

# **Australian Olives Project 6**

## **Agricultural Report**

**DATED – 01.08.2008**

**Carried out by Australian Green and  
Gold Limited**

**For**

**The Huntley Group**

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## **TERMS**

1. Australian Olives Project 6 is referenced as AO
2. Australian Olives Holdings management is referred to as AOH
3. Australian Green and Gold Limited is referred to as AGG
4. Huntley Group is referred to as HG
5. Australian Olives Project 6 investors are referred to as Growers.

## **ASSUMPTIONS**

1. The tree count data assessing the percentage of dead and or unviable trees is calculated assuming all trees were planted as per the projects allotment plans. Appendix A is the projects allotment plans.
2. Other data issued to AGG from AOH contains contrary data to actual trees planted, showing a reduced number of trees planted. This information is at Appendix B.
3. AGG has been provided with conflicting information in relation to actual grovelots allotted to Growers. AGG has used the members register found at Appendix C.
4. Tree count data was carried out by AGG staff physically counting the dead and viable trees. Whilst all care has been taken, there may be small variances due to human error. This data is at Appendix D.
5. All photographs (other than where otherwise stated) were taken on 18/06/08

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## EXECUTIVE SUMMARY

Australian Green and Gold Limited (AGG) was commissioned by the Huntley Group to undertake an assessment of the **Australian Olives Project 6** managed investment scheme.

The purpose of this report is to provide The Huntley Group with a snapshot of the current grove condition, carry out analysis using varying assumptions as to the viability of the olive growing operation and make recommendations as to the future management of the grove. AGG has considered dead and or unviable trees, frost, disease and pest affected trees, irrigation infrastructure and water availability when assessing the condition of the grove. AGG carried out analysis in relation to the viability of the grove operations using varying assumptions of water availability, yield and scaling management costs, using constants of price and extra virgin olive oil extraction yield in each scenario.

AGG has carried out this assessment primarily during two site visits from the authors and one AGG staff member counting the dead and or unviable trees in each section and recording these findings on data sheets, (provided at Appendix D.) During the two site visits dated 18<sup>th</sup> June 2008 and the 19<sup>th</sup> June 2008 photographs were taken of each section of AOP6 and other infrastructure which are contained in and referenced in this report.

In addition to AGG's own observations, it has relied on data provided by The Huntley Group by way of AOP6 allotment plans and members registers.

Peter Shakspeare is the Managing Director and Natalie Paul is the General Manger of Australian Green and Gold Limited, who are the Responsible Entity and Managers for the Brooklyn Park Olive Groves managed investment schemes. Both Peter and Natalie carried out the site visits, took the photographs and authored the report in its entirety. In addition to the site visits, Peter Shakspeare has been overseeing the management of AOP6 since March 2008 and has been on site on numerous other occasions and is familiar with the AOP6 grove.

The trees in Project 6 were planted in 2005 and should be 3 years old. The trees were planted over 11 sections identified on the allotment plans. The total amount of trees either dead, unviable or unplanted is 31.64%. Of the 11 sections in AOP6, 2 of these require less than 10% replanting, 5 groves require between 15% and 50% replant, 2 require between 50% and 65% replant, with the remaining 2 requiring over 70% replant. The total number of dead trees over the AOP6 project is 15,237, using an estimated cost of \$17 per tree to replant, the total re plant costs will be \$260,559. AGG considers these trees should have been replanted following their death and believe this cost of replant should have been borne by the Responsible Entity to the age of 4 years. AGG believes this is stated under the stocking guarantee in the AOP6 Prospectus and Product Disclosure Statement.

AGG considers frost events, poor vermin control and sub standard management in specific areas have been contributing factors to the death of these trees. Lack of water has contributed to reduced inputs such as fertiliser (and hence reduced management costs) and resulted in reduced yields.

Whilst AGG agrees that it may not have been practical (or viable) to replant certain sections of the AOP6 in cases where there was significant losses of over 40% and no water to irrigate, AGG does consider that these Growers should be advised of the condition of their grove and management fees reduced accordingly, especially for Growers allotted trees in sections that a 100% write off. AGG believes that in sections with less than 10% dead or unviable trees that a replant program with spot watering would have been an appropriate way to manage these losses and ideally planted immediately following death to minimise yield losses due to the age of the tree.

In certain areas of the groves neglect is evident from surviving trees that have been left unattended following a frost or vermin event. This is evidenced by regrowth and suckers from the base of the trees and growing within the trees guards placed on at initial plantings. AGG has experienced tree damage and death from frost at the Brooklyn Park groves and was able to resurrect most damaged trees via pruning back and encouraging a main lead to retrain the tree growth. AGG considers a considerable amount of trees could have been saved by employing this technique in certain areas of the AOP6 grove.

AGG and other groves throughout Australia have installed frost fans across high risk frost areas which have proven very effective for the reestablishment of these frost affected areas under subsequent extreme frost events. AGG has recommended a feasibility study be undertaken to consider the benefits of installing frost fans.

AGG has made a recommendation for a hydrological study to be carried out to determine whether or not the catchment area for Speers Creek that supplies water to Southern Dam has the capacity to supply 800 mega litres under normal seasonal conditions. This is paramount to assess the long term viability of the total amount of trees over all projects or whether the projects will require consolidation to a lesser amount of trees.

Fundamentally, this olive grove has potential to produce good yields to industry standard provided it is managed on an irrigated / dry land basis depending on water availability. The analysis contained in this report used water variables of 100%, 75%, 50% and 0% water allocation. In each case it shows profitability to Growers with the exception of 0% water, provided the management fees are adjusted to a user pay basis and a per hectare management fee paid to the operational manager.

# EVALUATION OF EXISTING GROVE CONDITION OVERVIEW

## Dead Trees

Trees in Project 6 were planted in 2005 and should be 3 years old. The overall percentage of dead trees is 38% assuming all trees were planted as per the allotment plans. The P6 members register states there are 914 grovelots at 53 trees per grovelot, which equates to 48,442 trees. The allotment plans for P6 show plantings of 53,265 trees, a surplus of 4,823 trees (or 91 grovelots). Using the total number of trees missing (either dead, unviable and add the over planted trees) the percentage decreases to 32%. Other data made available to AGG and shown at Appendix B offers conflicting tree number data, however this has not been used in this assessment as AGG could not confirm its reliability. The following table is an overview per section of the AOP6 grove;

	<b>Total Trees - Allotment Plans</b>	<b>Dead / Unviable Trees</b>	<b>% Dead</b>
<b>R1</b>	6,307	4,500	<b>71.35%</b>
<b>R2</b>	2,544	2,589	<b>101.77%</b>
<b>R3</b>	2,862	662	<b>23.13%</b>
<b>R4 (5)</b>	3,710	1,795	<b>48.38%</b>
<b>V1</b>	7,844	1,286	<b>16.39%</b>
<b>V2</b>	8,586	5,406	<b>62.96%</b>
<b>V3 E</b>	6,678	2,309	<b>34.58%</b>
<b>V3 W</b>	2,385	648	<b>27.17%</b>
<b>V4</b>	1,696	490	<b>28.89%</b>
<b>V5</b>	8,745	358	<b>4.09%</b>
<b>V6</b>	1,908	107	<b>5.61%</b>
	<b>53,265</b>	<b>20,150</b>	<b>37.83%</b>
	<b>Required Planting as Per Members Register</b>	<b>Dead / Unviable Trees</b>	<b>% Trees Dead / Unviable / Never Planted</b>
	<b>48442</b>	<b>15,327</b>	<b>31.64%</b>

Dead trees are seemingly a result of severe frost events and vermin damage in certain areas and lack of water and management in other areas. There is no evidence to suggest that replanting has been attempted at any stage in the P6 groves.

## ***Frost Affected Trees***

Frost affected areas are located in lower lying parts of the grove. It is unclear in certain parts of P6 to ascertain whether death occurred due to frost or other circumstances, (kangaroo and or lack of management). There are certain manageable variables that impact the degree to which frost may affect the trees, these are tree variety, land lye, air circulation and moisture availability. These factors would be considered in replanting recommendations.

## ***Disease and Pest***

Limited areas of P6 have been infected with scale, AGG considers this is not a major problem and can be contained. Specific larger areas have been affected by olive lace bug, indicating that strategic management spraying programs were not implemented on time. Subsequent spraying has been carried out and the infestation is currently being monitored. Affected areas will have a recovery period and the 2009 yields will be affected. Areas of the grove close to the vegetative boundaries have been badly damaged by kangaroos which has resulted in tree growth deformity.

