

APPENDIX D – CONSOLIDATED APPROVAL

Project Approval (Consolidated)

Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Approved 28 January 2009

The Hon Kristina Keneally MP
Minister for Planning

Sydney 2009

SCHEDULE 1

Application No: 06_0228
Proponent: Shoalhaven Starches Pty Ltd
Approval Authority: Minister for Planning
Land: The land listed in Appendix 1
Project: Shoalhaven Starches Expansion Project

MP06_0228 MOD 1 – Deletion of DDG Pelletiser (2011)

MP06_0228 MOD 2 – Improve operational/energy efficiency (2012)

MP06_0228 MOD 3 – Car park relocation (2012)

MP06_0228 MOD 4 – Modified DDG Pelletiser Construction (2014)

MP06_0228 MOD 5 – Modified design, footprint and odour controls on DDG Pelletiser (2015)

MP06_0228 MOD 6 – Demolition and temporary car park (2015)

MP06_0228 MOD 7 – Relocation of Starch Dryer No.5 (2015)

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DEFINITIONS

<p>BCA Council CEMP Construction</p>	<p>Building Code of Australia Shoalhaven City Council Construction Environmental Management Plan The carrying out of works, including bulk earthworks, and erection of buildings and other infrastructure covered by this approval</p>
<p>Day</p>	<p>The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays</p>
<p>DDG Demolition</p>	<p>Dried Distillers Grain The demolition or dismantling of a structure or part of a structure that is load-bearing, as covered by this approval</p>
<p>Department EA</p>	<p>Department of Planning The environmental assessment titled <i>Proposed Ethanol Production Upgrade Including Proposed Odour Reduction and Waste Water Treatment Measures For Existing Shoalhaven Starches Operations</i>, prepared by Cowman Stoddart Pty Ltd, and dated August 2008; and the associated response to submissions, prepared by Cowman Stoddart Pty Ltd, and dated October 2008</p>
<p>EP&A Act EP&A Regulation EPA EPL Evening GHD Report (October 2007)</p>	<p><i>Environmental Planning & Assessment Act 1979</i> <i>Environmental Planning & Assessment Regulation 2000</i> Environment Protection Authority Environmental Protection Licence The period from 6pm to 10pm Environmental Audit Odour Sources report dated October 2007 prepared for Shoalhaven Starches by GHD Pty Ltd to address Land and Environment Court judgment 2 November 2006.</p>
<p>Incident</p>	<p>An incident causing or threatening material harm to the environment, and/or an exceedance of the limits or performance criteria in this approval</p>
<p>Minister Mitigation</p>	<p>Minister for Planning (or delegate) Activities associated with reducing the impacts of the development prior to or during those impacts occurring</p>
<p>Night</p>	<p>The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays</p>
<p>NOW Odour Control Works POEO Act Project</p>	<p>Department of Primary Industries – NSW Office of Water The works described in Appendix 3 <i>Protection of the Environment Operations Act 1997</i> The development described in the EA, which includes the continued implementation of all existing and approved development on site, as modified by MP 06_0228 MOD 1, MP 06_0228 MOD 2, MP 06_0228 MOD 3, MP 06_0228 MOD 4, MP 06_0228 MOD 5, MP 06_0228 MOD 6 and MP 06_0228 MOD 7</p>
<p>Proponent Reasonable and Feasible</p>	<p>Shoalhaven Starches Pty Ltd, or its successors Reasonable relates to the application of judgment in arriving at a decision, taking into account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build</p>
<p>SafeWork Secretary Site Statement of Commitments VENM</p>	<p>SafeWork NSW Secretary of the Department (or nominee) The land referred to in Schedule 1 The Proponent's commitments in the EA Virgin Excavated Natural Material, as defined in the <i>Protection of the Environment Operations Act 1997</i></p>

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the **demolition**, construction, operation or decommissioning of the project.

Terms of Approval

2. The Proponent shall carry out the project in accordance with the:
 - a) EA and associated site plans (see Appendix 2);
 - b) amended modification proposal MP 06_0228 MOD 1 prepared by ME Engineering Pty Ltd and dated 21 December 2010;
 - c) modification proposal MP 06_0228 MOD 2, accompanying Environmental Assessment dated January 2012 and response to submissions report dated 4 May 2012, prepared by Cowman Stoddart Pty Ltd, accompanying plans (see Appendices 2A and 2B) and supplementary odour report dated 30 July 2012, prepared by PAE Holmes Pty Ltd;
 - d) modification proposal MP 06_0228 MOD 3, accompanying Environmental Assessment dated May 2012, response to submissions report dated 20 July 2012 and further response to submissions report dated 24 August 2012, prepared by Cowman Stoddart Pty Ltd and accompanying plans (see Appendix 2C);
 - e) modification proposal MP 06_0228 MOD 4, accompanying Environmental Assessment and accompanying plans (see Appendix 2D) dated February 2014, prepared by Cowman Stoddart Pty Ltd;
 - f) modification proposal MP 06_0228 MOD 5, accompanying Environmental Assessment and accompanying plans dated June 2015, prepared by Cowman Stoddart Pty Ltd (see Appendix 2E);
 - g) modification proposal MP 06_0228 MOD 6, accompanying Environmental Assessment and accompanying plans dated October 2015, prepared by Cowman Stoddart Pty Ltd (see Appendix 2F);
 - h) modification proposal MP 06_0228 MOD 7, accompanying Environmental Assessment and accompanying plans dated November 2015, prepared by Cowman Stoddart Pty Ltd (see Appendix 2G); and
 - i) statement of commitments.
3. If there is any inconsistency between the above, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the **Secretary** arising from the Department's assessment of:
 - a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this approval; and
 - b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.

Surrender of Existing Development Consents

5. Within 12 months of this approval, the Proponent shall surrender all existing development consents and project approvals for the site, apart from this project approval, in accordance with Clause 97 of the EP&A Regulation.

Limits on Approval

6. (1) The Proponent must not produce on site:
 - a) more than 265,000 tonnes of industrial grade flour per year; and
 - b) more than 300 million litres of ethanol per year, subject to (2) below.
- (2) The proponent must not produce on site more than 126 million litres of ethanol per year except in accordance with a staged approval granted by the **Secretary** in accordance with condition 7.

Note: Prior to this approval, the proponent was allowed to produce up to 126 million litres of ethanol per year. Condition 7 below provides for the Director – General to approve increased production of ethanol in stages, firstly up to 200 million litres and then up to 300 million litres. Increased production will only be approved after an independent audit of the performance of the odour controls required by this approval and only if the Director General is satisfied that odour controls will be adequate for such an increase.

Staged Implementation of Increased Ethanol Production Rates

7. (1) The Proponent may apply to the **Secretary** for approval to increase ethanol production up to the rate of 200 million litres of ethanol a year on site if –
- the mandatory odour controls listed in Appendix 3 to this Approval have been implemented; and
 - the Odour Management Plan required under condition 4 of Schedule 3 has been prepared to the satisfaction of the **Secretary** and is being implemented; and
 - an independent odour audit has been prepared and submitted in accordance with conditions 5 and 6 of Schedule 3; and
 - the proponent provides the **Secretary** with an assessment of the likely odour impacts of the proposed increase in ethanol production, using odour monitoring and predictive modelling.
- (2) The proponent may apply to the **Secretary** for approval to increase ethanol production from 200 million litres of ethanol a year on site up to 300 million litres of ethanol a year on site if –
- the site has been producing 200 million litres per year in accordance with an approval granted by the **Secretary** under this condition; and
 - an independent odour audit of the site operating at this rate has been prepared and submitted in accordance with conditions 5 and 6 of Schedule 3; and
 - the proponent has provided the **Secretary** with an assessment of the likely odour impacts of the proposed increase in ethanol production, using odour monitoring and predictive modelling.
- (3) An assessment provided to the **Secretary** in accordance with this condition –
- must assess the effectiveness of the mandatory odour controls required under this approval; and
 - may assess the effectiveness of implementing additional odour controls (such as those listed in Appendix 3).
- (4) In deciding whether to approve an increase in ethanol production under this condition, the **Secretary** must –
- assess the odour performance of the premises at its current rate of production; and
 - assess the likely odour impacts from the proposed increase; and
 - consider the requirement not to cause or permit the emission of offensive odours from the site as defined in section 129 of the POEO Act.

Structural Adequacy

8. The Proponent shall ensure that all new buildings and structures on the site are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

Structural Adequacy of Early Works (MP 06_0228 MOD 2)

- 8A. Within 2 months of the date of the approval of MP 06_0228 MOD 2, the Proponent shall:
- obtain and provide copies to the **Secretary** all necessary building certificate(s) from Shoalhaven City Council for any structures proposed as part of MP 06_0228 MOD 2 that have been constructed or partially constructed prior to the approval of MP 06_0228 MOD 2; and
 - ensure that all new structures, and any alterations or additions to existing structures, are constructed in accordance with the relevant requirements of the Building Code of Australia.

Structural Adequacy of Early Works (MP 06_0228 MOD 5)

- 8B. Within three (3) months of the date of approval of MP 06_0228 MOD 5, the Proponent shall:
- obtain and provide copies to the **Secretary** of all necessary building certificate(s) from Council for any structures proposed as part of MP 06_0228 MOD 5 that have been constructed or partially constructed prior to the approval of MP 06_0228 MOD 5; and
 - ensure that all new structures, and any alterations or additions to existing structures, are constructed in accordance with the relevant requirements of the Building Code of Australia.

Demolition

9. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001: The Demolition of Structures*, or its latest version and the requirements of the *Work Health and Safety Regulation, 2011*.

- 9A. The Proponent shall ensure that all demolition is undertaken by licensed demolition experts in accordance with the requirements of SafeWork and the *Work Health and Safety Regulation, 2011*.

Asbestos Removal, Transport, Disposal and Clearance

- 9B. The Proponent shall ensure that any asbestos encountered during construction and demolition is monitored, removed, transported and disposed of by appropriately qualified and licensed contractors in accordance with the requirements of SafeWork and relevant guidelines, including:
- (a) *Work Health and Safety Regulation 2011*;
 - (b) *Model Code of Practice – How to Manage and Control Asbestos in the Workplace, 2011 Safe Work Australia*;
 - (c) *Model Code of Practice – How to Safely Remove Asbestos, 2011 Safe Work Australia*; and
 - (d) *Protection of the Environment Operations (Waste) Regulation 2005*.

Protection of Public Infrastructure

10. The Proponent shall:
- a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters, footpaths), in consultation with Council, and submit a copy of this report to the Department prior to the commencement of construction;
 - b) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
 - c) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

Operation of Plant and Equipment

11. The Proponent shall ensure that all plant and equipment used on the site is:
- a) maintained in a proper and efficient condition; and
 - b) operated in a proper and efficient manner.

Staged Submission of Plans or Programs

- 12A. With the approval of the Secretary, the Proponent may:
- a) submit any strategy, plan or program required by this approval on a progressive basis; and/or
 - b) combine any strategy, plan or program required by this approval.
- 12B. Until they are replaced by an equivalent strategy, plan or program approved under this approval, the Proponent shall continue to implement existing strategies, plans or programs for operations on site that have been approved by previous consents or approvals.

Note:

- *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages and the trigger for updating the strategy, plan or program.*
- *There must be a clear relationship between the strategy, plan or program that are to be combined.*

Development Contribution

13. Within 12 months of this approval, the Proponent shall pay Council a suitable contribution for the project that has been determined generally in accordance with any applicable Section 94 Contribution Plan. If there is a dispute about the amount of the contribution then either party may refer the matter to the Secretary for resolution.

Compliance

14. In the event of a dispute between the Proponent and a public authority, in relation to an applicable requirement in this approval or relevant matter relating to the Project, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

ODOUR

Offensive Odour

1. The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.

Implementation of Mandatory Odour Controls

2. Prior to increasing ethanol production rates on site above 126 million litres a year or within 12 months of this approval, whichever is sooner, the Proponent shall implement all the mandatory odour controls listed in Appendix 3 and described in detail in the Odour Management Plan (see condition 4 below), to the satisfaction of the Secretary.
3. The Proponent shall implement additional mandatory odour controls as may be directed by the Secretary, arising from the Department's assessment of any:
 - a) Independent Odour Audit (see condition 5 below);
 - b) Independent Environmental Audit (see condition 4 of schedule 4); or
 - c) any monitoring results, incidents or complaints related to the project.
- 3A. Prior to commissioning the duct work that directs additional emissions from the evaporator plant area and load-out chute to the bio-filter (as identified in the amended modification proposal) the Proponent must demonstrate to the satisfaction of the Secretary and the EPA that the bio-filter can accommodate the additional load while maintaining acceptable treatment performance.
- 3B. Should the Proponent opt to install a DDG pelletising plant as identified in the additional odour controls in Appendix 3 the plant must comply with all regulatory requirements including air and odour emissions standards that are in force at the time of installation. Compliance must be demonstrated to the satisfaction of the Secretary and EPA before installation work begins.

3C. Deleted.

