprint of the plant is approximately 200m² and it will be appropriately screened from surrounding residences.

- Laydown/Hardstand Areas – The laydown/hardstand areas will be utilized for the parking of commercial vehicles (transport depot) and associated attachments of the GSS group of companies, which falls within the definition of *Transport Depot* of the LPS 1. In addition to the parking of commercial vehicles, this area will also be utilized for the storage of materials associated with the GSS group of companies, including, but not limited to sand, gravel, road base and similar construction materials. This use is defined as *Storage* by LPS 1.

The proponent has advised that receipt of Non-ACM materials, as well as proposed crushing operations and mobile asphalt plant will require licensing from the Department of Environment Regulation (DER). All of the above uses are additional to that which would normally be approved in the *General Agriculture* zone, hence the requirement to undertake an amendment to LPS 1.

4 Planning, Environmental and Servicing Considerations

4.1 Statutory and Strategic Planning Environment

4.1.1 State and Regional Planning

Applicable State Planning Policies are SPP1 – “State Planning Framework Policy (variation No.2), SPP2.5 “Land Use Planning in Rural Areas” and SPP4.1 “State Industrial Buffer Policy”. No applicable Development Control Policies apply.

State Planning Policy No.1 – State Planning Framework Policy

The proposed amendment is consistent with the objectives of SPP 1, as evidenced by the following:

- The proposal seeks to amend LPS 1 to include Additional Use Site No.31, as the proposed uses cannot be accommodated on existing land within Albany and due to the strategic location of the subject site;
- It will provide a site specific development opportunity for a valued business in the greater Albany area, expanding its current operations on the site with complimentary uses; and
- The proposal examines the land use context and justifies the proposal accordingly.

State Planning Policy No.2.5 – Land Use Planning in Rural Areas

SPP 2.5 provides the overarching objectives and policy statements for land use planning for rural and rural settlement development. The proposed amendment complies with the requirements of SPP2.5, as outlined by the following points:

- The land is not identified as *Priority Agriculture* by the Albany Local Planning Strategy nor is zoned *Priority Agriculture* by LPS 1. Therefore, the proposed development will not impact on land considered to be of priority for the continuation of agricultural land use;
- The proposal does not seek to discontinue rural uses on the majority of the subject site. It will introduce uses that are complimentary to the existing extractive industry use of the site;
- The proposal plans for the use of rural land through this amendment and the inclusion of Additional Use Site No.31 in LPS 1, rather than proposing ad-hoc development approvals to be considered under the current zoning of the land;
- The proposal seeks to promote regional development through the allocation of a suitably located and sized parcel of land for the GSS group of companies, so that the business can continue to develop without hindrance from ongoing residential encroachment, as is the case at its current John Street premises;
- The proposed development seeks to minimize land use conflicts by co-locating with similar uses (i.e. the Holcim Quarry) and well as demonstrating sufficient setbacks to surrounding residences; and
- The proposed development seeks to manage all impacts and protect the environment, as is outlined within this report.

The proposal complies with the requirements of SPP2.5 and will result in a well-managed development on rural land.

State Planning Policy No.4.1 – State Industrial Buffer Policy

The purpose of SPP4.1 is to provide a consistent approach to protecting industrial land uses, whilst also ensuring the rights of those surrounding uses are not impinged by residual impacts. This policy generally relates to large proposals for industrial type development, but also relates to extractive industry and the like.

When considering proposals to amend the local planning scheme, the local government must have due consideration to SPP4.1, as outlined in Section 1.3 of the Policy.

As shown on the Site Plan and depicted on the Development Guide Plan, and by measures also enacted by this document, the proposal takes consideration of nearby land uses and seeks to ensure these uses are not impacted by future development on the subject site. Measures include:

- The location of the proposed crushing area and mobile asphalt plant in the northwest corner of the subject site, which is advantageous due to the presence of remnant vegetation and topography which will reduce off-site impacts. This area also provides the greatest separation to nearby existing land uses;
- The Site Plan and Development Guide Plan depict the nearest nearby residences. The minimum separation from the crushing area will be 350m;
- The crushing use on the land is a minor use and will likely only operate on 3 – 4 days per year during daylight hours;
- All other uses on the subject site would not be considered to have a high level of impact on surrounding land uses; and
- The area for crushing and the mobile asphalt plant depicted on the Development Guide Plan will be subject to separate approval by the Department of Environment Regulation. Any further buffering mechanisms can be formally assessed by this department during the application process.

The proposed amendment seeks to ensure nearby land uses experience minimal impact as a result of the proposed operations on the subject site. At the time of assessment, the Department of Environment Regulation can ensure that suitable buffering mechanisms can be incorporated for any proposed crushing activities on the subject site. If these requirements are not met, approval for these uses would not be forthcoming.

Environmental Protection Authority Guidance Statement No.3 – Separation Distances between Industrial and Sensitive Land Uses (EPA Guidance Statement No.3)

The EPA's Guidance Statement No.3 outlines the requirements for separation distances between industrial and sensitive land uses and outlines generic separation distances for land use types that would be considered to produce industrial emissions, which include noise, noxious gases, light, odour and other emissions.

Appendix 1 of the Guidance Statement quantifies the separation distances required. For the “Crushing of building material” industry, the recommended generic buffer distance is stated as 1000m. However, it is important to note that each of these cases can be judged on a case by case basis.

As has been previously explained in this document the use of crushing and the mobile asphalt plant will be subject to the approval of the appropriate government agencies. Compliance with the requirements of these agencies negates the need for emissions of the future development to be assessed at this time. If compliance with criteria cannot be met, it will be the responsibility of these agencies to impose conditions limiting or reducing impact.

4.1.2 Local Planning

City of Albany Local Planning Scheme No.1

Under the City of Albany Local Planning Scheme No. 1 (LPS 1), the subject site is zoned *General Agriculture*. The objectives of the *General Agriculture* zone listed in Clause 4.2.20 of LPS 1 are:

- “(a) Provide for the sustainable use of land for agricultural and rural activities;*
- (b) Support complementary land uses where those land uses do not detract from adjoining agricultural and rural activities and are compatible with the character and amenity of the area;*
- (c) Prevent land uses and development within the zone that may adversely impact on the continued use of the zone for agricultural and rural purposes;*
- (d) Provide for value-adding opportunities to agricultural and rural products on-site; and*
- (e) Provide for tourism experiences where those development do not impact upon adjoining agricultural and rural land uses.”*

The proposed amendment to LPS 1 seeks to include an Additional Use site, to expand and accommodate the proposed activities of the GSS group of companies. However, the proposal seeks to ensure the intent of the zone is not compromised, as evidenced by the following:

- The purpose of the proposed amendment is not to remove the agricultural uses of the land. It seeks to add uses to that land, which in a strategic context appear suitable for the subject site. The land not impacted by the additional uses (which cover approximately 20 percent of the subject site), which will continue to be used for agricultural purposes, currently consisting of grazing of stock;
- As has been explained throughout this document, the proposed additional uses do not seek to detract from the rural landscape or conflict with agricultural land uses. This is achieved through the use of the Development Guide Plan to appropriately locate development on the site, the use of screening and separation distances to achieve

buffering and the uses proposed, which complement the existing approved extractive industry uses;

- The subject site is already an approved extractive industry site. Furthermore, the subject site is included within the buffer of the Rocky Crossing Road quarry, located adjacent to a heavy haulage route and suitably separated from surrounding residences; and
- Screening and the like have been incorporated to ensure the rural landscape is not impacted by the proposed development.

As indicated throughout this document, it is proposed to identify the subject site *Additional Uses* with LPS 1. Clause 4.5 states the following in relation to the *Additional Uses* category:

“Despite anything contained in the Zoning Table, the land specified in Schedule 2 may be used for the specific use or uses that are listed in additional to any uses permissible in the zone in which the land is situated subject to the conditions set out in Schedule 2 with respect to that land.

Note: An additional use is a land use that is permitted on a specific portion of land in addition to the uses already permissible in that zone that applies to the land.”

The purpose of the proposed to LPS 1 is to include Additional Use Site No.31 within the scheme, applicable to Lot 104 Rocky Crossing Road, Willyung, with the additional uses of:

- Plant and equipment storage and maintenance;
- Office (Incidental);
- Crushing;
- Mobile Asphalt Plant; and
- Storage of building/construction material/products.

Under the current zoning of the land, these uses would not be permissible. However, support is sought for these additional uses to be applicable to the subject site based on the individual merits of the proposal. All uses will be adequately controlled and guided by the Development Guide Plan and applicable provisions for Additional Uses Site No.31.

Albany Local Planning Strategy

The subject land is currently classified by ALPS as *General Agriculture*. The planning objectives of the *General Agriculture* land use classification included in Section 5.5.1 and 8.5.5 of ALPS are:

“Identify and protect rural land of State and regional significance as Priority Agricultural land and the balance of rural land that is not priority agriculture or identified for closer settlement as General Agricultural.”

“Facilitate the protection of priority and general agriculture land from incompatible land use, developments and land management practices.”

The above statement is also supported by the following action with ALPS:

“Identify Priority and General Agriculture zones, objectives, land-use classes and development standards in the LPS 1 to protect and promote agricultural uses and prevent non-compatible uses and developments, including settlements, being established that will impact adversely on agricultural uses.”

The proposed amendment does not seek to discontinue the use of the land for agricultural purposes, as they will still be maintained. However, it does seek to include additional uses which will see the land utilised in a manner that complements the extractive industry approved on the subject site.

When considering the strategic relevance of the proposal, the following factors should be taken into consideration:

- The site is located in close proximity to the Rocky Crossing Road quarry;
- The subject site is easily accessible from Rocky Crossing Road, which connects directly to Menang Drive. This is one of the main heavy haulage routes in the Albany urban area and provides good access to the main arterial routes entering Albany, being Chester Pass Road and Albany Highway; and
- The total development area for the proposed additional uses will be approximately 20 percent of the total site area as depicted on the Development Guide Plan.

4.1.3 Conclusion

The proposed amendment does not seek to change the use of the land, but incorporate additional uses on this appropriate site. The use of the land for agriculture and associated activities will still occur as a result of the proposed amendment, therefore it is believed the proposed amendment is compliant with ALPS.

4.2 Environmental Considerations

4.2.1 Land Capability for Development

The majority of the proposed development will be for laydown/hardstand purposes. These will be constructed of gravel, with drainage being directed into existing dams for settling.

At this time, the only physical buildings proposed on the subject site are the workshop and office. Soil types of the subject site relating to these buildings are considered suitable. As previously outlined, the proponent has advised that the subject site does have some shallow groundwater flows, but these are associated with the northwestern corner of the site and the west-east valley, which will not be impacted by the proposed development. Measures, such as drainage attenuation, and settling ponds will be incorporated to ensure ground and surface water is not impacted.

It is considered that the subject site is suitably capable of supporting future development as depicted on the Development Guide Plan. All areas considered of low capability or having groundwater close to the surface have been excluded from the proposed development.

4.2.2 Environmental Emissions/Outputs

Dust

As shown on the Development Guide Plan, it is proposed to seal the access road connecting the office/workshop carpark to Rocky Crossing Road. However, dust may be generated from other vehicle movements around the subject site, given all other roads are proposed to be constructed of gravel. The GSS group of companies has overcome this problem at its John Street headquarters by a combination of two methods, being:

- Application/incorporation of dust ameliorants on all gravel roads and surfaces; and
- Regular watering with water cart to suppress dust.

Given the relative separation of the subject site from surrounding land uses and residential premises, it is not anticipated that dust generated from vehicle movement will have any significant impact. The GSS group of companies owns multiple water carts, therefore any situation where dust from gravel surfaces or activities becomes an issue can be resolved quickly.

Noise

Noise is anticipated to be generated by the proposed land uses. These are likely to be from the following sources:

- Workshop;
- Machinery and Vehicle Movement; and
- Crushing and Mobile Asphalt Plant.

Noise from the workshop, machinery and vehicle movement around the site and the mobile asphalt plant is anticipated to be minimal and would be similar to that undertaken in agricultural areas as a result of farm practices and management.

Therefore, the likely noise generating activities will be located in the Crushing Area. The crushing of demolition products will occur via a horizontal shaft impactor, which does have the potential to generate high levels of noise. As has been demonstrated throughout this document, the crushing use is likely to be conducted sparingly (3 – 4 days per year) during daylight hours. Furthermore, the use of the crusher will require the separate approval of the Department of Environment Regulation, which will impose conditions and minimum requirements on its use to ensure that impact on nearby/neighbouring land uses is limited.

Effluent

Effluent disposal for the proposed development will be on-site, given a lack of ability to connect to a reticulated sewer network or similar, and given the type of effluent produced. These two sources of effluent will be:

- Workshop & Office – Effluent from these uses will be treated and disposed of using an Alternative Treatment Unit or similar by a licensed installer. The location and type of

device will be subject to the approval of the Health Department of Western Australia and the City of Albany;

- Machinery Washdown Bay – an effluent system will be installed that has the ability to trap oily wastes for separate disposal. The oil trap will be required to be of sufficient capacity to allow the settling of any oily emulsions derived from greases, oils and other hydrocarbons that collect on the outside of plant and machinery. Once treated, the resulting waste water will be disposed of within the stormwater retention pond utilising plantings of rushes, sedges and screening vegetation. The biodegradable nature of the detergents will reduce any potential impacts considerably.

Stormwater

Rainwater from rooftops will be harvested for potable water supply and stored on-site to the City of Albany requirements. All other stormwater generated on-site will be directed to dams, swales and stormwater retention ponds and away from any natural water flows of the site. As is normal requirement, the applicant may be required to provide a Drainage/Stormwater Management Plan to the City of Albany at the time of Planning Scheme Consent.

Hydrocarbons

As associated with most modern workshops, there is a presence of hydrocarbons and other associated chemicals used in vehicles. It is proposed that waste products from the workshop are captured within a purpose-built 'EVAC' system. The waste captured in this system will be removed at regular intervals by a contractor and disposed of accordingly.

4.2.3 Buffers to Surrounding Land Use

Agriculture

As shown on the Development Guide Plan and Site Plan for the subject site, distances to surrounding residences in the *General Agriculture* zone are depicted. The distance of closest residence to the proposed crushing area is 350 metres. This and another residence are located on the opposite side of the ridgeline to the proposed crushing area, as well as having a substantial buffer of remnant vegetation, which affords some noise buffering.

All other dwellings on *General Agriculture* zoned land are located in excess of 500 metres from the proposed crushing area. The location of the proposed crushing uses has been carefully chosen to utilise the remnant vegetation and topography of the subject site, to ensure impacts on sensitive land uses are minimized.

When assessing the buffers to agricultural land uses, it is also important to consider the context of the use and the location. The use of the crushing area for crushing purposes is only likely to occur on 3 – 4 days per year. Furthermore, the properties within closest proximity to the crushing use are also located within close proximity to the quarry on Rocky Crossing Road, which is likely to have a

substantially greater impact on the amenity of the locality. Furthermore, approval for the use will be required from the Department of Environment Regulation.

Rural Residential

Rural Residential Area No.12 is located to the south of Menang Drive, being buffered by a strip of *General Agriculture* zoned land. The following distances to the proposed development and nearest residence within Rural Residential Area No.12 are proposed:

- Approximately 480m to proposed workshop; and
- Approximately 780m to proposed crushing area.

Due to the topography of the subject site, additional buffering will be offered by the presence of the small hillock and remnant vegetation, which form a direct barrier between the proposed crushing area and Rural Residential Area No.12. Noise levels from the proposed workshop are not considered to be excessive, and would be associated with the use of rattle guns and other similar compressed air machinery. This is not dissimilar to many agricultural properties in the greater Albany area which would have similar equipment used for servicing vehicles in sheds.

The impact of the proposed development on Rural Residential Area No.12 is likely to be negligible, given the topography of the land, setback of development, presence of Menang Drive and other factors.

4.2.4 Fire Management

A Fire Management Plan has not been prepared as part of the Amendment documentation. As shown on the Development Guide Plan and Site Plan, the subject site is predominantly cleared, with some scattered remnant trees and parkland cleared/grazed bushland, lending the site to having a low bushfire hazard rating. Furthermore, all buildings are setback in excess of remnant vegetation on the site, nor will be permanently occupied for residential purposes. As such, the usefulness of any Fire Management Plan is negated. In accordance with the requirements of the City of Albany, fire management of the site will be undertaken in accordance with the annual City of Albany Fire Management Requirements brochure.

4.2.5 Visual Landscape

The subject site can be described as an 'Undulating Rural Landscape' by *Visual Landscape Planning in Western Australia*. It contains natural features such as undulating terrain, a ridgeline and wide valley, with scattered remnant vegetation.

Visual Landscape Planning in Western Australia suggests the following principles and guidelines be applied when planning for development within the 'Undulating Rural Landscape':

- *"Retain remnant vegetation throughout the landscape.*
- *Ensure that structures are not located on the skyline as seen from important viewing locations.*

- *Revegetate cleared ridgelines, to maintain the sense of elevation of these features that becomes diminished when vegetation is lost.*
- *Valued views should be maintained by not siting buildings in locations that are prominent in views, for example, at focal points or from panoramic lookout points.*
- *View corridors should be maintained to important elements in views, such as a vista to a scarp, and not inadvertently screened by buildings, dense roadside planting or plantations.”*

Future development of the subject site seeks to protect the visual elements of the site by:

- Retaining remnant vegetation throughout the site;
- Providing for visual screening fronting Menang Drive and Rocky Crossing Road to screen proposed development; and
- Ensuring development is not located on prominent ridgelines. Where development is proposed to be on the side of ridgelines, it is located lower than the high point of the ridgeline and has vegetation which also provides a visual offset, meaning the development is not the prominent aspect in the landscape;

It is believed that the Amendment and future development will be sensitive to the landscape and respond with appropriate visual form.

4.3 Servicing Considerations

4.3.1 Access

External Access

Access to the subject site will be from Rocky Crossing Road via the existing crossover. This crossover has good sight lines and will be sealed and upgraded to the specifications of the City of Albany to service the proposed development. Following a site visit of the City of Albany officers, it was determined that the applicant may have to contribute to the upgrade of the section of Rocky Crossing Road from the driveway entrance to the site to the intersection with Menang Drive, which has been included in the conditions applicable to the proposed development.

No direct access to Menang Drive will be permitted as a result of the proposed development.

Traffic Management and Vehicle Load on Road Network

The maximum number of heavy vehicles to be stored on the premises at any time is estimated to be twenty (20) at this time, plus associated attachments and equipment. In addition to employees entering and exiting the site, this is likely to equate to an average of 80 vehicle movements per day.

Rocky Crossing Road is of a suitable capacity to handle the proposed vehicle movements. Furthermore, it should be considered that when designing the intersection of Rocky Crossing Road

and Menang Road, Main Roads Western Australia has had consideration for a number of heavy vehicle movements accessing the Holcim Quarry.

Internal Access and Parking

Internal access will be via a network of gravel and sealed roads. As shown on the Development Guide Plan, it is proposed to seal the main access into the property, providing sealed access to the office and workshop. The remainder of access around the subject site will be constructed with gravel surfaces, including the laydown/hardstand areas. As outlined previously, where required the surfaces will be treated with dust suppressants and sprayed with water to reduce dust, should this prove an ongoing issue. As shown on the Development Guide Plan, it is proposed to locate an area for employee/visitor parking adjacent to the proposed office and workshop.

4.3.2 Services

Water

It is not proposed to connect a reticulated water supply to the proposed development. This supply is not available to the subject site. Therefore, it is proposed to use rainwater harvested from roof catchments of the proposed office and workshop and stored in rainwater tanks on-site accordingly. Details on the volume and catchment area of rainwater tanks will be provided in accordance with the requirements of the City of Albany at Application for Planning Scheme Consent stage.

Non-potable water supplies will be available from the numerous dams currently located on the property. As has been previously mentioned in this document, this water will be used for dust suppression and the machine washdown bay and is also available as a water supply for fire-fighting purposes should it be required.

Power

The subject site is currently serviced by an overhead power supply. Whilst no alterations to the existing power supply are proposed at this time, should a higher voltage supply be required for the operation of the workshop and office, this supply and its installation will be negotiated with Western Power.

On-site Effluent Disposal

All effluent disposal will be on-site, with appropriate systems installed to the satisfaction of Health Department of Western Australia and the City of Albany.

Telecommunications

It is likely that a telecommunications connection will be required to be installed. This installation will be arranged with the appropriate service provider.

5 RATIONALE AND CONCLUSION

Amendment No.4 to City of Albany Local Planning Scheme No.1 seeks to include Additional Use Site No.31 on Lot 104 Rocky Crossing Road, Willyung and insert the relevant provisions applicable to Additional Use Site No.31 into Schedule 2 of the Scheme.

This Amendment is justified by the following comments:

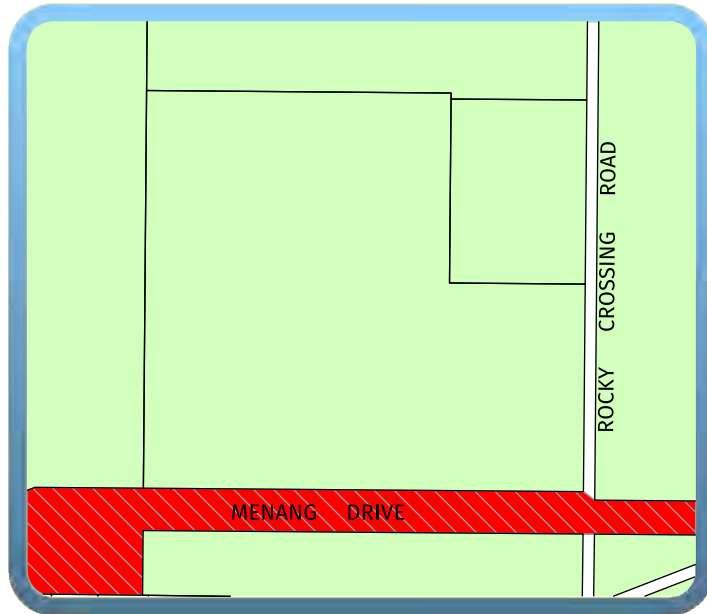
- It builds on and complements the existing approved extractive industry uses on the subject site;
- It actively plans for and controls the use of the subject site for limited purposes in conjunction with the Great Southern Sands group of companies, whilst the remainder of the property will continue to be used for rural purposes;
- The development is located in an area characterized by similar uses, being nearby to the Rocky Crossing Road quarry, located adjacent to the Menang Drive for good heavy haulage access;
- Prior to any development/use occurring for the Crushing and Mobile Asphalt Plant operations, it will be required that the relevant approvals are obtained from the Department of Environment Regulation;
- A similar industrial zoned site is not available in the Albany urban area. Those lots that may be available are either too small (Pendeen) for the operations or the Great Southern Sands group of companies does not meet the criteria for using the land (Mirambeena). Its existing premises are limited due to encroaching residential and sensitive premises;
- It will continue to support the growth of a local Albany business by providing a site appropriate to this business; and
- Adequate scheme controls applicable to the proposed development ensure that off-site impacts can be mitigated.

Endorsement of the Amendment identifying Lot 104 Rocky Crossing Road, Willyung as Additional Use Site No.31 is respectfully requested.

CITY OF ALBANY

Local Planning Scheme No. 1

Amendment No. 4

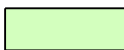


Existing Zoning

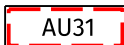
LOCAL SCHEME RESERVES

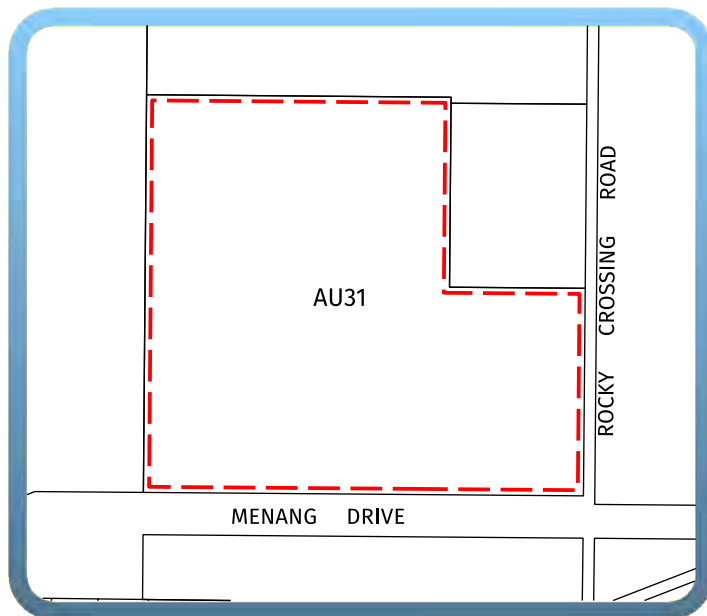
-  Local Roads
-  Major Road

ZONES

-  General Agriculture

OTHER

-  AU31
- Additional Use



Proposed Zoning



REPORT ITEM PD110 REFERS

PLANNING AND DEVELOPMENT ACT 2005

CITY OF ALBANY

LOCAL PLANNING SCHEME NO.1

AMENDMENT No.4

The City of Albany under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005 hereby amends the above local planning scheme by:

1. Designating an Additional Use Site over Lot 104 Rocky Crossing Road, Willyung including Additional Uses of Plant and Equipment Storage and Maintenance, Office (Incidental), Crushing, Mobile Asphalt Plant, and Storage of Building/Construction Materials/Products on Lot 104 Rocky Crossing Road, Willyung and amending the Scheme Maps accordingly; and
2. Amending Schedule 2 - Additional Uses to incorporate provisions relating to Lot 104 Rocky Crossing Road, Willyung (AU31).

Schedule 2 – Additional Uses [cl.4.5]			
No.	Description of Land	Additional Use	Conditions
AU31	Lot 104 Rocky Crossing Road, Willyung Deposited Plan 49239	Plant and Equipment Storage and Maintenance Office (Incidental) Crushing Mobile Asphalt Plant Storage of Building/Construction Materials/Products	<ol style="list-style-type: none"> 1. Development shall generally be in accordance with the Development Guide Plan endorsed by the CEO, subject to minor variations as may be supported by the Local Government. 2. The crushing and mobile asphalt plant uses shall be limited to the Crushing area depicted on the Development Guide Plan. 3. Plant and equipment storage and maintenance shall be limited to those vehicles, plant and equipment operated/owned by Great Southern Sands Group of Companies. 4. Storage of building/construction materials/products shall be limited to those used exclusively or dealt with by Great Southern Sands Group of Companies. 5. The washdown bay depicted on the Development Guide Plan shall be limited to those vehicles, plant and equipment operated/owned by Great Southern Sands Group of Companies. 6. The office use shall be limited and incidental to the predominant use of the property as determined by the Local Government. 7. Crushing activities shall not be permitted without approval from the relevant State Government agency. 8. Crushing activities are only permitted to be undertaken on-site within the hours of 8am to 5pm, Monday to Friday inclusive. 9. Vegetation screening depicted on the Development Guide Plan being implemented to the satisfaction of the Local Government and not unduly impacting the aspect of surrounding landowners. 10. At the time of development, the Local Government may require a contribution to the upgrade of Rocky Crossing Road between Menang Drive and the site access road.