## ***Irrigation infrastructure***

The irrigation infrastructure for project 6 is well designed and of high quality, however it does require minor repairs to valves, laterals and sprinklers. Irrigation engines, pumps and filters located at the southern dam are able to supply sufficient water to Projects 5 and 6 under maximum requirements in a timely manner. AGG has been advised that the southern dam is filled by high flow from Speers Creek and the immediate catchment area. Visually this is not apparent and water flow into this dam is from the immediate catchment area only, which appears limited.

Engine, pumping and filter facilities are excellent. Provision is available for a second pump. Fertigation facilities are available at the pump site.

Engine is a Cummins 350 horse power, Model M11-C, Engine # 35073888 driving a Grundfos high pressure pump serial # 0203/484647 1732102003, Pump type 11s300 x 250 x 380, volume 900m<sup>3</sup> p/h.

Two Amiad auto filters;

1. serial # 59353, 02.08.72, manufactured year 2002
2. serial # 59353, 02.11.119 manufactured year 2002

Main line underground supply, valve and gate control sub mains and lateral design and quality are well constructed and appear in good order, except for a few laterals in defunct groves, (refer to individual grove reports below).

The watering operation of the grove is by manual redirection of water as no automatic infrastructure has been put in place during development, although the sections valves are suitable for automatic operation. Manual redirection increases work load and labour costs.



Photographs taken 17/06/08. Photograph (left above) Filters. Photograph (right above) fertigation pump. Photograph (left below) is high pressure water pump and Photograph (right below) is Cummins 350hp diesel engine.



### ***Water Availability***

Water for project 6 is supplied from the southern dam. The dams stated capacity is 700 to 800 mega litres (unverified), which is for supply to both Projects 5 and 6. At the trees maximum requirement of 0.75 megalitre per grove (multiplied by 2031 groves), 1523 megalitres will be required. The dam therefore when full, would not be sufficient to adequately water the trees for both Project 5 and 6 at maturity.

The southern dam currently holds approximately 30 mega litres of water. To date AGG management has used approximately, (as water use is not metered) 10 mega litres of water pre harvest to maintain fruit hydration and quality pre picking. The only groves watered were T5, T4, V5, V1, V4, and V2 in projects five and six.

The total dam capacity when full as indicated by the depth pole is a maximum of 800 mega litres. This would require confirmation by a hydrological survey which would also indicate the reliability of flows and where they are accessed. A visual appraisal indicates that run off only comes from adjacent land and not from Speers Creek. If this is the case the reliability of the dam would be considered poor.



Photo Taken 18/06/08. P5 & P6 Dam. The stick to the right in picture is the capacity measure.

The other source of water for Project 6 (as per the water and services agreement) is Yallamundi lagoon. There is no infrastructure in place to supply irrigation to Projects 5 or 6 from the Yallamundi lagoon. The maximum capacity of Yallamundi is said to be 7000 mega litres (unverified). Currently it is estimated that there is between 700 and 800 mega litres of water available for use on projects 1 to 6 from this source.

# EVALUATION OF EXISTING GROVE CONDITION DETAILED

## *References to report*

The below analysis has been individually carried out on each section of P6. The following should be referenced whilst reading this report;

<b>REPLANT PRIORITY</b>	<b>DESCRIPTION (Section for this purpose are described as Irrigation Sections and Grove Sections).</b>
<b>1</b>	Rows in Irrigation Sections with less than 9% total dead and unviable trees and rows that have 50% or less dead trees in that row or rows that cannot be isolated from irrigation in that Irrigation Section.
<b>2</b>	Grove Sections with less than 9% dead trees
<b>3</b>	Irrigation Sections that cannot be isolated when total Grove Section is being irrigated.
<b>4</b>	Total Irrigation Sections and Grove Sections are dead. Only replant when water availability is 80% or greater.

<b>IRRIGATION PRIORITY</b>	<b>DESCRIPTION (Section for this purpose are described as Irrigation Sections and Grove Sections).</b>
<b>1</b>	Older trees with the greatest potential to produce 10 to 15kg within an Irrigation Section that has 20% or less dead trees and rows that have greater than 60% viable or replanted trees.
<b>2</b>	Younger trees with the greatest potential to produce 5 to 10kg within an Irrigation Section that has 20% or less dead trees and rows that have greater then 60% viable or replanted trees.
<b>3</b>	Only irrigate after total replant and 100% water availability

## SECTION R1

Evidence of..	Yes	No	Comments
Slashing		▪	Slashing has since been carried out by AGG. There is no evidence that the grove has been maintained at all. There are original plastic tree guards either still on trees (where sucker regrowth are growing in) or the bags are littered throughout the groves.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008		▪	No fruit on these trees
Harvest for 2009		▪	Do not expect a harvest
Total Trees Allotted			6307
Dead/Unviable Trees		71%	4500
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 4</li> <li>▪ Irrigation priority 3</li> </ul>		



Photographs taken 18/06/08 – R1 Grove. Of the trees that are still alive the tree growth is deformed making the trees unviable and unable to be resurrected, see above left and below left. Above right show paddy melons growing in the grove, indicative of the grove receiving no maintenance.

Overall the grove is in very poor health; the trees have stunted, deformed and bent growth of the main trunk, making resurrection of trees very difficult. Mature paddy melons growing between the rows indicate that the grove has not been maintained including spraying for weeds, slashing, pruning, fertilisation for at least two seasons.



The rodes grass is quite tall, seeding and growing between the rows, indicative of no weed control for a significant period of time, above left. Above right shows the 11<sup>th</sup> and 12<sup>th</sup> row of trees in R1, ie 1<sup>st</sup> eleven rows are all dead.



Photographs above show R1 grove rows 1 to 11, all trees are dead, above left across the grove, above right looking down a row to R2.

The 1<sup>st</sup> eleven rows of trees are not existent and no attempt at replant is evident. The weed height is approximately 0.7 metres high and the rodes grass has seeded. From row 12 onwards on the trees still living, there is little vegetation, a consequence of lace bug and lack of water. There is no evidence of pruning or weed control (significant clumps of grass within the tree rows). Sprinklers do not appear to have been maintained or checked for functionality (high percentage either broken or lying down). Estimate irrigation has not been carried out for between 12 – 24 months. There has been no obvious attempt to replant within the last two to three years as indicated by the age of the existing original trees. This grove will need to be totally replanted, there are very few trees that can be resurrected.

## SECTION R2

Evidence of..	Yes	No	Comments
Slashing		▪	R2 has similar damage on a similar scale to R1. There is evidence of regrowth from frost damaged trees, (evidenced by suckers regrowth only, no main lead has been structured into the trees). There does not appear to be any replant attempt evidenced by the tree protection plastic still insitue from original plantings.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008		▪	No fruit on these trees
Harvest for 2009		▪	Do not expect a harvest
Total Trees Allotted			2544
Dead/Unviable Trees		102%	2589
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 4</li> <li>▪ Irrigation priority 3</li> </ul>		



Photograph taken 18.06.08. Above left showing rows of dead trees, above right showing spasmodic tree life, however in very poor health.

### SECTION R3 & R4 (5)

Evidence of..	Yes	No	Comments
Slashing		▪	Slashing has since been carried out by AGG. There is no evidence that the grove has been maintained at all. There are original plastic tree guards either still on trees (where sucker regrowth are growing in) or the bags are littered throughout the groves.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008		▪	None or little fruit on these trees
Harvest for 2009		▪	Little to no fruit expected

The frost damage to trees does not appear to be significant. On surviving trees, severe frost damage is not apparent on the trunks. It is apparent that pruning has not occurred, this is evidenced by regrowth of suckers growing through plastic guards and no main leads in tree structure or bent leads. Initial frost damaged trees should have been pruned back, removing regrowth suckers and selecting a main lead for each tree. Severe lace bug damage is evidenced by yellow or dying foliage and little foliage on the trees.

The irrigation has been neglected with some rows the lateral pipes have been severed and not repaired and sprinklers lying down or broken. If this grove was considered unviable to maintain, spraying for lace bug is still required in order to prevent spreading to near viable groves.

R3 is in a better condition than R1 and R2, however there is still significant death of trees and neglect. R 3 and R4 are resurrect able under a long term strategy, with an immediate view to provide minimal maintenance, ie slashing, weed control, pruning and disease control until such time as sufficient water is available to undertake a replant.

It was of interest to note that the trees in R3 and R4 have seemingly survived frost events that have significantly affected R1 and R2. It may be possible that there is either a variety issue or a timing of planting issue.



Photographs taken 18.06.08. Above left showing irrigation laterals and sprinklers not maintained, above right, slashing has been carried out by new manager, however tree guards littered throughout grove and still on base of trees with regrowth occurring within, indicates no pruning has occurred.