Odour Management Plan

4. The Proponent shall prepare and implement an Odour Management Plan for the project to the satisfaction of the Secretary. This plan must:
 - a) be prepared in consultation with EPA by a suitably independent, qualified and experienced expert whose appointment has been endorsed by the Secretary, and submitted to the Secretary for approval within 3 months of the date of this approval;
 - b) describe in detail the measures that would be implemented on site to control the odour impacts of the project, and to ensure that these controls remain effective over time;
 - c) identify triggers for remedial action; and
 - d) include a program for monitoring the odour impacts of the project.
- 4A. Prior to increasing ethanol production the Odour Management Plan for the project must be updated to the satisfaction of the Secretary to include the additional Appendix 3 mandatory odour controls specified in the modification approval MOD 1 – Deletion of DDG Pelletiser.

Independent Odour Audit

5. Within 3 months of the implementation of the mandatory odour controls (see Appendix 3), and annually thereafter unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Odour Audit of the project. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Secretary. During the audit, this expert must:
 - a) consult with EPA and the Department;
 - b) audit the effectiveness of the odour controls on site in regard to protecting receivers against offensive odour;
 - c) review the Proponent's production data (that are relevant to the odour audit) and complaint records;
 - d) review the Odour Management Plan for the project;
 - e) measure all key odour sources on site, and compare the results of these measurements against the predictions in the EA;
 - f) determine whether the project is complying with the requirements in this approval; and, if necessary,
 - g) recommend and prioritise measures to either improve the odour controls on site and/or the Odour Management Plan, such that receivers would be protected against offensive odour from the site.

Note: The Secretary may vary the frequency of the audit depending on the performance of the project.

6. Within 6 weeks of the completion of this audit, the Proponent shall submit a copy of the audit report to both EPA and the Department with a response to any recommendations contained in the audit report.

Odour Verification (MP 06_0228 MOD 2)

- 6A. The Proponent shall ensure that any Independent Odour Audit submitted to the Secretary in accordance with Condition 5 of this Schedule includes:
 - a) 3 monthly (quarterly) odour monitoring with samples taken from the carbon dioxide/ethanol recovery scrubber inlet/s and outlet/s; and
 - b) quarterly odour monitoring with samples taken of single vent stack (direct to atmosphere) emissions from a filling fermenter tank.

- 6B. The Proponent shall construct, commission and operate the DDG exhaust stack in accordance with the following specifications:
 - a) 49.2 metres in height;
 - b) 1.5 metres in diameter;
 - c) discharge air temperature of 60 degrees Celsius; and
 - d) exit velocity of 12 metres per second.

Note: Conditions c) and d) apply unless otherwise prescribed in an EPL for the project.

- 6C. The Proponent shall conduct quarterly odour monitoring from the DDG exhaust stack and report the results in the independent odour audit required under Condition 5 of Schedule 3.
- 6D. The Proponent shall conduct odour monitoring on the relocated starch dryer described in MOD 7 in accordance with the requirements of the EPL and report the results in the independent odour audit required under Condition 5 of Schedule 3.
- 6E. If the results of odour monitoring show any odour impact greater than that predicted by the odour dispersion modelling in the EA and the modification proposals referred to in Condition 2 of Schedule 2, the Proponent shall investigate and implement further odour treatment options as directed by the Secretary or the EPA.

AIR QUALITY

General

7. The Proponent shall implement all reasonable and feasible measures to minimise the dust generated by the project.
8. During construction, the Proponent shall ensure that:
 - a) all trucks entering or leaving the site with loads have their loads covered; and
 - b) the trucks associated with the project do not track dirt onto the public road network.

Emission Limits - Boiler Stacks

9. The Proponent shall ensure that the emissions from the combined boiler stacks for Number 5 and 6 Boilers on site comply with the limits in the EPL.

Monitoring

10. The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Secretary. This program must:
 - a) be prepared in consultation with EPA;
 - b) be submitted to the Secretary for approval within 3 months of this approval; and
 - c) include a program to monitor the ongoing performance of the project.

Dust Management MOD 6

- 10A. The Proponent shall implement the Dust Management Plan included in the EA for MOD 6.

NOISE

Hours of Operation

11. The Proponent shall comply with the restrictions in Table 1.

Table 1: Construction and Operation Hours for the Project

Activity	Day	Time
Construction	Monday – Friday	7:00am to 6:00pm
	Saturday	8:00am to 1:00pm
	Sunday and Public Holidays	Nil
Piling activities	Monday – Friday	9:00am to 5:00pm
Operation	All days	Any time

Note: Construction activities may be conducted outside the hours in Table 1 provided that the activities are not audible at any residence beyond the boundary of the site.

Noise Limits

12. The Proponent shall ensure that noise from the project does not exceed the noise limits in Table 2.

Table 2: Project Noise Limits

Location	Day/Evening/Night LA _{10(15 minute)} dB(A)
1 - Terara on the south side of the Shoalhaven River	38
2,3 & 4 - Nowra on the south side of the Shoalhaven River	38
5 - Merroo Street, Bomaderry	42
6 - Other residential locations in Bomaderry	40

Note: To interpret the locations referred to Table 2, see the map in Appendix 4. Noise generated by the project is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy.

Noise Management Plan

13. During construction, the Proponent shall implement all reasonable and feasible measures to minimise the construction noise impacts of the project.
14. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:
- be prepared by a suitably qualified and experienced expert in consultation with EPA, and be submitted to the Secretary for approval within 3 months of this approval;
 - describe the measures that would be implemented to control the noise impacts of the project;
 - identify trigger levels for remedial action; and
 - include a program to:
 - investigate ways to reduce the noise impacts of the project; and
 - monitor the noise impacts of the project using a combination of real-time and supplementary attended monitoring measures, which includes a protocol for evaluating compliance with the noise limits.

Design and Noise Validation MOD 7

- 14A. The Proponent shall design and construct the relocated starch dryer in accordance with the design specifications included in the EA for MOD 7.
- 14B. Within 12 months of operation of the relocated starch dryer, the Proponent shall undertake noise validation to confirm that the noise levels comply with the predictions in the EA for MOD 7.
- 14C. If the results of noise validation show any noise impact greater than that predicted in the EA and the modification proposals referred to in Condition 2 of Schedule 2, the Proponent shall investigate and implement all reasonable and feasible noise mitigation measures to achieve compliance.

SOIL, WATER & ENERGY

Discharge Limits

15. Except as may be expressly provided in an EPL for the project, the Proponent shall:
- comply with Section 120 of the POEO Act; and
 - not discharge any wastewater, including treated wastewater to the Shoalhaven River.

Water & Energy Efficiency

16. The Proponent shall prepare and implement a Water Savings Action Plan and an Energy Savings Action Plan for the project to the satisfaction of the **Secretary**. These plans must be prepared:
- in consultation with DWE and be submitted to the **Secretary** for approval within 12 months of this approval; and
 - in accordance with the *Guidelines for Water Savings Action Plans (DEUS 2005)* and *Guidelines for Energy Savings Action Plans (DEUS 2005)*, respectively.

Bunding

17. The Proponent shall store all chemicals, fuels and oils used on site in appropriately banded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund. These bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or DECC's *Storing and Handling Liquids: Environmental Protection* manual.

Note: To avoid any doubt, this condition does not apply to the fermenters on site.

Importation of Fill

18. The Proponent shall ensure that all imported fill is VENM.

Erosion and Sediment Control

19. The Proponent shall prepare and implement an Erosion and Sediment Control Plan for the project to the satisfaction of the **Secretary**. This plan must:
- be submitted to the **Secretary** before the commencement of construction on site;
 - be prepared in accordance with Landcom's *Managing Urban Stormwater: Soils and Construction* manual;
 - identify the works that could cause soil erosion and generate sediment;
 - describe the location, function, and capacity of the erosion and sediment controls that would be implemented; and
 - describe the measures that would be implemented to maintain these controls during the construction period.

Note: the provisions of this plan shall be implemented for all construction works associated with the project and/or modification approved thereafter.

- 19A. Prior to the commencement of works associated with MOD 6, the Proponent shall implement the Erosion and Sediment Control Plan included in the EA for MOD 6.

Site Contamination

20. Prior to the commencement of construction, unless otherwise agreed by the **Secretary**, the Proponent shall demonstrate to the satisfaction of the **Secretary** that an accredited site auditor has prepared a site audit statement and summary site audit report and that the site is suitable for its intended use(s).
- 20A. Prior to the commencement of construction of the works associated with MOD 7, the Proponent shall prepare an unexpected finds protocol to ensure that potentially contaminated material is appropriately managed. Any material identified as contaminated shall be disposed of off-site, with the disposal location and results of testing submitted to Council, prior to its removal from the site.
- 20B. The Proponent shall implement the unexpected finds protocol for the duration of construction of the relocated starch dryer as described in MOD 7.

Acid Sulfate Soils

21. The Proponent shall prepare and implement an Acid Sulphate Soil Management Plan for the project *as modified*. The plan must be prepared in accordance with the *Acid Sulphate Soils Manual (Acid Sulphate Soils Management Advisory Committee, 1998)*, and be submitted to the **Secretary** for approval prior to the commencement of construction.

Stormwater

22. The Proponent shall prepare and implement a Stormwater Management Plan for the project to the satisfaction of the **Secretary**. This plan must:
- be prepared in consultation with Council and be submitted to the **Secretary** for approval prior to the commencement of construction;
 - be prepared in accordance with the latest version of *Managing Urban Stormwater: Council Handbook* (DECC);
 - outline measures to manage stormwater to prevent the pollution of waters; and

d) include detailed plans of the stormwater system.

22A. Prior to the commencement of construction of the temporary car park described in MOD 6, the Proponent shall submit a Stormwater Management Plan to Council describing the stormwater design, discharge location and pollution control for the temporary car park.

22B. The Proponent shall update the Stormwater Management Plan for the project to include MOD 7. The plan shall:

- a) be submitted to Council prior to the commencement of construction;
- b) detail pipe sizes, pit locations and all associated drainage for the relocated starch dryer;
- c) detail the location of dedicated drainage paths to the western bank of Abernathy's Creek and describe the erosion protection measures to be implemented;
- d) include a program for visual monitoring of the creek banks following significant rainfall events; and
- e) include procedures for ensuring that heavy vehicles and equipment are not stored between the starch dryer and Abernathy's Creek.

22C. Any excavations undertaken between the starch dryer and Abernathy's Creek shall be supervised by a geotechnical engineer.

Wastewater

23. The Proponent shall ensure runoff and spray from the irrigation of wastewater does not go beyond the boundary of the utilisation areas.

24. The Proponent shall ensure that the pollutants in the soils at the environmental farm do not exceed the soil quality impact assessment criteria outlined in the EPL for the project.

25. The Proponent shall prepare and implement a Wastewater Management Plan for the project to the satisfaction of the Secretary. This plan must:

- a) be prepared in consultation with EPA and be submitted to the Secretary for approval within 12 months of this approval;
- b) be prepared in accordance with DECC's *Environmental Guidelines: Use of Effluent by Irrigation*;
- c) outline the location, design and management of the irrigation, crop and grazing system, including measures to minimise soil and groundwater degradation; and
- d) include:
 - baseline data on soil and groundwater quality and characteristics;
 - wastewater and soil quality impact assessment criteria and the effluent treatment and irrigation system performance measures;
 - details of the wastewater, soil, silage and groundwater monitoring program;
 - procedures for the reporting the monitoring results against the criteria and to determine the annual site nutrient and analyte budgets and water balance;
 - contingency measures to address exceedances, pollutant triggers and problems with the wastewater management systems; and
 - a description how the effectiveness of actions would be monitored over time.

Flooding

26. The Proponent shall prepare a Flood Mitigation and Management Plan for the project to the satisfaction of the Secretary. This plan must:

- a) be prepared in consultation with Council and be submitted to the Secretary for approval within 12 months of this approval;
- b) include:
 - baseline data on local and regional flooding and the predicted flood impacts of the project;
 - details of all reasonable and feasible measures that would be implemented to minimise on-site and off-site flooding;
 - procedures for the monitoring, assessment and compensation of any flood impacts caused by the project;
 - a program for contribution toward the ALERT Flood Warning System operated by Council and the Bureau of Meteorology; and
 - procedures for collaboration and coordination with the paper mill with respect to flood emergency planning.

26A. The Proponent shall update the Flood Mitigation and Management Plan for the project to include MOD 7. The plan shall:

- a) be prepared in consultation with Council and submitted to the Secretary by the end of March 2016;

- b) detail the procedures for managing flood risks during construction, demolition and operation, including flood recovery measures, procedures for ensuring the protection of infrastructure and human safety; and
 - c) identify assembly points, emergency evacuation routes, flood warning alarms and evacuation procedures.
- 26B. The Proponent shall ensure that all new buildings and structures, additions to existing buildings and structures and all electrical installations are constructed in accordance with the relevant requirements of Chapter G9 of the *Shoalhaven Development Control Plan 2014* (Shoalhaven DCP). Any portion of buildings or structures below the flood planning level prescribed in the Shoalhaven DCP must be constructed from flood compatible materials and be built to withstand flooding, to the satisfaction of Council.
- 26C. The Proponent shall ensure that all hazardous materials stored on site are stored above the 1% AEP flood level.

TRANSPORT

Upgrade Existing Accesses to Factory

27. Within 12 months of this approval, the Proponent shall:
- a) upgrade the three accesses to the site off Bolong Road (marked in colour on the map in Appendix 5); and
 - b) clear and profile the road verges at the intersection of the site's access road and Hannigan's Lanes, to the satisfaction of Council and the RTA.