REPORT ITEM PD110 REFERS

PLANNING AND DEVELOPMENT ACT 2005

CITY OF ALBANY

LOCAL PLANNING SCHEME NO.1

AMENDMENT No.4

ADOPTION:

Adopted by resolution of the Council of the City of Albany at the meeting of the Council held on the _____ day of _____ 201__:

Mayor

Chief Executive Officer

FINAL APPROVAL:

Adopted for final approval by resolution of the City of Albany at the meeting of the Council held on the _____ day of _____ 201__ and the Common Seal of the municipality was pursuant to that resolution hereunto affixed in the presence of:

Mayor

Chief Executive Officer

RECOMMENDED / SUBMITTED FOR FINAL APPROVAL:

Delegated under s.16 of the PD Act 2005

Date

FINAL APPROVAL GRANTED:

Minister for Planning

Date

APPENDIX A – CERTIFICATES OF TITLE

WESTERN



AUSTRALIA

REGISTER NUMBER 104/DP49239	
DUPLICATE EDITION 2	DATE DUPLICATE ISSUED 14/3/2008

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME
2616

FOLIO
525

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 104 ON DEPOSITED PLAN 49239

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

ACHILLIES PTY LTD OF 61 PEELS PLACE, ALBANY

(T K522899) REGISTERED 29 FEBRUARY 2008

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. K522900 MORTGAGE TO NATIONAL AUSTRALIA BANK LTD REGISTERED 29.2.2008.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

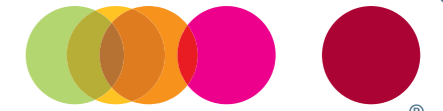
The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP49239.
PREVIOUS TITLE: 1728-83.
PROPERTY STREET ADDRESS: LOT 104 ROCKY CROSSING RD, WILLYUNG.
LOCAL GOVERNMENT AREA: CITY OF ALBANY.

APPENDIX B – SITE PLAN

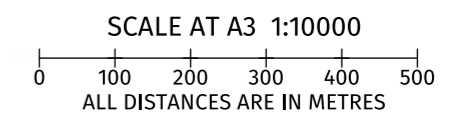
SITE PLAN

Lot 104 on DP49239
Rocky Crossing Road,
Willyung,
Albany

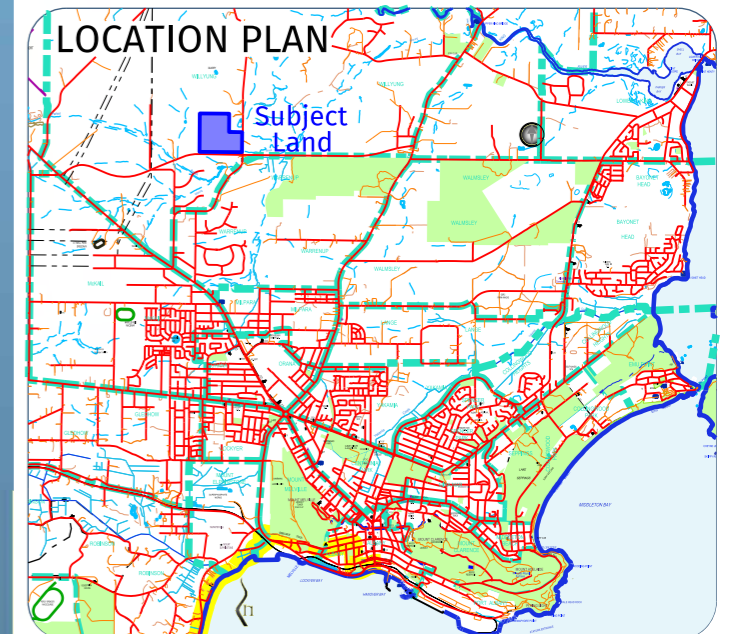


Harley Dykstra

PLANNING & SURVEY SOLUTIONS



DRAWN	CHECKED	DRAWING No
ABS 17/07/2014	SDP 17/07/2014	20112-02B.dgn
REV	DESCRIPTION	DATE
B	Client Modifications	17/07/2014
C	Appendix B Added	05/08/2014



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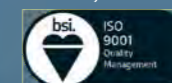
Offices also at Bunbury, Busselton, Kelmscott and Perth

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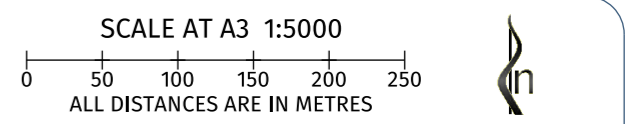
NOTE:

This plan has been prepared for planning purposes. Areas, Contours and Dimensions shown are subject to survey



APPENDIX C – DEVELOPMENT GUIDE PLAN

REPORT ITEM PD110 REFERS
**DEVELOPMENT
 GUIDE PLAN**
 Additional Use Site No.31
 Lot 104 Rocky Crossing Road,
 Willyung,
 Albany



DRAWN	CHECKED	DRAWING No
SDP 14/10/2014	SDP 14/10/2014	20112-04C.dgn
REV	DESCRIPTION	DATE
B	Client Modifications	05/08/2014
C	Modification for the City of Albany	14/10/2014

- LEGEND**
- Buildings & Concrete Apron
 - Laydown or Hardstand
 - Proposed Crushing Area/Mobile Asphalt Plant
 - Sand Extraction Area
 - Washdown Bay
 - Stormwater Retention
 - Vegetation Screening
 - Unsealed/Sealed Access Roads

This Development Guide Plan has been adopted by Council and signed by the Chief Executive Officer for the City of Albany

Chief Executive Officer.....Date.....

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Appendix C

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NOTE:
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Current and Future Rural Residential
 (closest residence is 780m from crushing area)

Planning and Development Committee Meeting (2 Sept 2015)

YAKAMIA/LANGE STRUCTURE PLAN

New Information & Questions on Notice

Executive Summary

The Planning and Development Committee recommended laying the Yakamia/Lange Structure Plan on the table to consider:

- Lower density development;
- Change to flood boundaries; and
- Not providing public open space in addition to foreshore areas.

1. Low Density (R5 - 2000m²)

- The City's Local Planning Strategy does not support low density (R5 - 2000m²) subdivision for the structure plan area.
- The Department of Planning advised that low density ('Special Residential' or R5 – 2000m²) subdivision will not be supported in the structure plan area.

2. Flood Prone Areas

- The Department of Water used a precise sensing method (LIDAR - aeroplane) in 2013 to examine the surface of the earth, to then define flood prone areas.
- To change flood boundaries, an engineering solution will need to be reached at a cost to the City and landholders through research, design and development and without impacting on neighbouring properties.

3. Public Open Space and Foreshore Areas

- State legislation requires 10% of a subdivision area to be given up for public open space.
- State Planning Policy (Liveable Neighbourhoods) requires a foreshore reserve to be given up in addition to the public open space.
- The Structure Plan designates areas susceptible to flooding as a foreshore, to be ceded when landholder subdivides.
- Foreshore areas are not suitable for development or public open space because they are generally wet under foot.
- Residential areas need public open space for residents to recreate.
- Unlikely that a variation to state policy can be supported such that public open space is not contributed.

4. Planning and Development Regulations 2015

- As of 19 October 2015, the Western Australian Planning Commission becomes the endorsing body for structure plans. The Local Government will no longer have the authority to endorse structure plans. Delaying the structure plan may have an impact on landholder and City aspirations.

New Information for Councillors

New Legislation

Planning and Development Regulations 2015

1. The Local Government and the Western Australian Planning Commission are currently responsible for endorsing structure plans. The new *Planning and Development Regulations 2015* come into operation on the 19 October 2015. The new Regulations deem the Western Australian Planning Commission as the *single determining authority* for structure planning (<https://www.corrs.com.au/publications/corrs-in-brief/new-planning-and-development-local-planning-scheme-regulations-2015-wa/>). Delaying the structure plan may further implicate landholder and City aspirations.

Questions Raised At Planning And Development Committee Meeting

Questions	Response
<p>1. How was the 1:100 year flood area determined? Resident informs me that Department of Water recorded water heights at 2005 flood event. Recording could be misleading considering lack of maintenance of Yakamia diversion drain.</p>	<p>1. Flood Plain</p> <ul style="list-style-type: none"> • In May 2015, the Department of Water forwarded to the City spatial flood data on the Yakamia Creek areas. The spatial data has been used in the Structure Plan to identify potential flood areas. The new flood data is based on LIDAR mapping undertaken in 2013. • LIDAR is a remote sensing method used to examine the surface of the earth. • Light pulses—combined with other data recorded by an airborne system— generate precise, three-dimensional information about the shape of the Earth and its surface characteristics. • LIDAR systems allow scientists and mapping professionals to examine both natural and manmade environments with accuracy, precision, and flexibility. LIDAR is being used around the world to produce more accurate shoreline maps, make digital elevation models for use in geographic information systems, to assist in emergency response operations, and in many other applications.
<p>2. Not imperative for Council to rush adoption of the Structure Plan.</p>	<p>2. Adoption of Structure Plan – Timing</p> <ul style="list-style-type: none"> • In accordance with the City's Scheme, subdivision and development cannot occur in the localities until such time that the Structure Plan is endorsed. • Landholders have requested that the City develop and endorse the plan so that they can develop and subdivide their land. To further delay adoption of the structure plan may inherit backlash from some landholders wishing to develop and subdivide their land. • Structure planning for the Yakamia area began in 1998 with the adoption of the draft Yakamia District Structure Plan. Preparation and finalisation of the structure plan has involved extensive research and investment including: <ul style="list-style-type: none"> ○ Developing an Environmental Plan; ○ Flora and Fauna surveys; ○ Developing a Water Management Strategy; ○ Developing an Arterial Drainage Plan; ○ Supporting the development of a Foreshore Management Plan; ○ Public and agency consultation on numerous occasions. Formal advertising process which includes a schedule reviewing public and government submissions; ○ A workshop with landholders and government agencies; ○ Independent site visits on request of landholders; ○ Site visits with the Councillors, Office of Environmental Protection Authority, Department of Planning, Department of Parks and Wildlife and Department of Water. • The Structure Plan has been varied to suit landholder requests as much as practically and legislatively possible. • As of October 19, structure planning will be governed by the Western Australian Planning Commission in accordance with the <i>Planning and Development Regulations 2015</i>. Delaying the structure plan may further implicate landholder and City aspirations.
<p>3. Not enough communication with landholders. There have been a couple of meetings but created apprehension with properties in green belt areas. Some landholders going to lose most of their property to green belt.</p>	<p>3. Communications with Landholders</p> <ul style="list-style-type: none"> • Communication with landholders on the most recent planning for the Yakamia Structure Plan area began in 2013. • Landholders were consulted on at least 5 separate occasions. Landholders were given access to draft and proposed final structure planning documents. Landholders were invited to make comment and to request individual site meetings to define foreshore boundaries. • Landholders were also invited to a workshop held on the 4 August 2015. • The City has made changes to the Structure Plan to support landholder concerns. Changes include reducing the extent of green belt areas. Changes have been made as much as what is practical and legally acceptable.

	<ul style="list-style-type: none"> • Land uses have been designated responsive to land characteristics. If the land is subject to flooding, then the structure plan indicates as such and recommends limiting the use of these areas in accordance with appropriate legislation. • Landholders were advised that the ceding of land for foreshore occurs when the landholder applies to subdivide, otherwise the foreshore remains in private ownership. • Objectives of the <i>State Planning Policy 2 Environment and Natural Resources</i> include: <ul style="list-style-type: none"> ○ <i>Protect, conserve and enhance the natural environment</i> ○ <i>Promote and assist in the wise and sustainable use and management of natural resources</i>
<p>4. Originally the plan indicated a choice in density of R5 (2000m²) or R25 (350m²). The new plan recommends a change to R25 only. Some steep sloping areas are not suited to the new proposed higher density. The structure plan needs to be changed to allow lower density.</p>	<p>4. Density</p> <ul style="list-style-type: none"> • As pointed out by the Department of Planning in their submission on the Structure Plan, development at the R5 (2000m²) density is not in keeping with the City's Local Planning Strategy, which recommends the development of the area as 'Future Urban' (fully serviced development) and not 'Special Residential' (2000m²). • Prior to supporting a lower density in the structure plan, the City and the Western Australian Planning Commission will need to endorse a change to the Local Planning Strategy. • Not in the interest of the majority landholders to delay the structure plan subject to a review of the Local Planning Strategy.
<p>5. Concern regarding extent of foreshore ceded free of cost and in addition landholders giving up 10% POS. The large extent of environmental protection will mean development will not occur. The current Structure Plan does not enable enough development to make viable.</p>	<p>5. Ceding Foreshore and POS</p> <ul style="list-style-type: none"> • Land within the Structure Plan area is subject to environmental constraints such as flooding. Simply not practical to support development and/or public open space in these areas. • The Western Australian Planning Commission Liveable Neighbourhoods Policy states: <p style="margin-left: 20px;"><i>The WAPC will require provision of a foreshore reserve free of cost where subdivision abuts a watercourse, such as a river or creek, or a body of water such as a lake, or the coast, in accordance with State Planning Policy 2.6 State Coastal Planning Policy and State Planning Policy 2.9 Water Resources. The WAPC will generally not include a foreshore reserve in the 10 per cent public open space contribution.</i></p> • Landholders do not give up foreshore areas unless they subdivide. The foreshore areas are generally wet and susceptible to flooding and not suited to development. • The Structure Plan designates areas for POS and for foreshore protection in accordance with State Planning Policy 2, 3, 2.6, 2.9 and the Liveable Neighbourhoods policy. If the Structure Plan proposes land use contrary to state policy, likely that an application for subdivision will be refused. • When landholders apply to re-zone or subdivide their land, additional detailed studies can be provided by the applicant to justify variations to the structure plan. • The City's <i>Local Planning Scheme No. 1</i> states: <p style="margin-left: 20px;">5.9.1.3 <i>Structure Plan Requirements</i></p> <p style="margin-left: 40px;">5.9.1.3.2 <i>Where a Structure Plan exists, the subdivision and development of land is to <u>generally</u> be in accordance with the Structure Plan, and any associated provisions contained in Schedule 13.</i></p> <p style="margin-left: 20px;">5.9.1.9 <i>Appeals</i></p> <p style="margin-left: 40px;">5.9.1.9.1 <i>The Proponent may appeal, in accordance with the Planning and Development Act 2005, any:</i></p> <p style="margin-left: 60px;">(a) <i>Determination or decision made by the Western Australian Planning Commission;</i></p> <p style="margin-left: 60px;">(b) <i>Requirement imposed by or modification sought by the Western Australian Planning Commission; or</i></p> <p style="margin-left: 60px;">(c) <i>Determinations deemed to have been made by the Western Australian Planning Commission under clauses 5.9.1.5.4 or 5.9.1.5.11</i></p> <p style="margin-left: 40px;"><i>in the exercise of the Western Australian Planning Commission's powers under clause 5.9.</i></p> <p style="margin-left: 40px;">5.9.1.9.2 <i>The Proponent may appeal, in accordance with the Planning and Development Act 2005, any decision made by the Local Government under clause 5.9.1.6.1.</i></p>
<p>6. What percentage of the Structure Plan area is designated Public Parkland?</p>	<p>6. Percentage Public Parkland</p> <ul style="list-style-type: none"> • The total land area is approximately 341ha (Areas 1 and 2) • The approximate area designated for Active Recreation is 15ha (4.3%) • The approximate area of Public Parkland (Passive Recreation and Foreshore Reserve) is 70ha (20%).

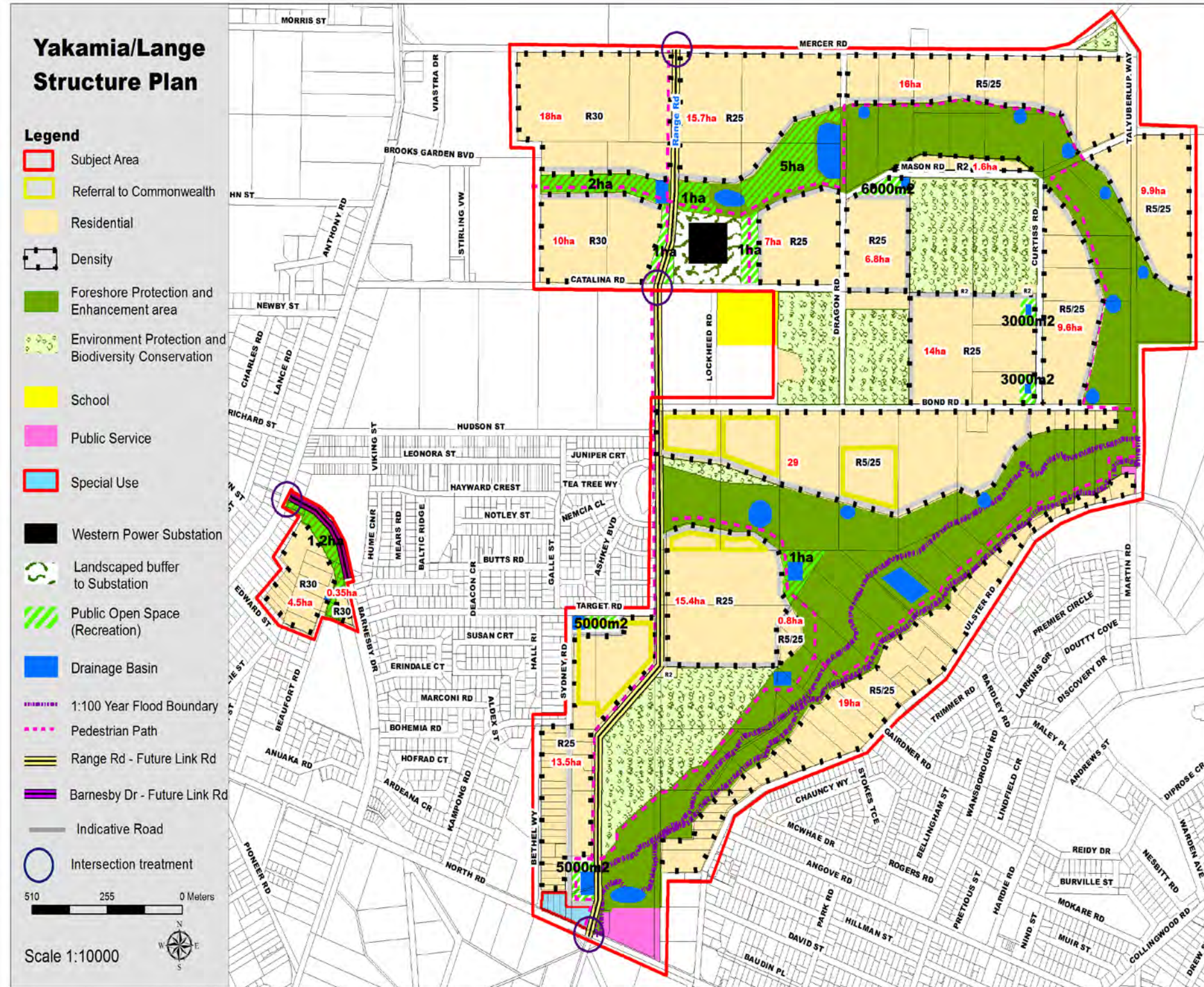
7. Estimated cost of maintaining and enhancing Public Parkland?	<p>7. Cost of maintaining 'Public Parkland'</p> <ul style="list-style-type: none"> The cost of maintaining and enhancing 'Public Parkland' is determined at the subdivision stage of the development process.
8. Structure Plan identifies substantial areas of private land as 'Private Conservation'. How is that use reconciled and permitted in <i>Local Planning Scheme No.1</i> ?	<p>8. 'Private Conservation' Lots</p> <ul style="list-style-type: none"> Areas within the structure plan that are zoned 'Future Urban' may be developed in accordance with the provisions of this structure plan and <i>Local Planning Scheme No.1</i>. Land use permissibility's in the Future Urban zone shall be in accordance with the land use permissibility's for the 'Residential' zone as shown in the <i>Table 1: Zoning Table of Local Planning Scheme No.1</i>. Land use and development proposals within the 'Future Urban' and 'Residential' zones will be assessed against the land use and development provisions of the <i>Local Planning Scheme No.1</i>, having due regard to the designations (including Residential Design Codes), vision, objectives and provisions of the structure plan. In the event of any inconsistency, the structure plan shall prevail. Land use and development proposals within the 'General Agriculture' zone will be assessed against the land use and development provisions of the 'General Agriculture' zone as set out in <i>Local Planning Scheme No.1</i>, having regard to the designations, vision, objectives and provisions of the structure plan. In the event of any inconsistency, <i>Local Planning Scheme No.1</i> shall prevail.
9. Has Council considered why and how 'Private Conservation' land will be levied by Council by way of rates and by the State for land tax, in what is really land set aside for a public benefit?	<p>9. 'Private Conservation' lot Levee</p> <ul style="list-style-type: none"> The collecting of tax to subsidize 'Private Conservation' lots is not proposed and is not necessary. The 'Private Conservation' lots maintain a development right (e.g. Single House) in accordance with the Structure Plan and Scheme. The 'Private Conservation' lots are not for public use. The purpose of the 'Private Conservation' is to protect areas of good to excellent quality vegetation. 'Conservation' areas are currently entertained for numerous areas in Albany, including Torbay and Big Grove. The scheme states: <p><i>5.3.3 Vegetation Protection</i> <i>The Local Government may require the protection of existing vegetation on a site as a condition of planning approval to:</i></p> <ul style="list-style-type: none"> (a) <i>Protect a vegetation community;</i> (b) <i>Prevent land degradation;</i> (c) <i>Protect roadside vegetation;</i> (d) <i>Maintain local visual amenity and the natural setting;</i> (e) <i>Protect habitat, or a threatened species;</i> (f) <i>Assist to provide vegetated corridors to maintain fauna and flora linkages; or</i> (g) <i>Assist in the maintenance of water quality.</i>
10. Has the Council considered purchasing 'Private Conservation' land not already under its ownership control?	<p>10. Council purchasing 'Private Conservation' lots</p> <ul style="list-style-type: none"> Council has not considered purchasing 'Private Conservation' lots, which have a development right in accordance with the Scheme and Structure Plan.
11. In accordance with <i>State Planning Policy 3, Urban Growth and Settlement</i> , how has the Council actively considered the relevant economic and social issues as part of the Structure Plan development - the environmental impacts appear to have taken primary?	<p>11. Economic, Social and Environmental Considerations</p> <ul style="list-style-type: none"> The <i>State Planning Policy 3, Urban Growth and Settlement</i> requires the following: <p><i>Proper consideration of the environment, recognising the need to restore and enhance as well as protect biodiversity and to minimise development impacts on land, water...and other natural resources that help sustain urban economies and society.</i></p> <ul style="list-style-type: none"> The Structure Plan recognises the need to minimise development impacts on foreshore areas (area adjacent to a watercourse) and some vegetation areas in good to excellent condition. In addition to environmental implications, the Structure Plan considers the availability of employment and social needs. The Structure Plan designates areas for residential development within close proximity to employment services at Chester Pass Road (industrial and commercial development services) and social services at North Road.

<p>12. Map indicates a road on the side of the creek which cuts access to creek. Too wet to build road adjacent to creek. Need extra roads to the area to improve safety due to fire risk. Consider developing Dragon Road through to Mercer Rd.</p>	<p>12. Road Access</p> <ul style="list-style-type: none"> • Road access indicated on the Structure Plan map is indicative only and will require further refinement at future planning stages. • Existing road networks in the vicinity of subdivision and/or development proposals may require upgrading as a condition of approval, in accordance with Western Australian Planning Commission policy and the City's Subdivision and Development Guidelines. • Future road networks will be refined at the subdivision stage in accordance with traffic impact assessments. • Subdivision and/or development approval may also be subject to contribution payments for construction/upgrading of the road network within the broader structure plan area.
<p>13. Concern regarding risk of fire due to vegetation?</p>	<p>13. Fire Risk</p> <ul style="list-style-type: none"> • A detailed Fire Management Plan and Bushfire Attack Level assessment shall be prepared to accompany any subdivision and/or development in areas within 100m of fire prone vegetation. These areas are generally defined by the 'Fire Risk' design element on the Structure Plan Map, and will require further refinement at future planning stages. • Any subdivision and/or development within 100m of fire prone vegetation shall comply with an approved Fire Management Plan and Bushfire Attack Level (BAL) assessment prepared in accordance with the relevant bushfire planning and management frameworks of the WAPC and Department of Fire and Emergency Services (DFES), and any City of Albany fire management requirements. Where it is deemed appropriate to do so, hazard separation areas shall be reduced and the BAL rating of buildings increased in order to protect vegetation. Hazard separation areas shall not include riparian vegetation or areas beyond the boundaries of a lot.