**R3**

Total Trees Allotted			2862
Dead/Unviable Trees		23%	662
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 2</li> <li>▪ Irrigation priority 2</li> <li>▪ Remove stakes</li> <li>▪ Prune</li> </ul>		

**R4**

Total Trees Allotted			3710
Dead/Unviable Trees		48%	1795
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 2</li> <li>▪ Irrigation priority 2</li> <li>▪ Remove stakes</li> <li>▪ Prune</li> </ul>		

## SECTION V1

ROWS 1 to 87

Evidence of..	Yes	No	Comments
Slashing		▪	Sprayed for weed control during late summer. Rodes grass dead between trees, however no slashing as the rodes grass has seeded between the rows. The western end of grove has a low attrition rate. The eastern side of the grove has approximately 30% trees are dead in rows 1 to 19. Rows 20 to 60 are generally in good condition with approx 10% replacement required. Rows 67 to 87 require pruning, re structuring and approx 30% replanting. This grove is resurrect able long term.
Pruning		▪	
Weed Control	▪		
Irrigated		▪	
Pig Damage		▪	
Roo Damage	▪		
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008		▪	
Harvest for 2009		▪	Not assessed
Total Trees Allotted			7844
Dead/Unviable Trees		16%	1286
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 2</li> <li>▪ Irrigation priority 2</li> <li>▪ Remove stakes</li> <li>▪ Prune</li> </ul>		

**Photograph taken 18/06/08. V1 Northern end viable for replant**



**Photograph taken 18/06/08. V1, sprayed for weeds, not slashed**



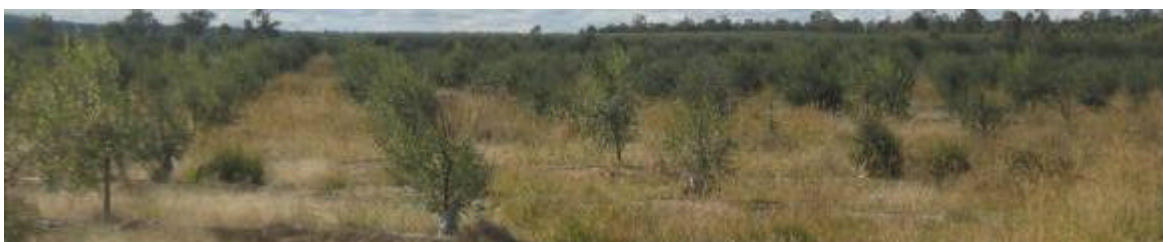
**Photograph taken 18/06/08. V1, Rows 67 onwards estimate 30% replant.**



## SECTION V2

Evidence of..	Yes	No	Comments
Slashing		▪	Estimated approximately 70 to 80 % replacement required. This grove has not been maintained. If earlier maintenance of pruning to remove suckers and generation of a lead branch within the tree would have provided a higher survival and regeneration rate. Sporadic tree were fruiting, however due to the degree of missing trees, harvesting was not economical. Not resurrectable at this stage to be reassessed in the future.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Roo Damage	▪		
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008		▪	Not harvested
Harvest for 2009		▪	None
Total Trees Allotted			8586
Dead/Unviable Trees		63%	5406
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 4</li> <li>▪ Irrigation priority 3</li> <li>▪ Remove stakes</li> <li>▪ Prune</li> </ul>		

Photograph taken 18/06/08. V2 South West Regrowth only



Photograph taken 18/06/08. Majority dead trees



Photograph taken 18/06/08, V2, Western end



Photographs taken 18/06/08, V2, Regrowth only, cannot restructure, requires replant



**SECTION V3 E**

Evidence of..	Yes	No	Comments
Slashing		▪	This grove has not been maintained. If earlier maintenance of pruning to remove suckers and generation of a lead branch within the tree would have provided a higher survival and regeneration rate. Sporadic tree were fruiting, however due to the degree of missing trees, harvesting was not economical. Not resurrect able at this stage to be reassessed in the future. See below for replant assessment.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Roo Damage	▪		
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008		▪	Not harvested
Harvest for 2009		▪	None
Total Trees Allotted			6678
Dead/Unviable Trees		35%	2309
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 2</li> <li>▪ Irrigation priority 2</li> <li>▪ Remove stakes</li> <li>▪ Prune</li> </ul>		

**Photograph taken 18/06/08. Rows 31 to 45 approximately 80% replant**



**Photograph taken 18/06/08. Rows 45 to 68, regrowth from suckers, require replant**



## SECTION V3 W

Evidence of..	Yes	No	Comments
Slashing		▪	This grove has not been maintained. If earlier maintenance of pruning to remove suckers and generation of a lead branch within the tree would have provided a higher survival and regeneration rate.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Roo Damage	▪		Sporadic trees were fruiting, however due to the degree of missing trees, harvesting was generally not economical and therefore only on selective rows. Variety planted is Coratina and approximately 27% replant is required.
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008	▪		Harvested sporadic rows approx 3kg per tree
Harvest for 2009	▪		Selective harvest based on economic viability
Total Trees Allotted			2385
Dead/Unviable Trees		27%	648
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 2</li> <li>▪ Irrigation priority 2</li> <li>▪ Remove stakes</li> <li>▪ Prune</li> </ul>		

Photograph taken 18/06/08, V3 W



## SECTION V4

Evidence of..	Yes	No	Comments
Slashing		▪	This grove has not been maintained. If earlier maintenance of pruning to remove suckers and generation of a lead branch within the tree would have provided a higher survival and regeneration rate. Sporadic tree were fruiting, however due to the degree of missing trees, harvesting was not economical. Melons growing between the rows indicate there has been no weed control for at least the last season.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Roo Damage		▪	
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008	▪		Sporadic rows harvested
Harvest for 2009	▪		Rows 1 to 55 only, estimate approx 3 to 5kg per tree
Total Trees Allotted			1696
Dead/Unviable Trees		29%	490
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 2</li> <li>▪ Irrigation priority 2</li> </ul>		

**Photographs taken 18/06/08. Rows 1 to 55 estimated 10% replant**



**Photograph taken 18/06/08. Rows 56 to 73 estimated 80% replant.**



## SECTION V5

Evidence of..	Yes	No	Comments
Slashing		▪	This grove was not well maintained in relation to slashing or weed control. The new manager has since commenced slashing and spraying (as seen in the photograph below). Approximately 4% replacement of trees required.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Roo Damage		▪	
Plough Damage		▪	
Lace Bug Damage		▪	
Stakes Removed		▪	
Harvested 2008	▪		Arbequina variety only – approx 2 to 3 kg
Harvest for 2009	▪		See below for details
Total Trees Allotted			8745
Dead/Unviable Trees		4%	358
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 1</li> <li>▪ Irrigation priority 2</li> <li>▪ Remove stakes</li> <li>▪ Prune</li> </ul>		

Estimates for the 09 harvest;

Rows 1 to 19, Coratina, (not harvested in 08) 09 estimate 5 to 8 kg.

Rows 20 to 34, Arbequina, (harvested 08) 09 estimate 3 to 5kg

Rows 35 to 50 Leccino, (not harvested 08) 09 estimate 5 to 8kg

Rows 51 to 70, Frantoio, (not harvested 08) 09 estimate 5 to 8kg

Rows 71 to 94, Arbequina, (harvested 08) 09 estimate 3 to 5kg

Rows 95 to 108, Frantoio, (not harvested 08) 09 estimate 5 to 8kg



## SECTION V6

Evidence of..	Yes	No	Comments
Slashing		▪	Grove not irrigated or weed controlled. Requires significant pruning and plastic protection bag removal from trees and littering throughout grove. The evidence of lace bug is moderate. Requires spraying for weed as Mexican poppy weed has commenced. Estimate approx 3 to 6kg for the 209 harvest assuming maintenance and irrigation. Rows 1 to 10 Arbequina, Rows 11 to 25 Frantoio, row 26 to 46 Arbequina. Approximately 6% replant.
Pruning		▪	
Weed Control		▪	
Irrigated		▪	
Pig Damage		▪	
Roo Damage		▪	
Plough Damage		▪	
Lace Bug Damage	▪		
Stakes Removed		▪	
Harvested 2008	▪		Arbequina variety only – approx 2 to 3 kg
Harvest for 2009	▪		Approx 3 to 6kg per tree
Total Trees Allotted			1908
Dead/Unviable Trees		6%	107
Recommendations	<ul style="list-style-type: none"> <li>▪ Replant priority 1</li> <li>▪ Irrigation priority 2</li> <li>▪ Remove stakes</li> <li>▪ Prune</li> </ul>		

**Photograph taken 18/06/08, V6**



## **ANALYSIS**

### ***YIELD AND COST ANALYSIS BASED ON VARYING ASSUMPTIONS***

The below financial analysis has been carried to provide information for both optimal and minimal results and provides a broad spectrum of scenarios. The assumptions for each calculation are listed below from a to g and correspond directly with the results in the table below, A to G.