Note: Site accesses referred to in this condition are illustrated by the figure in Appendix 5.

- 27A. The Proponent shall provide works-as-executed plans to the Secretary and Council for:
- a) the road upgrade works completed in accordance with condition 27, no later than 31 October 2012; and
 - b) the intersection upgrade works required by condition 27B, within 1 month of completion of the upgrade works, to the satisfaction of Council and RMS.

Upgrade Access to Car Park (MOD 3)

- 27B. Prior to operation of the car park described in MOD 3, the Proponent shall complete the following upgrades in accordance with *Austrroads Guide to Road Design – Part 4a: Unsignalised and Signalised Intersections*:
- a) upgrade the right turn in to the 'Dairy Farmers' site from Bolong Road to a Channelised Right (CHR) intersection; and
 - b) upgrade the left turn in to the 'Dairy Farmers' site from Bolong Road to an Auxiliary Right (AUL), to the satisfaction of Council and RMS.
- 27C. The Proponent shall remove the informal access point located to the east of Access Point 1 and reinstate the road verge to the satisfaction of Council, by the end of April 2013.
- 27D. The Proponent shall ensure that the existing access point for the relocated starch dryer no. 5 is designed to accommodate the largest vehicle. If manoeuvring areas for the largest vehicle impact on existing car parking spaces, these spaces must be relocated within close proximity to the relocated starch dryer, to the satisfaction of Council.

Road Works to the Packing Plant

28. Prior to the commencement of operations at the proposed packing plant, the Proponent shall:
- a) construct the proposed left turn only access to the packing plant site from Bolong Road with appropriate physical barriers and signage;
 - b) provide alternative access arrangements for the vehicles from the adjoining Shoalhaven Water site, and dedicate any land additional land required for these alternative access arrangements to Council as a road reserve; and
 - c) upgrade the access from the packing plant site to Railway Street; and
 - d) construct the proposed bridge over Abernethy Creek, to the satisfaction of Council and the RTA.

29. Prior to the commencement of construction on the proposed packing plant site, the Proponent shall prepare a Construction Traffic Management Plan for the construction works on site to the satisfaction of Council.

Upgrade Pedestrian Facilities

30. Within 12 months of this approval, the Proponent shall:
- provide a 1.2 metre pedestrian pathway along the southern boundary of Bolong Road between the Central Access Point (see map in Appendix 5) and the western boundary of Lot 62 DP 1078788;
 - provide a pedestrian refuge on Bolong Road between the factory and the:
 - CO₂ gas plant; and
 - the proposed packing plant; and
 - upgrade the street lighting along Bolong Road, in accordance with *AS/NZS 1158: Lighting for Roads and Public Spaces* to ensure that the pedestrian pathways, including the bridge over Abernethy Creek, and refuges are suitably lit after dark, to the satisfaction of the Council.

Note: The pedestrian pathway over Abernethy Creek must be designed and constructed in accordance DWE's Guidelines for Controlled Activities – Watercourse Crossings, dated February 2008.

Pedestrian Access from Car Park (MOD 3)

- 30A. The Proponent shall provide a formal pedestrian access from the car park described in MOD 3 to the existing pedestrian footpath adjacent to Bolong Road, as shown on the plans in Appendix 2C. The pedestrian access shall be:
- completed prior to operation of the car park;
 - designed in consultation with Council; and
 - appropriately lit in accordance with the requirements of condition 30c).

Internal Roads & Parking

31. The Proponent shall:
- ensure that all internal roads and parking on site complies with *AS2890.1:2004 and AS2890.2:2002*, or their latest versions;
 - construct at least 60 new parking spaces on the factory site, in accordance with the plans in Appendix 2C, by the end of April 2013;
 - construct at least 30 new parking spaces at the proposed packing plant prior to the commencement of operations at the plant; and
 - ensure that pedestrian access and car parking complies with *AS1428:2010 Design for Access and Mobility*, or its latest version;
- to the satisfaction of the Secretary.
32. The Proponent shall ensure that vehicles associated with the project do not park or queue on the public road network at any time.

Night-time Heavy Vehicle Restrictions

33. The Proponent shall ensure that heavy vehicles travelling to and from the site between 8pm and 7am only use Bolong Road and Princes Highway.

Railway Crossings

34. Within 12 months of this approval, the Proponent shall undertake an assessment of the safety of the rail level crossing of Bolong Road, in consultation with the RTA, Council, NSW Rail Level Crossing Unit and the Independent Safety and Reliability Regulator, and to the satisfaction of the Secretary.
35. The Proponent shall implement all reasonable and feasible recommendations in the rail level crossing safety assessment to the satisfaction of the Secretary.

Access for MOD 6

- 35A. The Proponent shall ensure that the temporary car park and its access described in MOD 6:
- is designed and constructed to the satisfaction of Council and in accordance with *AS2890:2009 Parking Facilities* and *AS1158:2010 Lighting for Roads and Public Spaces*, or their latest versions;
 - is used for light vehicles only, with the exception of heavy vehicles used to construct the temporary car park;
 - is removed following the completion of construction of the No. 5 starch dryer at the Moorehouse site as described in MOD 6;
 - is not used for the storage of plant, equipment or materials at any time.

- 35B. The Proponent shall ensure that access to Shoalhaven Water's pumping station is maintained at all times.

HAZARDS

Pre-construction Studies

36. The Proponent shall prepare and implement a Construction Safety Study in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.7 - Construction Safety Guidelines*, for the Project to the satisfaction of the Secretary.

Note: The commissioning portion of the Construction Safety Study may be submitted to the Department prior to the commencement of commissioning.

37. The Proponent shall not commence construction on site before the Construction Safety Study has been approved by the Director General.

Note: Preliminary construction works outside the scope of the hazard studies may be undertaken prior to the approval of the Construction Safety Study referred to above.

Pre-construction Studies for MP 06_0228 MOD 2

- 37A. The Proponent shall prepare and implement a Construction Safety Study in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.7 - Construction Safety Guidelines*, for MP 06_0228 MOD 2 to the satisfaction of the Secretary. The Proponent shall not commence any construction on site associated with MP 06_0228 MOD 2 before the Construction Safety Study has been approved by the Director General.

Note: Preliminary construction works outside the scope of the hazard studies may be undertaken prior to the approval of the Construction Safety Study referred to above.

Pre-construction Studies for MP 06_0228 MOD 4

- 37B. At least one month prior to the commencement of construction of MP 06_0228 MOD 4 (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Secretary may agree, the Proponent shall prepare and submit for the approval of the Secretary the studies set out under subsections (a) to (d). Construction of MP 06_0228 MOD 4 shall not commence until approval has been given by Secretary:

- a) a Construction Safety Study prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.7 - Construction Safety Guidelines*, for MP 06_0228 MOD 4;
- b) an updated Preliminary Hazards Analysis (PHA) for the project as modified by MP 06_0228 MOD 4 prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.6 - Guidelines for Hazard Analysis*. The PHA shall undertake an assessment of the potential risks arising from MP 06_0228 MOD 4;
- c) an updated Fire Safety Study for the project as modified by MP 06_0228 MOD 4 prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.2 - Fire Safety Study Guidelines* and the New South Wales Government's *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*. The Fire Safety Study shall also be prepared and implemented to the satisfaction of the NSW Fire Brigade; and
- d) a Hazard and Operability Study for MP 06_0228 MOD 4 prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 8 - HAZOP Guidelines*, chaired by an independent qualified person approved by the Secretary. This study shall include a program for the implementation of all recommendations made during the study; and if the Proponent intends to defer the implementation of certain recommendations, then justification shall be provided for the proposed deferral.

Pre-Commissioning Hazard Studies

38. The Proponent shall prepare and implement the following to the satisfaction of the Secretary:
- a) an updated Fire Safety Study for the project as modified by MP 06_0228 MOD 2 prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.2 - Fire Safety Study Guidelines* and the New South Wales Government's *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*. The Fire Safety Study shall also be prepared and implemented to the satisfaction of the NSW Fire Brigade;
 - b) a Hazard and Operability Study prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.8 - HAZOP Guidelines*, chaired by an independent qualified person approved by the Secretary, includes a program for the implementation of all recommendations made during the study; and if the Proponent

- intends to defer the implementation certain recommendations, then provide justification for the proposed deferral; and
- c) a Final Hazards Analysis (FHA) prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis*.
 - d) a Transport of Hazardous Materials Plan, which details arrangements for the transport of hazardous materials including routes to be used by vehicles carrying hazardous materials, selected in accordance with the Department's draft '*Route Selection*' Guidelines;
 - e) an updated Emergency Plan for the project as modified by MP 06_0228 MOD 2 prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1- Industry Emergency Planning Guidelines*; and
 - f) a Safety Management System prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.9 - Safety Management*, and specifies all safety-related procedures, responsibilities and policies, along with mechanisms for ensuring adherence to these procedures.

39. ~~The Proponent shall not commence the commissioning of the project before these plans and systems have been approved by the Secretary Deleted.~~

Pre-Commissioning Hazard Studies for MP 06_0228 MOD 2

- 39A. The Proponent shall prepare and implement the following to the satisfaction of the Secretary:
- a) a Hazard and Operability Study for MP 06_0228 MOD 2 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No.8 - HAZOP Guidelines, chaired by an independent qualified person approved by the Secretary, includes a program for the implementation of all recommendations made during the study; and if the Proponent intends to defer the implementation certain recommendations, then provide justification for the proposed deferral; and
 - b) a Final Hazards Analysis (FHA) for MP 06_0228 MOD 2 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis.

Pre-commissioning Studies for MP 06_0228 MOD 5

- 39B. The Proponent shall develop and implement the plans and systems set out under subsections a) to c). No later than one month prior to the commencement of commissioning of MP 06_0228 MOD 5, or within such further period as the Secretary may agree, the Proponent shall submit for the approval of the Secretary documentation describing those plans and systems. Commissioning of MP 06_0228 MOD 5 shall not commence until approval has been given by the Secretary:
- a) an updated Emergency Plan for the project as modified by MP 06_0228 MOD 5 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 1- Industry Emergency Planning Guidelines;
 - b) an updated Safety Management System for the project as modified by MP 06_0228 MOD 5 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No.9 - Safety Management, and specifies all safety-related procedures, responsibilities and policies, along with mechanisms for ensuring adherence to these procedures;
 - c) an updated Final Hazards Analysis (FHA) for the project as modified by MP 06_0228 MOD 5 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis. The FHA shall undertake an assessment of the potential risks arising from MP 06_0228 MOD 5. It should verify the potential risk imposed by the addition of process equipment and evaluate the risk arising from deviations from the MOD 4 design; and
 - d) a Hazard and Operability Study for MP 06_0228 MOD 5 prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 8 - HAZOP Guidelines*, chaired by an independent qualified person approved by the Secretary. This study shall include a program for the implementation of all recommendations made during the study, and if the Proponent intends to defer the implementation of certain recommendations, then justification shall be provided for the proposed deferral.

Hazard Audit

- 39C. Twelve months after the commencement of operations of MP 06_0228 MOD 5 and every three years thereafter, or at such intervals as the Secretary may agree, the Proponent shall carry out a comprehensive Hazard Audit of the project as modified and the site, and within one month of each audit submit a report to the Secretary.

The audits shall be carried out at the Proponent's expense by a qualified person or team, independent of the project, prior to commencement of each audit and shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5 - Hazard Audit Guidelines.

Pre-commissioning Studies for MOD 7

- 39D. The Proponent shall develop and implement the plans and systems set out under subsections a) to e). No later than one month prior to the commencement of commissioning of MP 06_0228 MOD 7, or within such further period as the Secretary may agree, the Proponent shall submit for the approval of the Secretary documentation describing those plans and systems. Commissioning of MP 06_0228 MOD 7 shall not commence until approval has been given by the Secretary:
- a) a site-wide Fire Safety Study for the entire project as modified by the modification proposals included in Condition 2 of Schedule 2. The site-wide Fire Safety Study is to be prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No.2 - Fire Safety Study Guidelines and the New South Wales Government's Best Practice Guidelines for Contaminated Water Retention and Treatment Systems. The Fire Safety Study shall also be prepared and implemented to the satisfaction of the NSW Fire Brigade;
 - b) an updated Emergency Plan for the project as modified by MP 06_0228 MOD 7 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 1- Industry Emergency Planning Guidelines;
 - c) an updated Safety Management System for the project as modified by MP 06_0228 MOD 7 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No.9 - Safety Management, and specifies all safety-related procedures, responsibilities and policies, along with mechanisms for ensuring adherence to these procedures; and
 - d) an updated Final Hazards Analysis (FHA) for the project as modified by MP 06_0228 MOD 7 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis. The FHA shall undertake an assessment of the potential risks arising from MP 06_0228 MOD 7.
 - e) a Hazard and Operability Study for MP 06_0228 MOD 7 prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 8 - HAZOP Guidelines, chaired by an independent qualified person approved by the Secretary. This study shall include a program for the implementation of all recommendations made during the study; and if the Proponent intends to defer the implementation of certain recommendations, then justification shall be provided for the proposed deferral.