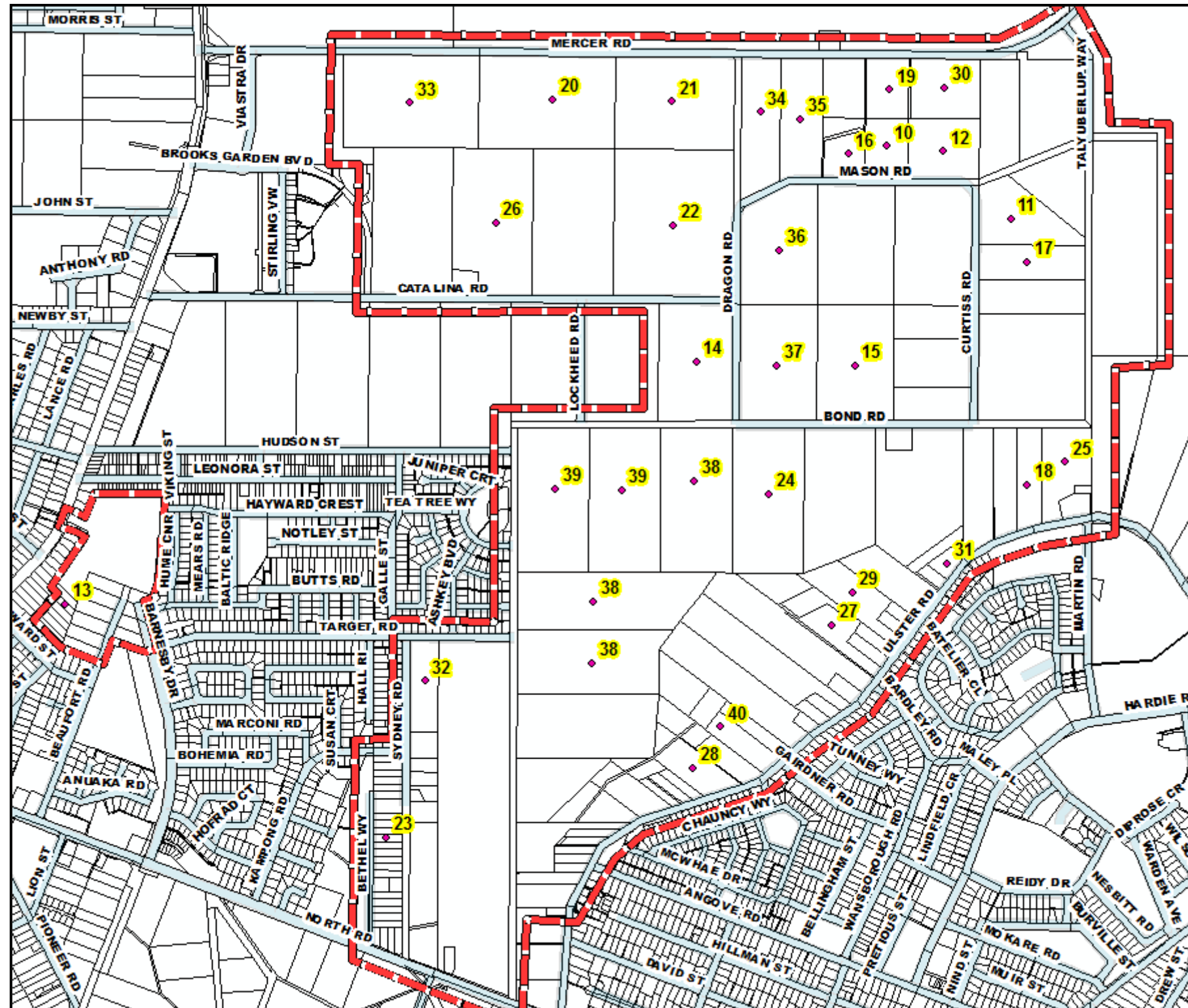
SCHEDULE OF COMMENTS

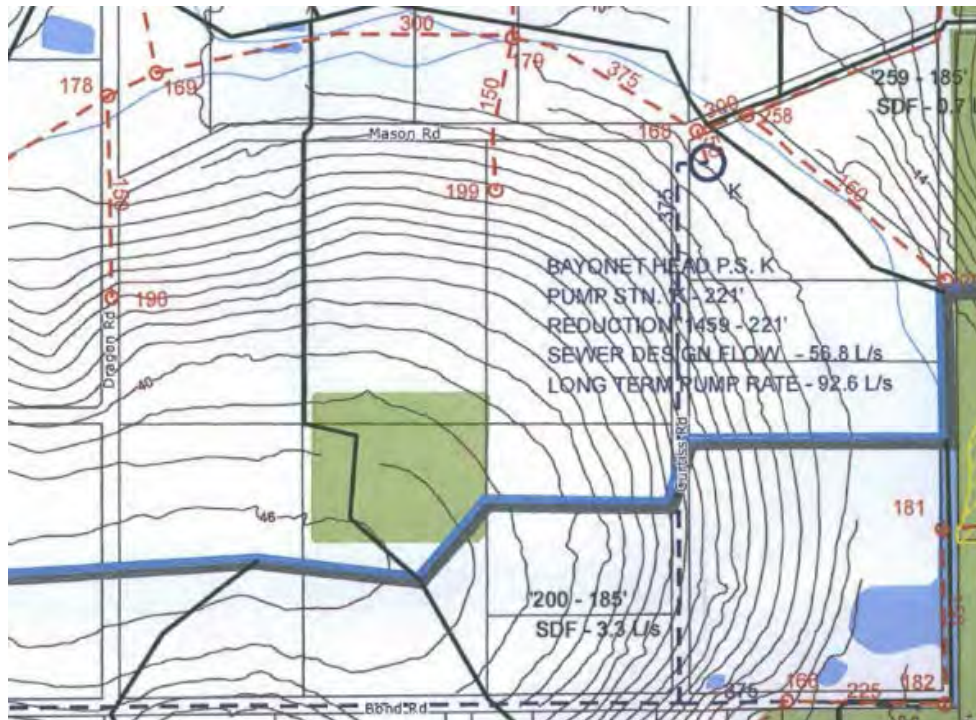

Yakamia/Lange Structure Plan

Advertised Plan



Properties/Comment



No	Submission	Comment - Landholder	Recommendation - COA
1	Main Roads Western Australia	<p>Barnesby Drive to Chester Pass Road Intersection</p> <p>1. The proposed connectivity via Barnesby Drive to Chester Pass Road would increase conflict points on Chester Pass Road and would have a substantial impact on properties adjacent to this intersection.</p> <p>Main Roads considers the connection of Barnesby Drive to Hudson Street and the connection Hudson Street to Catalina Road as a solution in providing connectivity. This would negate the need for the Barnesby Drive/Chester Pass Road intersection.</p> <p>Contributions</p> <p>1. Amend point 'g)', page 57 of the draft structure plan.</p>	<p>Barnesby Drive to Chester Pass Road</p> <p>1. The City requested MRWA to consider a left in and out connection between Chester Pass Road and Barnesby Drive.</p> <p>Main Roads agreed that this may work subject to a dedicated left turn pocket into the proposed Barnesby Drive intersection and an acceleration lane from the intersection onto Chester Pass Road, heading toward the roundabout.</p> <p>Recommend that the structure plan is changed such that connection to Barnesby Drive is restricted to left out and left in only.</p> <p>Contributions</p> <p>1. Delete point 'g)', page 57 of the draft structure plan, which reads:</p> <p><i>The Barnesby/Chester Pass Road intersection (approximate value - \$1.5million) is to be funded by Main Roads WA and the City of Albany.</i></p>
2	Telstra	<p>Telstra Infrastructure</p> <p>1. Landowners/developers will need to submit applications for network extensions prior to construction. Applications will need to be made to the National Broadband Network for development or subdivision of more than 100 lots.</p>	<p>Telstra Infrastructure</p> <p>1. Include the following commentary within structure plan:</p> <p><i>Prior to future subdivision and/or development proposing more than 100 lots, applications will need to be made to the National Broadband Network.</i></p>
3	Water Corporation	<p>Staging of Development</p> <p>1. The area will need to be developed in a logical and orderly manner from west to east. Leapfrogging the urban front will likely incur costs for the developers in the construction of temporary wastewater infrastructure and the extension of water reticulation mains.</p> <p>Pump Station</p> <p>1. Servicing relies on the construction of a major waste pumping station shown in following plan. Provision will need to be made for a suitable odour buffer around the pumping station.</p> 	<p>Staging and Development</p> <p>1. Include the following commentary within the structure plan:</p> <p><i>The area will need to be developed in a logical and orderly manner from west to east. Leapfrogging the urban front will incur costs for the developers in the construction of temporary wastewater infrastructure and the extension of water reticulation mains.</i></p> <p>Pump Station</p> <p>1. Annotate on the structure plan map, the approximate location of a Waste Water Pumping Station and advise the following within the structure planning text:</p> <p><i>The structure plan indicates the location of a future Waste Water Pumping Station (WWPS) and associated mains infrastructure. The location is approximate and has been based on land form and the need to maximise the catchment coverage of the pump station. The exact location of future WWPS will be determined at the subdivision stage in liaison with the Water Corporation. The required size of the WWPS site and the configuration of any odour buffer around the WWPS will also be detailed at the subdivision stage.</i></p>  <p><i>The ultimate pump rate of a WWPS has been planned to be in the order of 92 litres/second. The WWPS will therefore be built as a 'Type 90' WWPS, which requires an odour buffer of 30m radius measured from the centre of the WWPS wet well. A 'Type 90' WWPS site typically requires an area of 2,000-3,000m² (sometimes</i></p>


			<p><i>smaller). The size and configuration (usually rectangular) of the WWPS site will be based on the amount of underground emergency storage vessels required for that location. The site for the future WWPS will need to be created at the subdivision stage and transferred to the Water Corporation.</i></p>
		<p>Ulster Road 1. The existing gravity sewer along Ulster Road is unlikely to be able to serve the proposed R5/R25 area along the northern side of Ulster Road.</p>	<p>Ulster Road 1. Change elements within the structure plan such that the areas adjacent to Ulster Road can only be developed to a minimum lot size of 3000m² (deep sewer not required), being consistent with current scheme requirements.</p>
		<p>Cost Sharing 1. Landowners/developers bounded by Chester Pass Road, Edward Street and Beaufort Road will need to coordinate and share the cost of sewerage extensions to service higher density development. A detailed plan should include a servicing report examining sewerage options and layouts.</p>	<p>Cost Sharing 1. Include the following commentary within structure plan: <i>Landowners/developers bounded by Chester Pass Road, Edward Street and Beaufort Road will need to coordinate and share the cost of sewerage extensions to service higher density development. A detailed plan should include a servicing report examining sewerage options and layouts.</i></p>
		<p>Reticulated Water 1. While the Water Corporation has made allowances for water servicing to the Yakamia area, the Corporation has not prepared a detailed water distribution and reticulation layout. Water reticulation mains of 200mm diameter and a water main along Catalina Rd of 250mm will be required.</p>	<p>Reticulated Water 1. Include the following commentary within structure plan: <i>While the Water Corporation has made allowances for water servicing to the Yakamia area, the Corporation has not prepared a detailed water distribution and reticulation layout. Water reticulation mains of 200mm diameter and a water main along Catalina Rd of 250mm will be required.</i></p>
4	Department of Education	<p>Primary School 1. The expected yield of development (2,700 dwellings) will generate a need for an additional primary school. The primary school site identified within the Catalina Structure Plan along with the existing Yakamia Primary School will provide educational facilities for the anticipated student yield.</p>	<p>Primary School 1. No additional comments or requirements required.</p>
5	Department of Parks and Wildlife	<p>Fauna 1. The structure plan states that the subject area contains habitat for the EPBC listed Black Cockatoo, namely Carnaby's Black Cockatoo (<i>Calyptorhynchus latirostris</i>) and Western Ringtail Possum (<i>Pseudocheirus occidentalis</i>). The structure plan needs to include the following: <ul style="list-style-type: none"> • EPBC listed Baudin's Black Cockatoo (<i>Calyptorhynchus baudinii</i>) and the Forest Red-tail Black Cockatoo (<i>Calyptorhynchus banksii naso</i>), which are known to occur; and • Southern Brown Bandicoot or Quenda (<i>Isodon obesu/us</i>), which is listed as priority 5 'conservation dependent'. </p>	<p>Fauna 1. Identify within the structure plan, the following species as being known to occur in the structure plan area: <ul style="list-style-type: none"> • EPBC listed Baudin's Black Cockatoo (<i>Calyptorhynchus baudinii</i>) and the Forest Red-tail Black Cockatoo (<i>Calyptorhynchus banksii naso</i>); and • Southern Brown Bandicoot or Quenda (<i>Isodon obesu/us</i>), which is listed as priority 5 'conservation dependent'. </p>
		<p>Priority Species 1. The plan correctly states that the subject area contains no listed threatened flora. However priority flora <i>Boronia crassipes</i> (P3), <i>Laxmania jamesii</i> (P3) and <i>Leucopogon altemifo/ius</i> (P4) are recorded from the area and should be mentioned.</p>	<p>Priority Species 1. Make mention within structure plan of the following priority species as being evident within the area: <i>Priority flora: Boronia crassipes (P3), Laxmania jamesii (P3) and Leucopogon altemifo/ius (P4).</i></p>
		<p>Albany Regional Vegetation Survey 1. Section 2.2 on page 23 lists the "Previous Reports and Studies" that have played a part in guiding the development of the Yakamia/Lange Structure Plan. The List should include the <i>Albany Regional Vegetation Survey 2010</i>.</p>	<p>Albany Regional Vegetation Survey 1. Make reference to the following report within section 2.2: <i>Albany Regional Vegetation Survey 2010</i>.</p>
		<p>Typha 1. Page 28 should provide notes for clarification regarding ARVS unit 68 Typha orientalis sedgeland in that it is only mapped where it occurs as a mosaic with remnant vegetation (see page 185 ARVS 2010), as Typha is an introduced weed.</p>	<p>Typha 1. Include the following within the structure plan: <i>Typha is only mapped where it occurs as a mosaic with remnant vegetation (see page 185 ARVS 2010), as Typha is an introduced weed.</i></p>
6	Department of Planning	<p>Structure of Document 1. A date on the front page is recommended to assist with version control.</p>	<p>Structure of Document 1. Include a date on the front page of the document to assist with version control.</p>

<p>2. The implementation section should be included in the statutory section.</p> <p>3. Some figures contradict each other, for example, the 100 year ARI is inconsistent between Plan 6 (Existing flood extent and Key Reporting Locations) and Plan 9 (Opportunities and Constraints Plan).</p> <p>4. Plans throughout document should have an associated legend and be referenced in the text of document.</p> <p>5. It is recommend the Opportunities and Constraints plan be provided up front in the document and discussed as this plan has informed the content and development of the Structure plan.</p> <p>6. The structure plan should include references to the scheme where relevant.</p> <p>7. The water management strategy section should be in the background/explanatory section, rather than implementation section.</p> <p>8. Page numbering and clause numbering could be improved.</p> <p>9. The statutory section should outline all provisions and standards which have statutory effect and should not include any explanations, description or supporting information – this needs to be in the background section.</p> <p>10. The endorsement page refers to Scheme 1A and Scheme 3 and should refer to Local Planning Scheme No 1.</p> <p>11. Please refer to the Planning website, http://www.plannin.wa.gov.au/publications/823.asp with regard to Structure Plan digital data and mapping standards for the structure plan map.</p>	<p>2. Move implementation section of structure plan document to statutory section.</p> <p>3. Delete Plan 6.</p> <p>4. Noted. Some plans are sourced without a legend and therefore not practical to apply a legend.</p> <p>5. Include commentary relating to Opportunities and Constraints plan up front in the document as components of this plan have been used to inform the content and development of the structure plan.</p> <p>6. Make reference within the structure plan to the scheme where relevant.</p> <p>7. Move the water management strategy section to the background/explanatory section, rather than implementation section. Included as an appendix.</p> <p>8. Make corrections for page and clause numbering.</p> <p>9. Move any explanations, description or supporting information from the statutory section of the document to an appendix.</p> <p>10. Change the endorsement page so that it refers to Local Planning Scheme No 1 and not Scheme 1A and Scheme 3.</p> <p>11. Refer to http://www.planning.wa.gov.au/dop_pub_pdf/Structure_Plan_Digital_Data.pdf</p> <p>Changes made to structure plan map to match planning commission requirements.</p>
<p>Operation/Implementation</p> <p>1. It should be clarified at the front of the structure plan report that this is a statutory structure plan for land zoned Future Urban as it is a requirement of the scheme and is prepared under the scheme (reference scheme clauses). Once endorsed by the WAPC it will have statutory effect.</p> <p>2. At 1.8 Implementation, it states there are a number of steps to be taken prior to implementation. This is incorrect. Once the structure plan is endorsed in accordance with sub-clause 5.9.1.5.10 the structure plan comes into effect. If further investigation is required, the following statement is suggested; for example, An application for subdivision to create more than three lots shall be accompanied by the following water management plan, bush fire hazard assessment , etc</p> <p>3. It is unnecessary to rezone the Future Urban land to Residential. Sub-clause 5.9.1.8.5 of <i>Local Planning Scheme No. 1</i> states for land within the Future Urban zone, unless otherwise specified by the structure plan, the reserves, zones and uses shall have the same force and effect as if enacted as part of the scheme. If the land was rezoned to residential the structure plan would have no effect or head of power.</p> <p>4. As the structure plan technically only applies to the Future Urban zoned land, it needs to be specific in stating how it applies over the Rural and Yakamia Creek zoned land.</p> <p>5. The density code over the Yakamia Creek zone area should be removed as the minimum lot size for this land of 3000m² is specified in LPS 1 and the structure plan cannot vary that.</p>	<p>Operation/Implementation</p> <p>1. Clarify at the front of the structure plan report that this is a statutory structure plan for land zoned Future Urban as it is a requirement of the scheme and is prepared under the scheme (reference scheme clauses). Once endorsed by the WAPC it will have statutory effect.</p> <p>2. Review section 1.8 of the structure plan.</p> <p>3. Include sub-clause 5.9.1.8.5 of <i>Local Planning Scheme No. 1</i> within the structure plan.</p> <p>4. Specify how the structure plan applies to the General Agriculture and Yakamia Creek zoned land. Land zoned General Agriculture will need to be rezoned to Future Urban prior to supporting subdivision. The Yakamia Creek zone is not expected to change due to servicing constraints and for consistency with scheme requirements (min lot size of 3000m²).</p> <p>5. Change the density code within the structure plan for the Yakamia Creek zone to make consistent with the scheme (min lot size of 3000m²).</p> <p>6. Finalise road and POS contributions as part of the structure plan. Amend section 1.8 to reflect this requirement.</p> <p>7. Recommend changing designations to make consistent with model Scheme and Liveable Neighbourhood terminology.</p> <p>8. Include a land use permissibility information within the structure plan. Make</p>

		<p>6. At 1.8 Implementation it states contribution planning reviews are required. Road and POS contributions plans should be finalised as part of the structure plan.</p> <p>7. It is recommended the reserves be designated 'Future' Foreshore Protection and Enhancement Area and 'Future' Public Open Space. As the structure plan is a statutory instrument over this land, designating privately owned land as Reserve may bring about claims for compensation.</p> <p>8. The structure plan should contain either a land use table or state land use permissibility.</p> <p>For example; for areas designated residential on the structure plan map, land use permissibility and development requirements are the same as for the Residential zone contained in Local Planning Scheme No 1.</p> <p>9. Include reference or identify on the structure plan map that Rural zoned lots are required to be rezoned prior to subdivision.</p>	<p>consistent with the scheme.</p> <p>9. Make reference in the structure plan text and map for General Agriculture zone properties to be rezoned prior to supporting subdivision.</p>
		<p>Roads</p> <p>1. Previous advice from Main Roads is that they have concerns regarding the intersection of Barnesby Drive and Chester Pass Road. This issue will need to be clarified with Main Roads.</p> <p>2. Plan 19 is outdated.</p> <p>3. The structure plan document could be more succinct as to which roads need constructing, upgrading, widening, and intersection treatments rather than various statements throughout the document. At Transport Recommendations on page 43, only Mercer Road and Catalina Road are identified for upgrading however, on page 58 Sydney Road is also identified for upgrading. We would anticipate that other roads in the Structure plan area such as Bond Road and Dragon Road, for example, would also need upgrading.</p> <p>4. At 9. g) on page 57, it states the Barnesby/Chester Pass Road intersection is to be funded by Main Roads and City of Albany. Why would this not be included in the contribution plan?</p> <p>5. At 9. n) on page 58, it states lots fronting Sydney Street are to provide financial contribution towards upgrading/construction. Would Sydney Street be included in the contribution plan to receive a contribution from other lots in the vicinity?</p> <p>6. A road contribution plan should be finalised as part of the structure plan process including construction of new Range Road, Barnesby Drive, east west link road, upgrades (Sydney Street, Mercer Road, Catalina Road, Bond Road, Dragon Road) and intersections (including Barnesby/Chester Pass Road) and a per lot contribution calculated. The structure plan, as advertised, could be more succinct with regard to what is required and who contributes.</p> <p>7. The numbers on Plan 20 on page 38 are to be added together, for example it is approximately 30 000 vehicles using Range Road, not 15 000 as stated in the text on page 38.</p> <p>8. Plan 35 on page 59 indicates no connection to Barnesby Drive. Beaufort Road needs to connect to Barnesby Drive to provide efficient school access and this should be indicated on the plan.</p>	<p>Roads</p> <p>1. The structure plan is to be changed to reflect Main Roads requirements.</p> <p>2. Delete Plan 19.</p> <p>3. The structure plan is to clarify which roads need constructing, upgrading, widening, and intersection treatments.</p> <p>4. The structure plan is to be changed to reflect Main Roads requirements. Any requirements for funding are to be in accordance with a contribution plan. Modify structure plan to reflect outcomes from liaison with MRWA and contribution plan.</p> <p>5. The structure plan is to clarify lot contributions for Sydney Street. At the time of subdivision or development, lots fronting Sydney Street are to either:</p> <ul style="list-style-type: none"> • <i>Develop half the width of Sydney Street for the section fronting the Lot; or</i> • <i>Provide a financial contribution valued at the cost of developing half the width of Sydney Street for the section fronting the Lot.</i> <p>6. The structure plan is to be modified to concisely define what is required and who contributes (per lot) for road infrastructure (contribution plan). The contribution plan is to include: construction of new Range Road, Barnesby Drive, east west link road, upgrades (Sydney Street, Mercer Road, Catalina Road, Bond Road, Dragon Road) and intersections (including Barnesby/Chester Pass Road).</p> <p>7. Make corrections for vehicle movements (p38). The vehicle numbers given are a tally of vehicles travelling in one direction and not as a total (both ways).</p> <p>8. Modify structure plan to show Beaufort Road connecting to Barnesby Drive.</p>
		<p>Sewer</p>	<p>Sewer</p>

<p>1. The Water Corporation has previously advised, in correspondence to the city of Albany dated 30 October 2014, that provision has been made for wastewater planning provided the area is developed in a logical and orderly manner. Given this advice, any new lot created in the Yakamia/Lange structure plan area should be connected to reticulated sewer; with the exception of land currently zoned Yakamia Creek as this land cannot be serviced. The R-Code densities displayed on the structure plan map will need to be updated to reflect this; i.e. the split density codings. A statement should also be included in the statutory section that all new lots must be connected to reticulated sewer. Ambiguous wording throughout the document that references on site effluent disposal and development not requiring connection to deep sewer should also be removed.</p>	<p>1. Make the following changes to the structure plan; a) With the exception of land currently zoned Yakamia Creek, any new lot created in the Yakamia/Lange structure plan area shall be connected to reticulated sewer; b) Delete split density coding; c) Apply a minimum density of 3000m² for the Yakamia Creek zone; d) Remove any ambiguous wording throughout the document that reference on site effluent disposal and development not requiring connection to deep sewer.</p>
<p>POS 1. The POS contribution schedule should be reviewed and expanded so it is clear what each lot is contributing; whether contribution is land or cash; if land contribution is more or less than 10%; and which lots are to be reimbursed. 2. The school site has been included in Table 3 - potential land use; however it is not in the structure plan area.</p>	<p>POS 1. Review and expand the POS schedule so it is clear what each lot is contributing. 2. Delete the school site from Table 3.</p>
<p>Wetlands and Foreshore Protection 1. A 50m wetland buffer should be indicated on structure plan map. 2. The drainage basins identified within the floodway boundary should be deleted. DOW have previously advised these are not appropriate within the floodway. 3. It seems a portion of the Special Use zone lot along North Road is located within floodway. This should be removed and the floodway boundary be reinstated. 4. At 8 a) on page 55 it states water management is to occur in accordance with recommendations made in the Yakamia/Lange Water Management Strategy and Arterial Drainage plan. These recommendations should be included in the structure plan under the implementation section as criteria to be addressed at subdivision/development stage. This will ensure the recommendations are endorsed by Council and the WAPC. 5. Lots at the eastern end of Bond Road have a portion identified for Residential however are identified on the Opportunities and Constraints Plan as relatively constrained as they are within the boundary of the wetland.</p>	<p>Wetlands and Foreshore Protection 1. Recommend including within the structure plan, a 50m buffer to water courses. 2. The drainage basins identified within the floodway boundary are to be deleted. 3. Remove the special use designation over floodplain and reinstate flood boundary. 4. Include recommendations from the Yakamia/Lange Water Management Strategy and Arterial Drainage plan in the structure plan at 8 a) on page 55. 5. Noted. Lots at the eastern end of Bond Road have a portion identified for Residential however are identified on the Opportunities and Constraints Plan as relatively constrained as they are within the boundary of the wetland. The Opportunities and Constraints Plan is overly conservative. The boundary to the wetland is based on a generic distance and not necessarily reflective of the site which rises steeply from the wetland and therefore is very unlikely to flood.</p>
<p>Special Use Area 1. It is unclear why a Special Use area is identified. The special uses listed, with the exception of 'Office', can be considered by Council in the Residential zone. It is recommended the area that is not within the floodway is identified as Future Commercial and included in the review of the Activity Centres policy, with a clause in the structure plan prohibiting development of Commercial uses until the activity centres review is undertaken, and that development is to be in accordance with the recommendations of the activity centres review.</p>	<p>Special Use Area 1. Remove the special use designation and replace with residential.</p>
<p>Bushfire 1. Plan 17 Fire mapping shows a 100m buffer to all areas of extreme bush fire hazard, and leaves little land unaffected by bush fire constraints. Currently the plan implies that residential development may occur alongside areas of extreme bush fire hazard. All land within 100m of extreme bush fire hazard needs to have a bush fire level assessment undertaken and have a BAL assigned. A note should be included on the structure plan map that subdivision and/or development is subject to a bushfire assessment and not necessarily all land can be developed.</p>	<p>Bushfire 1. Recommend highlighting on structure plan, areas subject to fire risk.</p>
<p>Environmental Protection Lots</p>	<p>Environmental Protection Lots</p>

	<ol style="list-style-type: none"> 1. The structure plan report should include discussion as to what the 'environmental protection and biodiversity conservation' designation means. 'Private Conservation' may be a more appropriate name. At section 22 on page 61 the provisions indicate that subdivision of these lots can be considered. These provisions should be removed as these lots are not identified for further subdivision. The structure plan, in identifying these lots as 'no further subdivision' and related provisions sufficiently protects the vegetation and there is a need for a conservation covenant. 2. The structure plan states at paragraph b) under land use permissibility on page 46 that areas delineated as 'Environmental Protection and Biodiversity Conservation' will be reserved for 'Parks and Recreation.' This may bring about compensation claims for the private landowners and is unnecessary if modifications suggested in first point above are made. 3. The R2 designations on these lots are unnecessary. 4. As stated previously, a bushfire hazard assessment would need to be undertaken prior to development of a single house on these lots. 5. It should be clarified in the document that clearing for development on these lots requires assessment with regard to the quality of the vegetation even though it may be considered exempt clearing under the <i>Environmental Protection (Clearing of Native Vegetation) Regulations 2004</i>. 6. What is a protection notice as referenced at section 22.c)? 	<ol style="list-style-type: none"> 1. Change the term 'environmental protection and biodiversity conservation' to reflect model planning terminology. 2. The term 'Environmental Protection and Biodiversity Conservation' is to be changed to reflect the model planning terminology. 3. Delete the R2 designations on the 'Environmental Protection and Biodiversity Conservation'. 4. A note is to be included in the structure plan saying that subdivision and/or development is subject to a bushfire assessment. 5. Include the following requirement/advice within the structure plan: <i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i> 6. Change wording in structure plan as follows: Replace 'protection notice' with 'conservation notice'.
	<p>Referral to Commonwealth</p> <ol style="list-style-type: none"> 1. Several lots are identified on the structure plan map as 'referral to Commonwealth' however there is no guidance in the structure plan report as to what this means or what is involved. 2. On 1 January 2015 a unilateral agreement between the State and Commonwealth came into effect to allow the state to conduct environmental assessments on behalf of the Commonwealth, removing duplication including the need for a separate Commonwealth assessment. The agreement does not cover approvals and it is the understanding that where approval is required (ie clearing, development) then the Commonwealth is still the decision making authority under the EPBC Act. 3. Designations will need to be reviewed and possibly go to private conservation. 	<p>Referral to Commonwealth</p> <ol style="list-style-type: none"> 1. Provide notification on structure plan to advise requirements for referrals to Commonwealth in accordance with Biodiversity Act – as follows: <i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i> 2. Noted. 3. Recommend changing designation of environmentally sensitive areas to 'Conservation' with a requirement for a conservation notice to be placed on the title.
	<p>Western Power Site</p> <ol style="list-style-type: none"> 1. The buffer and screening to the substation should be contained within Western Power's lot, rather than impact on neighbouring lots. POS should not be ceded from neighbouring land to provide a buffer. 2. It is suggested that investigation and discussions occur with Western Power to relocate the substation site, as this would appear to be an incompatible use in a new urban area. 	<p>Western Power Site</p> <ol style="list-style-type: none"> 1. Modify the structure plan to show a buffer to the substation within Western Power's lot, rather than on neighbouring lots. Delete/relocate the POS areas shown around the substation. 2. Western Power is maintaining the need to develop its site at Lot 36 Catalina Road for substation purposes within a 10-25 year period. The City undertook discussions with Western Power and the following comments were made: <ul style="list-style-type: none"> • <i>The Structure Plan should highlight the zone substation and buffer separation, with provision in the Structure Plan text for establishing the required buffer separation.</i> • <i>There is sufficient capacity within the Catalina Road site to accommodate the substation and a considerable buffer within the property boundaries. A zone substation needs 1.4 hectare with a buffer of 20 metres around the perimeter of the substation. The Catalina Road site is approximately 91,500 sq metres.</i> • <i>With respect to concerns raised about the location of a substation near a school, there are examples of new schools located near substations e.g. Star of the Sea Primary School is located next to Rockingham Substation. In some examples schools</i>