- a. Maximum water (5mgl per hectare), normal rainfall, maximum trees, maximum yield 40kg per tree, at maturity of 8 years old
- b. Maximum water (5mgl per hectare), normal rainfall, current trees (32% reduction), maximum yield 40kg per tree, at maturity of 8 years old
- c. 75% water, normal rainfall, no variable costs change, maximum trees, reduced yield 30kg per tree, at maturity of 8 years old
- d. 75% water, normal rainfall, no variable costs change, current trees (32% reduction), reduced yield 30kg per tree, at maturity of 8 years old
- e. 50% water, normal rainfall , 25% variable costs, maximum trees, reduced yield 20kg per tree, at maturity of 8 years old
- f. 50% water, normal rainfall , 25% variable costs, current trees (32% reduction), reduced yield 20kg per tree, at maturity of 8 years old
- g. 0% water, normal rainfall, 25% variable costs, current trees (32% reduction), reduced yield 10kg per tree, at maturity 8 years old.

The below analysis has been carried out to assess the financial outcomes for Growers using varying assumptions with the main impacting variables being water reliability and those listed from 1 to 3 below. The calculations cover all grove management costs with the exception of charges related to the water and services agreement held between the Growers and AOHL.

AGG has made water purchase cost assumptions to assist with the assessment of the affordability of water supply charges.

The below analysis *includes* both harvesting, processing and storage costs.

Other variables to note are;

1. produce sales are based on processed extra virgin olive oil only
2. sale price assumption used is a \$4.50 per litre
3. yield extraction rate of oil from olive fruit used is 17%

Any increases or decreases to the above variables will either increase or decrease the overall profit to Growers.

P6	A	B	C	D	E	F	G
<b>Produce Sales</b>	<b>\$1,480,927</b>	<b>\$1,006,862</b>	<b>\$1,110,695</b>	<b>\$755,147</b>	<b>\$740,463</b>	<b>\$503,431</b>	<b>\$251,716</b>
<b>Mment Costs</b>	\$364,171	\$353,978	\$327,579	\$325,075	\$212,678	\$211,009	\$137,623
<b>Harvest Costs</b>	\$137,100	\$137,100	\$137,100	\$137,100	\$137,100	\$137,100	\$137,100
<b>Proc &amp; Storage Costs</b>	\$417,176	\$283,632	\$312,882	\$212,724	\$208,588	\$141,816	\$70,908
<b>Gross Op Expenses</b>	<b>\$562,480</b>	<b>\$232,152</b>	<b>\$333,134</b>	<b>\$80,248</b>	<b>\$182,097</b>	<b>\$13,506</b>	<b>-\$93,915</b>
<b>AGG Mment Fee</b>	\$109,680	\$109,680	\$109,680	\$109,680	\$109,680	\$109,680	\$109,680
<b>Nett Op Profit</b>	<b>\$452,800</b>	<b>\$122,472</b>	<b>\$223,454</b>	<b>-\$29,432</b>	<b>\$72,417</b>	<b>-\$96,174</b>	<b>-\$203,595</b>
<b>Nett Per Grower</b>	<b>\$495</b>	<b>\$134</b>	<b>\$244</b>	<b>-\$32</b>	<b>\$79</b>	<b>-\$105</b>	<b>-\$223</b>
<b>Water Costs Assumptions</b>	<b>Nett Return to Grower</b>	<b>Nett Return to Grower</b>	<b>Nett Return to Grower</b>	<b>Nett Return to Grower</b>	<b>Nett Return to Grower</b>	<b>Nett Return to Grower</b>	<b>Nett Return to Grower</b>
\$100 mgl	\$420	\$59	\$169	-\$107	\$4	-\$180	-\$298
\$80 mgl	\$435	\$74	\$184	-\$92	\$19	-\$165	-\$283
\$60 mgl	\$450	\$89	\$199	-\$77	\$34	-\$150	-\$268
\$40 mgl	\$465	\$104	\$214	-\$62	\$49	-\$135	-\$253



## **RECOMMENDATIONS**

### ***MANAGEMENT PRACTICES***

Under the existing situation of water availability and state of P6 groves, current management practices recommended are;

1. control and monitoring of disease and pests
2. slashing and spraying for weed control
3. strategic irrigation and fertilisation program on the following basis;
  - 3<sup>rd</sup> week in August (subject to irrigation priorities for each section), applying essential fertiliser at maximum rates with minimum water to prep the trees for their potential flowering
  - Trees will be foliar sprayed with trace elements prior to flowering to promote flowering and set
  - At 10% flowering a second irrigation and fertigation will be applied to encourage pollination and fruit set.
  - At the end of October fruit set will be assessed and depending on water availability and / or the onset of summer rain falls, further irrigation and fertigation will be applied.

The above management program makes strategic use of the minimal water resource currently available and will position the grove for the most optimum production in these circumstances or in the event of a wet season. If water availability increases in the southern dam, the management practices will be altered accordingly to promote maximum yields. Management practices such as pruning, stake removal, slashing and road maintenance will be carried out when necessary.

### ***INFRASTRUCTURE REQUIREMENTS (servicing all projects)***

1. Managers accommodation (preferably on site or at the nearest town)
2. Work and maintenance compound with lock up storage on site
3. Toilet and staff amenities
4. Fuel storage facilities
5. On site medical kit and room

## **FENCING**

The boundary fencing is inadequate to discourage vermin damage to groves, (mainly pigs and kangaroo's). The fencing is currently two electrified plain wires appropriate for cattle proofing only. Some areas of the groves have been destroyed by kangaroo and pig damage. The fencing required will be ring lock wires with electric stand off wires. The boundary fencing will require upgrading to vermin proof which will require 4 kilometres of vermin proof fencing an approximate total cost of \$7,000 per kilometre. Note, this fence will service both project 5 and 6.

## **IRRIGATION AND WATER MANAGEMENT**

AGG recommends a hydrological study is commissioned to be carried out in order to assess the probability of the south dam being filled. This would include a survey of the capacity of the catchment area to supply the amount of water as per the water license for the extraction from Speers Creek. The license states that Speers Creek must reach a depth of 0.3 metre full flow depth and that extraction must not exceed 2.7 cubic metres per second (or 2700 litres per second). To fill the capacity of the south dam (700 to 800 mega litres), the extraction from Speers Creek and / or surrounding catchment would require 27 mega litres per day for 30 days, (note : the above extraction from Speers Creek into the southern dam will be in competition with the extraction into the main lagoon which requires 233 megalitres per day for 30 days in order to fill). The hydrological survey would need to assess the following;

1. water run off in the catchment area and the possible diversion from Speers Creek
2. rain events and frequency of rain events
3. capacity of the extraction channel under gravity feed to facilitate the inflows into the south dam (note: no extraction channel has been sighted by AGG)

This analysis will allow the management to ascertain the probability of achieving projected production parameters and a more reliable assessment of the risk related to water supply and ultimately to the Growers.

The watering operation of the grove is by manual redirection of water as no automatic infrastructure has been put in place during development, although the sections valves are suitable for automatic operation. Manual redirection increases work load and labour costs. AGG considers a feasibility study should be carried out to consider the long term benefits of automation of this manual redirection.

## ***MANAGEMENT FEES***

AGG considers that the current management fee structure is unsustainable given the current production parameters and unreliable water source. Under the current arrangement, Growers are charged for inputs regardless of whether they are used, eg fertiliser, water and for the management of trees that do not exist, ie 32% for P6.

The financial analysis carried out for the purpose of this report is calculated on a user pay basis and a set annual management fee on a per hectare basis. AGG considers that the management fee structure used in the analysis for this report would be more appropriate for the P6 Growers given the adverse olive growing circumstances.

AGG recommends that for the sustainability of the project, the water and services agreement should be renegotiated with AOHL. AGG notes however that to renegotiate the water and services agreement would require the co-operation of Projects 1 to 6, as to negotiate without the support of Projects 1, 2 and 3 could result in the cancellation of the water and services agreement with Projects 4, 5 and 6. This would be to the benefit and sustainability of Projects 1, 2 and 3 only, by increasing the allocation of water to those projects.

## ***FROST MANAGEMENT***

It is the experience of management that frost fans are an effective way of mitigating against frost damage to trees. AGG recommends that a study be undertaken to assess the financial feasibility of frost fan installation across the property where frost is considered a high risk. This should be considered in concert with other manageable variables that impact the degree to which frost may affect the trees, such as tree variety, land lye, air circulation and moisture availability. These factors will be considered in replanting recommendations.

## ***REPLANTING RECOMMENDATIONS***

Please refer to the individual section analysis contained in this report.