Note: If a modification proposal does not require an update of the studies listed in Conditions a) to c) above, the Proponent shall provide written justification to the satisfaction of the Secretary.

Hazard Audit

- 39E. Twelve months after the commencement of operations of MP 06_0228 MOD 7 and every three years thereafter, or at such intervals as the Secretary may agree, the Proponent shall carry out a comprehensive Hazard Audit of the project as modified and the site, and within one month of each audit submit a report to the Secretary.

The audits shall be carried out at the Proponent's expense by a qualified person or team, independent of the project, prior to commencement of each audit and shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5 - Hazard Audit Guidelines.

WASTE

40. Except as expressly permitted by an EPL, the Proponent shall:
- a) not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing or disposal; and
 - b) ensure that all waste generated on the site is classified and managed in accordance with the DECC's Environmental Guidelines: *Waste Classification Guideline*.

40A. The Proponent shall ensure that the use of any waste, including steel mill slag, is in accordance with the requirements of a Resource Recovery Order and Exemption issued under the *Protection of the Environment Operations (Waste) Regulation 2014*.

Waste Management Plan

41. The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the Secretary. This plan must:
- a) be submitted to the Secretary for approval within 3 months of this approval;
 - b) identify the various waste streams of the project;
 - c) describe what measures would be implemented to reuse, recycle or minimise the waste generated by the project; and
 - d) include a program to monitor the effectiveness of these measures.

LANDSCAPE

Lighting

42. The Proponent shall ensure that the lighting associated with the project:
- complies with the latest version of *AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting*; and
 - is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

42A. If any LED obstruction lighting is to be installed on tall structures on the site, the frequency range of the LED light emitted must fall within the range of wavelengths 655 to 930 nanometres, and be installed to the satisfaction of the Department of Defence.

Landscape and Vegetation Management

43. The Proponent shall prepare and implement a Vegetation Management Plan for the project to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with DWE and Council and be submitted to the Secretary for approval within 6 months of this approval;
 - be prepared in accordance with *DWE's Guidelines for Controlled Activities – Vegetation Management Plans*; and
 - include:
 - a Landscape Plan for the project, which identifies screen plantings to minimise visual impacts;
 - detailed plans and procedures to:
 - restore and maintain the waterways and riparian zones of Shoalhaven River, Bomaderry Creek, Abernethy's Creek and Broughton Creek on the site;
 - manage weeds in the vicinity of the riparian zones;
 - integrate works into the proposed landscaping for the rest of the site;
 - manage impacts on fauna; and
 - monitor the performance of the proposed restoration works.
44. The Proponent shall, to the satisfaction of the Secretary, ensure that:
- all landscaping works proposed in the Landscape Plan/s in Appendix 2B of this approval are completed within 6 months of the date of approval of MP 06_0228 MOD 2 in consultation with Council;
 - the Landscape Plan/s in Appendix 2B of this approval are incorporated into the approved Landscaping and Vegetation Management Plan for the project; and
 - suitable measures are in place and detailed in the Landscaping and Vegetation Management Plan to ensure vegetation at the site is maintained for the life of the project.
45. The Proponent shall:
- commence landscaping as proposed in the Landscape Plans in Appendix 2C within 6 weeks of commencing construction of the car park described in MOD 3;
 - update the Vegetation Management Plan for the project, in consultation with Council, to include the Landscape Plan in Appendix 2C, including details of the measures to be implemented to ensure that landscaping is maintained for the life of the project; and
 - submit the updated Vegetation Management Plan to the Secretary for approval, by the end of April 2013.
46. Prior to operation of the pelletising plant described in MP 06_0228 MOD 4 and as modified by MP 06_0228 MOD 5, the Proponent shall provide evidence to the satisfaction of the Secretary demonstrating that the Landscape Plan/s in Appendix 2B have been fully implemented.
47. Where possible the Proponent shall utilise building materials that will minimise the potential visibility of the Project (i.e. use of non-reflective materials).
48. One month following the completion of construction of the DDG exhaust stack described in MP 06_0228 MOD 5, the Proponent shall provide as-constructed details to Airservices Australia.
49. One month following the completion of construction of the starch dryer described in MP 06_0228 MOD 7, the Proponent shall provide as-constructed details to Airservices Australia.

SCHEDULE 4 ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING

ENVIRONMENTAL MANAGEMENT

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must:
 - a) be submitted to the Secretary for approval within 3 months of this approval;
 - b) identify the statutory requirements that apply to the project;
 - c) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the project;
 - respond to any non-compliance;
 - manage cumulative impacts; and
 - respond to emergencies; and
 - d) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the project.

ENVIRONMENTAL REPORTING

Incident Reporting

- 2A. The Proponent shall notify the Secretary and any other relevant agencies of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment associated with the facility immediately after the Proponent becomes aware of the incident.
- 2B. Within 7 days of the date of this incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident.

Annual Reporting

3. By the end of October each year, or other timing as may be agreed by the Secretary, the Proponent shall review the environmental performance of the Project to the satisfaction of the Secretary. This review must:
 - a) be submitted to the Secretary by the end of October each year;
 - b) describe the development that was carried out over the previous 12 month period, and the development that is proposed to be carried out over the next year;
 - c) include a summary of monthly production levels over the year;
 - d) include a comprehensive review of the monitoring results and complaints records of the Project over the previous year, which includes a comparison of these results against the
 - (i) the relevant statutory requirements, limits or performance measures/criteria;
 - (ii) requirements of any plan or program required under this approval;
 - (iii) the monitoring results of previous years; and
 - (iv) the relevant predictions in the EA;
 - e) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - f) identify any trends in the monitoring data over the life of the Project;
 - g) identify any discrepancies between the predicted and actual impacts of the Project, and analyse the potential cause of any significant discrepancies; and
 - h) describe what measures will be implemented over the next year to improve the environmental performance of the Project.

INDEPENDENT ENVIRONMENTAL AUDIT

4. Within 12 months of the commencement of operations, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
 - a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Secretary;
 - b) be undertaken in consultation with EPA, DWE and Council;
 - c) assess the environmental performance of the project and undertake any works necessary to determine whether it is complying with the relevant standards, performance measures, and statutory requirements;
 - d) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,

- e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

Note: Wherever possible, the timing of the Independent Environmental Audit, Independent Odour Audit and Hazard Audit should be co-ordinated to avoid duplication, and the experts conducting the Independent Odour Audit and Hazard Audit should be included in the broader audit team. In the initial years, the Independent Environmental Audit team should include experts in Odour, Noise, and Wastewater Irrigation.

2. Within 6 weeks of completing this audit, or as otherwise agreed by the **Secretary**, the Proponent shall submit a copy of the audit report to the **Secretary** with a response to any recommendations contained in the audit report.
3. Within 3 months of submitting an audit report to the **Secretary**, the Proponent shall review and if necessary revise the strategy/plans/programs and undertake additional mitigation measures as required under this approval to the satisfaction of the **Secretary**.

Revisions of Management Plans/Monitoring Programs

- 5A. Within 3 months of the submission of an:
- a) annual review under condition 3;
 - b) incident report under condition 2;
 - c) audit under condition 4; or
 - d) any modification to the conditions of this approval,

the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.

ACCESS TO INFORMATION

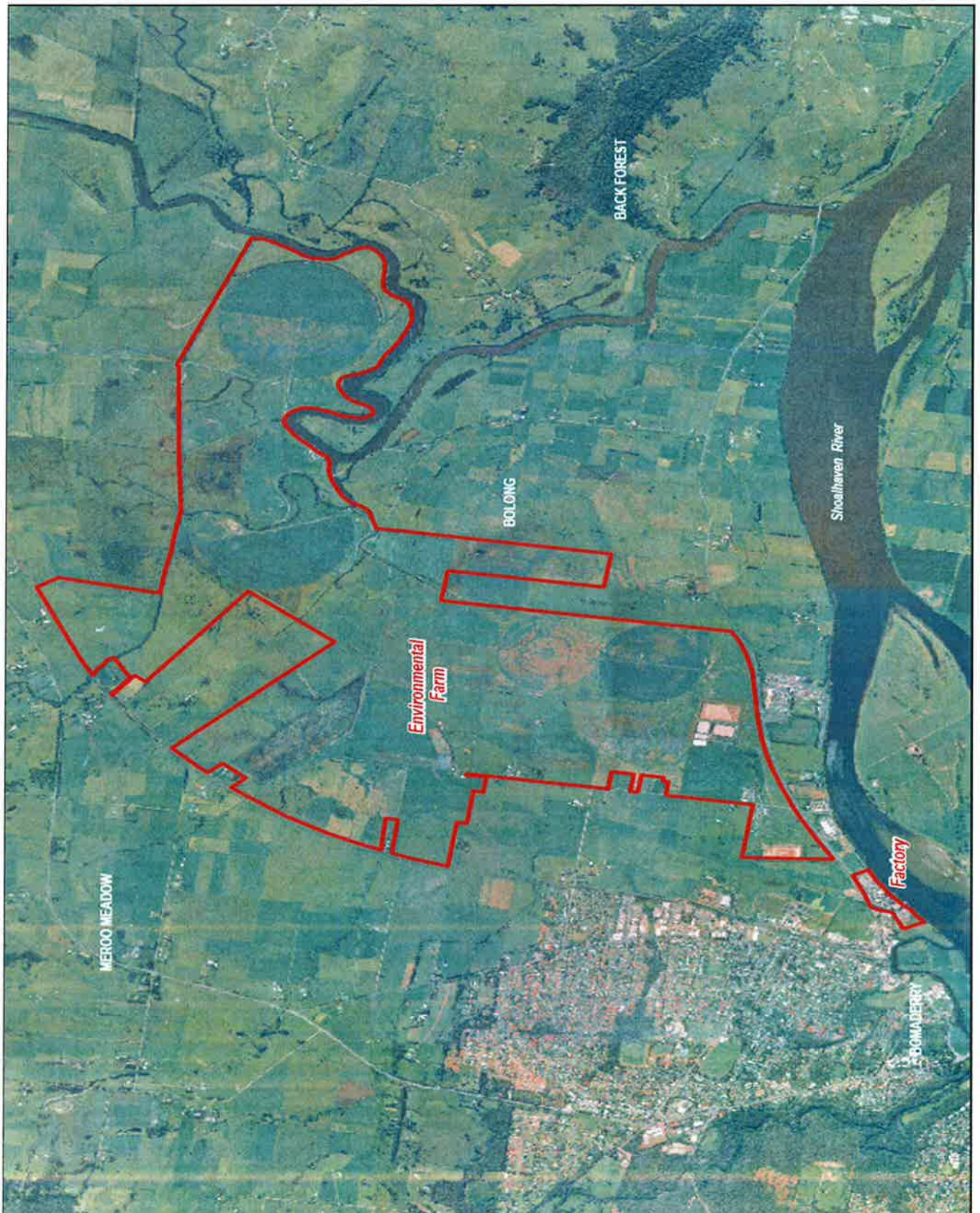
6. The Proponent shall:
- a) make copies of the following publicly available on its website:
 - (i) the documents referred to in Condition 2 in Schedule 2;
 - (ii) all current statutory approvals for the Project;
 - (iii) all approved strategies, plans and programs required under the conditions of this approval;
 - (iv) a comprehensive summary of the monitoring results of the Project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;
 - (v) a complaints register, updated on an annual basis;
 - (vi) minutes of community meetings;
 - (vii) the annual reviews of the Project;
 - (viii) any independent environmental audit of the Project, and the Proponent's response to the recommendations in any audit;
 - (ix) any other matter required by the **Secretary**; and
 - b) keep this information up to date,

Note: This condition does not require any confidential information to be made available to the public.