			<p><i>near substations have designed the school so that ovals and other recreational areas are nearest the substation with classrooms and utility areas furthest away. The majority of the concern is based around Electromagnetic Fields and the following websites contain the latest and best information on Electromagnetic Fields:</i></p> <p><i>ARPANSA website – www.arpansa.gov.au/radiationprotection World Health Organization – www.who.int/en</i></p> <p><i>The following is an example of a substation with a size, fencing and landscaping expected to be developed at Lot 36 Catalina Rd (source – Western Power):</i></p> 
		<p>ARVS</p> <p>1. The <i>Albany Regional Vegetation Survey</i> has been a significant study over the subject land and further discussion should be included in the background section of the document. ARVS should be mentioned under major planning influences at 1.4.</p>	<p>ARVS</p> <p>1. Include the following information within the structure plan document:</p> <p><i>The Albany Regional Vegetation Survey (ARVS) report has been endorsed as a key information source. The ARVS report was produced to increase the understanding of regional flora and vegetation in the Albany region.</i></p> <p><i>The major findings of the survey include:</i></p> <ul style="list-style-type: none"> • <i>35% (44,093 ha) of the original extent of vegetation remains within the survey area.</i> • <i>19% of this remnant vegetation occurs within formal conservation reserves (IUCN I-IV) and 39% in other Crown reserves.</i> • <i>Identification of 67 native vegetation units, of which 19 units do not appear to have been described previously.</i> • <i>Many units only occur as small patches, with 49 units each having an area of less than 1% (<440ha) of the remnant vegetation within the ARVS area.</i> • <i>Over 50% of units occur at their range limit in the area, reflecting the location of the ARVS area at the junction of three bio-geographic regions.</i> • <i>Over 25% of units are likely to be restricted to the survey area with four units likely to have <30% pre-clearing extent remaining.</i> • <i>Over 800 species were recorded during the survey including six Declared Rare Flora, 43 Priority listed species and 19 species occurring beyond their previously known distribution.</i> • <i>Phytophthora dieback, hydrological change, weed invasion, fire, land clearing and grazing were identified as the major threats.</i>
		<p>City of Albany Local Planning Scheme 1</p> <p>1. Particular clauses of the scheme should be referenced where applicable; for example ,</p> <ul style="list-style-type: none"> • clause 4.2.3 requirement to prepare structure plan for future urban zoned land; • clause 5.3.6.1 setbacks from water courses; • clause 5.3.7.1 land subject to flooding; and 	<p>City of Albany Local Planning Scheme 1</p> <p>1. Make reference in the structure plan to clauses in the City's LPS1 including the following:</p> <ul style="list-style-type: none"> • Clause 4.2.3 requirement to prepare structure plan for future urban zoned land; • Clause 5.3.6.1 setbacks from water courses; • Clause 5.3.7.1 land subject to flooding; and

		<ul style="list-style-type: none"> • clause 5.9 structure plan preparation and adoption. <p>Local Development Plans</p> <p>1. At clause 3 on page 46, the structure plan refers to local development plans being prepared prior to any subdivision or development. WAPC Policy DC2.2 Residential Development refers to local development plans only being required when creating lots less than 260m². Is this the intent or background to clause 3? Subdivision of land coded R30 doesn't necessarily mean the lots proposed will be 260m².</p> <p>Contaminated Sites</p> <p>1. Lot 4743 (No 102) and Lot 100 (No 120) are classified as contaminated site - remediated for restricted use however there is no mention of this in the structure plan.</p>	<ul style="list-style-type: none"> • Clause 5.9 structure plan preparation and adoption. <p>Local Development Plans</p> <p>1. Change clause 3 on page 46, such that local development plans are prepared prior to any subdivision or development of lots less than 260m².</p> <p>Contaminated Sites</p> <p>1. An Environmental Opportunities and Constraints Plan developed for the City by environmental consultants, Aurora Environmental concluded that:</p> <p><i>Lots 100 and 4743 have been remediated and are suitable for their current land uses.</i></p> <p><i>Recommendation:</i> <i>No action required for identified sites unless there is a proposal to change the land use to a more sensitive type (e.g. residential).</i></p>				
7	Western Power	<p>Substation</p> <p>1. Western Power retains the need to develop its site owned at Lot 36 Catalina Road, Albany for substation purposes within a 10-25 year period.</p> <p>2. Further develop buffering separation and development requirements and provisions for future subdivision and development affected by substation development. All subdivision and development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict.</p> <p>3. Where subdivision/development applications adjoin or affect Western Power interests they should be referred for comment prior to approval by the local authority to ensure no land use conflict.</p> <p>Land Swap</p> <p>1. Western Power is willing to consider any land swap opportunities which can be facilitated by the City of Albany that may better balance the needs of the City and Western Power. However, Western Power will retain its current plans to develop on Lot 36 Catalina Road, Albany unless a suitable alternative can be facilitated by the City.</p> <p>132kV Transmission Line</p> <p>1. 132kV transmission line entries to the currently proposed substation are required from the existing Albany substation at L123 Albany Highway to ensure that future works planned for new and existing road networks in the area facilitate these future line entries. Transmission line entries to the proposed substation development being identified on the draft structure plan in accordance with alignments to be determined in consultation with Western Power. Works associated with new distribution lines and the upgrading of existing lines (including increasing capacity and undergrounding) will be at the developer's cost. Electrical design will be to the satisfaction of Western Power - refer to http://www.westernpower.com.au/idd/Undergrounddistributionschemes.html</p> <p>and</p> <p>http://www.westernpower.com.au/documents/WADistributionConnectionsManual.pdf</p>	<p>Substation</p> <p>1. The City undertook discussions with Western Power. Western Power is maintaining the need to develop its site at Lot 36 Catalina Road for substation purposes within a 10-25 year period. Retain Lot 36 Catalina Road for substation purposes.</p> <p>2. Illustrate landscaping and roads around substation to enhance buffer.</p> <p>3. Include following advice within the structure plan:</p> <p><i>Where subdivision/development applications adjoin or affect Western Power interests they should be referred for comment prior to approval by the local authority to ensure no land use conflict.</i></p> <p>Land Swap</p> <p>1. The City researched Crown land stocks and determined that there are no available alternatives in the locality. Retain Lot 36 Catalina Road for substation purposes.</p> <p>132kV Transmission Line</p> <p>1. Noted. Include the following at section 20 of the structure plan:</p> <p><i>Transmission line entries to the proposed substation development will be considered at the time of rezoning and subdivision proposals in consultation with Western Power. Works associated with new distribution lines and the upgrading of existing lines (including increasing capacity and undergrounding) will be at the developer's cost. Electrical design will be to the satisfaction of Western Power.</i></p> <p>2. Include the following within the structure plan:</p> <p><i>Western Power requires the following (Table 1) minimum clearance requirements for transmission lines and overhead distribution lines for infill and new development/subdivision applications:</i></p> <table border="1"> <tr> <td colspan="2" style="text-align: center;"><i>Table 1</i></td> </tr> <tr> <td style="width: 50%;"></td> <td style="text-align: center;"><i>Clearance (horizontal and vertical from centre of line)</i></td> </tr> </table>	<i>Table 1</i>			<i>Clearance (horizontal and vertical from centre of line)</i>
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		<p>2. Western Power requires that the minimum clearance requirements for transmission lines and overhead distribution lines for structure plans, infill and new development/subdivision applications within the jurisdiction to ensure appropriate protection of the asset. See clearance requirements below in Table 1.</p> <table border="1"> <thead> <tr> <th colspan="3">Table 1</th> </tr> <tr> <th></th> <th colspan="2">Clearance (horizontal and vertical from centre of line)</th> </tr> </thead> <tbody> <tr> <td>Transmission</td> <td>330kV</td> <td>35.0m</td> </tr> <tr> <td></td> <td>132kV</td> <td>10.0m</td> </tr> <tr> <td></td> <td>66kV</td> <td>8.0m</td> </tr> <tr> <td>Distribution</td> <td><33kV</td> <td>3.0m</td> </tr> </tbody> </table> <p>3. The local distribution power network may require modification, upgrading and the construction of new assets as infill and new subdivision/development proposals progress. Works of this nature are customer funded, as part of the subdivision and development process.</p>	Table 1				Clearance (horizontal and vertical from centre of line)		Transmission	330kV	35.0m		132kV	10.0m		66kV	8.0m	Distribution	<33kV	3.0m	<table border="1"> <tbody> <tr> <td>Transmission</td> <td>330kV</td> <td>35.0m</td> </tr> <tr> <td></td> <td>132kV</td> <td>10.0m</td> </tr> <tr> <td></td> <td>66kV</td> <td>8.0m</td> </tr> <tr> <td>Distribution</td> <td><33kV</td> <td>3.0m</td> </tr> </tbody> </table> <p>3. Include the following within the structure plan:</p> <p><i>The local distribution power network may require modification, upgrading and the construction of new assets as infill and new subdivision/development proposals progress. Works of this nature are customer funded, as part of the subdivision and development process.</i></p>	Transmission	330kV	35.0m		132kV	10.0m		66kV	8.0m	Distribution	<33kV	3.0m
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	66kV	8.0m																															
Distribution	<33kV	3.0m																															
8	Department of Water	<p>General</p> <ol style="list-style-type: none"> The DoW is supportive of the measures contained within the draft structure plan that will protect and restore Yakamia Creek. The DoW supports the requirements for additional water management planning - foreshore and stormwater - at subdivision stage. The additional water management planning needs to be consistent with the Yakamia/Lange Structure Plan Water Management Strategy. Page 32 refers to the stormwater sampling that the DoW conducted in 2011. It is good to include a summary of the results however the reference to site codes (YAK001- YAK1) is a bit meaningless unless a map of the sample sites is included. That level of detail is not required for a high level planning document such as this, so the Dow recommends removal of the reference. Page 58 (p) notes that as a condition of development Lot 9000 Beaufort Rd is required to relocate and develop the arterial drain to the satisfaction of the City. The DoW has no objection to the requirement for relocation given the highly modified nature of Yakamia Creek at that location. The DoW requests that the word arterial drain be replaced with Yakamia Creek and that DoW should be consulted during this process. Page 62 Section 23 Monitoring. This section should clarify who is responsible for monitoring. i.e. <i>"At subdivision stage, the developer will need to develop a monitoring program to gather baseline information ..."</i> The DoW queries the designation of the previous 'Yakamia Creek' zone to R5/25, when the structure plan states (pg 44) that <i>"Water Corporation have advised that sewer is not available to the areas located between the areas located between Yakamia Creek and Ulster Rd."</i> Without sewer, the maximum lot yield would be R5, (depending upon the land capability) in line with the Country Sewerage policy. <p>Yakamia Creek Floodplain</p> <ol style="list-style-type: none"> The 'Water Recommendations ' (pg 33) suggests that 'special uses' and the new Range Rd will be supported within the floodway at North Rd. The DoW floodplain policy does not support any development in the floodway, due to the potential to increase the flood level upstream. In this instance, it would exacerbate the flooding over North Rd and potentially cause floodwaters to spill out to the eastern side of the creek. The main structure plan map is being disingenuous by omitting the floodplain boundary over the special uses lot. The floodway extends over the entire southern half of Lot 421. It would also appear that the construction of Range Road may also conflict with the 30m 	<p>General</p> <ol style="list-style-type: none"> Noted. The structure plan recommends that development complies with Yakamia/Lange Structure Plan Water Management Strategy. Include a map to correspond with sample site results. Replace the word arterial drain with Yakamia Creek and include notification that the DOW should be consulted during any process involving relocating the creek. Include the following provision to ensure the developer is responsible for monitoring <i>At subdivision stage, the developer will need to develop a monitoring program to gather baseline information.</i> Change the density for the Yakamia Creek to a minimum of 3000m² lots - in line with the City's scheme. <p>Yakamia Creek Floodplain</p> <ol style="list-style-type: none"> Modify the structure plan such that no development potential is shown for the southern portion of Lot 421, the area subject to flooding and Aboriginal Heritage exclusion (30m). Noted. New flood mapping has been provided by the DOW (18/5/2015). Recommend including as a layer on structure plan map. 																														

		<p>Aboriginal heritage exclusion buffer to Yakamia Creek.</p> <p>2. As previously mentioned, the DoW is currently reviewing the Yakamia Creek floodplain mapping with the provision of new data that has been obtained with the LiDAR mapping. The DoW will make the new floodplain mapping available to the City of Albany as soon as it is finalised.</p>	
9	Office Environmental Protection Authority	<p>Letter 14 January 2014</p> <p>1. The OEPA considers that the area the subject of the Yakamia/Lange Structure Plan contains a number of significant environmental values, including:</p> <ul style="list-style-type: none"> a) Priority 1 Ecological Community - Albany Vegetation Unit (AVU) 14 Banksia coccinea shrubland/ E. staeril Sheoak Open Woodland; b) vegetation in Very Good to Excellent condition which supports significant ecological communities and Threatened or Priority flora and fauna protected under State and Federal legislation; c) Yakamia Creek and its associated wetlands and tributaries which are classified as Conservation Category wetlands; d) consolidated areas of native vegetation containing multiple vegetation units (catena from upland to wetland) identified as having high conservation value in the Albany Regional Vegetation Survey (ARVS). <p>The OEPA supports the draft Yakamia/Lange Structure Plan on the basis that the areas of significant environmental value, listed above, are situated in the following foreshore and/or vegetation protection areas, in the draft structure plan.</p> <ul style="list-style-type: none"> • portion of Council's land south of the proposed link road Lot 4743 and adjoining property's east of Range Road (Lots 75 and 76); • properties south of Bond Road adjacent to Range Road and adjoining Yakamia Creek area (Lots 79, 80,81 and 82); and • vegetation on Lots 997, 1001 and 1002 north of Bond Road. <p>2. Proposed modifications to foreshore and vegetation protection areas should be sent to the OEPA for comment.</p> <p>3. The Environmental Assessment by Aurora Environmental (5 March 2013) refers to the minimum extent of protection for an ecological community being 10%. However, EPA Position Statement No. 2 (EPA, 2000) Guidance for the Assessment of Environmental Factors states that at least 30% of the original extent of ecological communities should be retained to prevent unacceptable cumulative and potentially irreversible loss of biodiversity. The EPA's Guidance Statement 10 Level of assessment for proposals affecting natural areas within the System 6 Region and Swan Coastal Plain portion of the System 1 Region allows for a reduced area of representation in 'constrained areas' of 10%. Constrained areas may include urban, urban deferred and industrial zones. However, The OEPA considers that EPA Position Statement No. 2 (EPA, 2000) Guidance for the Assessment of Environmental Factors should prevail until such time as a 'constrained area' boundary has been identified around Albany in agreement between the OEPA and the Department of Planning.</p> <p>Letter 7 July 2014</p> <p>1. The revised draft has removed a number of vegetated areas from the previous draft the OEPA commented on in January 2014. As you know, the OEPA has been supportive of the City of Albany developing a structure plan for the area because there is greater capacity to achieve good planning outcomes and an appropriate level of environmental protection at a more strategic scale. The OEPA supports the proposed outcomes in the most recent draft structure plan for Lot 4743 and Lots 79, 80, 81 and 82 which form part of the area zoned</p>	<p>Letter 14 January 2014</p> <p>1. Noted. The structure plan seeks to protect vegetation on:</p> <ul style="list-style-type: none"> • Lot 4743 and adjoining property's east of Range Road (Lots 75 and 76); • Properties south of Bond Road adjacent to Range Road and adjoining Yakamia Creek area (Lots 79, 80,81 and 82); and • Vegetation on Lots 997, 1001 and 1002 north of Bond Road. <p>2. Noted. The following condition is to be included in the structure plan:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p> <p>3. Noted. Recommend undertaking the following as a requirement of subdivision or development:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p> <p>Letter 7 July 2014</p> <p>1. Noted. Recommend changing the term 'environmental protection and biodiversity conservation' to reflect model planning terminology and include the following requirement/advice within the structure plan:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p>

urban deferred. However, the remaining outstanding issue is the extent of vegetation clearing on the rural zoned Lots 997, 998, 1001 and 1002 which contains Albany Vegetation units (AVU's) 12 and 13 (Attachment 3) which may also provide habitat for State and Commonwealth listed Black Cockatoos. The OEPA would support the City of Albany retaining a consolidated portion on these lots for conservation purposes in accordance with the EPA's Bulletin No 20 Protection of naturally vegetated areas through planning and development (Attachment 4). Lots 997 and 998, which are adjacent to the creekline, may offer the best opportunity to achieve a suitable outcome.

If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.



Letter 2 September 2014

1. The OEPA is of the view that the creation of one building envelope at Lots 1001 and 1002 can meet the EPA's environmental objectives subject to the proposed lots being managed for conservation purposes. The OEPA recommends that provisions should be included in LPS No 1 in relation to Lots 1001 and 1002 limiting fencing and firebreaks in the conservation areas. The OEPA does not support further subdivision of Lots 997 and 998 as the bushland is described as being in 'Very Good' to 'Excellent Condition' (Keighery, 1994), is in close proximity to other areas of native vegetation and contains habitat for Black Cockatoos. The OEPA is of the view that development on Lots 997 and 998 should be restricted to one dwelling per lot as currently permitted under LPS No 1. Building envelopes should be located on the edges of the lots adjacent to the road to reduce fragmentation and impacts on the bushland.
2. The OEPA notes that the proposed 5000m² building include building protection zones. Permitted buildings would need to be constructed to Australian Standard 3959. Recommended that the City discusses this aspect with the DOP and Department of Fire and Emergency Services to ensure that this is acceptable from a bushfire risk perspective.

Letter 2 September 2014

1. Noted. The following conditions are to be included to address OEPA concerns:

If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.
2. Noted. Include requirements within structure plan around fire protection.

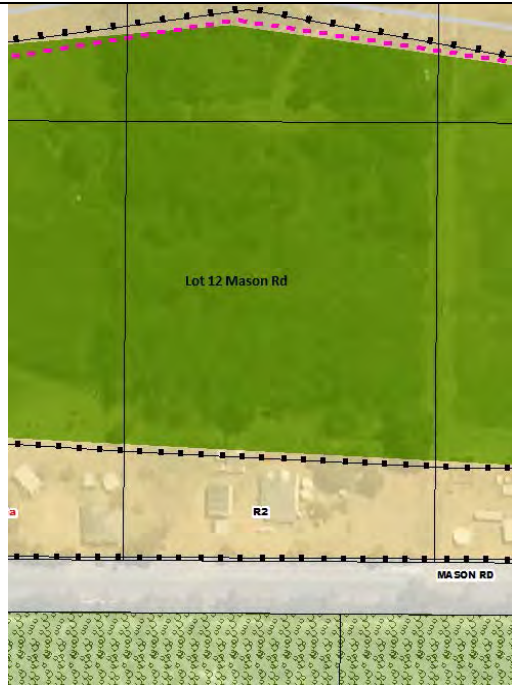
10 Lot 12 Mason Rd

Framework

1. Given the fragmented nature of landholdings within Yakamia, the presentation of an overall structure plan is required to provide a frame work to coordinate the provision and arrangement of future land use, subdivision and development, staging, servicing, transport networks, public open space, foreshore reserves and urban water management.

Framework

1. Provide additional information within the structure plan around the provision and arrangement of future land use, subdivision and development, staging, servicing, transport networks, public open space, foreshore reserves and urban water management.



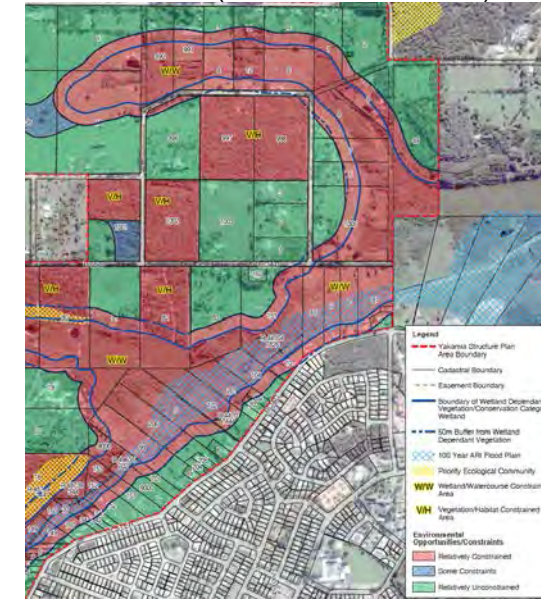
Foreshore Buffer

1. The foreshore buffer zone to creek is too excessive (The creek is only 1m wide). A 10m buffer is fair.

Foreshore Buffer

1. The extent of the foreshore buffer area to the creek came about from the following environmental study, which identifies a standard setback distance to watercourses: City of Albany (2013), Yakamia Structure Plan Area, Environmental Assessment (Aurora Environmental).

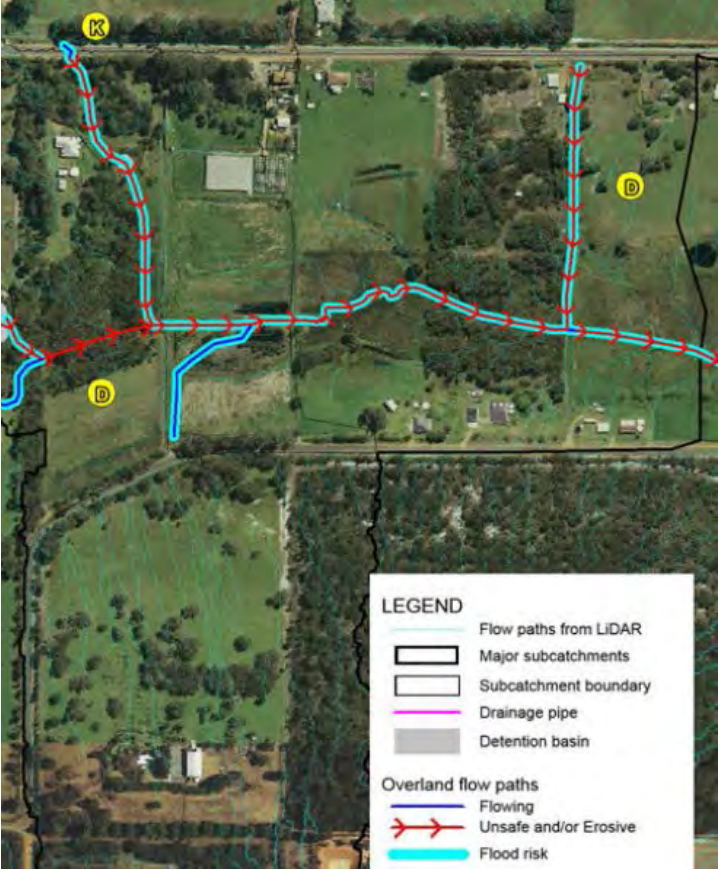
Figure 12 - City of Albany (2013), Yakamia Structure Plan Area, Environmental Assessment (Aurora Environmental).





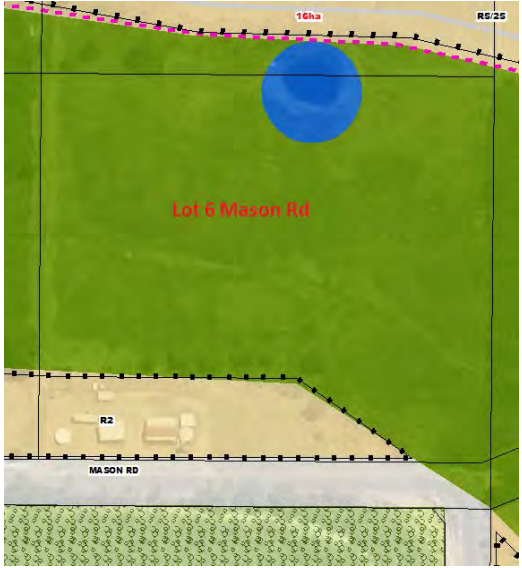

Standard setback distances to watercourses, as indicated by the draft structure plan may not be true to land characteristics (e.g. topography (steep/flat), height above sea level, historical events, flow velocity of water, width of creek, evidence of erosion and wetland dependent vegetation).

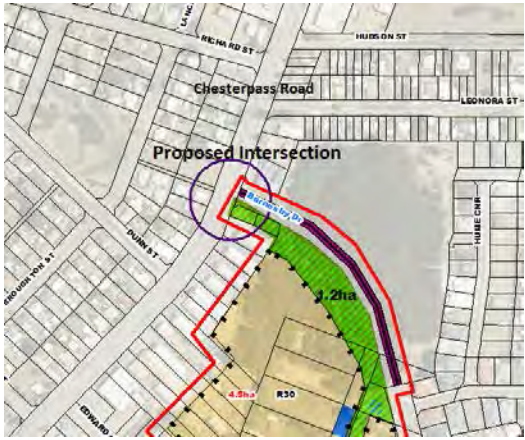

The City of Albany (2013), Yakamia Creek, Arterial Drainage Plan (Essential Environmental) identifies areas within the Yakamia catchment as being susceptible to various elements including flooding or erosion. For Lot 12 Mason Rd, the arterial drainage plan concludes the potential for erosion during a 5yr event and flood risk during a 1 in 100 year flood.


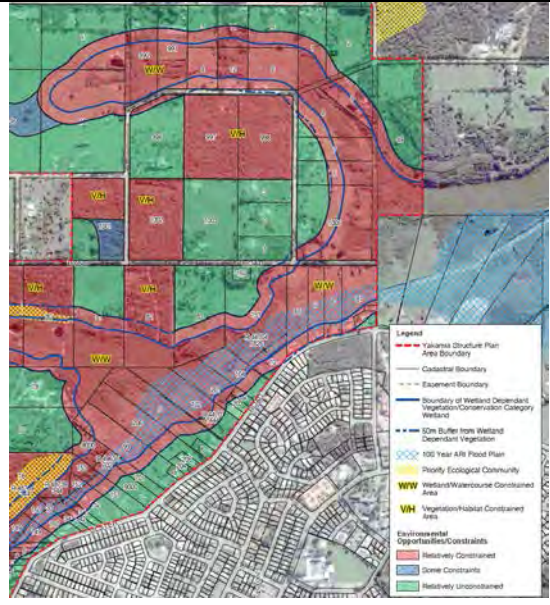
City of Albany (2013), Yakamia Creek Arterial Drainage Plan – 1 in 100 year event.