## **APPENDICES**

**APPENDIX A – P6 ALLOTMENT PLANS**

**APPENDIX B – P6 TREE DATA ISSUED AOH**

**APPENDIX C – P6 MEMBERS REGISTER**

**APPENDIX D – AGG TREE COUNT DATA**

## **APPENDIX A – PROJECT 6 ALLOTMENT PLANS**

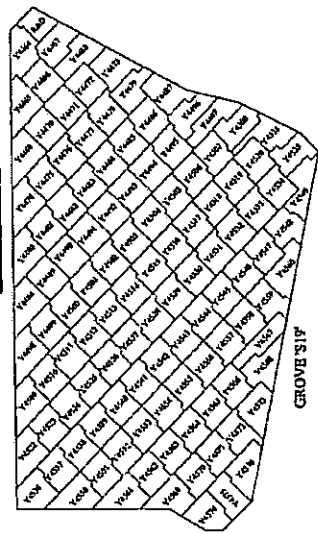
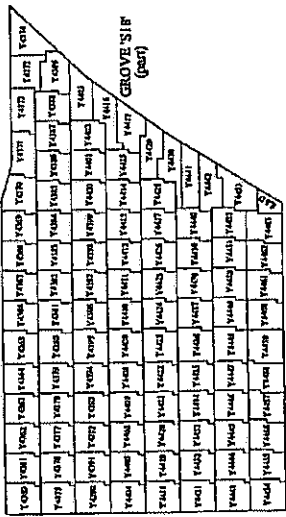
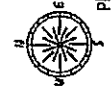
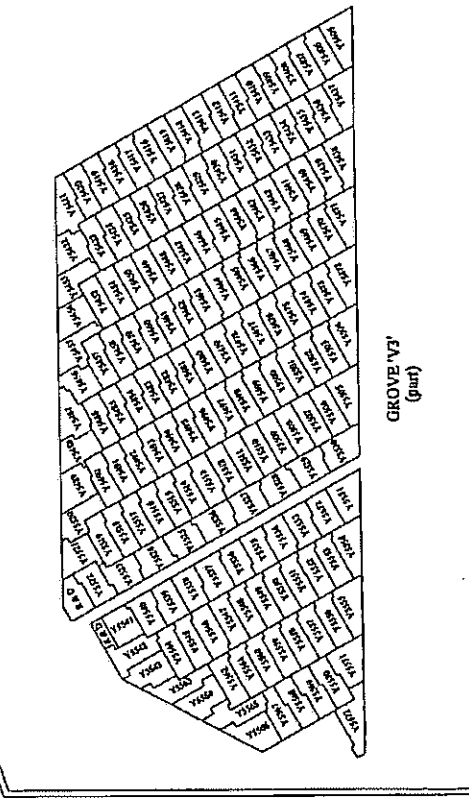


DIAGRAM A  
SCALE: 1:3,000



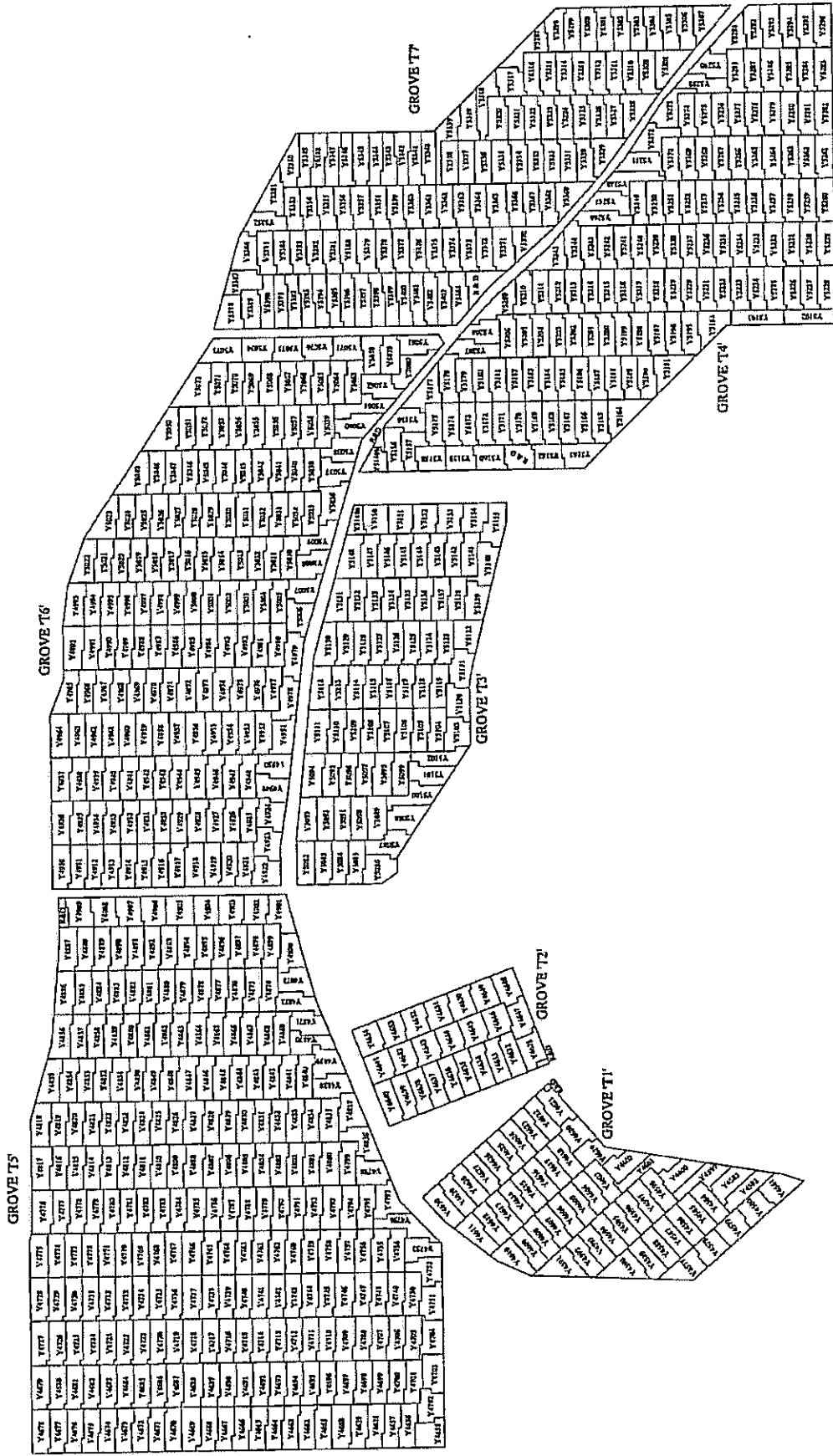
CLIENT	AUSTRALIAN OLIVES LTD
PROJECT	OLIVE GROVE PLOT LAYOUTS 'PROJECT'S'
LOCALITY	YALLAMUNDI
DRAWING NO.	PROJECT 5 (1 of 2)

**O'REILLY NUNN FAVIER**  
CONSULTING SURVEYORS  
194 Kingaroy St., Kingaroy Q. 4610  
Ph. (07) 4162 2667, Fax. (07) 4162 5599  
Email: orn@sbsurveyors.com.au

PROPOSED GROVE AREA (ha)	N/A	CONTRACT AREA (ha)	N/A	LOCALITY	N/A
PROPOSED GROVE PERCENTAGE	N/A	PERCENTAGE	N/A	DATE	N/A
DATE	N/A	DATE	N/A	DATE	N/A
DATE	SP113870	DATE	N/A	DATE	24/04/05
DATE	13000 (A1)	DATE	NAME\AUST. OLIVES\PROJECT 5A.dwg	DATE	

**NOTE:-**

- \* EACH PLOT CONTAINS MINIMUM OF 53 TREES @ 1500m<sup>2</sup>
- \* TOTAL NUMBER OF GROVES IN PROJECT 5 = 1212
- \* TOTAL NUMBER OF TREES AT TIME OF GROVE ALLOCATION = 65,204
- \* TOTAL TREES FOR 'R & D' PURPOSES = 235



CLIENT	AUSTRALIAN OLIVES LTD
PROJECT	OLIVE GROVE PLOT LAYOUTS PROJECT 5
LOCALITY	YALLAMUNDI
DRAWING NO.	PROJECT 5 (2 OF 2)