**APPENDIX 1
SCHEDULE OF LAND**

Lot	DP/FP
Factory	
1	838753
A	334511
B	334511
B	376494
62	1078788
201	1062668
1	385145
241	1130535
143	1069758
Packing Plant	
16	1121337
2	538289
Wastewater Treatment Plant & Environmental Farm	
4	610696
	131008
1	842231
2	842231
3	235705
1	235705
2	235705
Part 2	854837
4	1109510
22	811233
164	4469
2	854764
210	6131
211	6131
PT 212	6131
213	6131
214	6131
248	6131
2	955009
42	751268
63	751268
PT 2	854837
3	1109510
2	1109510
1	1109510
2	833181
Overhead bridge – Bolong Road Reserve	
2	538289
Fire Services	
241	1130535

APPENDIX 2 SITE PLANS



**OVERALL SITE PLAN SHOWING ETHANOL UPGRADE
FOR SHOALHAVEN STARCHES P/L JUNE 2008**

1:1250 (A1) (B2)

DATE: 21/06/08

SCALE: 1:1250

PROJECT: ETHANOL UPGRADE FOR SHOALHAVEN STARCHES P/L

DESIGNED BY: [Name]

CHECKED BY: [Name]

APPROVED BY: [Name]

DATE: 21/06/08

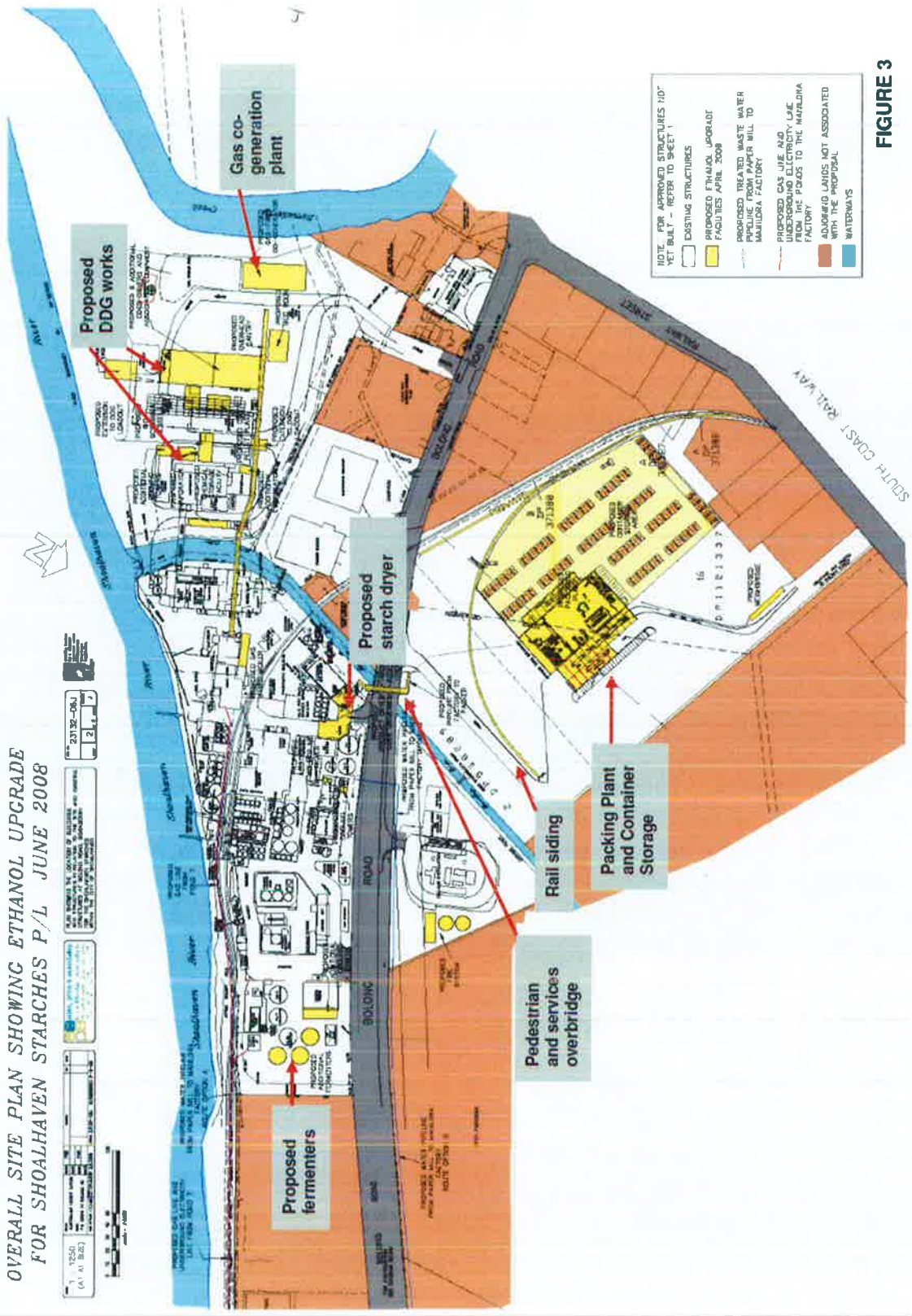


FIGURE 3

OVERALL SITE PLAN SHOWING ETHANOL UPGRADE
FOR SHOALHAVEN STARCHES P/L JUNE 2008

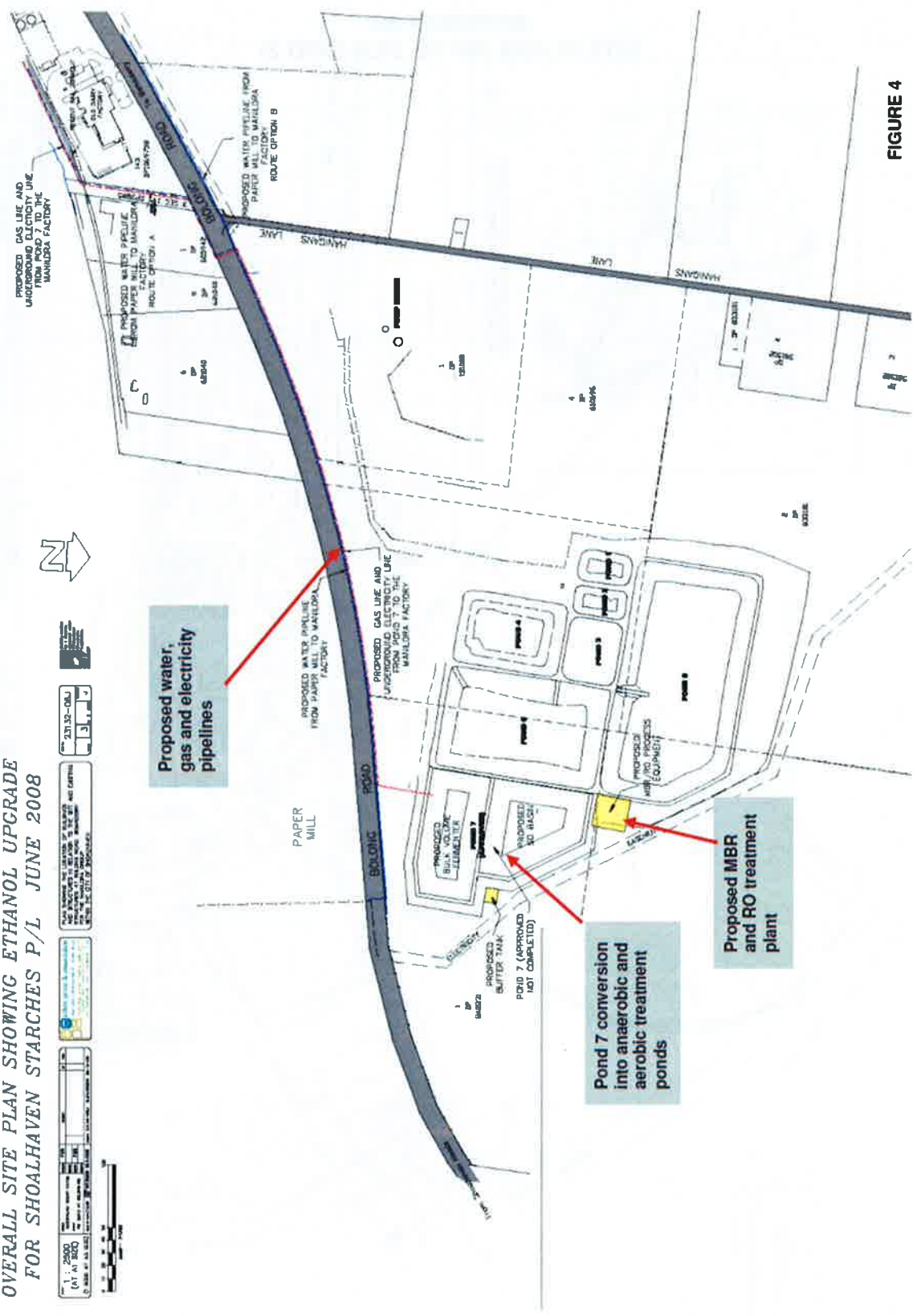