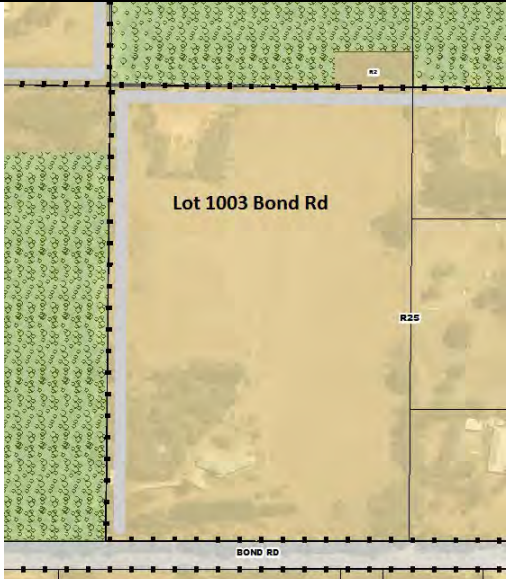


			 <p>The width and depth of the creek (1.5m) and the condition of vegetation (trees) suggests that low volumes of water travel through the precinct and that the land rarely floods.</p> <p>It is recommended that the section of creek (Lot 12 Mason Rd) is marginally reduced.</p>
		<p>Management of foreshore</p> <p>1. Due to the extent of the foreshore, management of the area would be a massive burden to the City.</p>	<p>Management of foreshore</p> <p>1. Noted</p>
		<p>Public Open Space Contribution</p> <p>1. A 10% POS contribution for development at an R5 (2000m² lots) density is too onerous.</p>	<p>Public Open Space Contribution</p> <p>1. Change density to R25 as recommended by Department of Planning. In accordance with the <i>Planning and Development Act 2005</i>, properties with the potential to create more than two lots may be required to provide a POS contribution at the time of subdivision.</p>
		<p>Fire</p> <p>1. We are concerned about the risk of fire due to vegetation in the vicinity. Retention of all vegetation places too much of an onus on the City and landholder to manage against fire.</p>	<p>Fire</p> <p>1. Noted. As indicated in the structure plan, new development will need to protect itself against the risk of fire.</p>
		<p>Dual Density coding</p> <p>1. The intent of dual residential density coding is unclear. If there is a choice and some land is developed to an R5 density, then viability of developing to a higher density is likely to be affected. We believe there is subdivision potential considering the size and location of the property – close to town.</p>	<p>Dual Density coding</p> <p>1. Change density to R25 as recommended by Department of Planning.</p>
<p>11</p>	<p>Lot 8 Curtiss Rd</p>	<p>Foreshore Buffer</p> <p>1. The foreshore buffer zone to creek is too excessive. Some land identified as foreshore is developable. A 10m foreshore area either side of the creek is</p>	<p>Foreshore Buffer</p> <p>1. The City of Albany (2013), Yakamia Creek, Arterial Drainage Plan (Essential Environmental) shows a steady flow of water through Lot 8 Curtiss Road, with the</p>


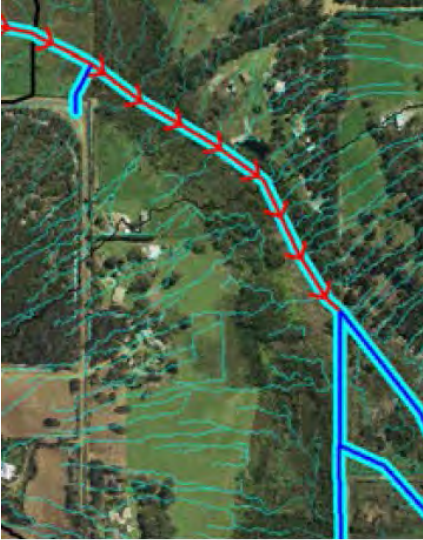



	<p>more practical.</p>	<p>potential for flooding (100yr flood event).</p>  <p>Overland flow paths — Flowing → Unsafe and/or Erosive — Flood risk</p> <p>The extent of foreshore shown on the draft structure plan can be reduced due to the rise in gradient either side of the creek. The variation should only be marginal due to the potential for flooding.</p>
	<p>Public Open Space Contribution</p> <ol style="list-style-type: none"> 1. A 10% contribution is considered unnecessarily onerous if the area is to be developed at a density of R5. 	<p>Public Open Space Contribution</p> <ol style="list-style-type: none"> 1. Change density to R25 as recommended by Department of Planning. In accordance with the <i>Planning and Development Act 2005</i>, properties with the potential to create more than two lots may be required to provide a POS contribution at the time of subdivision.
	<p>Foreshore – Weeds, Maintenance and Security (path).</p> <ol style="list-style-type: none"> 1. Who is going to maintain function of foreshore? Problem with weeds adjacent to creek. Security concern with persons walking through foreshore. 	<p>Foreshore – Weeds, Maintenance and Security (path).</p> <ol style="list-style-type: none"> 1. As noted in the structure plan, the foreshore is to be ceded to the Crown for its intended purpose (foreshore reserve, public open space) at the time of subdivision or development, free of cost and without payment of compensation by the Crown. 2. As noted in the structure plan, subdivision and development will need to be designed to ensure surveillance (i.e. development of roads adjacent to foreshores).
	<p>Fire</p> <ol style="list-style-type: none"> 1. We are concerned about the risk of fire due to vegetation in the vicinity. Retention of all vegetation places too much of an onus on developers and the City to manage risk. 	<p>Fire</p> <ol style="list-style-type: none"> 1. The foreshore and properties west of Curtiss Road are fire prone. Development within 100m of fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Prior to supporting subdivision, a bushfire attack level assessment will need to be undertaken. The structure plan makes requirements for fire management. 2. Based on identified fire risk and legislative requirements, it is recommended that the following Yakamia/Lange Structure Plan conditions remain with minor amendments as follows: <i>A detailed Fire Management Plan and Bushfire Attack Level assessment shall be prepared for any subdivision and/or development in areas within 100m of fire prone vegetation. These areas are generally defined by the 'Fire Risk' design element on the Structure Plan Map, and will require further refinement at future planning stages.</i>



			<p>Any subdivision and/or development within 100m of fire prone vegetation shall accord with an approved Fire Management Plan and Bushfire Attack Level assessment in accordance with the relevant bushfire planning and management frameworks of the WAPC and DFES, and any City of Albany fire management requirements.</p> <p>Where appropriate to do so, hazard separation areas are to be reduced and BAL building standards increased as a means to protect vegetation.</p> <p>Hazard separation areas are not to include riparian vegetation or areas beyond the boundaries of a lot.</p>
		<p>Dual Zoning</p> <p>1. The ability to economically provide sewer to the precinct will determine whether a high density can be achieved. If some land is developed at a low density without deep sewer, viability of developing will be affected. Yakamia is acknowledged as a key opportunity to consolidate urban development – close to the CBD.</p>	<p>Dual Zoning</p> <p>1. The structure plan currently recommends minimum lot sizes in this precinct of 2000m² (R5 – without deep sewer) or 300m² (R25 – with deep sewer). The Department of Planning has required that development in the Yakamia Structure Plan area (other than for the ‘Yakamia Creek’ zone properties) connect to deep sewer. Development/subdivision potential is unknown without a fire management plan and bushfire attack level assessment. It is recommended that an R25 density is designated with a condition for connection to deep sewer and compliance with a fire management plan and bushfire attack level assessment.</p>
<p>12</p>	<p>Lot 6 Mason Rd</p> 	<p>Foreshore Buffer</p> <p>1. Foreshore buffer to creek is too excessive.</p>	<p>Foreshore Buffer</p> <p>1. The City of Albany (2013), Yakamia Creek, Arterial Drainage Plan (Essential Environmental) shows the potential for flooding and erosion at Lot 6 Mason Road. Due to a rising gradient, the extent of foreshore can be marginally reduced.</p> 
		<p>Horticulture</p> <p>1. Our intent is to advertise the potential for horticulture farming within the foreshore area. The designation as a foreshore is to our detriment – financially.</p>	<p>Horticulture</p> <p>1. Noted. A ‘foreshore’ is defined as “land adjoining or directly influencing a body of water that is managed to protect waterway and riparian values” (Water and Rivers Commission Foreshore Policy 1, 2002). The use of land adjacent to the creek for horticulture maybe to the detriment of the waterway and riparian values.</p>

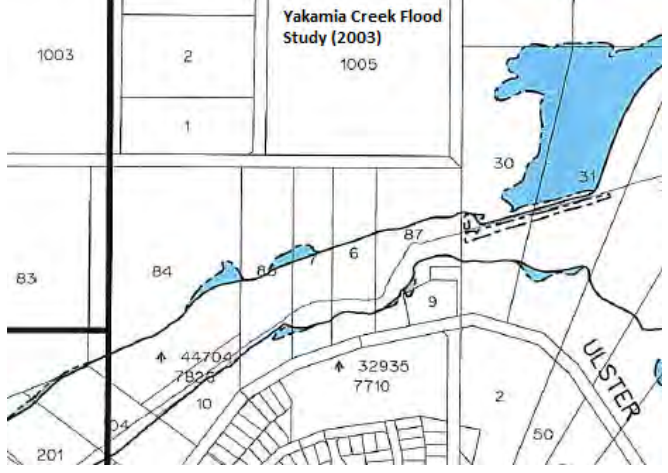
		<p>Fire</p> <ol style="list-style-type: none"> 1. We are concerned about the risk of fire due to vegetation in the vicinity. 	<p>Fire</p> <ol style="list-style-type: none"> 1. Noted. The vegetated foreshore area and vegetated properties south of Mason Rd are fire prone. In accordance with the Western Australian Planning Commission's <i>Planning for Bushfire Protection Guidelines – Edition 2, 2010</i>, development within 100m of fire prone vegetation needs to accommodate fire protection measures including, a building protection zone, hazard separation measures and ember and flame attack measures.
		<p>Vermin</p> <ol style="list-style-type: none"> 1. The future foreshore will increase vermin. 	<p>Vermin</p> <ol style="list-style-type: none"> 1. Noted. The amount and diversity of flora and fauna is expected to increase, the result of enhancing the foreshore.
<p>13</p>	<p>Lot 5 Chesterpass Rd</p> 	<p>Proposed Intersection (Barnesby Drive/Chester Pass Road)</p> <ol style="list-style-type: none"> 1. The structure plan recommends that Barnesby Drive is connected to a corner and downhill section of Chester Pass Road. The purpose being to relieve congestion at the main Chester Pass roundabout. Given that Chester Pass Road is a heavy freight route, the location of the intersection is not appropriate. Trucks need to maintain speed through this section of road to get up the hill. An intersection at this location is fraught with danger. 2. A better option may be to connect Beaufort Road to Barnesby Drive to provide connection via Edward Street to Chester Pass Road. 	<p>Proposed Intersection (Barnesby Drive/Chester Pass Road)</p> <ol style="list-style-type: none"> 1. Main Roads WA have agreed in principle to left in and left out treatments only. Recommend that the structure plan is changed such that connection to Barnesby Drive is restricted to left out and left in only. 2. Recommend indicating on the structure plan, the potential to connect Beaufort Rd to Barnesby Drive. 
<p>14</p>	<p>Lot 1001 Catalina Road</p>	<p>Residential (R25)</p> <ol style="list-style-type: none"> 1. The land demonstrates similar vegetation types and values to other properties within the YLSP area which have not been burdened with an 'Environment Protection and Biodiversity Conservation' classification. The selective nature of choosing properties for this classification is not a fair process and all landowners should be given the opportunity to seek relevant environmental approvals. Opportunities and constraints mapping included within the draft YLSP only identifies half of the property as being 'Relatively Constrained', with the remainder having 'Some Constraints' or being 'Relatively Unconstrained'. The following conclusions can be made regarding the representation of the vegetation type at the subject property (Afra/Emar/Ccal/Athe): <ul style="list-style-type: none"> • It is well represented; • Nearly 10% (preferred) is protected within conservation reserves; • The vegetation type is common and widespread; and • The property contains a small, relatively isolated pocket of this vegetation type in varying condition. <p>It is respectfully requested that the City of Albany consider the reclassification of Lot 1001 Catalina Road, Lange to 'Residential', with a density of 'R25' and</p>	<p>Residential (R25)</p> <ol style="list-style-type: none"> 1. The Environmental Assessment (Aurora Environmental) has identified the southern half of Lot 1001 Catalina Road as having some constraints and the northern portion as being relatively constrained.

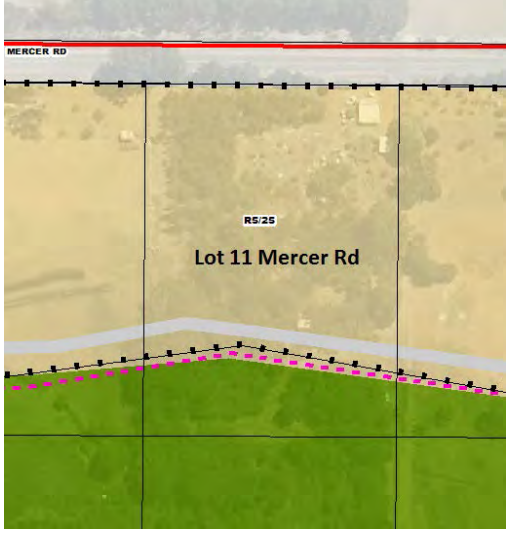
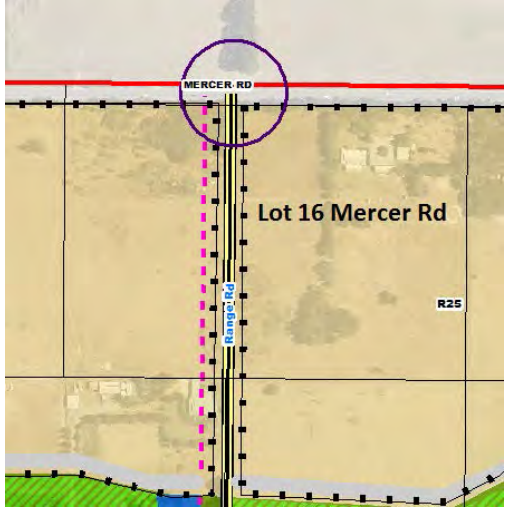
		<p>subject to 'Referral to Commonwealth'.</p>	 <p>Recommend changing the structure plan for Lot 1001 Catalina Road to support development in the southern portion of Lot 1001 Catalina Road.</p>
		<p>Compensation</p> <ol style="list-style-type: none"> The draft YLSP does not offer any compensation to landowners required to conserve vegetation. Furthermore, through the conservation covenant process, the landowners will be burdened for maintenance of the land. 	<p>Compensation</p> <ol style="list-style-type: none"> Noted.
		<p>Education Establishment</p> <ol style="list-style-type: none"> The landowner has previously had a Planning Scheme Consent issued for the development of an 'Education Establishment'. Although they did not act on this approval, it is an indication that this land use is considered acceptable for the land. The intent of the landowner is to develop an 'Education Establishment'. This use does not require the full clearing of the property and vegetation can be incorporated into the future design to ensure that this occurs. This would be well located, given the existing planned government primary school directly adjoining the western boundary. 	<p>Education Establishment</p> <ol style="list-style-type: none"> Noted. The planning approval has expired and is therefore no longer valid. Since the previous approval, a new <i>Local Planning Scheme No. 1</i> has been endorsed with new provisions. Applications for planning approval are assessed in accordance with provisions of the new <i>Local Planning Scheme No. 1</i>, including the following: <p>5.3.3 Vegetation Protection <i>The Local Government may require the protection of existing vegetation on a site as a condition of planning approval to:</i></p> <ol style="list-style-type: none"> Protect a vegetation community; Prevent land degradation; Protect roadside vegetation; Maintain local visual amenity and the natural setting; Protect habitat, or a threatened species; Assist to provide vegetated corridors to maintain fauna and flora linkages; or Assist in the maintenance of water quality.
<p>15</p>	<p>Lot 1003 Bond Road</p>	<p>Environment/Biodiversity</p> <ol style="list-style-type: none"> Understand that environment and biodiversity are important elements of planning, but would suggest it is way out of proportion. 	<p>Environment/Biodiversity</p> <ol style="list-style-type: none"> Noted. Recommend making modifications to reduce the amount of protected areas. For example, the width of foreshores has been reduced and some vegetated areas in degraded condition have been supported for development.
		<p>Fire</p> <ol style="list-style-type: none"> Protected vegetation will always be an extreme bushfire hazard. 	<p>Fire</p> <ol style="list-style-type: none"> Noted. Recommend highlighting on the structure plan, areas subject to fire risk.
		<p>POS</p> <ol style="list-style-type: none"> Locate POS at northern part of Lot 1003 to border private conservation lot. 	<p>POS</p> <ol style="list-style-type: none"> Recommend locating POS at northern section of Lot 1003. The location of POS will be confirmed at the subdivision stage of development.

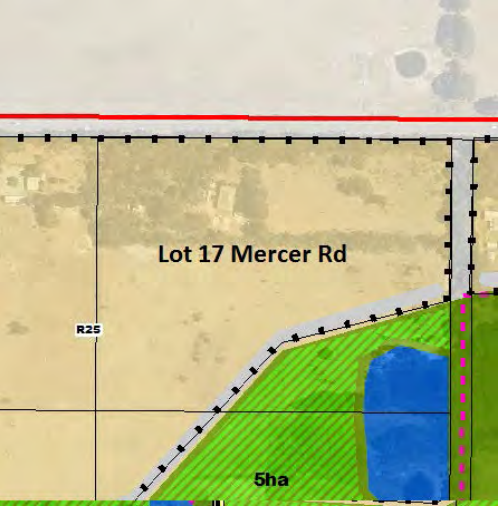
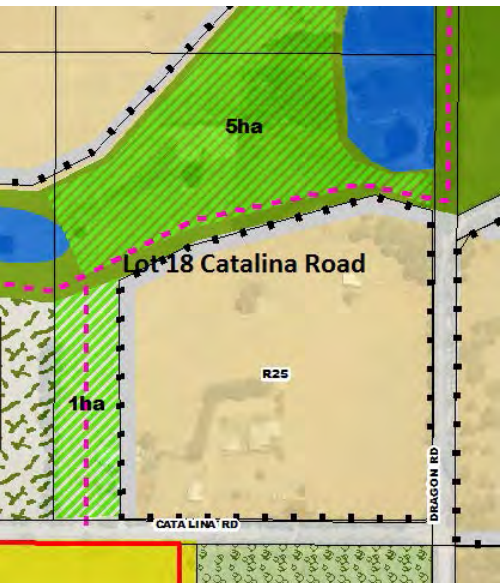
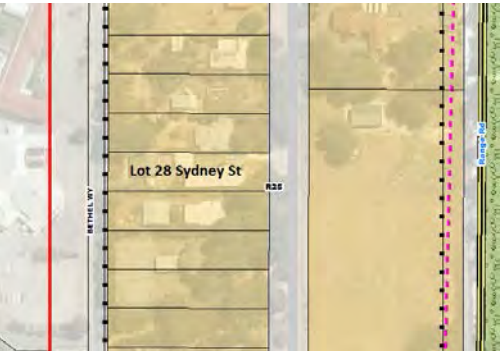
			
<p>16</p>	<p>Lot 4 Mason Road</p> 	<p>Foreshore Buffer</p> <ol style="list-style-type: none"> Understand a need for a buffer around the creek but not to the extent proposed (80% of property). The creek that runs through my property is only 1m wide. Flooding occurred once over a twenty year period. The extent of buffer places a huge onus on the City for maintenance. A 10m buffer would be a fair outcome. 	<p>Environment/Biodiversity</p> <ol style="list-style-type: none"> The City of Albany's <i>Yakamia Creek Arterial Drainage Plan 2013</i> (Essential Environmental) shows flood (100yr event) and erosive risk characteristics of the creek running through Lot 4 Mason Road. Any reduction in foreshore boundaries should be minimal. It is recommended that the structure plan is changed to illustrate a marginally reduced foreshore boundary.  <p>Overland flow paths</p> <ul style="list-style-type: none"> — Flowing → Unsafe and/or Erosive — Flood risk



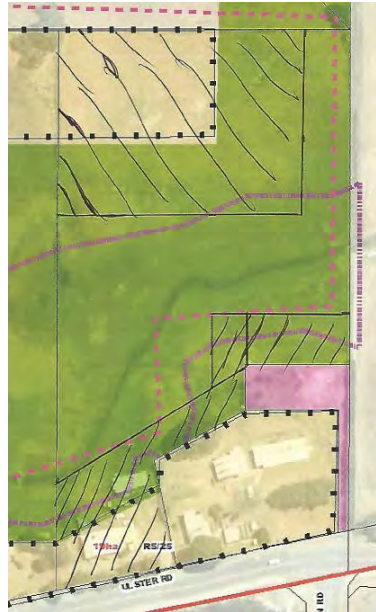
		<p>Fire</p> <p>1. Protected vegetation in the vicinity of residents in Mason Road is a fire hazard. This places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</p>	<p>Fire</p> <p>1. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the Environmental Protection Regulations 2004). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</p>
		<p>Dual Density coding</p> <p>1. The intent of dual residential density coding is unclear. If there is a choice and some land is developed to an R5 density, then viability of developing to a higher density is likely to be affected.</p>	<p>Dual Density coding</p> <p>1. Uphold. In order to achieve viability, development needs to be at the R25 density and connected to deep sewer. The Department of Planning has required that development in the Yakamia Structure Plan area (other than for the 'Yakamia Creek' zone properties) connect to deep sewer.</p>
		<p>Servicing</p> <p>1. Servicing in the area is unclear, particularly in relation to deep sewer.</p>	<p>Servicing</p> <p>1. As per comments made by the Department of Planning, development of more than one dwelling or subdivision to more than one lot will need to connect to deep sewer.</p>
		<p>Public Open Space Contribution</p> <p>1. A 10% POS contribution is not appropriate if the land is developed at a density of R5 (2000m² lots).</p>	<p>Public Open Space Contribution</p> <p>1. As per comments made by the Department of Planning, an R25 density applies, meaning a POS contribution is appropriate in accordance with the <i>Planning and Development Act 2005</i>.</p>
<p>17</p>	<p>Lot 7 Curtiss Road</p> 	<p>Foreshore Buffer</p> <p>1. The extent of the foreshore reserve (150m width) is well in excess of that required for the creek and what the City is capable of managing. A 10m reserve on either side of the creek is more practical.</p>	<p>Foreshore Buffer</p> <p>1. The City of Albany's <i>Yakamia Creek, Arterial Drainage Plan 2013</i> (Essential Environmental) shows flood (100yr event) and erosion risk characteristics of the creek running through Lot 7 Curtiss Road. Any reduction in foreshore boundaries should be minimal. It is recommended that the structure plan is changed to illustrate a marginally reduced foreshore boundary.</p>  <p>Overland flow paths  Flowing  Unsafe and/or Erosive  Flood risk</p>
		<p>Public Open Space Contribution</p> <p>1. A 10% POS contribution for development at an R5 (2000m² lots) density is too onerous.</p>	<p>Public Open Space Contribution</p> <p>1. As per comments made by the Department of Planning, an R25 density applies, meaning a POS contribution is appropriate in accordance with the <i>Planning and Development Act 2005</i>.</p>
		<p>Fire</p>	<p>Fire</p>

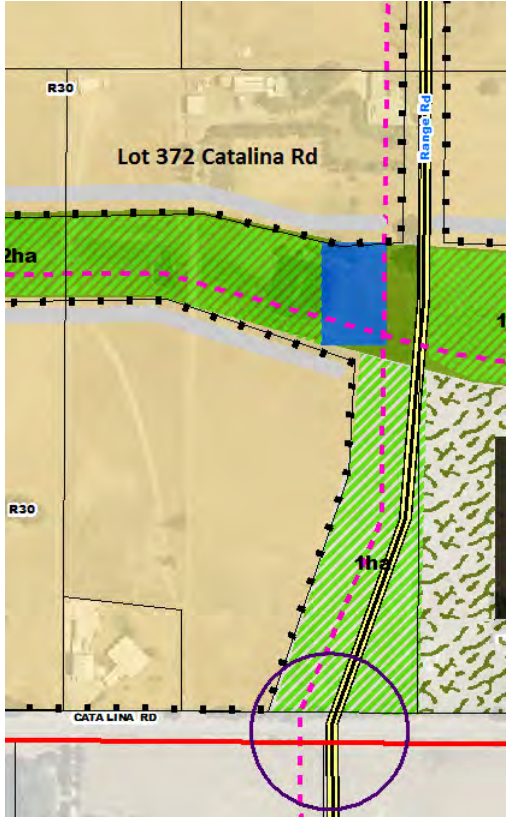


		<p>1. Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</p>	<p>1. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</p>
		<p>Dual Density coding</p> <p>1. The intent of dual residential density coding is unclear. If there is a choice and some land is developed to an R5 density, then viability of developing to a higher density is likely to be affected.</p>	<p>Dual Density coding</p> <p>1. Agree. In order to achieve viability, development needs to be at the R25 density and connected to deep sewer. The Department of Planning has required that development in the Yakamia Structure Plan area (other than for the 'Yakamia Creek' zone properties) connect to deep sewer.</p>
		<p>Servicing</p> <p>1. Servicing in the area is unclear, particularly in relation to deep sewer.</p>	<p>Servicing</p> <p>1. As per comments made by the Department of Planning, development of more than one dwelling or subdivision to more than one lot will need to connect to deep sewer. It is recommended that additional information is provided in the structure plan around the development/staging of deep sewer.</p>
<p>18</p>	<p>Lot 7 Ulster Rd</p> 	<p>Foreshore Buffer</p> <p>1. The extent of the foreshore reserve is too excessive. A foreshore reserve of 30m either side of the creek is considered more reasonable.</p>	<p>Foreshore Buffer</p> <p>1. The City of Albany's <i>Yakamia Creek, Arterial Drainage Plan 2013</i> (Essential Environmental) shows flood (100yr event) and erosion risk characteristics of the creek running through Lot 7 Ulster Road. The Department of Water <i>Yakamia Creek Flood Study 2003</i> indicates a floodplain evident over Lot 7 Ulster Road. Any reduction in foreshore boundaries should be minimal and not beyond flood boundaries.</p>  <p>Overland flow paths</p> <ul style="list-style-type: none"> — Flowing → Unsafe and/or Erosive — Flood risk



		 <p>It is recommended that the structure plan is changed to illustrate a marginally reduced foreshore boundary to follow the floodplain boundary</p>	
	<p>Management of foreshore</p> <p>1. Given the manner in which the Yakamia creek area is likely to be developed, i.e. in a piecemeal manner over many years, it is suggested the City access funding from State or Federal sources to prepare an overall foreshore management plan, which landholders can use for maintenance.</p>	<p>Management of foreshore</p> <p>1. South Coast Natural Resource Management in partnership with the Oyster Harbour Catchment Group developed a foreshore management plan for the Yakamia Creek. The aims of this management plan are to:</p> <ul style="list-style-type: none"> • Provide recommendations on appropriate management of Yakamia Creek/ drain by private landholders, the City of Albany and State Government agencies. • Identify, and propose solutions for, key problem areas and issues. • Inform environmental rehabilitation priorities for natural resource management stakeholders, the City of Albany and State Government agencies. • Identify the next two to five rehabilitation sites for Yakamia Creek Living Stream Projects. <p>It is recommended that the foreshore management plan is noted in the structure plan under 'Previous Reports and Studies'.</p>	
	<p>Dual Density coding</p> <p>1. Clarification is required for density. The Western Australian Planning Commission failed in its bid to require a recent subdivision in the 'Yakamia Creek' zone to connect to scheme sewer.</p>	<p>Dual Density coding</p> <p>1. Change elements within the structure plan such that the areas adjacent to Ulster Road can only be developed to a minimum lot size of 3000m² (deep sewer not required), being consistent with current scheme requirements.</p>	
	<p>Public Open Space Contribution</p> <p>1. A POS contribution was not required for a recent subdivision in the 'Yakamia Creek' zone.</p>	<p>Public Open Space Contribution</p> <p>1. Change the structure plan such that a contribution for POS is not required for properties adjacent to Ulster Road.</p>	
	<p>Fire</p> <p>1. Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</p>	<p>Fire</p> <p>2. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</p>	
	<p>Servicing</p> <p>1. Servicing in the area is unclear, particularly in relation to deep sewer.</p>	<p>Servicing</p> <p>1. Areas adjacent to Bond Road are required to connect to deep sewer (more than one dwelling). Areas adjacent to Ulster Road (south side of Yakamia Creek) are not required to connect to deep sewer.</p>	
<p>19</p>	<p>Lot 11 Mercer Road</p>	<p>Foreshore Buffer</p> <p>1. As the creek runs through the neighbouring property (40-70m away) to the south, it is considered unnecessary for any land to be given up as foreshore.</p>	<p>Foreshore Buffer</p> <p>1. Uphold. Modify foreshore boundary to follow southern property boundary. This is consistent with previous planning assessments undertaken at the subdivision stage.</p>