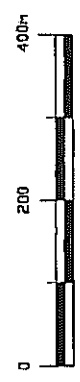
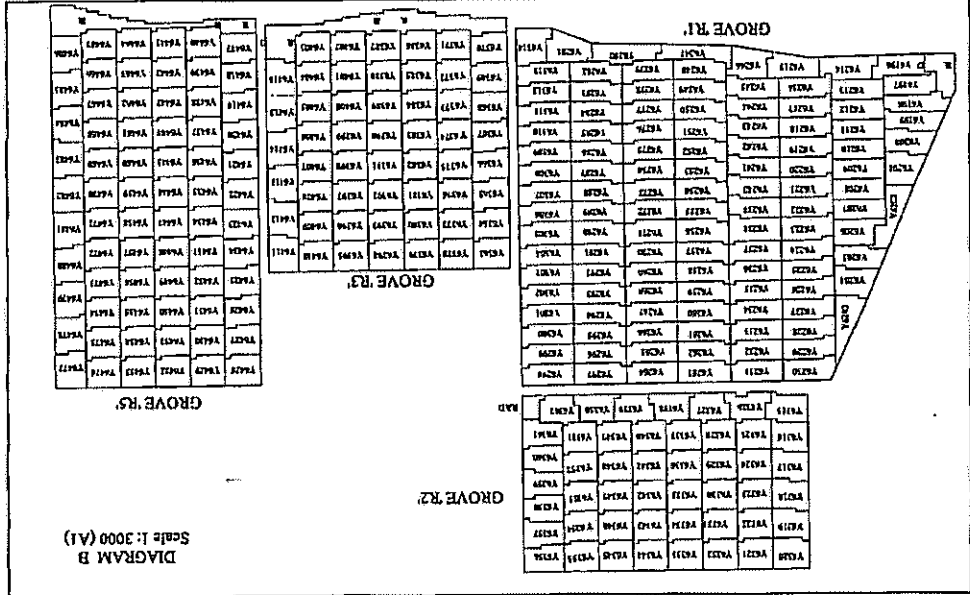
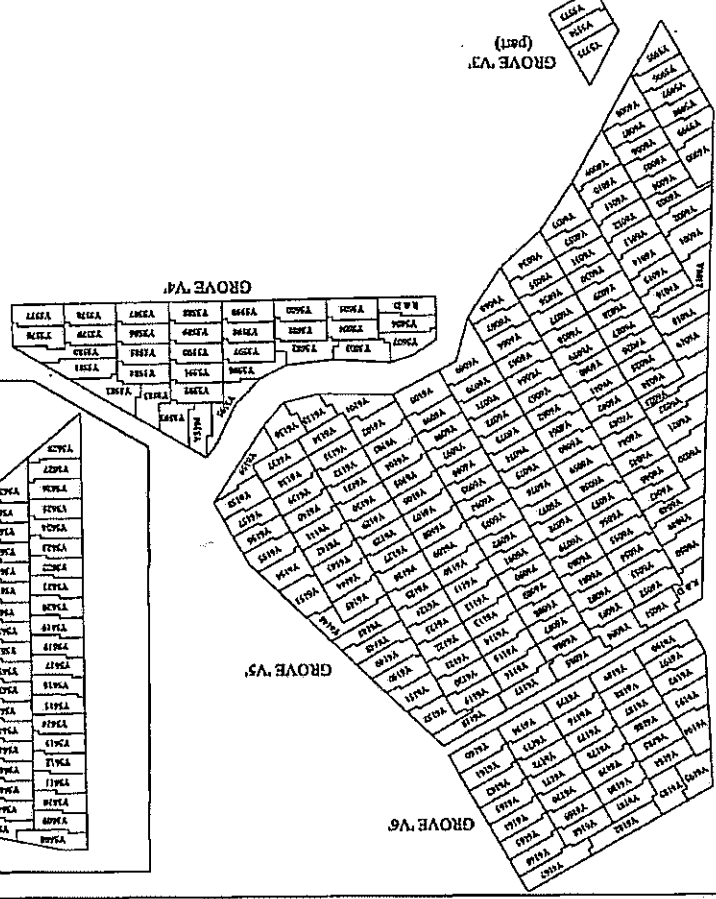
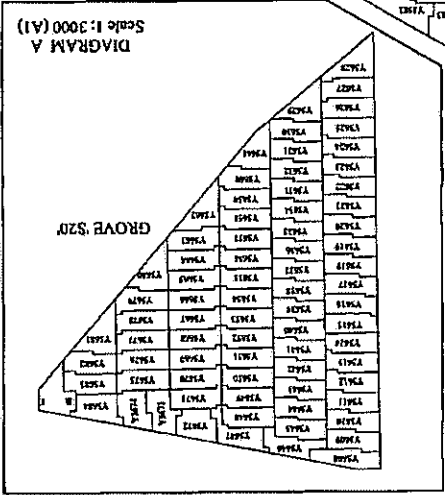
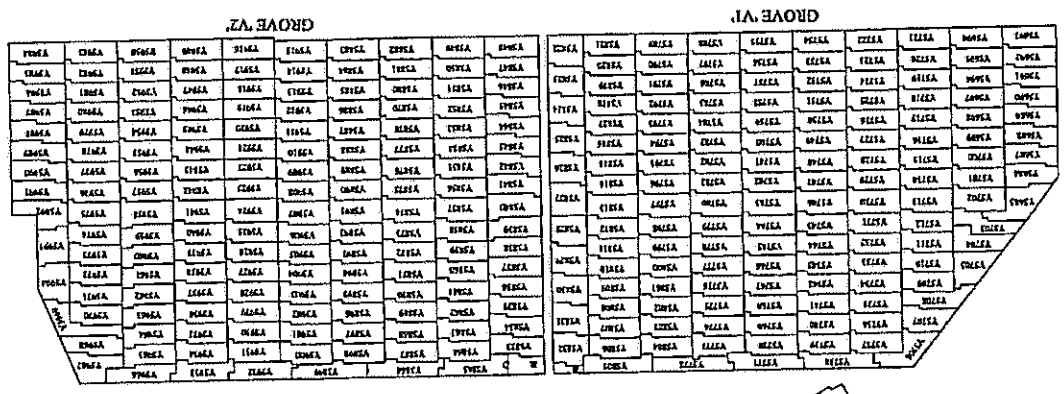
**O'REILLY NUNN FAVIER**  
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 Ph. (07) 4162 2647, Fax. (07) 4162 5599  
 Email: orn@sbsurveyors.com.au



PERMIT/LOCAL GOV. REF.	N/A	CONTRACT REF.	N/A	LOCAL REF.	N/A
APPROVAL/STATE GOV. REF.	N/A	DRAWING	N/A	SCALE	N/A
DATE	N/A	DATE	N/A	DATE	N/A
PROJECT NO.	SP113870	PROJECT NO.	N/A	DATE	24/04/06
SCALE	1:3000 (A1)	PROJECT NO.	CL-1-NAMES(AUST. OLIVES)project_5A.dwg		

**NOTE:-**

- \* EACH PLOT CONTAINS MINIMUM OF 53 TREES @ 1500m<sup>2</sup>
- \* TOTAL NUMBER OF GROVES IN PROJECT 5 = 1212
- \* TOTAL NUMBER OF TREES AT TIME OF GROVE ALLOCATION = 65,204
- \* TOTAL TREES FOR 'R & D' PURPOSES = 235



CLIENT: AUSTRALIAN OLIVES LTD  
 PROJECT: OLIVE GROVE PLOT LAYOUTS PROJECT 6  
 LOCALITY: YALLAMUNDI PROJECT 6

O'REILLY NUNN FAVIER  
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 Email: [oreillynunn@bsurveys.com.au](mailto:oreillynunn@bsurveys.com.au)

PROPOSED CLIENT'S NAME:	N/A	PROPOSED CONTRACT VALUE:	N/A	DATE:	N/A
PROPOSED CONTRACT VALUE:	N/A	PROPOSED CONTRACT VALUE:	N/A	DATE:	N/A
DATE:	N/A	DATE:	N/A	DATE:	N/A
DATE:	5/11/2010	DATE:	14/03/06	DATE:	

NOTE:-  
 \* EACH PLOT CONTAINS MINIMUM OF 53 TREES @ 1500m<sup>2</sup>  
 \* TOTAL NUMBER OF GROVES IN PROJECT 6 = 914  
 \* TOTAL NUMBER OF TREES AT TIME OF GROVE ALLOCATION = 49,595  
 \* TOTAL TREES FOR R & D PURPOSES = 578