FIGURE 4

**APPENDIX 2A
SITE PLANS (MP 06_0228 MOD 2)**

OVERALL SITE PLAN SHOWING ETHANOL MODIFICATIONS
FOR SHOALHAVEN STARCHES P/L NOV 2011

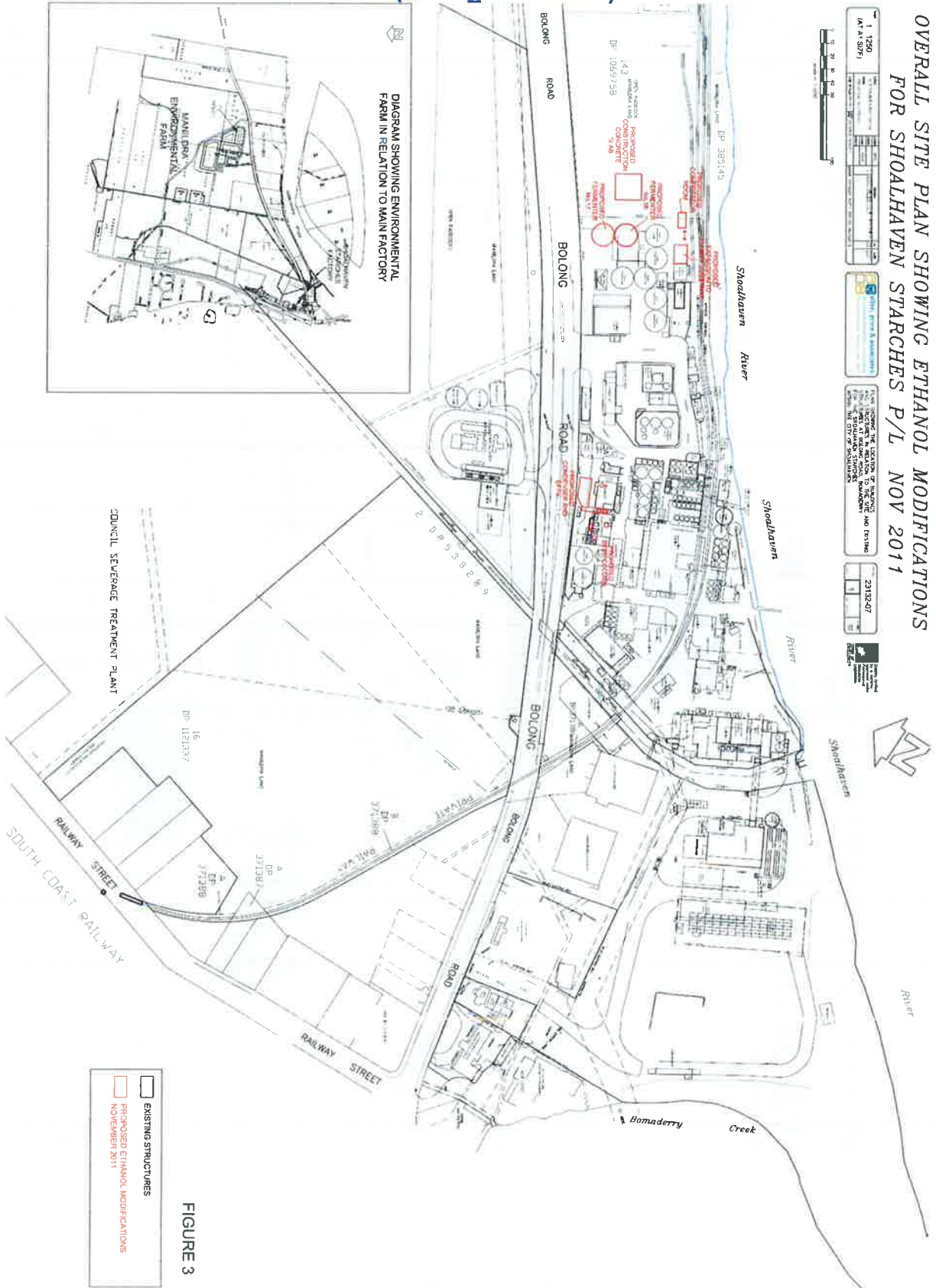


FIGURE 3

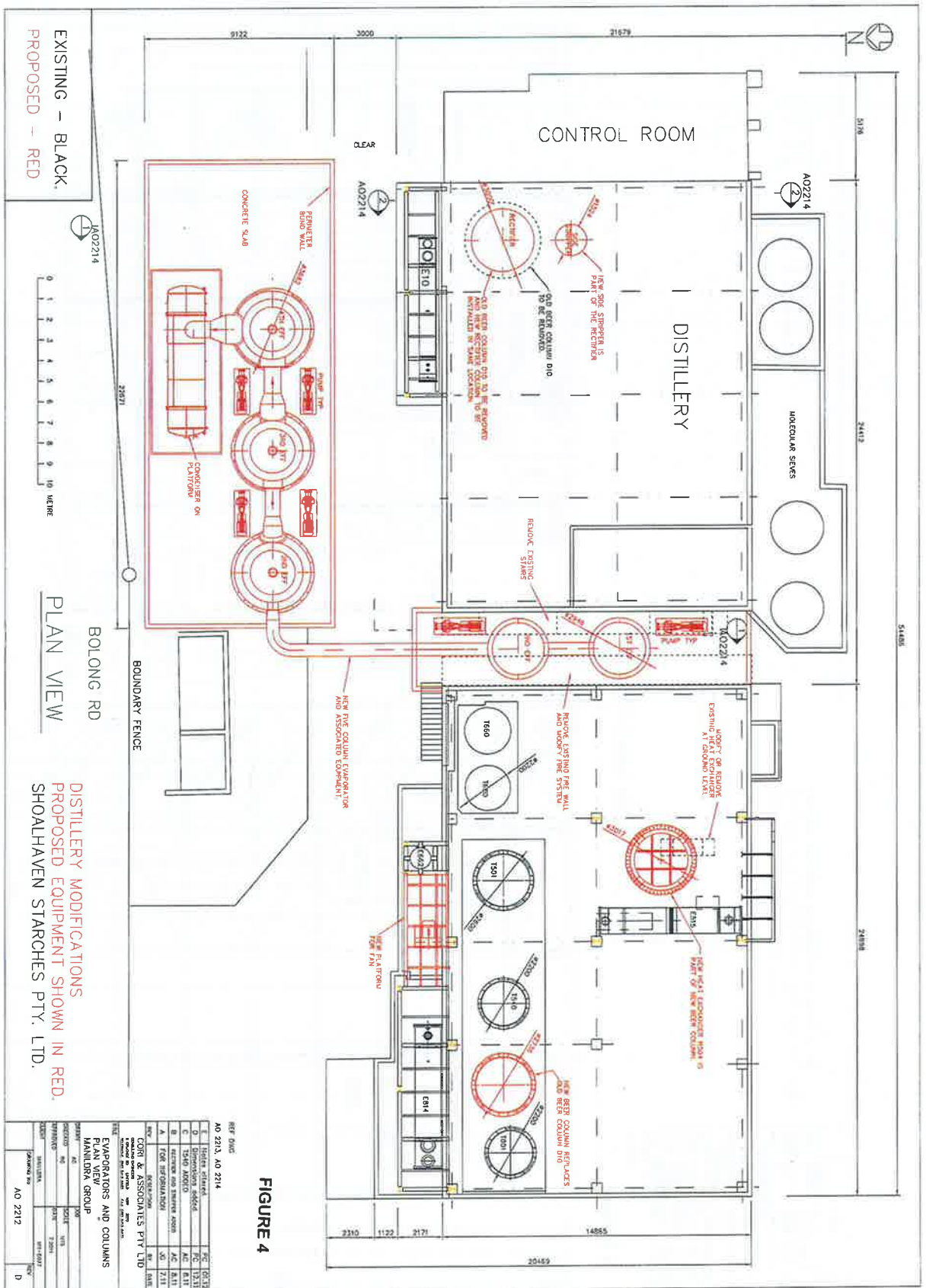
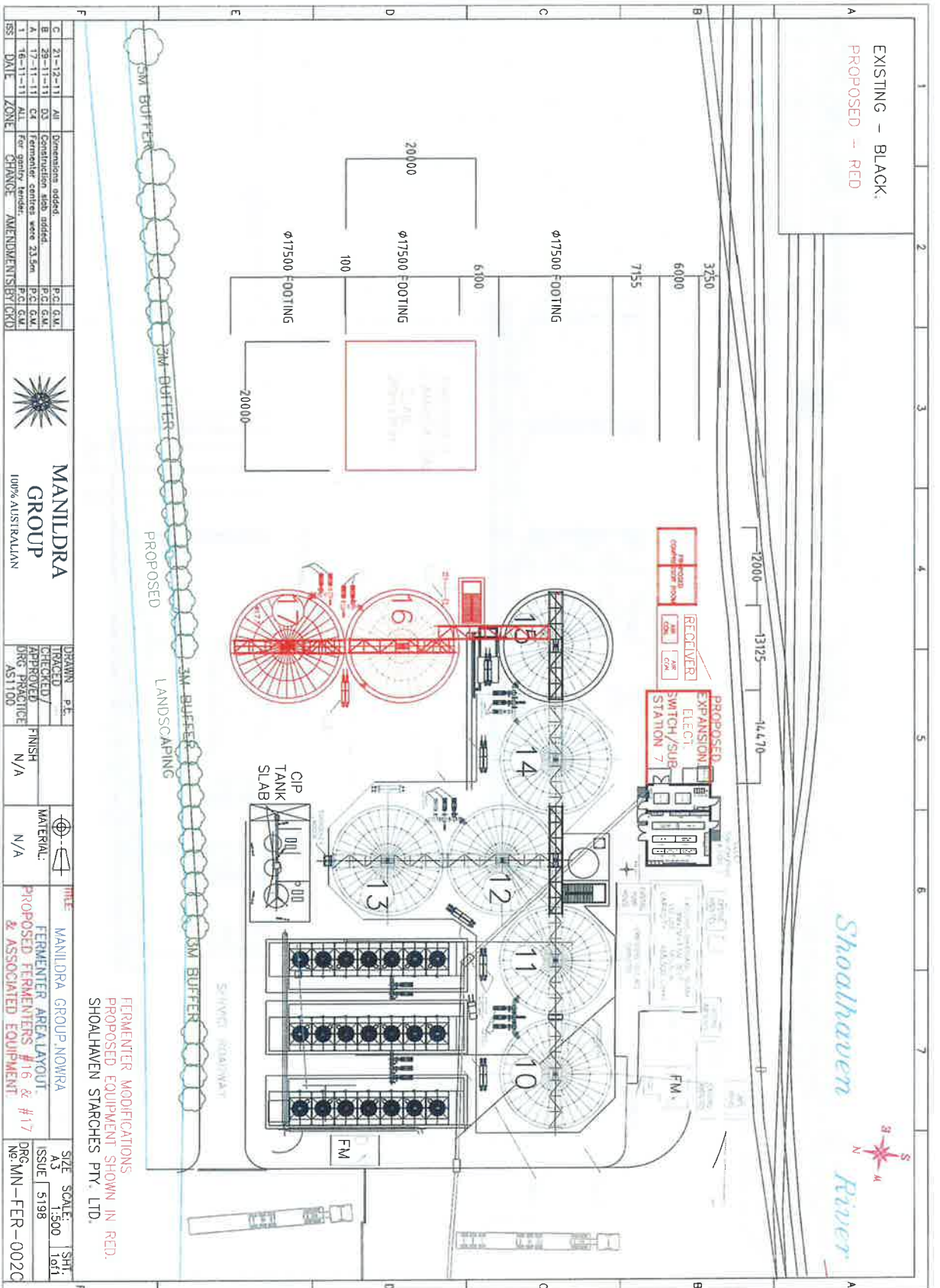


FIGURE 4



DATE	ZONE	CHANCE	AMENDMENTS	BY	CHKD
21-12-11	AL				
29-11-11	O2				
17-11-11	C4				
16-11-11	AL				

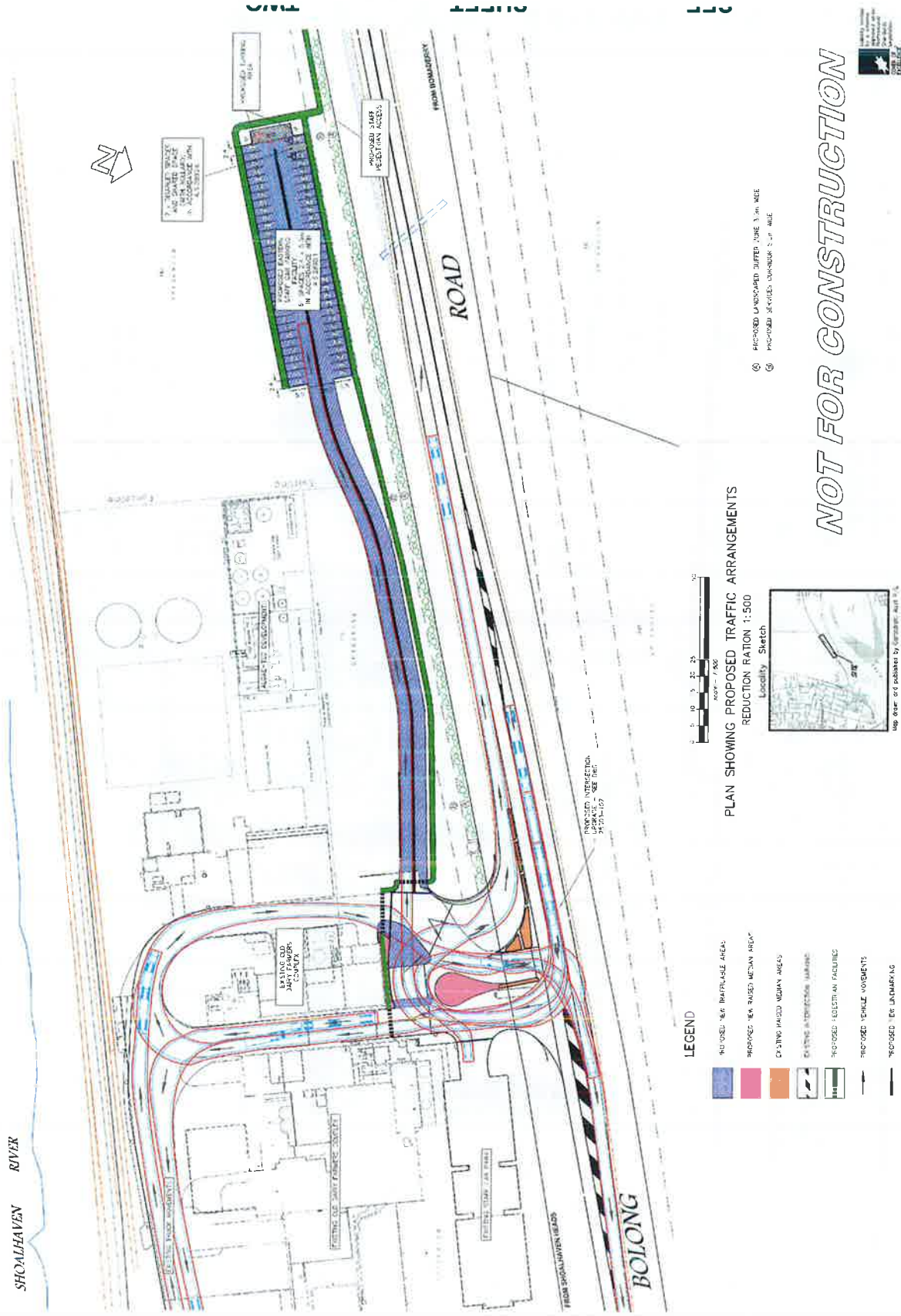
Dimensions added:	P.C.I. G.M.
Construction slab added:	P.C.I. G.M.
Fermenter centres were 23.5m:	P.C.I. G.M.
For gantry tender:	P.C.I. G.M.
CHANCE	AMENDMENTS
BY	CHKD

MANILDRA GROUP	100% AUSTRALIAN
MANILDRA GROUP NOWRA	FERMENTER AREA LAYOUT
PROPOSED FERMENTERS #16 & #17	& ASSOCIATED EQUIPMENT

DRAWN	P.E.	FINISH	N/A	MATERIAL:	N/A	SCALE:	SH1
TRACED						1:500	1 of 1
CHECKED							
APPROVED							
ORG. PRACTICE	AS1100						

FERMENTER MODIFICATIONS
 PROPOSED EQUIPMENT SHOWN IN RED.
 SHOALHAVEN STARCHES PTY. LTD.

APPENDIX 2C LAYOUT AND LANDSCAPE PLANS (MP 06_0228 MOD 3)