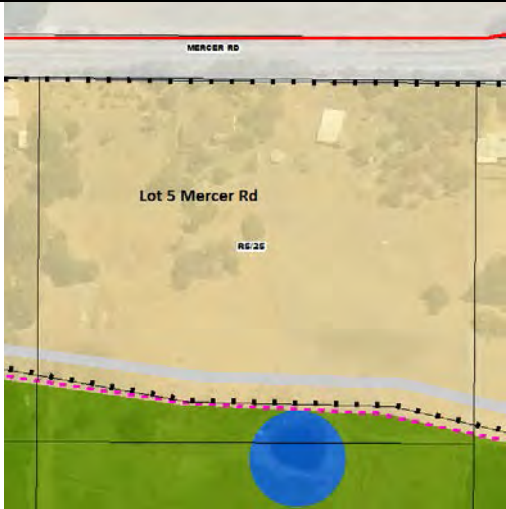
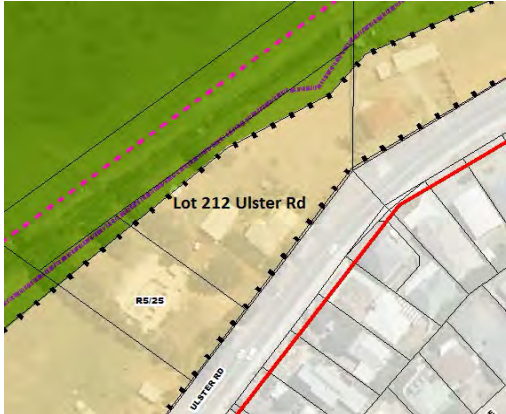
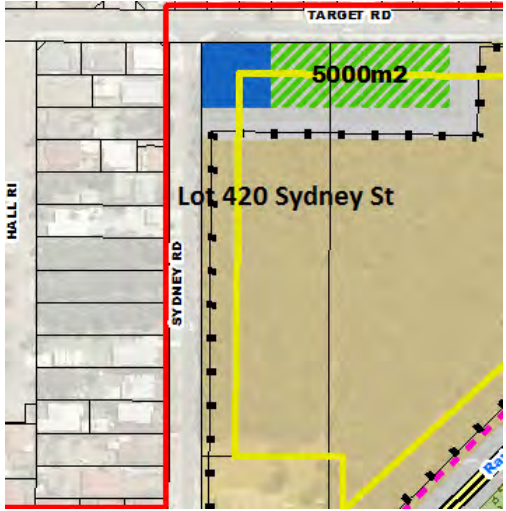
		<p>Public Open Space Contribution</p> <p>1. A 10% POS contribution is unnecessarily onerous if developed to a density of R5.</p> <p>Fire</p> <p>1. Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</p> <p>Dual Density coding</p> <p>1. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected.</p> <p>Management of foreshore</p> <p>1. Given the manner in which the Yakamia creek area is likely to be developed, i.e. in a piecemeal manner over many years, it is suggested the City access funding from State or Federal sources to prepare an overall foreshore management plan, which landholders can use for maintenance.</p>	<p>Public Open Space Contribution</p> <p>1. Recommend changing the density to R25. A POS contribution is required for an R25 density (<i>Planning and Development Act 2005</i>).</p> <p>Fire</p> <p>1. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</p> <p>Dual Density coding</p> <p>1. Recommend changing the density to R25 in keeping with Department of Planning comment.</p> <p>Management of foreshore</p> <p>1. South Coast Natural Resource Management in partnership with the Oyster Harbour Catchment Group is developing a foreshore management plan for the Yakamia Creek. The aims of this management plan are to:</p> <ul style="list-style-type: none"> • Provide recommendations on appropriate management of Yakamia Creek/ drain by private landholders, the City of Albany and State Government agencies. • Identify, and propose solutions for, key problem areas and issues. • Inform environmental rehabilitation priorities for natural resource management stakeholders, the City of Albany and State Government agencies. • Identify the next two to five rehabilitation sites for Yakamia Creek Living Stream Projects. <p>It is recommended that the foreshore management plan is noted in the structure plan under 'Previous Reports and Studies'.</p>
20	<p>Lot 16 Mercer Road</p> 	<p>Framework</p> <p>1. Given the fragmented nature of landholdings within Yakamia, the presentation of an overall structure plan is required to provide a framework to coordinate the provision and arrangement of future land use, subdivision and development, staging, servicing, transport networks, public open space, foreshore reserves and urban water management.</p> <p>Development Potential</p> <p>1. The excessive designation of foreshore reserve within the precinct is likely to deter landholders from proceeding to develop their land, which in turn could complicate cooperation and coordination of servicing in the area.</p> <p>Servicing</p> <p>1. It is unclear how sewer will be provided and staged. Further information at Plan 26 would assist in demonstrating how development can be staged.</p>	<p>Framework</p> <p>1. Provide additional information within the structure plan around the provision and arrangement of future land use, subdivision and development, staging, servicing, transport networks, public open space, foreshore reserves and urban water management.</p> <p>Development Potential</p> <p>1. Recommend reducing areas designated as 'Foreshore Protection and Enhancement' to comply with characteristics of the land (e.g. topography) and water (e.g. flow and flooding characteristics).</p> <p>Servicing</p> <p>1. Provide additional information to demonstrate potential staging of development.</p>
21	<p>Lot 17 Mercer Road</p>	<p>Foreshore Buffer</p> <p>1. As a drainage line does not pass through the property, it is considered that there is no valid reason for any foreshore reserve to be taken from Lot 17.</p> <p>Development Potential</p>	<p>Foreshore Buffer</p> <p>1. Recommend modifying foreshore boundary outside of subject property.</p> <p>Development Potential</p>


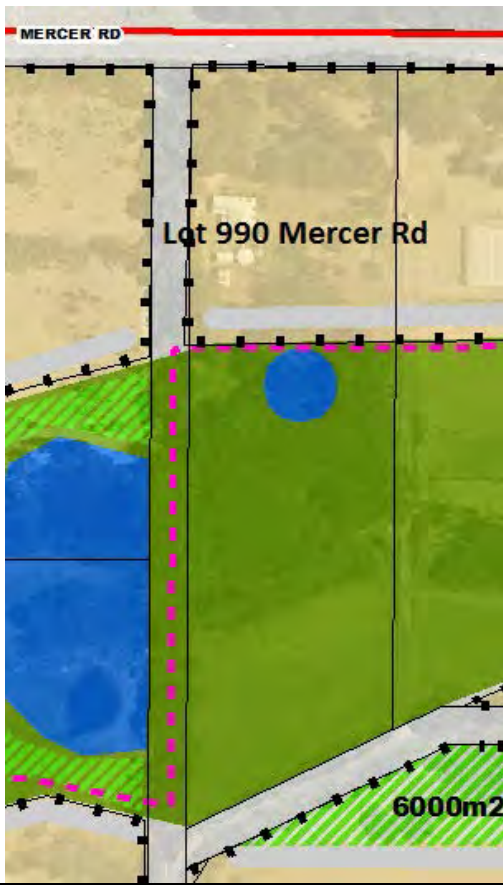
		<p>1. The excessive designation of foreshore reserve within the precinct is likely to deter landholders from proceeding to develop their land, which in turn could complicate cooperation and coordination of servicing in the area.</p>	<p>1. Recommend reducing areas designated as 'Foreshore Protection and Enhancement' to comply with characteristics of the land (e.g. topography) and water (e.g. flow and flooding characteristics).</p>
		<p>Servicing</p> <p>1. It is unclear how sewer will be provided and staged. Further information at Plan 26 would assist in demonstrating how development can be staged.</p>	<p>Servicing</p> <p>1. Provide additional information to demonstrate potential staging of development.</p>
22	<p>Lot 18 Catalina Road</p> 	<p>Foreshore Buffer</p> <p>1. Given the creek only runs on a seasonal basis, the extent of foreshore reserve is considered unnecessarily extensive. The fact that the foreshore is proposed to be used for active public open space is contrary to the intent of the Town Planning Act. If part of it is to be used for POS then it should be designated as such, not as foreshore reserve.</p>	<p>Foreshore Buffer</p> <p>1. Recommend modifying foreshore boundary to comply with characteristics of the land (e.g. topography) and water (e.g. flow and flooding characteristics).</p>
		<p>Power Station</p> <p>1. The power station designated on the neighbouring property should only be contemplated as a last resort and should accommodate a buffer within its own property boundaries.</p>	<p>Power Station</p> <p>1. Recommend changing the structure plan such that the power station accommodates a buffer within its own property boundaries.</p>
		<p>Servicing</p> <p>1. It is unclear how sewer will be provided and staged. Further information at Plan 26 would assist in demonstrating how development can be staged.</p>	<p>Servicing</p> <p>1. Provide additional information to demonstrate potential staging of development.</p>
23	<p>Lot 28 Sydney Street</p> 	<p>Costs incurred to Subdivide</p> <p>1. Costs expected from subdivision are excessive. More information needs to be provided to explain what ratepayers may expect from costs incurred from subdividing.</p>	<p>Costs incurred to Subdivide</p> <p>1. Provide additional information to explain what costs landholders may expect as a result of subdivision.</p>
24	<p>Lot 82 Bond Road</p>	<p>Future Urban Zone</p> <p>1. Strongly object to any environmental protection measures base on the zoning of Future Urban. I was led to believe that the property could be developed with block sizes of 450-700m².</p>	<p>Future Urban Zone</p> <p>1. Dismiss. The property in question has been designated for urban development (R25). An area consisting of a foreshore with riparian vegetation exists and is required to be protected in accordance with state requirements. The subject area contains habitat for threatened species and therefore an application to clear vegetation may need to be made to the Commonwealth in accordance with the <i>Environmental Protection and Biodiversity Conservation Act</i>.</p>

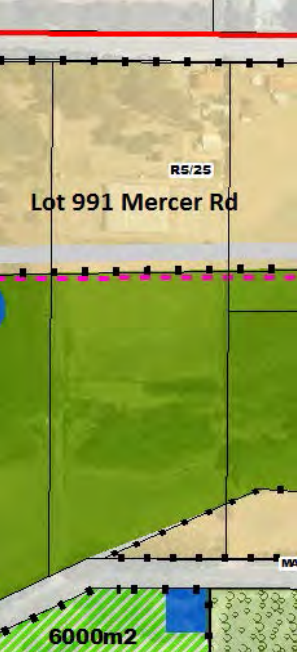

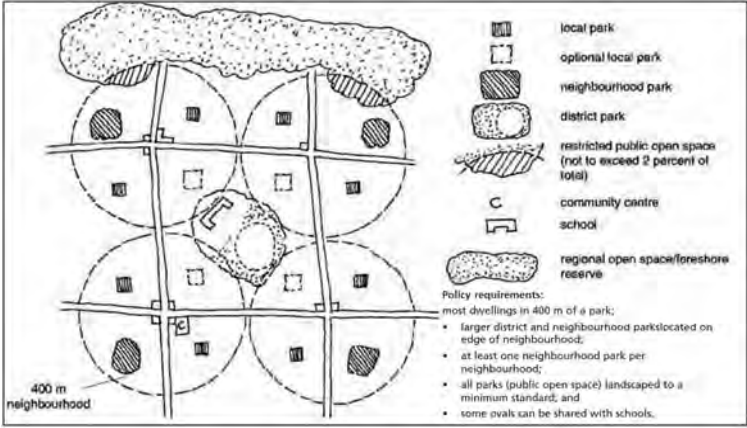
			
<p>25</p>	<p>Lot 87 Ulster Road</p> 	<p>Foreshore Buffer</p> <p>1. A 30m buffer either side of the creek should be used as the benchmark for this section of creek. This is the norm for the area. The designation of a foreshore reserve down the eastern boundary is considered unnecessary given the distance from the creek. Plan 16 of the structure plan demonstrates how filling and building is acceptable within the flood fringe. This appears to be at odds with the excessive designation of foreshore reserve in the draft plan. The following is where we think the buffer should be:</p>  <p>Sewer/Density/POS</p> <p>1. The majority of subdivision in this locality is choosing to develop larger un-sewered lots which will make the R25 option increasingly unlikely.</p>	<p>Foreshore Buffer</p> <p>1. Recommend reducing the extent of foreshore in the northern precinct based on land characteristics (topography). The foreshore boundary in the southern precinct of the subject lot is to stay the same due to flood characteristics.</p> <p>Sewer/Density/POS</p> <p>1. Recommend changing the structure plan as follows:</p> <ul style="list-style-type: none"> • The minimum size for properties adjacent to Ulster Road is 3000m², which is in keeping with scheme provisions for the Yakamia Creek zone. • Deep sewer and a contribution for POS is not required for this area. • Areas to the north of the foreshore adjacent to Bond Road are to be developed to an R25 density (subject to connecting to deep sewer and providing a POS contribution).

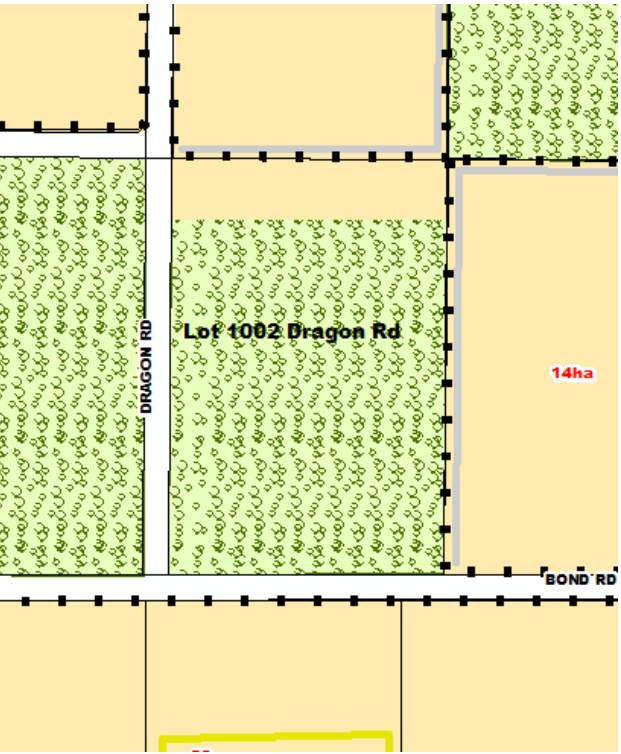
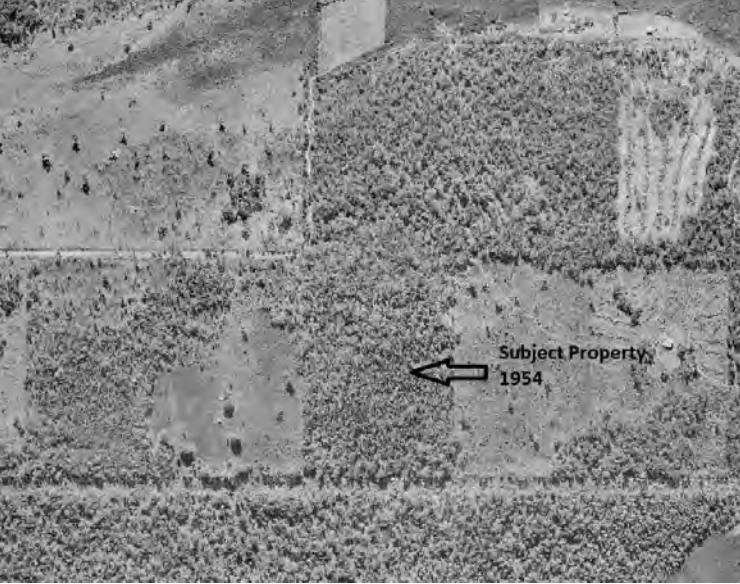

<p>26</p>	<p>Lot 372 Catalina Road</p> 	<p>Range Road Alignment</p> <ol style="list-style-type: none"> 1. Range Road needs to be moved further into 'sub station' land for a better buffer to our home. 	<p>Range Road Alignment</p> <ol style="list-style-type: none"> 1. Range Road has been aligned to comply with an endorsed structure plan (Catalina Structure Plan). The alignment for range Road will be defined by an engineer at the subdivision stage (refer to following endorsed Catalina Structure Plan showing endorsed road reserve): 
<p>27</p>	<p>Lot 102 Ulster Road</p> 	<p>Foreshore</p> <ol style="list-style-type: none"> 1. A recent outcome of a State Administrative Tribunal decision designated 18% of the subject property for drainage, as opposed to 68% designated as foreshore under the draft structure plan. The width of the foreshore should be approximately 66m, which is consistent with other areas. 	<p>Foreshore</p> <ol style="list-style-type: none"> 1. Recommend maintaining foreshore in keeping with flood boundaries and riparian vegetation.
<p>Drainage</p> <ol style="list-style-type: none"> 1. The structure plan shows a large drainage basin within the foreshore area. Where drainage basins are required on an owners land over and above their own requirement, then it is fair that they be compensated. 		<p>Drainage</p> <ol style="list-style-type: none"> 1. Recommend removing drainage basin from floodplain. 	
<p>Management</p> <ol style="list-style-type: none"> 1. Where possible, makes sense for land owners to remain responsible for ongoing management of foreshore areas. 		<p>Management</p> <ol style="list-style-type: none"> 1. Where land is subdivided, areas designated foreshore, are to be ceded to the Crown and managed by the City. The South Coast Natural Resource Management in partnership with the Oyster Harbour Catchment Group is developing a foreshore management plan for the Yakamia Creek. The aims of this management plan are to: <ul style="list-style-type: none"> • Provide recommendations on appropriate management of Yakamia Creek/ drain by private landholders, the City of Albany and State Government agencies. • Identify, and propose solutions for, key problem areas and issues. • Inform environmental rehabilitation priorities for natural resource management stakeholders, the City of Albany and State Government agencies. • Identify the next 2 to 5 rehabilitation sites for Yakamia Creek Living Stream Projects. <p>It is recommended that the foreshore management plan is noted in the structure plan under 'Previous Reports and Studies'.</p> 	
<p>Sewer</p> <ol style="list-style-type: none"> 1. Further clarification is required on the potential to provide scheme sewer. 		<p>Sewer</p> <ol style="list-style-type: none"> 1. The structure plan is to be modified to state that connection to deep sewer is not 	

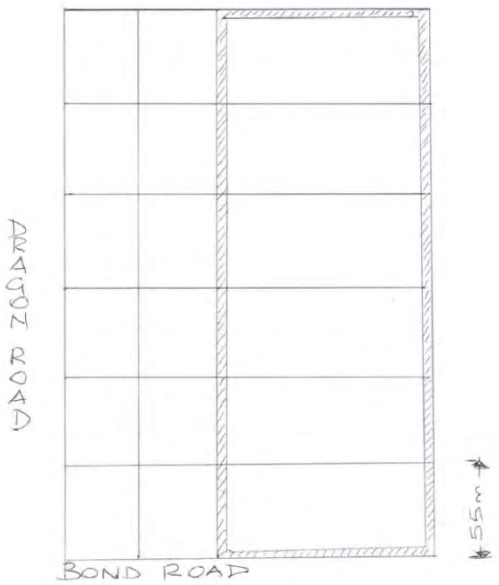


			mandatory for properties fronting Ulster Road.
		<p>POS</p> <p>1. Concern is also raised in relation to the requirement to provide cash-in-lieu in addition to ceding land free of cost for foreshore reserve.</p>	<p>POS</p> <p>1. Recommend changing the structure plan such that POS as land or cash-in-lieu is not necessary for properties fronting Ulster Road.</p>
28	<p>Lot 152 Ulster Road</p> 	<p>Foreshore</p> <p>1. The extent of foreshore illustrated is excessive. A 30m buffer either side of the creek should be used as the benchmark for this section of creek. Given the manner in which the Yakamia creek area is likely to be developed, ie in a piecemeal manner over many years, it is suggested the City access funding from State or Federal sources to prepare an overall foreshore management plan, which landholders can use for maintenance.</p> <p>Deep Sewer/Density/POS</p> <p>1. Insufficient information is provided regarding the ability to provide deep sewer. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected. Concern is also raised in relation to the requirement to provide cash-in-lieu in addition to ceding land free of cost for foreshore reserve.</p>	<p>Foreshore</p> <p>1. Recommend maintaining foreshore in keeping with flood boundaries and riparian vegetation.</p> <p>Deep Sewer/Density/POS</p> <p>1. Recommend changing the density for properties adjacent to Ulster Road to minimum lot size of 3000m² in keeping with scheme provisions for the Yakamia Creek zone.</p> <p>Connection to deep sewer and a contribution for POS is not required for this area.</p> <p>Areas to the north of the foreshore adjacent to Bond Road are to be developed to an R25 density (subject to connecting to deep sewer and providing a POS contribution).</p>
29	<p>Lot 201 Ulster Road</p> 	<p>Foreshore</p> <p>1. The extent of foreshore illustrated is excessive. A 30m buffer either side of the creek should be used as the benchmark for this section of creek.</p> <p>Management</p> <p>1. Consideration should be given to ongoing management costs for the City who would be responsible for managing significant areas of reserve. Given the manner in which the Yakamia creek area is likely to be developed, ie in a piecemeal manner over many years, it is suggested the City access funding from State or Federal sources to prepare an overall foreshore management plan, which landholders can use for maintenance.</p> <p>Density/POS</p> <p>1. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected. Concern is also raised in relation to the requirement to provide cash-in-lieu in addition to ceding land free of cost for foreshore reserve.</p>	<p>Foreshore</p> <p>1. Recommend maintaining foreshore in keeping with flood boundaries and riparian vegetation.</p> <p>Management</p> <p>2. Where land is subdivided, areas designated foreshore, are to be ceded to the Crown and managed by the City. The South Coast Natural Resource Management in partnership with the Oyster Harbour Catchment Group is developing a foreshore management plan for the Yakamia Creek. The aims of this management plan are to:</p> <ul style="list-style-type: none"> • Provide recommendations on appropriate management of Yakamia Creek/ drain by private landholders, the City of Albany and State Government agencies. • Identify, and propose solutions for, key problem areas and issues. • Inform environmental rehabilitation priorities for natural resource management stakeholders, the City of Albany and State Government agencies. • Identify the next 2 to 5 rehabilitation sites for Yakamia Creek Living Stream Projects. <p>It is recommended that the foreshore management plan is noted in the structure plan under 'Previous Reports and Studies'.</p> <p>Density/POS</p> <p>1. Recommend changing the density for properties adjacent to Ulster Road to minimum lot size of 3000m² in keeping with scheme provisions for the Yakamia Creek zone.</p> <p>Connection to deep sewer and a contribution for POS is not required for this area.</p> <p>Areas to the north of the foreshore adjacent to Bond Road are to be developed to an R25 density (subject to connecting to deep sewer and providing a POS contribution).</p>
30	<p>Lot 5 Mercer Road</p>	<p>Water Supply</p> <p>1. The draft plan would impact on our current water supply. We would lose our dam which is used to provide water to our livestock and gardens.</p>	<p>Water Supply</p> <p>1. Recommend modifying the structure to show the foreshore boundary following the cadastre boundary.</p>

			
<p>31</p>	<p>Lot 212 Ulster Road</p> 	<p>Subdivision</p> <ol style="list-style-type: none"> 1. Neighbouring properties have rights of carriage over Lot 212 Ulster Road. The carriageway is 5m wide and any further subdivision and subsequent increased traffic will be unsafe due to poor line of site and impact on the amenity of our land. 	<p>Subdivision</p> <ol style="list-style-type: none"> 1. Recommend modifying the structure plan to limit the amount of subdivision to 3000m² lots in keeping with current scheme requirements.
<p>32</p>	<p>Lot 420 Sydney Street</p> 	<p>Referral to Commonwealth</p> <ol style="list-style-type: none"> 1. We are concerned regarding the label applied to our land being: 'Referral to Commonwealth'. 	<p>Referral to Commonwealth</p> <ol style="list-style-type: none"> 1. Species listed as being threatened in the <i>Environment Protection and Biodiversity Act 1999</i> have been known to inhabit the area. <p>Include additional information within the structure plan to explain environmental issues.</p> <p>An overview of the Environment Protection and Biodiversity Act 1999, written by the Australian, Department of the Environment and Heritage states:</p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister. An overview of the Environment Protection and Biodiversity Conservation Act 1999, written by the Australian, Department of the Environment and Heritage states:</i></p> <p><i>A person must not take an action that has, will have or is likely to have a significant impact on a matter of national environmental significance except:</i></p> <ul style="list-style-type: none"> • <i>in accordance with an approval from the Commonwealth Environment Minister;</i> • <i>or</i> • <i>in accordance with an approval from another Commonwealth decision-maker under a management plan accredited by the Commonwealth Environment Minister for the purposes of a Ministerial declaration (declarations are explained on p.7); or</i> • <i>in accordance with an approval from a State in accordance with a management plan accredited by the Commonwealth Environment Minister for the purposes of a bilateral agreement (bilateral agreements are explained on p.7).</i>

			<ul style="list-style-type: none"> The unlawful taking of an action that has a significant impact on a matter of national environmental significance may attract a civil penalty of up to \$5.5 million or a criminal penalty of up to 7 years imprisonment. <p>The Act provides for the listing of:</p> <ul style="list-style-type: none"> nationally threatened native species and ecological communities; internationally protected migratory species; and marine species.
33	<p>Lot 541 Mercer Road</p> 	<p>Structure Plan</p> <p>1. We are very much in favour of the plan.</p>	<p>Structure Plan</p> <p>1. Noted.</p>
34	<p>Lot 990 Mercer Road</p> 	<p>Foreshore Buffer</p> <p>1. Give this is a tributary, the extent of foreshore is extreme. The area of foreshore shown also includes a cleared area adjacent to Mason Road. The foreshore should only be 10m either side of the creek.</p>	<p>Foreshore Buffer</p> <p>1. A site visit was conducted to confirm location of riparian vegetation and extent of topographies. Recommend modifying the foreshore boundaries in accordance with characteristics of the area.</p>
		<p>Public Open Space Contribution/Density</p> <p>1. A 10% POS contribution is unnecessarily onerous if developed to a density of R5. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected.</p>	<p>Public Open Space Contribution</p> <p>1. Recommend changing the density to R25, meaning POS will need to be provided as land or cash in lieu.</p>
		<p>Fire</p> <p>1. Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</p>	<p>Fire</p> <p>1. Noted. The protection of riparian vegetation generally takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</p>
35	<p>Lot 991 Mercer Road</p>	<p>Foreshore Buffer</p> <p>1. Give this is a tributary, the extent of foreshore is extreme. The area of foreshore shown also includes a cleared area adjacent to Mason Road. The foreshore should only be 10m either side of the creek.</p>	<p>Foreshore Buffer</p> <p>1. Recommend changing the foreshore boundary to align with land characteristics (topography) and neighbouring property designations.</p>
		<p>Public Open Space Contribution/Density</p>	<p>Public Open Space Contribution/Density</p>