**APPENDIX B – PROJECT 6 AOH TREE DATA**

80 - S20  
 50 - S19  
 60 - S18

UNVIABLE

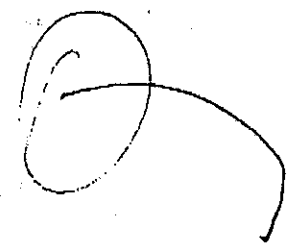
Block	Variety	Trees	Yield	Total
80 - T1	Barnea	1837	12	22044
200 - T1	Picholine	1054	5	5270
80 - T2	Koroneiki	1278	10	12780
20 - T3	Coratina	3931	5	19655
40 - T4	Barnea	588	12	7032
40 - T4	Koroneiki	2408	12	28896
40 - T4	Coratina	2087	12	24804
20 - T5	Picual	3810	10	38100
20 - T5	Frantoio	4607	5	23035
20 - T6	Frantoio	2443	5	12215
20 - T6	Hojiblanca	3446	5	17230
20 - T6	Picual	2686	12	32232
OR 100 - T7	Arbequena	4580	5	22900
10 - T7	Barnea	1054	12	12648
20 - V1	Mixed	8738	0	0
90 - V2	Koroneiki	544	0	0
90 - V2	Frantoio	760	0	0
90 - V2	Coratina	580	0	0
20 - V3W	Picholine	392	0	0
20 - V3W	Frantoio	1082	0	0
20 - V3W	Coratina	930	0	0
20 - V3W	Arbequena	987	0	0
30 - V3E	Coratina	3184	0	0
30 - V3E	Picholine	1199	0	0
30 - V3E	Frantoio	1306	0	0
20 - V4	Frantoio	534	0	0
20 - V4	Picholine	963	0	0
20 - V4	Coratina	384	0	0
10 - V5	Mixed	8873	0	0
10 - V6	Mixed	1931	0	0
70 - R1	Mixed	6443	0	0
100 - R2				278841
70 - R3				
100 - R4				

375 trees  
 \$202,000

45,000  
 18,500  
 + fruit

PROMATE 0.02%

P5 64 236  
 P6 48,442  
 JOHN KNOX  
 0416 244 244



Peter Shakopian  
 FAX 07 83673557

stop it

Emory W  
 1/1/00

**APPENDIX C – PROJECT 6 MEMBERS REGISTER**

**APPENDIX D – PROJECT 6 TREE COUNT DATA**

96

# TREE'S PER ROW

## Field Report

Field Number	RL	Date	21-7-08	Name	SHANE
Row		Row		Row	
1	52	51		101	
2	52	52		102	
3	52	53		103	
4	52	54		104	
5	52	55		105	
6	53	56		106	
7	53	57		107	
8	53	58		108	
9	53	59		109	
10	53	60		110	
11	52	61		111	
12	52	62		112	
13	53	63		113	
14	53	64		114	
15	53	65		115	
16	53	66		116	
17	53	67		117	
18	53	68		118	
19	53	69		119	
20	53	70		120	
21	52	71		121	
22	53	72		122	
23	53	73		123	
24	53	74		124	
25	53	75		125	
26	53	76		126	
27	53	77		127	
28	53	78		128	
29	53	79		129	
30	53	80		130	
31	53	81		131	
32	53	82		132	
33	53	83		133	
34	53	84		134	
35	53	85		135	
36	53	86		136	
37	52	87		137	
38	53	88		138	
39	53	89		139	
40	53	90		140	
41	53	91		141	
42	53	92		142	
43	53	93		143	
44	53	94		144	
45	53	95		145	
46	53	96		146	
47	53	97		147	
48	53	98		148	
49	53	99		149	
50		100		150	
Weed type	GRASS + WINTER		Sprayed		
Pest type			Sprayed		
Irrigation			Watered		

TOTAL 4975  
 ALL TREES DEAD - REPLANT  
 STEEL STAKES

Field Report

Field Number	R3	Date	21-7-08	Name	SHANE
Row		Row		Row	
1	35 75	51		101	
2	26 75	52		102	
3	10 75	53		103	
4	12 75	54		104	
5	6 75	55		105	
6	7 75	58		108	
7	8 76	57		107	
8	42 76	58		108	
9	25 76	59		109	
10	34 76	60		110	
11	13 76	61		111	
12	20 76	62		112	
13	11 77	63		113	
14	3 77	64		114	
15	18 77	65		115	
16	7 78	66		116	
17	7 78	67		117	
18	12 78	68		118	
19	5 78	69		119	
20	27 78	70		120	
21	20 78	71		121	
22	20 77	72		122	
23	12 77	73		123	
24	8 77	74		124	
25	18 77	75		125	
26	17 76	76		126	
27	23 76	77		127	
28	7 76	78		128	
29	11 75	79		129	
30	14 75	80		130	
31	9 75	81		131	
32	17 74	82		132	
33	18 74	83		133	
34	8 74	84		134	
35	15 74	85		135	
36	16 74	88		136	
37	11 74	87		137	
38	3 74	88		138	
39	40 74	89		139	
40	15 74	90		140	
41	32 74	91		141	
42		92		142	
43		93		143	
44		94		144	
45		95		145	
46		96		146	
47		97		147	
48		98		148	
49		99		149	
50		100		150	
Weed type	WINTER BAD		Sprayed		
Pest type	LACE / BLACK SCALE		Sprayed		
Irrigation			Watered		

STEEL STAKES  
 DAMAGED IRRIGATION & MISSING SPRINKLERS  
 ALOT OF REGROWTH & SUCKERS

Field Report

Field Number	R4	Date	21-7-08	Name	SHANE
Row	Row	Row	Row	Row	Row
1	69 110	51		101	
2	27 110	52		102	
3	24 110	53		103	
4	26 110	54		104	
5	26 110	55		105	
6	27 110	58		106	
7	39 110	57		107	
8	32 110	58		108	
9	22 110	59		109	
10	19 109	60		110	
11	31 109	61		111	
12	7 109	62		112	
13	44 109	63		113	
14	23 109	64		114	
15	42 109	65		115	
16	29 109	66		116	
17	52 109	67		117	
18	44 109	68		118	
19	32 109	69		119	
20	46 110	70		120	
21	37 110	71		121	
22	30 110	72		122	
23	58 111	73		123	
24	82 111	74		124	
25	67 111	75		125	
26	71 112	76		126	
27	60 112	77		127	
28	68 113	78		128	
29	86 113	79		129	
30	90 114	80		130	
31	95 114	81		131	
32	90 115	82		132	
33	89 115	83		133	
34	101 115	84		134	
35	110 115	85		135	
36		86		136	
37		87		137	
38		88		138	
39		89		139	
40		90		140	
41		91		141	
42		92		142	
43		93		143	
44		94		144	
45		95		145	
46		96		146	
47		97		147	
48		98		148	
49		99		149	
50		100		150	
Weed type	WINTER BAD		Sprayed		
Pest type	LACE/BLACK SCALE		Sprayed		
Irrigation			Watered		

STEEL STAKES.  
 MOSTLY REGROWTH  
 SUCKERS

Field Report

Field Number	VI	Date	21-7-08	Name	SHANE
Row		Row		Row	
1	12	51	1	101	
2	18	52	2	102	
3	25	53	3	103	
4	17	54	2	104	
5	18	55	2	105	
6	21	56	1	106	
7	16	57	3	107	
8	22	58	30	108	
9	14	59	2	109	
10	25	60	26	110	
11	23	61	3	111	
12	22	62	6	112	
13	18	63	7	113	
14	11	64	4	114	
15	60	65	12	115	
16	50	66	11	116	
17	37	67	4	117	
18	42	68	22	118	
19	18	69	33	119	
20	3	70	31	120	
21	7	71	25	121	
22	13	72	3	122	
23	16	73	8	123	
24	15	74	13	124	
25	17	75	6	125	
26	15	76	7	126	
27	6	77	4	127	
28	14	78	7	128	
29	36	79	5	129	
30	29	80	8	130	
31	52	81	11	131	
32	58	82	6	132	
33	53	83	6	133	
34	18	84	11	134	
35	36	85	9	135	
36	13	86	9	136	
37	11	87	16	137	
38	18	88		138	
39	9	89		139	
40	16	90		140	
41	6	91		141	
42	14	92		142	
43	4	93		143	
44	5	94		144	
45	1	95		145	
46	5	96		146	
47	3	97		147	
48	3	98		148	
49	9	99		149	
50	8	100		150	
Weed type	WINTER BAD		Sprayed		
Pest type	LACE/BLACK SCALE		Sprayed		
Irrigation			Watered		

FROST DAMAGING  
STEEL STAKES  
SLASHING

Field Report

Field Number	V2	Date	21-7-08	Name	SHANE
Row		Row		Row	
1	8	51	47	101	
2	10	52	57	102	
3	14	53	52	103	
4	5	54	50	104	
5	19	55	57	105	
6	3	56	61	106	
7	6	57	100 ALL	107	
8	6	58	101	108	
9	9	59	101	109	
10	7	60	101	110	
11	48	61	101	111	
12	47	62	101	112	
13	57	63	101	113	
14	51	64	101	114	
15	41	65	101	115	
16	52	66	101	116	
17	51	67	101	117	
18	57	68	101	118	
19	53	69	101	119	
20	65	70	101	120	
21	84	71	101	121	
22	77	72	101	122	
23	80	73	101	123	
24	74	74	101	124	
25	85	75	101	125	
26	15	76	101	126	
27	17	77	101	127	
28	18	78	101	128	
29	22	79	101	129	
30	35	80	99	130	
31	38	81	95	131	
32	17	82	90	132	
33	26	83	88	133	
34	18	84	81	134	
35	20	85	76	135	
36	18	86	73	136	
37	38	87	57	137	
38	43	88	57	138	
39	48	89	57	139	
40	52	90	57 ✓	140	
41	55	91		141	
42	35	92		142	
43	34	93		143	
44	26	94		144	
45	37	95		145	
46	49	96		146	
47	57	97		147	
48	35	98		148	
49	49	99		149	
50	62	100		150	
Weed type	WINTER BAD		Sprayed		
Pest type	LACE/BLACK SCALE		Sprayed		
Irrigation			Watered		

REPAIR IRRIGATION ROW # 53  
 STEEL STAKES  
 REGROWTH BAD.  
 MOST DEAD TREES ON S.E. SIDE OF GROVE.