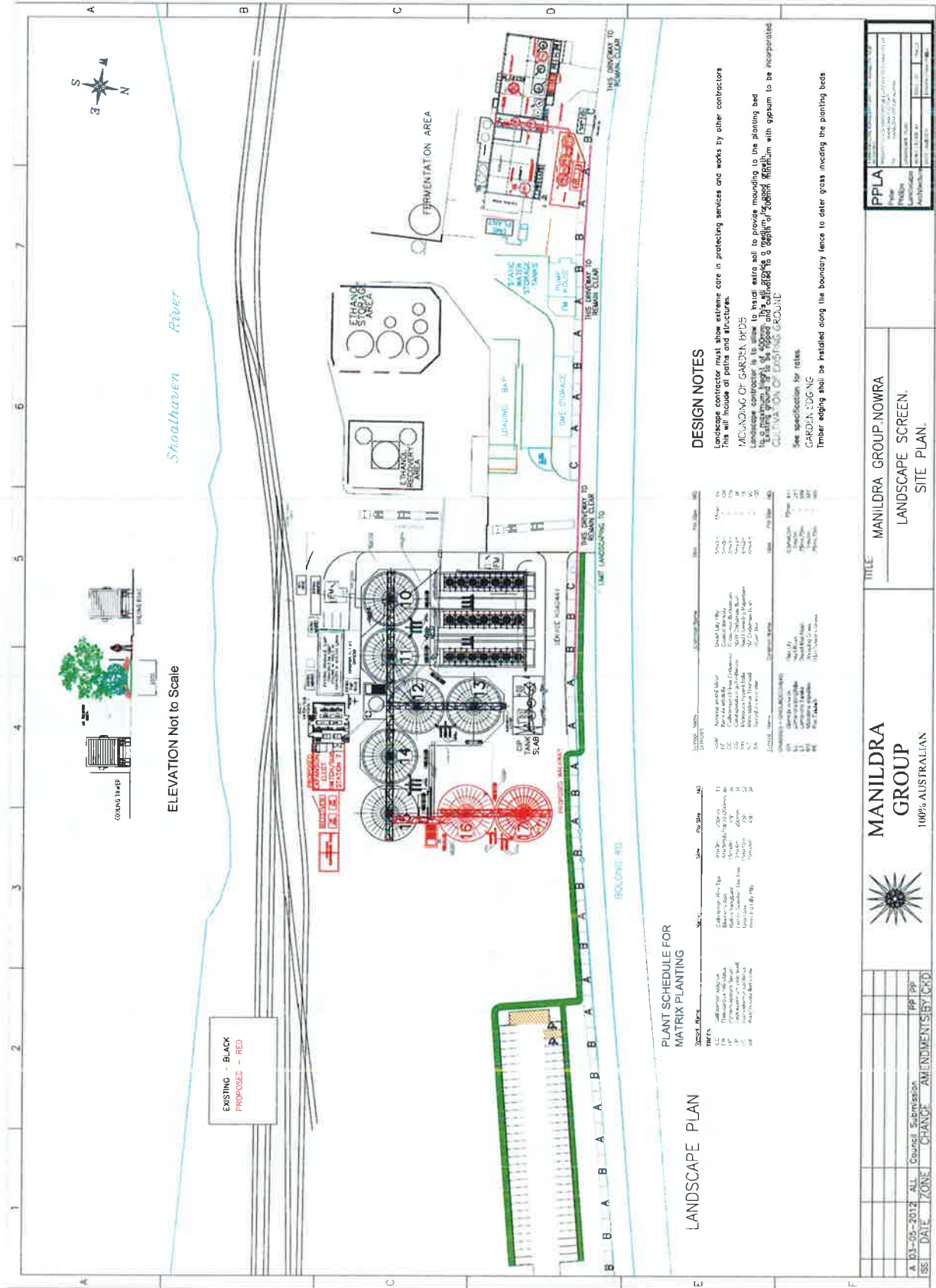
NOT FOR CONSTRUCTION

25003-106	
1	02

PLAN SHOWING PROPOSED TRAFFIC ARRANGEMENTS FOR "ACF" DRIVEWAY & CARPARK UPGRADE AT BOLONG ROAD BOLONG FOR MANILDRA GROUP LIMITED

allen, price & associates
 land and development consultants
 75 blunell street, newcastle NSW 2341

<p>1:500 (AT SITE)</p>	<p>APRIL 2012</p>
<p>AUSTRALIAN HEIGHT DATUM 50m RL 3.245</p>	<p>DATE: APRIL 2012</p>
<p>SCALE</p>	<p>DATE: APRIL 2012</p>



DESIGN NOTES

Landscape contractor must show extreme care in protecting services and works by other contractors. This will include all poles and structures.

LANDSCAPING OF GARDEN BEDS
 The landscape contractor shall provide a depth of 200mm fill with gypsum to be incorporated into the garden beds.

ESTABLISHMENT OF PLANTING SCENE
 See specification for rates.
 GARDEN LOGGING
 Timber edging shall be installed along the boundary fence to order grass invading the planting beds.

PLANT SCHEDULE FOR MATRIX PLANTING

Species Name	Quantity	Plant Size	Plant Type	Plant Source	Planting Date	Planting Location
...

MANILDRA GROUP
100% AUSTRALIAN

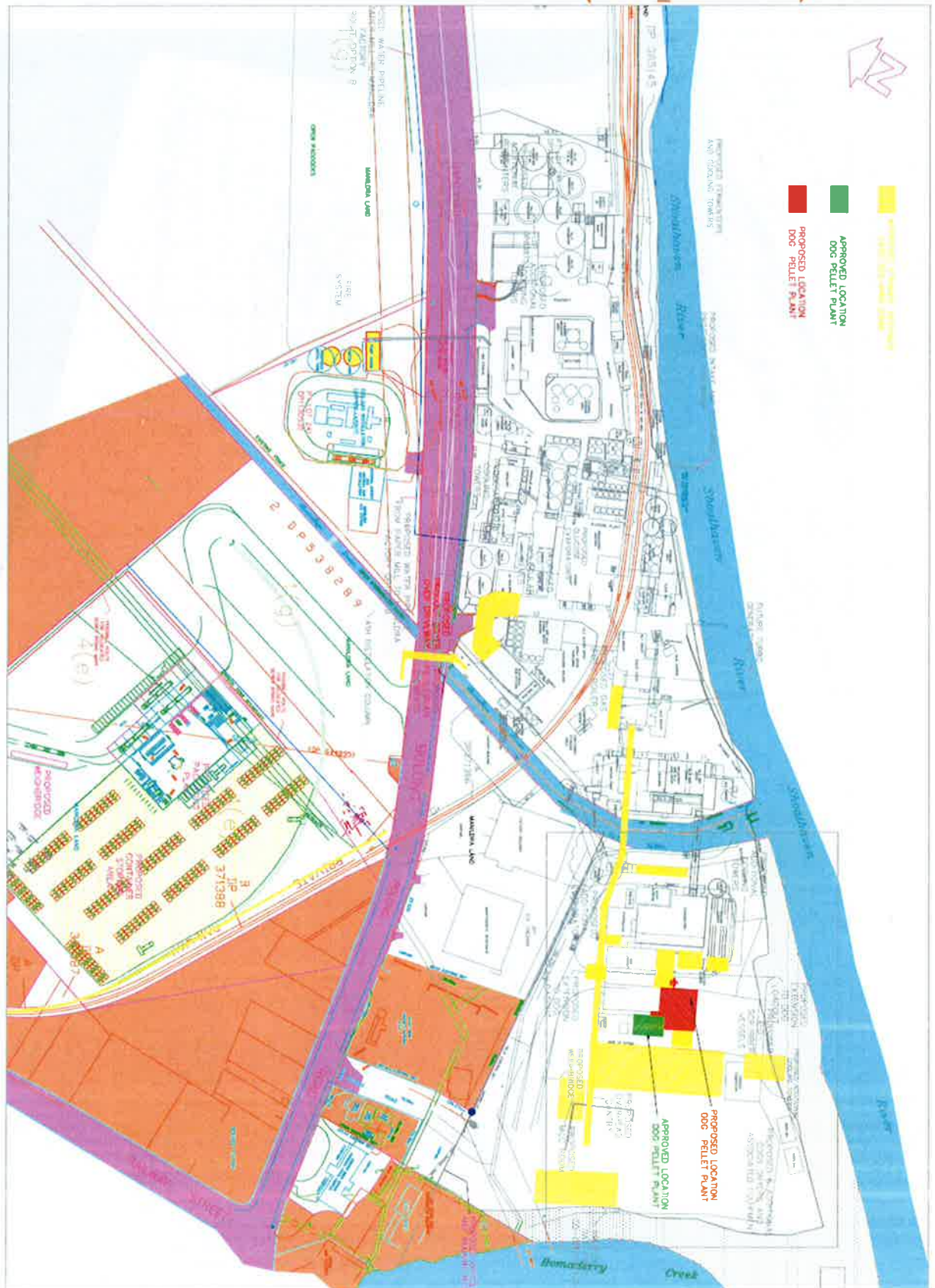
MANILDRA GROUP NOWRA
LANDSCAPE SCREEN SITE PLAN.

PPLA

Project: ...
 Author: ...
 Date: ...

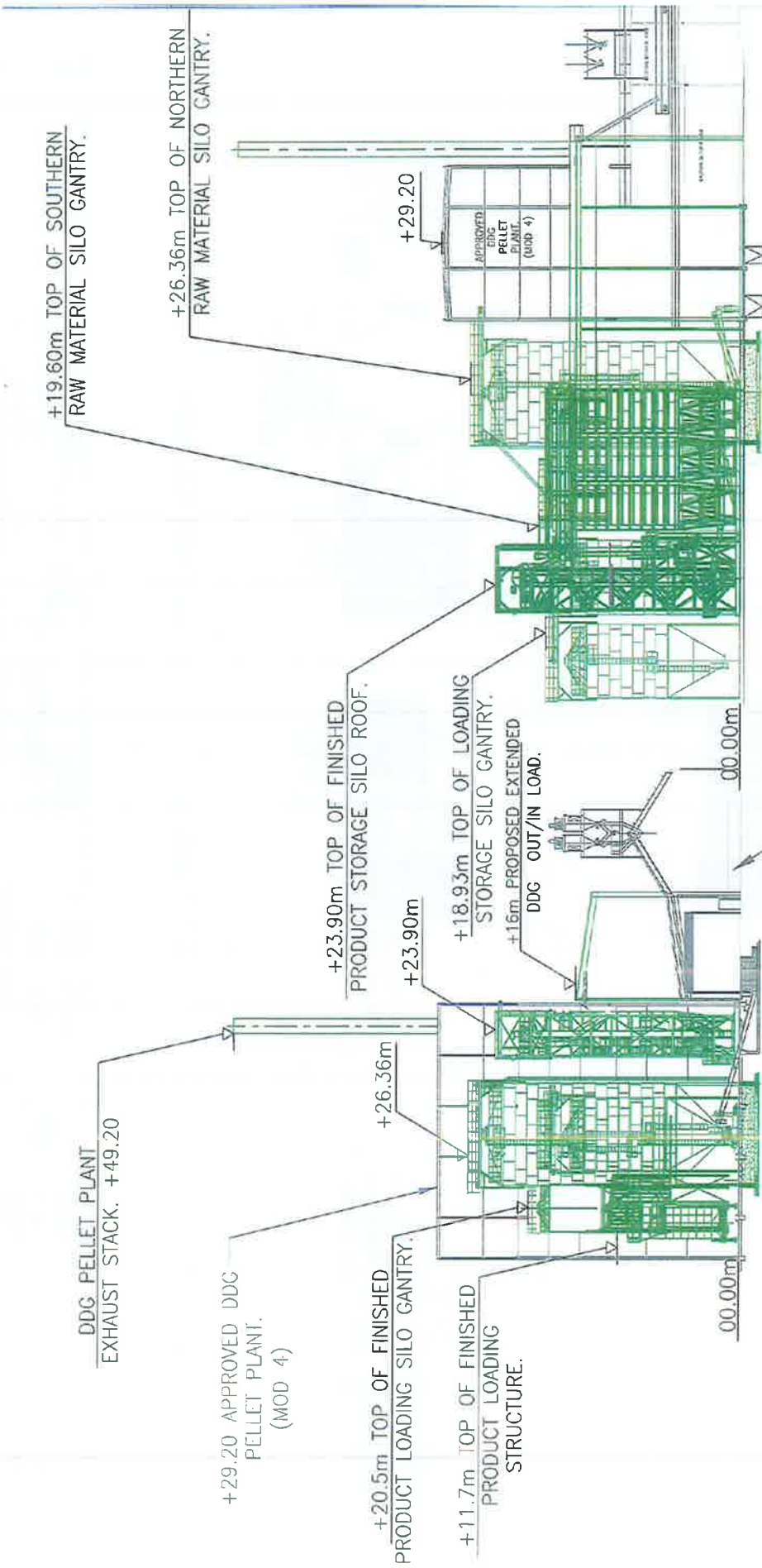
DATE: ... ZONE: ... CHANGE: ... AMENDMENT SHEET (C/D)

APPENDIX 2D: SITE PLANS AND ELEVATIONS (MP 06_0228 MOD 4)



APPENDIX 2E – SITE PLANS AND ELEVATIONS (MP 06_0228 MOD 5)