		<p>1. A 10% POS contribution is unnecessarily onerous if developed to a density of R5. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected.</p>	<p>1. Recommend changing the density to R25, meaning POS will need to be provided as land or cash in lieu.</p>
		<p>Fire</p> <p>1. Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</p>	<p>Fire</p> <p>1. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</p>
<p>36</p>		<p>Fire</p> <p>1. Object to the plan on the grounds of the bushfire risk, the result of vegetation protection.</p>	<p>Fire</p> <p>1. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</p>
		<p>POS</p> <p>1. Public Open Space being taken off some blocks and not others.</p>	<p>POS</p> <p>1. A minimum contribution of 10% of a gross subdivisional area must be given up free of cost by the developer/subdivider as land for public parkland and/or as cash to be used to develop public parkland and associated facilities.</p> <p>The Western Australian Planning Commission's <i>Liveable Neighbourhoods</i> 'Public Open Space Model' accomplishes at least two local parks and one neighbourhood park per 400m radius (neighbourhood). A district park is recommended for every four neighbourhoods.</p>  <p>Policy requirements:</p> <ul style="list-style-type: none"> most dwellings in 400 m of a park; larger district and neighbourhood parks located on edge of neighbourhood; at least one neighbourhood park per neighbourhood; all parks (public open space) landscaped to a minimum standard; and some ovals can be shared with schools.
		<p>Contributions/Roads</p> <p>1. Road infrastructure should be divided equally between blocks.</p>	<p>Contributions/Roads</p> <p>1. Recommend providing additional information within the structure plan to explain what costs landholders may expect as a result of subdivision. Recommend making cost contributions in accordance with the Western Australian Planning Commission's <i>State Planning Policy 3.6 – Development Contributions for Infrastructure</i>. This Policy has been developed to:</p>

			<ul style="list-style-type: none"> • Promote the efficient and effective provision of public infrastructure and facilities to meet the demands arising from new growth and development; • Ensure that development contributions are necessary and relevant to the development to be permitted and are charged equitably among those benefiting from the infrastructure and facilities to be provided; • Ensure consistency and transparency in the system for apportioning, collecting and spending development contributions; • Ensure the social well-being of communities arising from, or affected by, development.
		<p>Substation</p> <p>1. Disagree with a substation near a proposed school.</p>	<p>Substation</p> <p>1. Western Power has retained the need to develop its site owned at Lot 36 Catalina Road, Albany for substation purposes within a 10-25 year period.</p>
<p>37</p>	<p>Lot 1002 Dragon Road</p>  <p>The site plan shows Lot 1002 Dragon Road, a rectangular lot bounded by Dragon Rd to the north and west, and Bond Rd to the south. The lot area is 14ha. A yellow rectangle is highlighted within the lot, and a red '14ha' label is present.</p>	<p>Condition of Vegetation</p> <p>1. The subject property was originally cleared and is not natural bush.</p>	<p>Condition of Vegetation</p> <p>1. Aerial photographs going back 19 years and 64 years (1954 and 1996) illustrate vegetation over the subject property. Twenty year old regrowth is deemed to be remnant.</p>   <p>The 1954 aerial photograph shows a cleared area with sparse vegetation. An arrow points to the 'Subject Property 1954'. The 1996 aerial photograph shows the same area with significant regrowth, marked with a red star.</p>
		<p>Bush Blocks</p>	<p>Bush Blocks</p>

		<p>1. We have attached a plan for what we are seeking bearing in mind conservation that the City seeks. Our plan proposes six rural lifestyle bush blocks. This would leave 57% of the property protected and vegetated.</p> 	<p>1. Noted. The Office of the Environmental Protection Authority has recommended protection of the vegetation at the subject property. Recommend including the following notation within the structure plan:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i></p>
<p>38</p>	<p>Lots 77 and 78 Range Rd and Lot 81 Bond Rd</p> 	<p>Foreshore/POS</p> <p>1. The landholder objects land shown as foreshore (Lot 78), which has previously been given up as a condition of subdivision for POS. The structure plan then requires a cash contribution for POS, in addition to the foreshore being given up. This is not considered justifiable. Object to just under half of Lot 81 being designated for a foreshore reserve. The excessive foreshore makes it extremely unlikely that the land can be economically developed.</p>	<p>POS</p> <p>1. A site visit has concluded that the areas shown as foreshore have characteristics of a foreshore. A 'foreshore' is defined as; "land adjoining or directly influencing a body of water that is managed to protect waterway and riparian values" (<i>Water and Rivers Commission Foreshore Policy 1 2002</i>). The land is low lying and adjacent to a creek. The soil is wet under foot in the winter months and the vegetation includes Taxandria (Heath), which occurs in soil (clay loam) common to wet areas.</p> <p>Recommend keeping the foreshore designations in keeping with characteristics.</p> <p>Recommend keeping POS designation in keeping with previous Western Australian Planning Commission subdivision approval.</p>
		<p>Local Centre</p> <p>1. A local centre needs to be identified at the intersection of Target Road and Range Road to service the predominantly residential area.</p> 	<p>Local Centre</p> <p>1. Recommend not identifying a local centre until such time that a review of the <i>Albany Local Planning Strategy</i> is completed. This strategy will consider planning criteria around defining the appropriate location of commercial centres.</p>
		<p>Vegetation</p> <p>1. It is unclear as to what criteria is used to determine whether or not to protect vegetation (e.g. vegetation that's poorly represented in the region, vegetation deemed to be in good to excellent condition and/or vegetation associated with</p>	<p>Vegetation</p> <p>1. Noted. Vegetation throughout the area is in good to excellent condition. The vegetation forms corridors, provides habitat to flora and is visually appealing.</p>

Conservation Category wetland). An effective balance of development versus protecting vegetation needs to be achieved to enable development to occur.

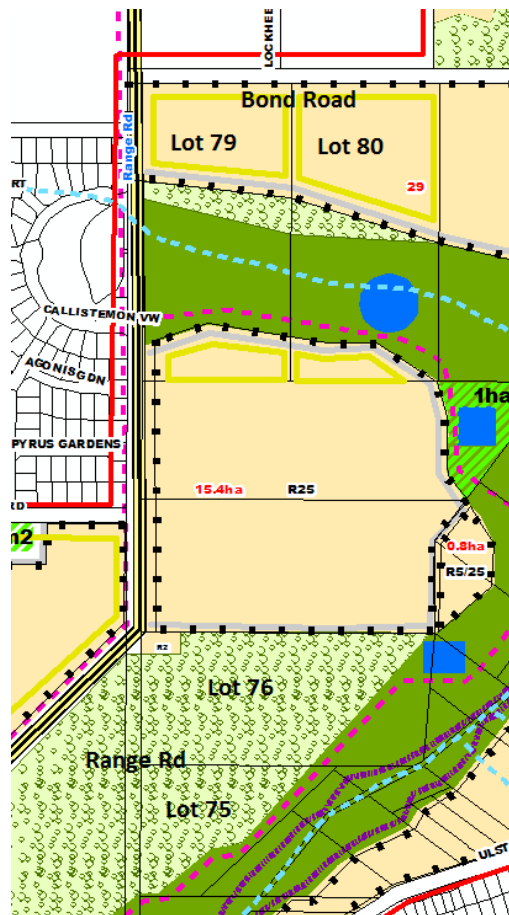
In accordance with Local Planning Scheme 1 (Clause 5.3.3), the Local Government may require the protection of existing vegetation on a site to:

- (a) Protect a vegetation community;
- (b) Prevent land degradation;
- (c) Protect roadside vegetation;
- (d) Maintain local visual amenity and the natural setting;
- (e) Protect habitat, or a threatened species;
- (f) Assist to provide vegetated corridors to maintain fauna and flora linkages; or
- (g) Assist in the maintenance of water quality.

The structure plan seeks to protect the vegetation in accordance with *Local Planning Scheme No. 1* and for the following reasons:

- Vegetation is adjacent to foreshores;
- Vegetation forms a natural corridor with neighbouring vegetation;
- The vegetation acts as a habitat for fauna;
- Clearing of vegetation will substantially alter the character of the area and may cause land degradation such as erosion and water management issues.

39 Lots 79 and 80 Bond Rd and Lots 75 and 76 Range Rd.

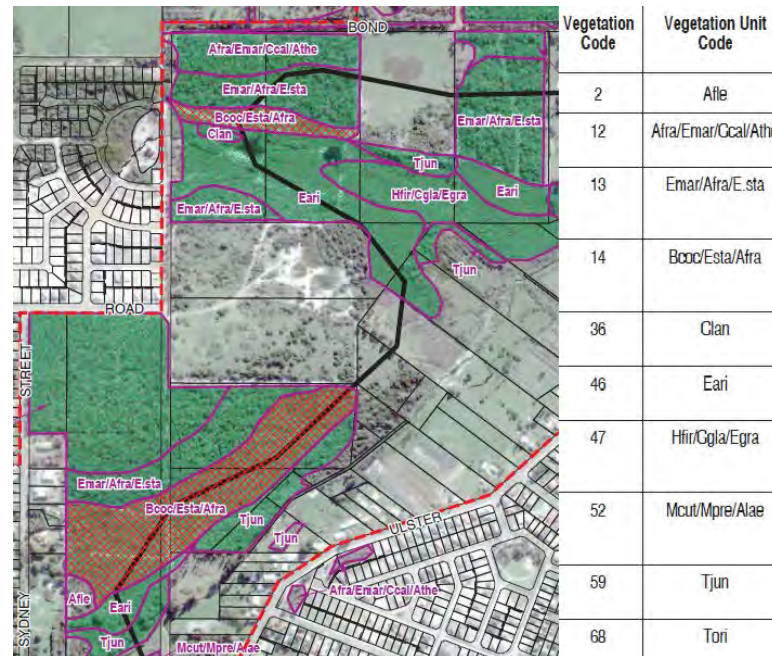


Vegetation

1. The *Albany Regional Vegetation Survey* (ARVS) does not give an overall conservation status or rating for vegetation units. A threshold value was used in the ARVS being:
 - 30% being a threshold level; and
 - <10% being an endangered level.

The ARVS makes the following assessment on clearing:

- Units 12 and 59 – Unclear
- Unit 13, 14, 46 and 47 – <30%



Based on the ARVS assessment, clearing will take the extent of vegetation below thresholds. The impact of clearing from the subject landholdings (8-10ha) would have little impact on the percentage remaining given the extent of vegetation species remaining in the region (13,144ha).

There is an argument that land within the City of Albany urban expansion area should be considered as a 'constrained area' as is the case for the Perth

Vegetation

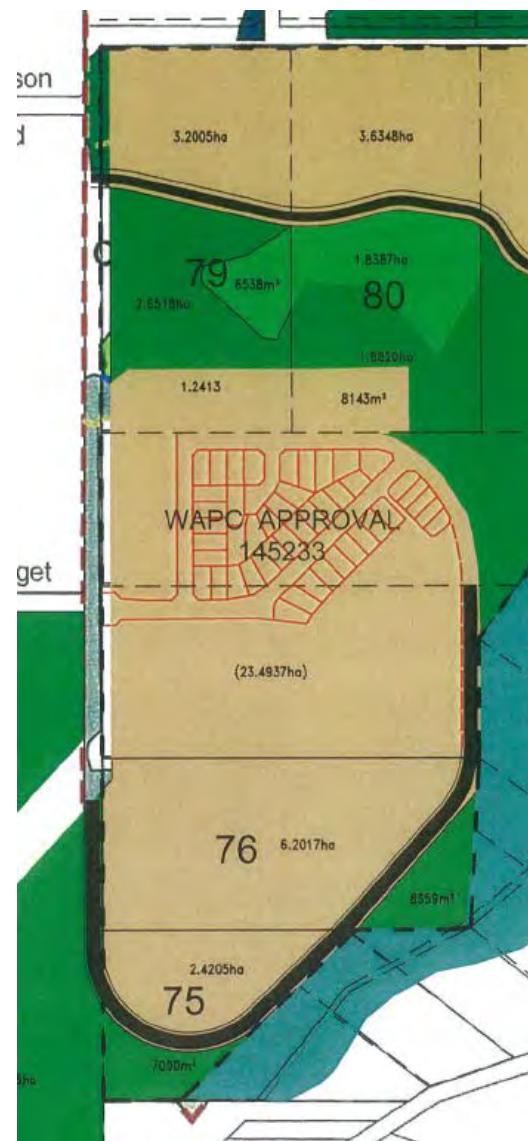
1. Noted. The City is currently reviewing the *Albany Local Planning Strategy*, which may include criteria for clearing within a 'Constrained Area'.

Metropolitan Region and parts of the Greater Bunbury Region. The target retention of vegetation types in constrained areas is 10%. All vegetation associations have a lot more than 10% remaining.

The EPA's *Environmental Protection Bulletin No.13* states that for the quantitative determination of the impact of clearing on vegetation in the Albany region, the Vegetation Association data contained in Shepherd et al. 2002 and DAFWA 2005 should be used. On that basis the clearing of vegetation on the Ardross Yakamia landholdings would not impact on the 30% retention target for vegetation associations that occur on land.

Proposal

1. We believe the structure plan is not a viable plan for development but rather a plan for vegetation protection. We contend that the process to get to where we are was not sufficiently inclusive of landowners. The following is a concept plan proposed for the development and conservation for Lots 79 and 80 Bond Rd and Lots 75 and 76 Range Rd.



Additional Work

1. Prior to finalisation of the structure plan more detailed work needs to be done on:

Proposal

1. Noted. The development of the structure plan involved consulting with land holders and government agencies. The structure plan seeks to find a compromise between supporting some development in environmentally constrained areas and protecting some vegetation that's in good to excellent condition, forms a corridor, acts to provide a habitat to threatened species and is visually appealing. The Office of the Environmental Protection Authority has recommended protecting vegetation. Recommend including the following notation in the structure plan:

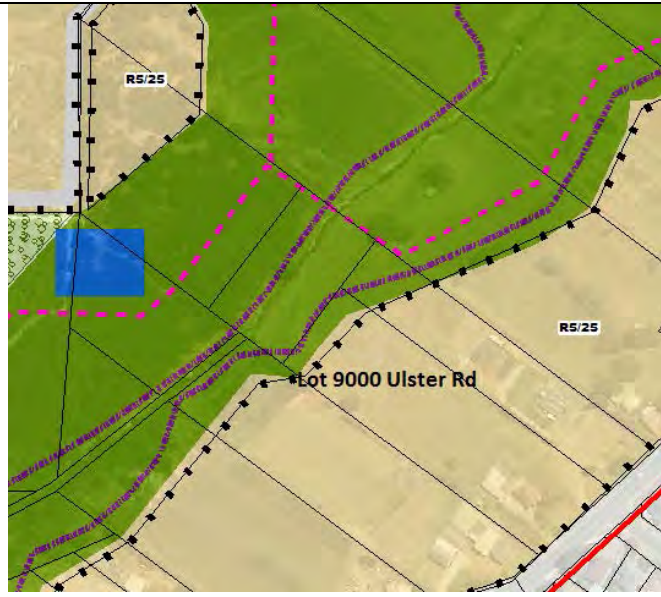
If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.

If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.

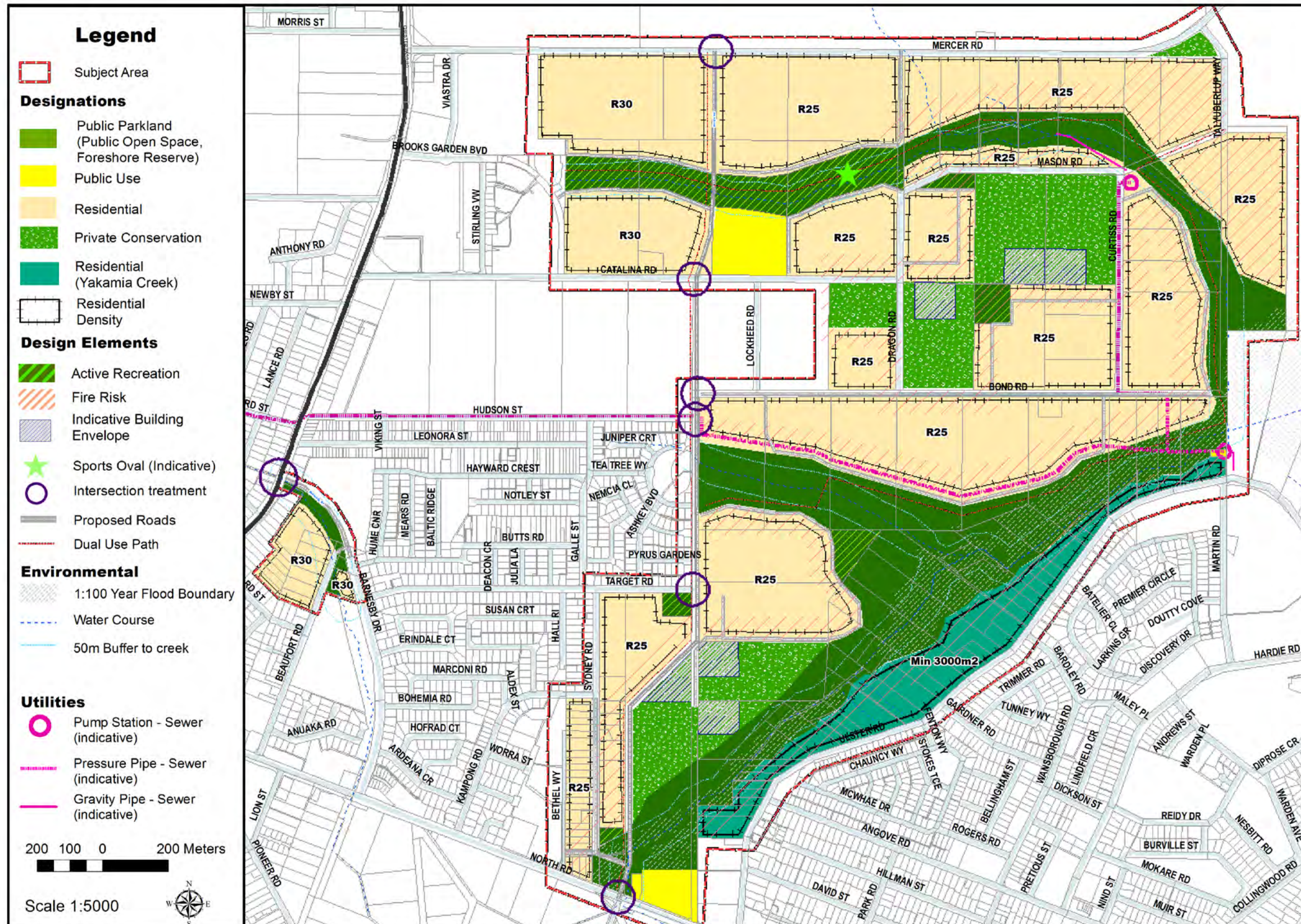
Additional Work

1. Recommend including additional information within the structure plan around cost sharing arrangements. Recommend including the following additional information

		<ul style="list-style-type: none"> • cost sharing arrangements for infrastructure; • 'Referral to Commonwealth' (our understanding is that structure plans are not formally assessed by the EPA, therefore referral to commonwealth is unnecessary); and • Determination of land designated as 'Environmental Protection and Biodiversity Conservation'. <p>2. The WAPC structure plan preparation guidelines advise that 'the local structure plan also identifies all land uses (as provided under the local planning scheme)'. Neither 'Environment Protection and Biodiversity Conservation' nor 'Foreshore Protection and Enhancement Area' are land uses identified in the Scheme as zones, reserves or anything else.</p> <p>3. It seems likely that contributions will be required from subdividers to pay for land and construction of distributor roads beyond the sites of the subdivisions themselves. In addition, the designation of whole parcels of land for conservation purposes means that the only means by which these purposes can be realistically achieved is through acquisition. For both of these reasons it appears a Development Contribution Plan is required and should be presented concurrently with the structure plan.</p>	<p>within the structure plan around referral to Commonwealth.</p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i></p> <p>Species listed as being threatened in the <i>Environment Protection and Biodiversity Act 1999</i> have been known to habituate the area. An overview of the <i>Environment Protection and Biodiversity Act 1999</i>, written by the Australian Department of the Environment and Heritage states:</p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister. An overview of the Environment Protection and Biodiversity Conservation Act 1999, written by the Australian, Department of the Environment and Heritage states:</i></p> <p><i>A person must not take an action that has, will have or is likely to have a significant impact on a matter of national environmental significance except:</i></p> <ul style="list-style-type: none"> • <i>in accordance with an approval from the Commonwealth Environment Minister; or</i> • <i>in accordance with an approval from another Commonwealth decision-maker under a management plan accredited by the Commonwealth Environment Minister for the purposes of a Ministerial declaration (declarations are explained on p.7); or</i> • <i>in accordance with an approval from a State in accordance with a management plan accredited by the Commonwealth Environment Minister for the purposes of a bilateral agreement (bilateral agreements are explained on p.7).</i> • <i>The unlawful taking of an action that has a significant impact on a matter of national environmental significance may attract a civil penalty of up to \$5.5 million or a criminal penalty of up to 7 years imprisonment.</i> <p><i>The Act provides for the listing of:</i></p> <ul style="list-style-type: none"> • <i>nationally threatened native species and ecological communities;</i> • <i>internationally protected migratory species; and</i> • <i>marine species.</i>
40	Lot 9000 Ulster Road	<p>Foreshore</p> <p>1. Contest the proposed size of the area of land to be designated as foreshore, particularly at the northerly end of the property where the topography rises. Suggest a reserve distance of 40m to the north of the creek.</p> <p>Density/POS</p> <p>1. Please confirm density and POS requirements.</p>	<p>Foreshore</p> <p>1. A site visit clearly indicated a change in land characteristics at around a 75m distance from the edge of the creek. Land between the creek and a distance of approximately 75m is subject to characteristics of a foreshore, such as, inundation of water, erosion and clay loam soils. Recommend maintaining the designated foreshore at approximately 75m from creek on northern side.</p> <p>Density/POS</p> <p>1. Recommend changing the structure plan to show the following:</p> <ul style="list-style-type: none"> • Minimum 3000m² lot development south of Yakamia Creek (connection to deep sewer not required). • Connection to deep sewer is required for development on the north side of Yakamia Creek. The northern precinct may be developed to a density of R25.



New Proposed Plan - Post Submissions





YAKAMIA/LANGE STRUCTURE PLAN 2015

Planning & Development Services

Yakamia/Lange Structure Plan	
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Draft	City of Albany	To Office of the Environmental Protection Authority for informal comment	March 2014
Draft	City of Albany	To landholders for 'Question Period'	Sept/Oct 2014
Draft	City of Albany	Council approval to advertise	25/11/2014
Draft	City of Albany	Draft - Advertised	4 December 2014 to 30 January 2015
Final	City of Albany	September Council Meeting. Council resolved to defer outcome for further consideration at workshop.	September 2015
Final	City of Albany	Workshop – Councilors	November 9 2015
Final	City of Albany	Yakamia/Lange Structure Plan 2015 December Council Meeting Final - Adoption	December 2015

CONTENTS

This structure plan comprises four (4) parts, namely: an executive summary; a statutory (provisions) section; a non-statutory (explanatory) section; and appendices.

Part 1 – Executive Summary

The executive summary gives an overview of the purpose of the plan, major influences that guided outcomes and the vision and objectives of the plan.

Part 2 – Statutory (provisions) section

The statutory section contains the Structure Plan Map and statutory planning provisions.

Part 3 – Non-statutory (explanatory) section

The explanatory section provides a reference guide to the implementation of the statutory section.

Part 4 - Appendices

The appendices include background studies and supplementary information that have informed preparation of the structure plan and will be used to guide its implementation.

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2005 - Flood/Yakamia Creek

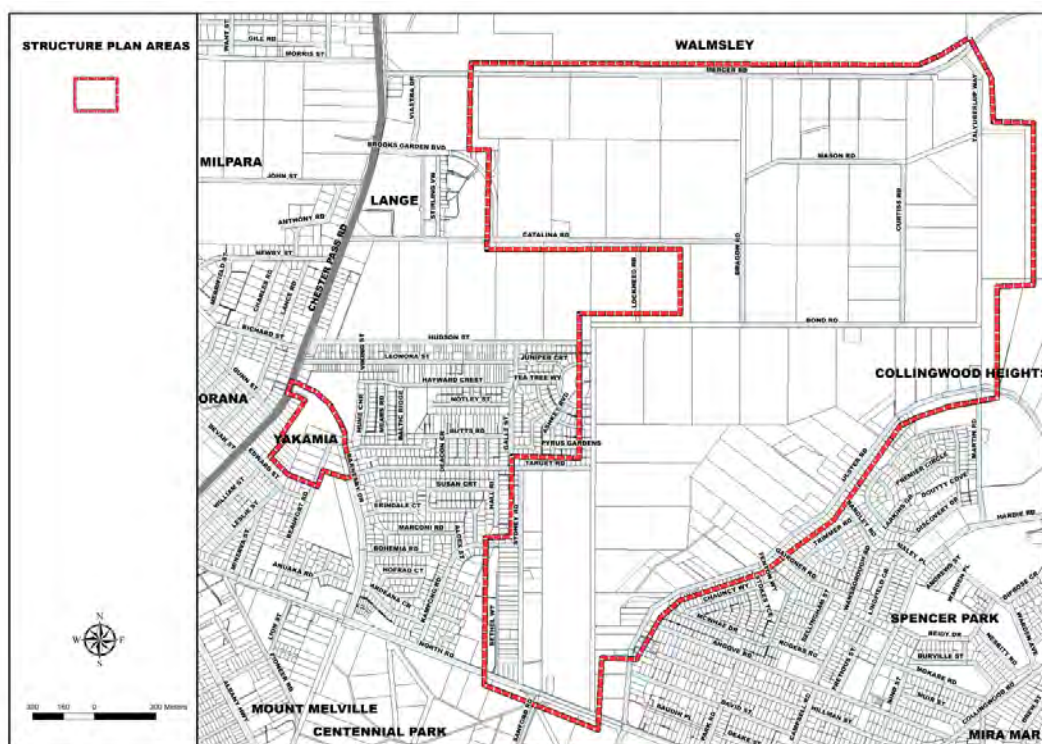
1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

This is a district structure plan applying to land in the Yakamia and Lange localities, as shown on Figure 1.

The structure plan area is located to the north of Albany on the fringes of the existing urban developed land, approximately 3.5km from Albany's Central Business District (CBD) and 1.5km from a neighbourhood shopping centre and service industries at Catalina and Chester Pass Roads. The structure plan is split into two precincts – a small precinct to the west of Yakamia, adjacent to Barnesby Drive, and a larger precinct located between Mercer and North Roads.