Field Report

Field Number	V3 EAST	Date	21-7-08	Name	SHANE
Row		Row		Row	
1	43	51	33	101	
2	26	52	70	102	
3	33	53	48	103	
4	45	54	41	104	
5	36	55	18	105	
6	30	56	56	106	
7	44	57	20	107	
8	37	58	65	108	
9	43	59	35	109	
10	17	60	20	110	
11	10	61	20	111	
12	13	62	21	112	
13	5	63	427	113	
14	7	64	41	114	
15	16	65	19	115	
16	20	66	38	116	
17	9	67	30	117	
18	16	68	31	118	
19	17	69		119	
20	12	70		120	
21	13	71		121	
22	11	72		122	
23	21	73		123	
24	9	74		124	
25	23	75		125	
26	1	76		126	
27	8	77		127	
28	3	78		128	
29	12	79		129	
30	5	80		130	
31	46	81		131	
32	25	82		132	
33	41	83		133	
34	34	84		134	
35	48	85		135	
36	45	86		136	
37	66	87		137	
38	64	88		138	
39	39	89		139	
40	58	90		140	
41	58	91		141	
42	72	92		142	
43	57	93		143	
44	69	94		144	
45	52	95		145	
46	47	96		146	
47	52	97		147	
48	58	98		148	
49	42	99		149	
50	68	100		150	
Weed type	WINTER	BAD	Sprayed		
Pest type	LACE/BLACK	SCALE	Sprayed		
Irrigation			Watered		

STEEL STAKES  
 FROST DAMAGE  
 REGROWTH + SUCKERS

Field Report

Field Number	V4	Date	16-7-08	Name
Row		Row		Row
1	2	51	7	101
2	1	52	10	102
3	0	53	11	103
4	3	54	1	104
5	6	55	6	105
6	3	56	7	106
7	4	57	13	107
8	9	58	14	108
9	9	59	13	109
10	9	60	14	110
11	10	61	16	111
12	3	62	14	112
13	4	63	10	113
14	3	64	17	114
15	6	65	11	115
16	6	66	8	116
17	6	67	8	117
18	0	68	5	118
19	3	69	6	119
20	1	70	6	120
21	2	71	6	121
22	1	72	8	122
23	0	73	1	123
24	0	74		124
25	2	75		125
26	5	76		126
27	2	77		127
28	4	78		128
29	8	79		129
30	3	80		130
31	9	81		131
32	0	82		132
33	10	83		133
34	6	84		134
35	6	85		135
36	2	86		136
37	5	87		137
38	10	88		138
39	4	89		139
40	5	90		140
41	9	91		141
42	10	92		142
43	23	93		143
44	13	94		144
45	6	95		145
46	12	96		146
47	11	97		147
48	7	98		148
49	4	99		149
50	6	100		150
Weed type	WINTER	BAD	Sprayed	
Pest type	LACE	BLACK SCALE	Sprayed	
Irrigation			Watered	

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SUCKERS + REGROWTH  
 STEEL STAKES  
 SHORT ROWS -- NOT GOOD.

Field Report

Field Number	V5	Date	16-7-08	Name	SHANE
Row		Row		Row	
1	7	51	4	101	4
2	9	52	2	102	8
3	4	53	3	103	2
4	3	54	2	104	2
5	4	55	3	105	2
6	5	56	1	106	2
7	1	57	1	107	2
8	6	58	1	108	0
9	3	59	1	109	2
10	4	60	3	110	
11	5	61	1	111	
12	4	62	1	112	
13	4	63	4	113	
14	3	64	1	114	
15	5	65	3	115	
16	7	66	7	116	
17	3	67	2	117	
18	8	68	4	118	
19	2	69	1	119	
20	2	70	4	120	
21	3	71	6	121	
22	9	72	1	122	
23	1	73	1	123	
24	2	74	2	124	
25	2	75	5	125	
26	3	76	4	126	
27	5	77	12	127	
28	2	78	3	128	
29	2	79	0	129	
30	0	80	1	130	
31	0	81	0	131	
32	1	82	1	132	
33	2	83	3	133	
34	5	84	1	134	
35	3	85	1	135	
36	0	86	1	136	
37	3	87	1	137	
38	4	88	2	138	
39	3	89	3	139	
40	3	90	6	140	
41	5	91	2	141	
42	3	92	4	142	
43	13	93	0	143	
44	8	94	5	144	
45	7	95	10	145	
46	7	96	1	146	
47	3	97	1	147	
48	3	98	1	148	
49	3	99	10	149	
50	2	100	3	150	
Weed type	WINTER	RAN IN SPOTS	Sprayed		
Pest type	LACE/BLACK SCALE		Sprayed		
Irrigation			Watered		

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FROST DAMAGE  
 STEEL STAKES  
 SUCKERS & REGROWTH.

# DEAD/MISSING

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## Field Report

Field Number	V6	Date	16-7-08	Name	SHANE
Row		Row		Row	
1	0	51		101	
2	0	52		102	
3	1	53		103	
4	0	54		104	
5	2	55		105	
6	0	56		106	
7	3	57		107	
8	4	58		108	
9	1	59		109	
10	3	60		110	
11	0	61		111	
12	2	62		112	
13	3	63		113	
14	2	64		114	
15	0	65		115	
16	1	66		116	
17	2	67		117	
18	7	68		118	
19	5	69		119	
20	5	70		120	
21	10	71		121	
22	8	72		122	
23	2	73		123	
24	2	74		124	
25	9	75		125	
26	0	76		126	
27	1	77		127	
28	2	78		128	
29	2	79		129	
30	7	80		130	
31	2	81		131	
32	5	82		132	
33	5	83		133	
34	3	84		134	
35	0	85		135	
36	1	86		136	
37	0	87		137	
38	0	88		138	
39	2	89		139	
40	0	90		140	
41	0	91		141	
42	1	92		142	
43	0	93		143	
44	0	94		144	
45	0	95		145	
46	1	96		146	
47		97		147	
48		98		148	
49		99		149	
50		100		150	
Weed type	WINTER	BAD	Sprayed		
Pest type	LACE	BLACK SCALE	Sprayed		
Irrigation			Watered		

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FROST DAMAGE  
 STEEL STAKES  
 SUCKERS & REGROWTH

Field Report

Field Number	V3 WEST	Date	21-7-08	Name	SHANE
Row		Row		Row	
1	7	51		101	
2	4	52		102	
3	6	53		103	
4	10	54		104	
5	9	55		105	
6	8	56		106	
7	13	57		107	
8	14	58		108	
9	15	59		109	
10	21	60		110	
11	20	61		111	
12	24	62		112	
13	22	63		113	
14	26	64		114	
15	20	65		115	
16	25	66		116	
17	30	67		117	
18	15	68		118	
19	19	69		119	
20	15	70		120	
21	21	71		121	
22	10	72		122	
23	27	73		123	
24	11	74		124	
25	14	75		125	
26	7	76		126	
27	7	77		127	
28	18	78		128	
29	21	79		129	
30	17	80		130	
31	15	81		131	
32	27	82		132	
33	10	83		133	
34	9	84		134	
35	15	85		135	
36	15	86		136	
37	11	87		137	
38	18	88		138	
39	4	89		139	
40	8	90		140	
41	9	91		141	
42	22	92		142	
43	15	93		143	
44		94		144	
45		95		145	
46		96		146	
47		97		147	
48		98		148	
49		99		149	
50		100		150	
Weed type	WINTER	BAD	Sprayed		
Pest type	LACE/BLACKSCALE		Sprayed		
Irrigation	ROW #37	REPAIR	Watered		

STEEL STAKES  
 ALOT OF TREES DEAD/MISSING - ONLY SHORT ROWS.