EAST ELEVATION

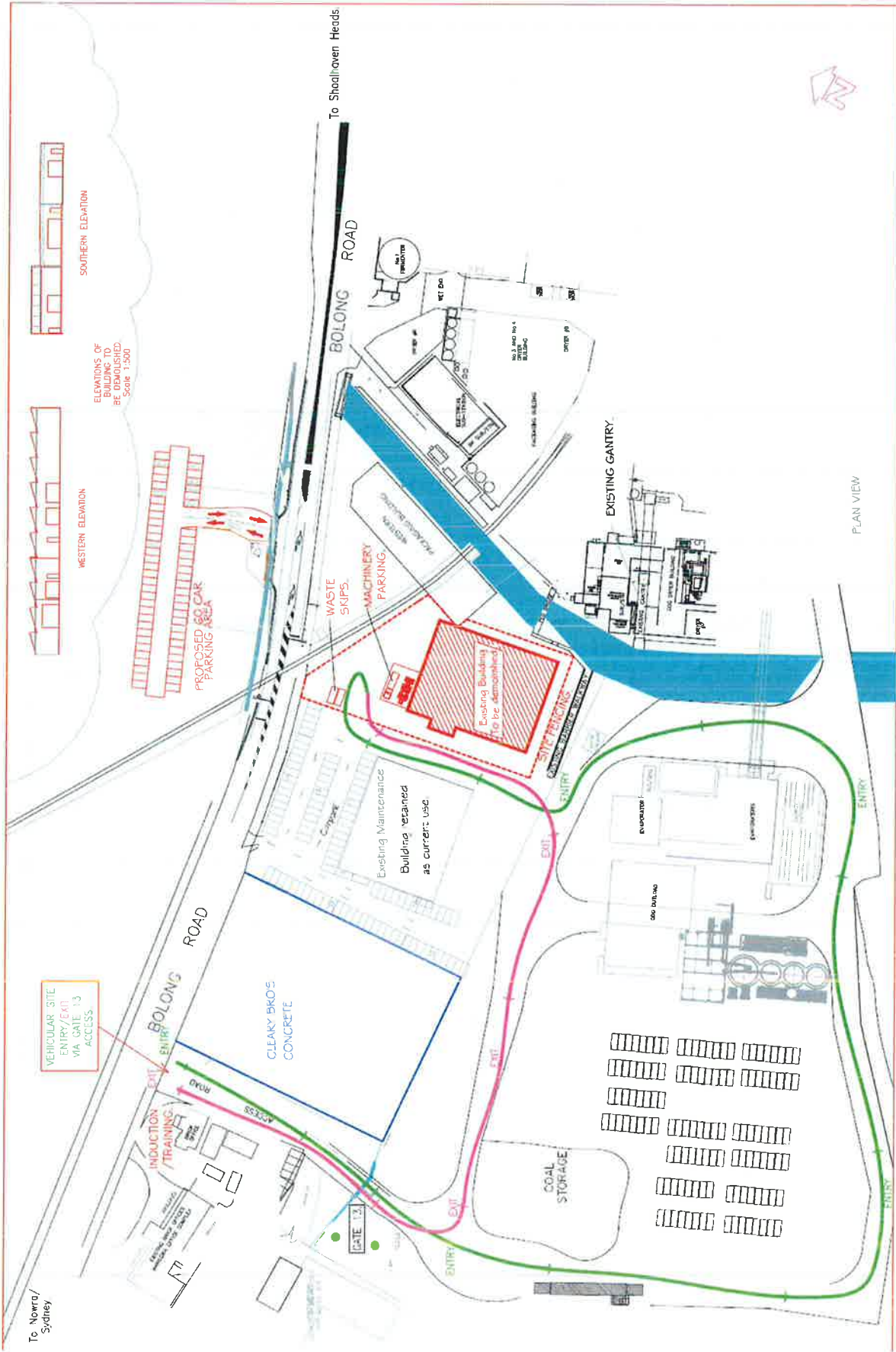
SOUTHERN ELEVATION

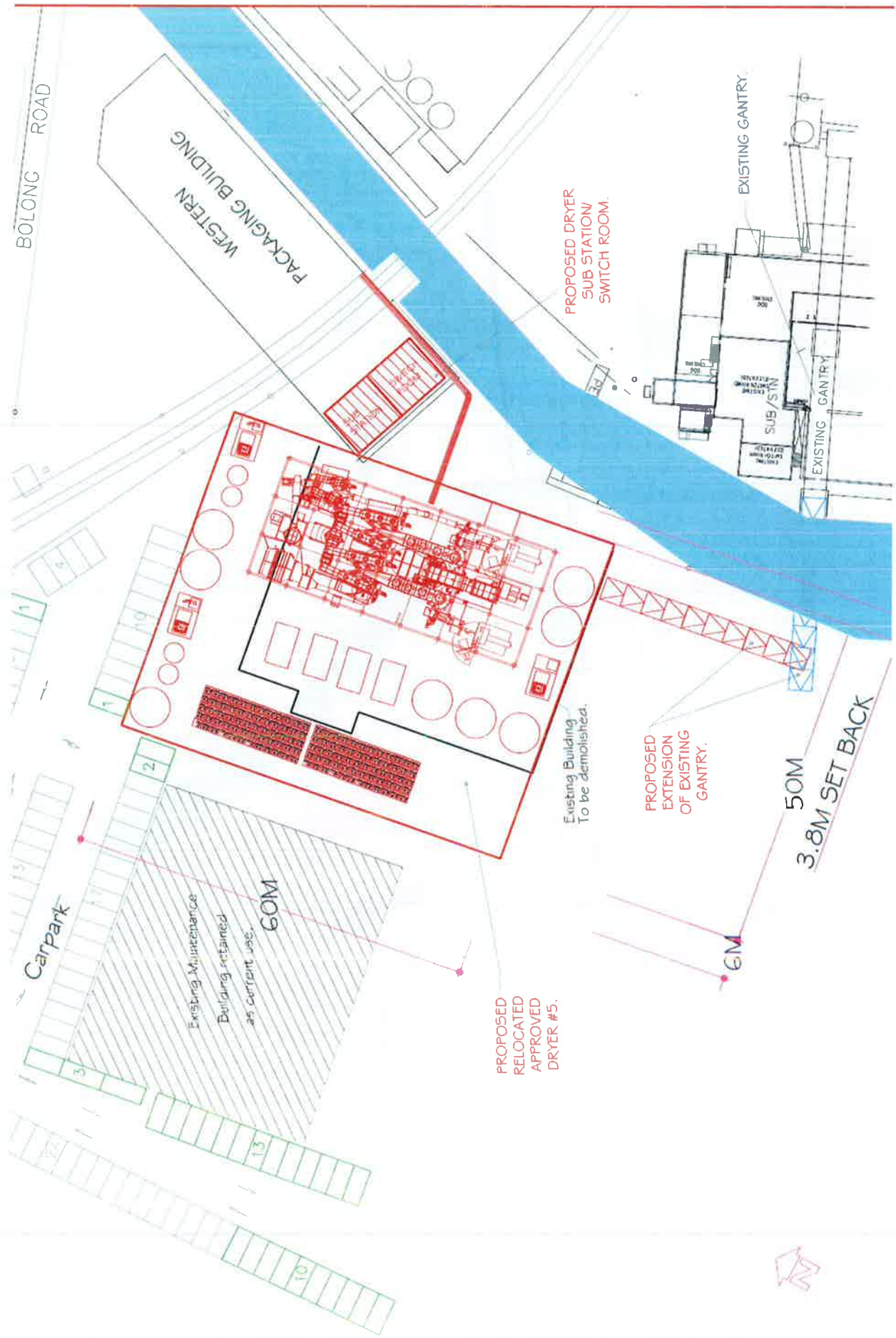


PROPOSED MODIFICATION TO PELLET PLANT.(MOD 5). ELEVATIONS.

APPENDIX 2F – SITE PLANS (MP 06_0228 MOD 6)







BOLONG ROAD

WESTERN PACKAGING BUILDING

PROPOSED DRYER SUB STATION SWITCH ROOM.

EXISTING GANTRY

50M
3.8M SET BACK

Existing Building To be demolished.

PROPOSED EXTENSION OF EXISTING GANTRY.

Carpark

Existing Maintenance Building retained as current use.

60M

PROPOSED RELOCATED APPROVED DRYER #5.

6M

APPENDIX 3 ODOUR CONTROLS

Mandatory odour controls¹

- Install and commission a bioscrubber or biofilter (full details of its design, location, size, capacity and output must be included in the Odour Management Plan).
- Duct high priority dry distillers grain plant (DDG) odour sources to the bioscrubber/biofilter. The odorous sources include the DDG liquids line, the DDG solid line, the DDG (liquids) plant concentrate tank, finisher feed tank and feed holding tank (syrup). These have been identified as sources with very unpleasant odour. It is proposed to increase the volume of foul process air from sources within the DDG dryer building to the boiler.
- The bioscrubber/biofilter must have sufficient capacity to eliminate the odour collected at the plant's ultimate production limit and/or be capable of being readily upgraded to meet the requirements of any other control works that require implementation in the future, for example any of the additional odour control measures listed below.
- Install and commission a wastewater treatment plant at the Environmental Farm capable of processing the liquid waste streams from the factory at full approval capacity (full details of its design, location, capacity and output must be included in the Odour Management Plan).
- Install wet-legs on key odour sources that are not ducted to the bioscrubber at this stage. These sources include:
 - Farm tank (located near ethanol plant)
 - Ethanol plant Jet cooker retention tank "F7"
 - Glucose plant enzyme tank
 - DDG (solids) plant decanter feed tank
- Regularly clean all starch and gluten dryer ductwork to remove build up of solids that can become odorous
- Implement and maintain best practice standards for factory housekeeping in general and in particular the DDG plant grounds.
- *(Deleted)*
- Decommission designated odour sources as follows:
 - Ethanol plant cooling towers
 - Kestner dryer exhaust at Starch plant
- *Install a ducting system in the DDG plant to collect odorous discharges from the sources listed in the GHD Report (October 2007) and direct them to at least 2 of the boilers. Existing connections from the non-condensables discharge fans and cyclone transfer fans must remain connected to the boilers.*
- *Re-route the Palmer cooler discharge stack to at least 2 of the boilers.*
- *Install a ducting system to collect all odorous discharges nominated in the GHD Report (October 2007) for the evaporator plant area and direct them to a new bio-filter via a venturi scrubber and cyclone separator.*
- *Modify the DDG load-out area in the following manner:*
 - *Extend the existing load-out awning to the south and fit each end of the shed with a motorised roller door configured such that at all times either the north or south door will be closed when a truck is loading DDG to prevent a wind tunnel effect and powder drifting out of the load-out area.*
 - *Install the truck load-out chutes with Moduflex Bellow Feeders fitted with a dust extraction system to collect dust at the chute discharge and duct it to the bio-filter.*

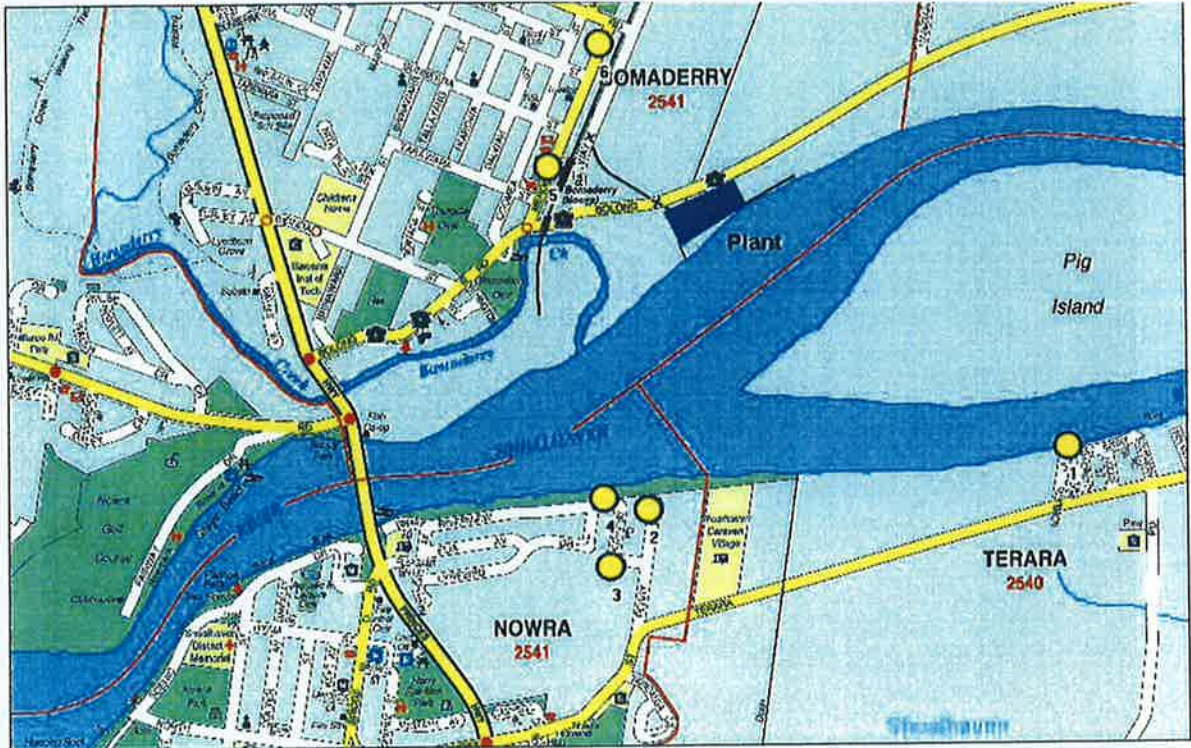
Additional odour controls²

- Duct medium priority odour sources to bioscrubber. These sources include:
 - Farm tank (located near ethanol plant)
 - Ethanol plant Jet cooker retention tank "F7"
 - Glucose plant enzyme tank
 - Ethanol plant decanter feed tank
 - Ethanol plant yeast propagators (tanks 1 to 5)
 - DDG (liquid) plant vent condenser drain
 - DDG (solids) plant decanters 1 and 4 and decanter feed
- Duct low priority odour sources to bioscrubber. These sources include:
 - Residual emission from the DDG dryer building
 - DDG (solids) plant **load out shed**
 - Glucose plant drum vacuum receiver

- Distillery plant molecular sieve vacuum drum
- Ethanol plant jet cookers 1, 2 and 4
- Glucose plant cooker A&B flash tanks
- DDG (liquids) plant light phase recovery tank
- Glucose plant ion exchange effluent tank
- Ethanol plant starch factory rejects collection tank
- Duct individual starch and gluten dryer discharge points to common tall stack.
- Pelletise DDG product.

*Notes: 1 Equivalent to the Stage 1 odour controls in the Odour Audit prepared by GHD, 2007;
2 Equivalent to the Stage 2 and 3 odour controls in the Odour Audit prepared by GHD, 2007*

**APPENDIX 4
REFERENCE MAP FOR NOISE LIMITS**



Key

- Receiver Location

**APPENDIX 5
TRANSPORT MAPS**