FIGURE 1. STRUCTURE PLAN AREAS (ALBANY C. O., MAPPING)



1.2 PURPOSE OF STRUCTURE PLAN

The Yakamia/Lange Structure Plan ('the structure plan') provides guidance to the City of Albany, Western Australian Planning Commission (WAPC), developers and land owners on future subdivision, development, land use, and environmental management within the structure plan area.

Land within the structure plan area is identified for urban development (Priority 1 and 2) and regional reserve in the *Albany Local Planning Strategy 2010* (ALPS). Section 9.4 of ALPS provides broad guidance on the preparation of structure plans and identifies the Yakamia locality as a priority area for structure planning.

This structure plan includes designations for potential residential development, public parkland including foreshore reserves and active and passive public open space, private conservation, public use and road networks. It also provides guidance on the implementation of the plan via

planning controls such as zoning mechanisms; subdivision and development provisions and management arrangements.

1.3 STRUCTURE PLAN APPROVAL PROCESS

Preparation and adoption of the structure plan has been undertaken by the City of Albany in accordance with the requirements of *Local Planning Scheme No.1* and with the support from environmental consultants who have assisted with the development of a Local Water Management Strategy (LWMS) and an Environmental Opportunities and Constraints Plan.

Key stakeholders including Councilors, landowners, Department of Planning (DoP), Department of Parks and Wildlife (DPaW), Office of the Environmental Protection Authority (OEPA), Department of Water (DoW), Main Roads WA (MRWA) and Water Corporation were also involved in the preparation of the structure plan.

Preparation and finalisation of the structure plan has involved the following key steps:

- Identification of opportunities and constraints;
- Discussion and evaluation of options;
- Public and agency consultation, including seeking the advice of the Environmental Protection Authority (EPA); and
- Adoption of the structure plan by Council and endorsement by the Western Australian Planning Commission (WAPC).

1.4 MAJOR PLANNING INFLUENCES

Major planning influences informing the structure planning process included the following:

- Designation of the Yakamia-Lange locality in ALPS for 'future urban' and 'regional reserve' land uses;
- Requirements of *Local Planning Scheme No.1*, in particular;
 - Clause 4.2.3 (requirement to prepare structure plans for future urban zoned land);
 - Clause 5.3.6.1 (setbacks from water courses);
 - Clause 5.3.7.1 (land subject to flooding); and
 - Clause 5.9 (structure plan preparation and adoption);
- The Local Water Management Strategy and Opportunities and Constraints Plan prepared for the structure plan area;
- Design principles defined by the WAPC's *Liveable Neighbourhoods policy*; and
- Comments received from the Office of the Environmental Protection Authority, including advice in relation to findings of the Albany Regional Vegetation Survey (ARVS) (2010).

1.5 VISION AND OBJECTIVES

The vision for the structure plan is to establish an integrated and environmentally sustainable urban form that achieves balance between residential subdivision and development; and retention and enhancement of environmental values.

Objectives of the structure plan to achieve the vision are:

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1. Facilitate an urban form that provides for housing and associated infrastructure that is responsive to the character of the site and the locality, as depicted on the Structure Plan Map (Figure 2);
2. Provide for fully serviced urban development, ranging from higher density housing adjacent to the Catalina commercial precinct, through to medium density on steeper slopes and adjacent to public parkland, private conservation areas and fire risk areas;
3. Provide safe and convenient vehicle and pedestrian access to the activity centres at Catalina Road and the Central Business District;
4. Provide a range of public parkland catering for recreational, sporting and nature activities by the local community;
5. Provide an integrated urban water management system that minimises risk to public health and amenity, protects the built environment from flooding and water logging, and enhances the quality of water flowing to Oyster Harbour; and
6. Protect, manage and enhance the environmental values of the area, including vegetation, flora and fauna, waterways, wetlands and foreshores.



2. STATUTORY SECTION

2.1 STRUCTURE PLAN MAP

The Structure Plan Map is shown on Figure 2. The Map provides designations guiding the preferred locations for future land uses; matters to be taken into account at the time of rezoning, subdivision and/or development (e.g. fire, vegetation, waterways and floodways); and key future infrastructure including roads, pedestrian paths, public use sites and utility service alignments.

Designations are indicative and based on the major planning influences outlined in Section 1.4 of the structure plan. Specific land use boundaries (including delineation of different categories of public parkland such as foreshores and active or passive recreational areas) and the location of infrastructure will be refined through detailed investigation and design by proponents at the time of rezoning, subdivision and/or development, as appropriate.

Broad objectives and guidance for the land uses designated on the Structure Plan Map are discussed in the Explanatory Section (Part 3) of the structure plan.

2.2 RELATIONSHIP TO LOCAL PLANNING SCHEME

This structure plan operates as set out in Section 5.9.1.8 of *Local Planning Scheme No.1* and, in the case of particular zones within the structure plan area, in accordance with the provisions below.

2.2.1 FUTURE URBAN ZONE

Areas within the structure plan that are zoned 'Future Urban' may be developed in accordance with the provisions of this structure plan and *Local Planning Scheme No.1*. Land use permissibilities in the Future Urban zone shall be in accordance with the land use permissibilities for the 'Residential' zone as shown in the *Table 1: Zoning Table of Local Planning Scheme No.1*. Land use and development proposals within the 'Future Urban' and 'Residential' zones will be assessed against the land use and development provisions of the *Local Planning Scheme No.1*, having due regard to the designations (including Residential Design Codes), vision, objectives and provisions of the structure plan. In the event of any inconsistency, the structure plan shall prevail.

2.2.2 YAKAMIA CREEK ZONE

Areas within the structure plan that are zoned Yakamia Creek may be developed in accordance with the relevant provisions of the Yakamia Creek zone contained in the *Local Planning Scheme No.1*. Assessment of land use and development proposals within the Yakamia Creek zone will also have regard to the designations, vision, objectives and

provisions of the structure plan. In the event of any inconsistency, *Local Planning Scheme No.1* shall prevail.

2.2.3 GENERAL AGRICULTURE ZONE

Areas within the structure plan that are zoned 'General Agriculture' require rezoning to the 'Future Urban' zone via an amendment to *Local Planning Scheme No.1*, prior to urban development in accordance with the provisions of this structure plan. Land use and development proposals within the 'General Agriculture' zone will be assessed against the land use and development provisions of the 'General Agriculture' zone as set out in *Local Planning Scheme No.1*, having regard to the designations, vision, objectives and provisions of the structure plan. In the event of any inconsistency, *Local Planning Scheme No.1* shall prevail.

2.3 SUBDIVISION

Within the 'Future Urban' zone:

- Subdivision proposals are to be generally in accordance with the designations (including Residential Design Codes), vision, objectives and provisions of the structure plan.
- Lot sizes shall be in accordance with the standards of the Residential Design Codes (R-Codes) designated on the Structure Plan Map.
- Subdivision design is to be generally in accordance with the WAPC's *Liveable Neighbourhoods* policy.

Within the 'Yakamia Creek' zone:

- Subdivision shall be in accordance with the relevant provisions of *Local Planning Scheme No.1*, whilst having regard to the designations, vision, objectives and provisions of the structure plan.

Within the 'General Agriculture' zone:

- Further subdivision of existing lots will not be supported prior to rezoning to the 'Future Urban' zone.

2.4 OTHER MATTERS

2.4.1 INFORMATION ACCOMPANYING APPLICATIONS

The Local Government and/or Western Australian Planning Commission may require investigations and/or plans to accompany rezoning, subdivision and/or development proposals, relating to matters including but not limited to:

- Foreshore management;
- Vegetation, flora and fauna;
- Acid sulfate soils;
- Urban water management;
- Fire hazard assessment and risk management;
- Weed management;
- Revegetation/land rehabilitation;
- Traffic management
- Geotechnical matters;
- Coordination of infrastructure between separate land parcels;

- Infrastructure contributions; and
- Local Development Plans (LDP) for proposals where lot sizes are 260m² or less.

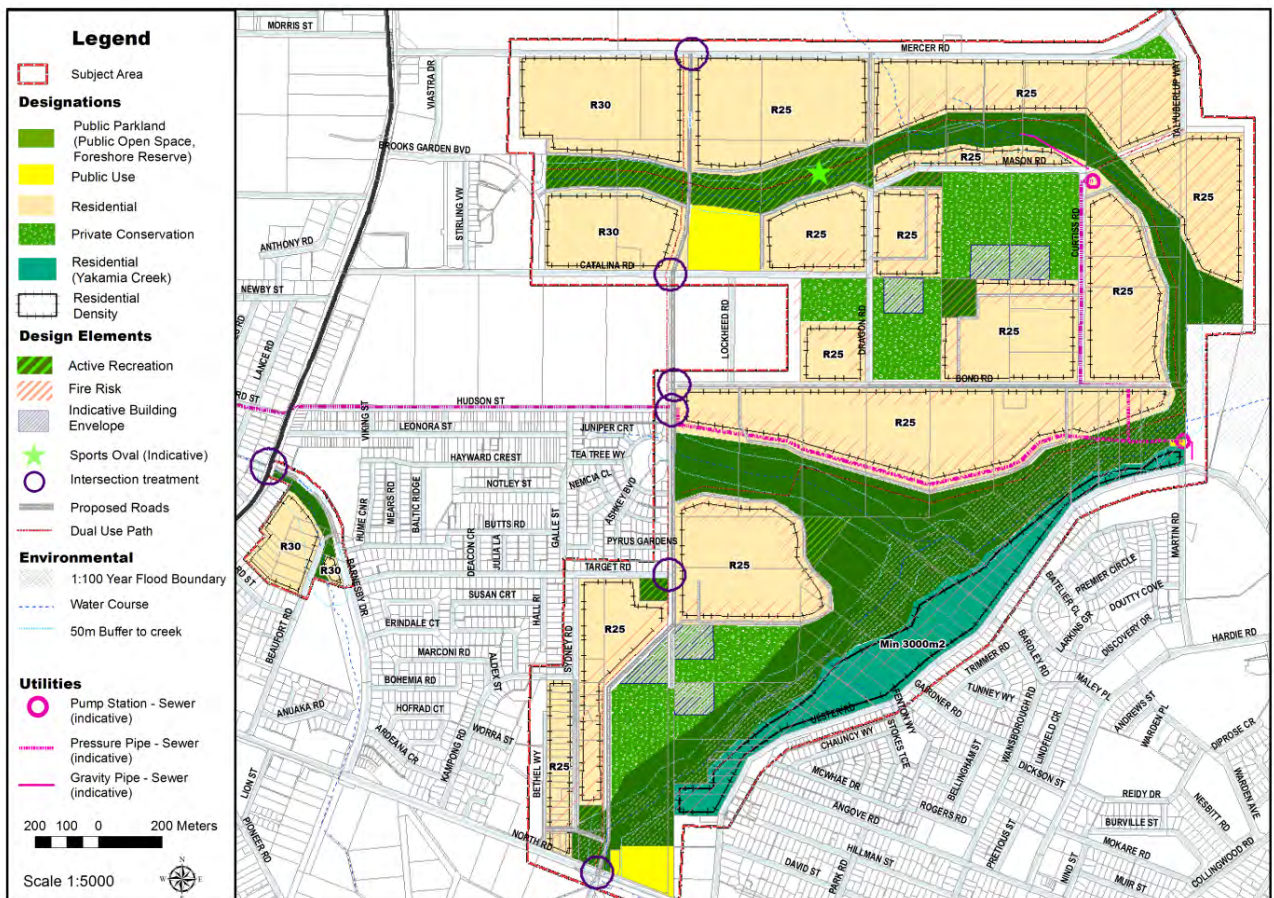
2.4.2 UTILITY SERVICE STANDARDS

All new subdivision and development within the structure plan area shall be provided with reticulated water and sewerage, underground electricity connections and roads to an urban standard.

Notwithstanding the above, current standards of utility service may be retained for:

- Single house development;
- Subdivision of a single house within the ‘Future Urban’ zone where:
 - the subdivision creates one lot of the smallest reasonable size to contain the single house and its curtilage;
 - on-site effluent disposal requirements remain compliant; and
 - one balance lot is created;
- The balance lot receives a notification, covenant, or other suitable instrument confirming that any further subdivision or development of the lot will require full provision of utility services to the urban residential standards outlined above; and
- The subdivision is otherwise generally in accordance with the designations, vision, objectives and provisions of the structure plan.

FIGURE 2. STRUCTURE PLAN MAP



3. EXPLANATORY SECTION

3.1 PURPOSE OF EXPLANATORY SECTION

Provisions contained in this section will be used to guide and inform subdivision and development within the structure plan area. The intent of the explanatory section is to provide broad objectives for the land use designations shown on the Structure Plan Map; and provide guidance to developers and decision makers on key matters and design elements that should be taken into account in rezoning, subdivision and/or development proposals within the structure plan area.

The provisions of this section are not exhaustive and apply in conjunction with the relevant planning and development framework for decision-making including, but not limited to State Planning Policies, Development Control Policies, *Local Planning Scheme No.1*, *Liveable Neighbourhoods* and the *Residential Design Codes of WA*.

3.1.1 LAND USE DESIGNATIONS

Objectives for the land use designations shown on the Structure Plan Map are:

PUBLIC PARKLAND

- Provide a range of public reserve areas for the purposes of active and passive recreation, protection of foreshores, wetlands, waterways and vegetation, protection of Aboriginal Heritage values and best-practice urban water management.

PUBLIC USE

- Provide for a suitably sited, buffered and visually screened electricity substation with potential impacts on surrounding sensitive land uses being contained within the site (northern Public Use designation).
- Provide a site for the ongoing civic and administrative functions of the City of Albany (southern Public Use designation).

RESIDENTIAL

- Provide for a high standard of well designed, fully serviced urban residential development, in accordance with designated densities, that responds to the natural attributes of the locality and interfaces with surrounding development areas.

PRIVATE CONSERVATION

- Provide for establishment of a single house on existing lots, whilst meeting standards for fire hazard management.
- Maximise protection of remnant vegetation, while retaining it in private ownership for the use and enjoyment of individual land owners.

RESIDENTIAL (YAKAMIA CREEK)

- Provide for subdivision and development in accordance with existing *Local Planning Scheme No.1* provisions for the 'Yakamia Creek' zone, whilst having regard to the provisions of the structure plan.

3.2 GENERAL SUBDIVISION AND DEVELOPMENT MATTERS

Geotechnical investigations may be required to accompany subdivision or development proposals to address matters such as building stability, land capability for residential development and acid sulfate soils.

Easements or suitable reserves may be required as part of a development or subdivision to enable access to public parkland areas.

Appropriate setbacks will be required to achieve separation between residential development and roads, watercourses and foreshores, fire prone areas, and public parkland.

Retaining walls are typically required to accommodate future development on lots of less than 1000m² and with a slope greater than 1 in 20. Where an application to subdivide land to create lots of less than 1000m² where the slope is greater than 1 in 20, is forwarded to the City of Albany by the Western Australian Planning Commission, the City will request the Commission to apply conditions to ensure that:

- Retaining at property boundaries is provided to create level lots and to ensure consistent retaining design; and
- Where retaining is not provided at the time of subdivision or this is not the preferred option, a restrictive covenant, to the benefit of the Local Government, pursuant to section 129BA of the *Transfer of Land Act 1893* (as amended) is to be placed on the certificates of title of the proposed lot(s), advising of the existence of a restriction on the use of the land. Notice of this restriction to be included on the diagram or plan of survey (deposited plan). The restrictive covenant shall state that:

"At the time of design and constructing buildings, any retaining must be integrated into the building footprint. Other retaining may be considered, but not within the front setback (as per Residential Design Codes) or 1m of other boundaries."

Contributions toward a future school site within the *Catalina Structure Plan* area may be required as a condition of subdivision and/or development approval.

DEVELOPMENT OF LOT 9000 BEAUFORT ROAD

Future residential development in the vicinity of Beaufort Road and Barnesby Drive is to achieve a minimum setback of 7.5m to neighbouring commercial development.

As a condition of subdivision/development of Lot 9000 Beaufort Road, the following requirements shall be met:

- Development of Barnesby Drive to the satisfaction of the City of Albany;
- Relocation and development of the arterial drain to the satisfaction of the City; and
- Provision of connectivity between Beaufort Road and Barnesby Drive.

3.3 VEHICLE AND PEDESTRIAN INFRASTRUCTURE

3.3.1 TRAFFIC IMPACT ASSESSMENTS

Traffic Impact Assessments may be required as part of subdivision and/or development applications that have the potential to substantially increase the amount of vehicular traffic in the local area. Subdivision and development design should respond to Traffic Impact Assessment recommendations to the satisfaction of the City of Albany.

3.3.2 BEAUFORT ROAD, BARNESBY DRIVE, RANGE ROAD AND SYDNEY STREET

Road alignments for Beaufort Road, Barnesby Drive and Range Road are to be designed and developed in accordance with the Structure Plan Map. Variations to alignment may be necessary in order to protect existing vegetation, provide a better traffic management outcome, refine lot orientations or provide public access to parkland and foreshore areas.

An east-west road link is to be developed at the time of subdivision and/or development between Sydney Street and Range Road. An indicative road plan has been provided as an example – refer to the *Issues Background Paper* (Appendix 4).

Crossovers between lots and Sydney Street are to be co-located to enable sharing of crossovers. As a condition of subdivision and/or development, lots on the east side of Sydney Street are to be designed to incorporate access on to Sydney Street and not Range Road. At the time of subdivision or development, lots fronting Sydney Street are to either:

- Develop half the width of Sydney Street for the section fronting the lot; or
- Provide a financial contribution valued at the cost of developing half the width of Sydney Street for the section fronting the lot.

3.3.3 ROAD UPGRADES AND INTERSECTION TREATMENTS

The existing road network in the vicinity of subdivision and/or development proposals may require upgrading as a condition of approval, in accordance with WAPC policy and the City's *Subdivision and Development Guidelines*.

Subdivision and/or development approval may also be subject to contribution payments for construction/upgrading of the road network within the broader structure plan area, generally in accordance with the Contribution Plan in Appendix 3.

3.3.4 ROAD ALIGNMENTS

Road alignments proposed in subdivision or development applications shall be located wherever possible to follow the contours of the land and with consideration of vegetation protection and fire risk reduction measures.

3.3.5 CROSSOVERS

Access to Range Road shall be via internal subdivisional roads only and not via crossovers direct from lots.

The land fronting Mercer Road offers poor lines-of-sight in places, due to the alignment and topography of the road. Access from developments to Mercer Road shall be minimized, shared and strategically located to maintain safe movement.

3.3.6 PATHS

2.5m Dual Use Paths (DUP) are to be constructed along strategic routes as indicated by the 'pedestrian path' design element on the Structure Plan Map, as a condition of subdivision or development approval.

A connected network of pedestrian paths is to be provided within residential developments in accordance with the WAPC's *Liveable Neighbourhoods* policy.

3.4 DRAINAGE AND SERVICING

3.4.1 DRAINAGE

Water management, and in particular the preparation and implementation of urban water management plans, shall be guided by recommendations made in the Yakamia/Lange Local Water Management Strategy (LWMS) and Arterial Drainage Plan (refer to Appendix 1). Key recommendations of the Local Water Management Strategy include:

- Retention of hydrology as close as possible to pre-development conditions.
- Nutrient and flood mitigation measures such as detention or infiltration swales, filter strips and nutrient stripping features being incorporated for primary treatment of stormwater before discharge into creeks.
- Drainage management measures being designed to withstand high velocity flows and to minimise erosion, generation of sediment and ongoing maintenance requirements.
- Realignment and redevelopment of the arterial drain near Barnesby Drive to avoid flooding of residential lots.
- Design of intersections at Barnesby Drive and Chester Pass Road and Range Road and North Road to facilitate passage of major flood events.

3.4.2 WATER

Water Corporation has indicated that capacity allowances have been made to provide water services to the Yakamia-Lange Structure Plan area. Whilst a detailed water distribution and reticulation layout has not yet been determined, water mains of 200mm diameter and a water main along Catalina Road of 250mm will be required.

REPORT ITEM PD093 REFERS

In addition to reticulated potable water supplies, onsite rainwater catchment and storage is encouraged as a sustainability measure and may be required in some locations within the wider structure plan area, to assist in stormwater attenuation.

3.4.3 SEWERAGE

The structure plan indicates the location of a future waste water pumping station and associated mains infrastructure. The location is approximate and has been based on landform and the need to maximise the catchment coverage of the pumping station. The exact location of the pumping station will be determined at the subdivision stage, in consultation with the Water Corporation. The required size of the pumping station site and the configuration of any odour buffer around it will also be detailed at the subdivision stage.

Landowners/developers bounded by Chester Pass Road, Edward Street and Beaufort Road will need to coordinate and share the cost of sewerage network extensions to service higher density development. A detailed plan should be prepared including a servicing report examining sewerage options and layouts.

3.4.4 ELECTRICITY AND TELECOMMUNICATIONS

WESTERN POWER

Prior to future development and subdivision, developers will be required to submit applications to Western Power for network extensions. Where subdivision and development applications adjoin or affect Western Power interests they should be referred to Western Power for comment, prior to approval, to ensure that there will be no land use conflict.

The location of transmission lines to the proposed substation will be considered at the time of rezoning and subdivision, in consultation with Western Power. Works associated with new distribution lines and the upgrading of existing lines (including increasing capacity and undergrounding) shall be at the developer's cost, to the satisfaction of Western Power.

Western Power requires the following minimum clearance to be met by transmission lines and overhead distribution lines for all new subdivisions and development:

	<i>Clearance (horizontal and vertical from centre of line)</i>	
<i>Transmission</i>	<i>330kV</i>	<i>35.0m</i>
	<i>132kV</i>	<i>10.0m</i>
	<i>66kV</i>	<i>8.0m</i>
<i>Distribution</i>	<i><33kV</i>	<i>3.0m</i>

DEVELOPMENT OF WESTERN POWER SUBSTATION SITE

Development of electrical infrastructure at Lot 36 Catalina Road shall be located centrally within the lot, with all necessary buffers being contained within the lot. Suitable visual screening of electrical infrastructure with appropriate vegetation and/or landscaping shall be required.

The balance of Lot 36 is to be developed and subdivided in accordance with the structure plan, which designates portions for:

- Range Road;
- Public Parkland; and
- Residential lots.

If in future the 'Public Use' designated portion of Lot 36 is not required for a substation, residential development at the R30 density may be supported as an alternative.

NATIONAL BROADBAND NETWORK

Prior to future subdivision and/or development proposing more than 100 lots, applications shall be made for connection to the National Broadband Network.

3.5 PUBLIC PARKLAND

3.5.1 GENERAL REQUIREMENTS

Areas designated for 'Public Parkland' are to be accurately defined at the time of rezoning, subdivision or development (as appropriate) and ceded to the Crown for its intended purpose (foreshore reserve, public open space) at the time of subdivision or development, free of cost and without payment of compensation by the Crown.

The Structure Plan Map indicates the preferred locations, size and configuration of active recreation areas. In particular a consolidated active recreation area including a sports oval and associated facilities will be required in the north-western R30 precinct of the structure plan area.

At the time of subdivision, developers shall provide an open space schedule detailing the amount, distribution and staging of the delivery of open space, in accordance with the structure plan. Where required, rehabilitation of public parkland areas shall occur as a condition of subdivision and/or development, in accordance with a suitable management plan.

No development will be permitted in 'Public Parkland' areas other than for conservation, recreation or stormwater management.

3.5.2 CONTRIBUTIONS

Western Australian Planning Commission policy for urban development requires provision of a minimum 10 per cent of gross subdividable land area for public open space. The Structure Plan Map designations for public parkland indicate that development of some land parcels may involve ceding in excess of 10 per cent of their gross subdividable land area, in order to achieve the vision and objectives of the structure plan. Conversely, the Structure Plan Map indicates that some other land parcels may have no requirement to cede land for public parkland. In such cases, developers that do not cede land will provide equivalent cash-in-lieu, which will be utilised to reimburse developers for the ceded portion in excess of 10 per cent of their gross subdividable area.

3.6 PRIVATE CONSERVATION AREAS

The following areas have been designated on the structure plan for 'Private Conservation' purposes, due to the significance of their identified vegetation, flora and fauna values:

- Portion of Lot 4743 south of proposed Range Road;
- Lots 75 and 76 Range Road;
- Portion of Lot 1001 Catalina Road;
- Lot 1002 Dragon Road;
- Lot 997 Mason Road; and
- Lot 998 Mason Road.

At the time of subdivision or development, areas designated for 'Private Conservation' shall be protected via a conservation covenant or other suitable mechanism and without payment of compensation by the Crown.

If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer that proposal to the Environmental Protection Authority.

If a developer proposes to take an action in a designated 'Private Conservation' area that is likely to have a significant impact on a matter of national environmental significance. For instance, clearing of vegetation that would affect the habitat of Carnaby's Black Cockatoo, the developer may need to obtain approval from the Commonwealth Environment Minister, prior to taking that action.

Provided that the above matters have been satisfactorily addressed, a single house may be developed on each private conservation lot shown on the Structure Plan Map, subject to the following criteria:

- Building Protection and Hazard Separation zones being implemented and maintained to a standard satisfactory to the City of Albany;
- The construction being in accordance with *Australian Standard 3959 - Construction of Buildings in Bushfire Prone Areas* – to withstand Bushfire Attack Level 29 or higher;
- The dwelling being located to protect as much vegetation as possible (indicative building envelopes have been shown on the structure plan);
- No development taking place outside of defined building envelope(s), unless otherwise approved by the Local Government. The building envelope refers to the area within which all development on each lot (including the dwelling, sheds, water storage, low fuel area and effluent disposal areas) must be confined.

Fencing and firebreak development on the private conservation lots shall be implemented in a manner that does not negatively impact the protection of the vegetation. Bollards may be permitted to demarcate lot boundaries in vegetated areas.

3.7 FIRE RISK

A detailed Fire Management Plan and Bushfire Attack Level assessment shall be prepared to accompany any subdivision and/or development in areas within 100m of fire prone vegetation. These areas are generally defined by the 'Fire Risk' design element on the Structure Plan Map, and will require further refinement at future planning stages.

REPORT ITEM PD093 REFERS

Any subdivision and/or development within 100m of fire prone vegetation shall comply with an approved Fire Management Plan and Bushfire Attack Level (BAL) assessment prepared in accordance with the relevant bushfire planning and management frameworks of the WAPC and Department of Fire and Emergency Services (DFES), and any City of Albany fire management requirements. Where it is deemed appropriate to do so, hazard separation areas shall be reduced and the BAL rating of buildings increased in order to protect vegetation. Hazard separation areas shall not include riparian vegetation or areas beyond the boundaries of a lot.

CERTIFIED THAT THIS STRUCTURE PLAN
WAS ADOPTED BY RESOLUTION OF THE
WESTERN AUSTRALIAN PLANNING COMMISSION ON

..... Date

Signed for and on behalf of the Western Australian Planning Commission

.....
an officer of the Commission duly authorised by the Commission pursuant to
section 16 of the *Planning and Development Act 2005* for that purpose, in the
presence of:

..... Witness

..... Date

And by
RESOLUTION OF THE COUNCIL OF THE CITY OF ALBANY ON

..... Date

And
PURSUANT TO THE COUNCIL'S RESOLUTION HEREUNTO AFFIXED IN THE
PRESENCE OF:

.....
Mayor, City of Albany

.....
Chief Executive Officer, City of Albany

..... Date

This Structure Plan is prepared under the provisions of the
City of Albany *Local Planning Scheme 1*.

FIGURE 2: STRUCTURE PLAN MAP

